August 31, 1999

FINANCIAL INSTRUMENTS

Issues Relating to Banks

Introduction

1.1 This paper considers issues, arguments and evidence related to concerns raised by banks and banking associations throughout the world in response to proposals for measuring all financial instruments at fair value in general purpose financial statements. Appendix A lists the banking papers and response letters that were reviewed in preparing this paper.

1.2 The International Joint Working Group on Accounting for Financial Instruments (JWG) believes that it is vitally important to obtain a thorough understanding of the concerns of the banking community, and the basis for these concerns. Many of the issues that appear to be at the root of banking concerns are matters that the JWG has been addressing in its work programme. The membership, objectives and work programme of the JWG are set out in Appendix B. In carrying out our work, various members of the JWG have met with bankers and banking regulators (see list in Appendix A), and several of our JWG members have banking experience.

1.3 The JWG wholeheartedly agrees with the comments in a recent letter (March 31, 1999) from the British Banking Association that “it would be in all our interests if the next stage of consultation could adopt a more constructive approach…”, recognising that we have a common interest “to improve the quality and transparency of [a bank’s] published financial statements.”

1.4 This paper is prepared with the objective of providing a basis for constructive dialogue. It reflects the present thinking of the JWG on fair value measurement of financial instruments, which thinking is the result of analysis and evidence developed by the accounting standards-setting organisations represented on the JWG over many years.

The working conclusions drawn from analyses to date are, of course, subject to obtaining further information from banking interests. It is to be noted that members of one of the ten delegations represented on the JWG did not support the JWG working conclusions with respect to the superior relevance of fair value measurements in general, and for banking book assets and liabilities in particular.

1.5 We continue to welcome opportunities for sharing information on the issues considered in this paper, while recognising the need to move forward without undue delay to develop a comprehensive standard on accounting for financial instruments that is a substantial improvement on existing practices and standards.

Organisation of this paper

1.6 This paper is organised in three parts, representing a progression of three fundamental areas, as follows:

Part I: General relevance of fair values in comparison with cost-based measures of financial instruments

1.7 This Part reviews evidence relating to the relevance of fair value measurement of financial instruments, without addressing (a) whether there are some financial instruments whose fair value cannot be measured reliably (these matters are addressed in Part II) and (b) whether banks are different from other enterprises in ways that render comprehensive fair value measurement of financial instruments inappropriate (these issues are addressed in Part III).

1.8 The primary issues are:

- As compared to cost-based information, does reliable fair value information about financial instruments improve the ability of investors, creditors and other users of financial statements to understand the financial position and performance of an

enterprise, and to assess the risks inherent in, and the returns provided by, their investments?

- Does the volatility of reported financial assets and liabilities and profit and loss that results from measuring financial instruments at fair value help or hinder users of financial statements in their analyses?
- Does the relevance of fair value depend on the current realisability of financial instruments and/or management's intention to trade or hold?

Part II: Feasibility of reliable fair value measurement

1.9 The JWG agrees that there are important practical issues that need to be resolved relating to the reliable determination of fair values of financial instruments in certain circumstances. Those practical issues relate to:

- the reliability of techniques for estimating fair values in the absence of prices from active markets, and
- the feasibility of developing cost-effective fair value measurement and control systems in respect of some types of financial instruments.

Part III: Banking differences

1.10 The question is whether the uniqueness of banking activities, their impact on national and international financial stability and economic policies, and internal banking risk management practices, are such that fair value measurement is inappropriate or is an unnecessary burden with respect to "banking book" financial assets and liabilities.

1.11 In addressing these issues, we are cognisant that banks strongly believe that consideration must be given to the relationship of external financial reporting by banks with:

- the ways in which banking book activities are typically managed;

- the regulation of banking activities in general, and capital adequacy requirements in particular; and
- the needs of users (creditors, depositors, investors, regulators).

1.12 Also, inextricably linked to these issues are conceptual questions related to the appropriate fair value measurement of bank deposit liabilities and loans with prepayment options.

Part I: General relevance of fair value in comparison with cost-based measures of financial instruments

2.1 A letter from the Joint Working Group of Banking Associations on Financial Instruments (dated November 4, 1998) states:

> "It appears that the IASC and the Joint Working Group of standard setters have assumed that fair value accounting is the most relevant measurement basis for all financial instruments without either providing compelling evidence that user and preparer support exists for this fundamental change or presenting a sufficiently robust case that clearly deals with the many objections raised to it."

2.2 At the outset, it is important to define clearly what is meant by relevance, so that it is not confused with reliability of measurement (to be discussed in Part II), or with whether there are unique aspects of banking activities that make comprehensive fair value measurement of financial instruments inappropriate or unnecessary (to be discussed in Part III). The concept of relevance is simply defined as follows:

> "To be useful, information must be relevant to the decision-making needs of users. Information has the quality of relevance when it influences the economic decisions of users by helping them evaluate past, present or future events or confirming, or correcting, their past evaluations." [IASC Framework for the Preparation and Presentation of Financial Statements, paragraph 26]

2.3 For the purposes of this paper, the question of relevance of fair value measurement of financial instruments may be posed in the following terms:

Is fair value more relevant than cost-based or mixed cost/fair value-based systems for general external financial reporting purposes for all financial instruments for which fair value is reliably determinable?

2.4 This question of relevance has been the subject of extensive study and deliberation by leading accounting standard-setting organisations over many years, and a considerable body of evidence has been compiled.

2.5 Some significant considerations relating to the conceptual case are highlighted below:

- The essence of the conceptual case for the superior relevance of fair value measurement of financial instruments is that fair values reflect the effects of current economic conditions, and changes in fair values reflect the effects of changes in conditions when they take place. Cost-based figures reflect only the effects of conditions that existed when the transactions took place, and the effects of price changes are reflected only when they are realised (even though realisation is not the event that caused the gains or losses).

- Further, at any point in time, fair values are comparable and additive, because all financial instruments represent the present value of currently expected future cash flows discounted at the current market rate of return appropriate to the level of risk. Cost-based values, in contrast, impede comparability because they make like things look different and different things look alike. For example, two entities holding instruments with cash flows of identical timing, amounts and risks could report very different cost values if they were acquired at different times.

- Since fair values embody current information about current economic conditions and market expectations, they can be expected to provide a superior basis for prediction than can out-of-date cost figures.

- On a fair value basis, an enterprise's performance is reported on the basis of holding management accountable for the current effects of its decisions to hold financial instruments, rather than only for the effects of realising assets or settling liabilities. Costs and mixed cost-fair value systems provide opportunities for income management by selective realisation and settlement of financial assets and liabilities.

- Fair value measurement is consistent with rational practices for managing financial risk exposures, in that entities that effectively hedge existing risk exposures will report decreased volatility. On a cost basis, the effects of changes in prices on exposed risk positions will not be readily evident.

- Mixed fair value-cost systems require complex hedge accounting to correct for the income effects of measuring some financial instruments in a hedging relationship at cost and others at market.

For a comprehensive analysis of these and other conceptual considerations, see IASC, 1997, Chapters 5 and 6, and other documents of accounting standard-setting bodies at Appendix C.

2.6 The case for the superior relevance of fair value measurement is supported by a growing body of market-based research, much of which is summarised in Appendix C. These empirical studies indicate that:

  - fair value information about loans, securities, and long-term debt provide significant explanatory power of share prices and returns beyond that provided by related historical cost values;
  - historical cost information about loans, securities, and long-term debt provides no significant explanatory power of share prices and returns beyond that provided by fair value;

- fair value accounting increases the volatility of earnings, but investors do not penalise earnings multiples because of it;
- fair value information improves the ability to forecast violations of bank regulatory capital requirements; and
- share prices reflect interest rate changes, even for financial instruments that are being held to maturity. Thus fair values appear to be relevant for these instruments.

2.7 The JWG is not the only group to believe that the weight of evidence points to fair value measurement. The following accounting standard-setters have reached similar conclusions:

- The FASB's conclusion that fair value is the most relevant attribute for financial instruments is based on extensive study and active dialogue with constituent interests that began in 1987. The FASB has developed a comprehensive body of literature on the relevance issue. A partial list of the more pertinent publicly available documents prepared by the FASB is contained at Appendix C. The FASB sees its recently issued standard on Accounting for Derivative Instruments and Hedging Activities (SFAS 133) as an intermediate step in its long term project on accounting for financial instruments. SFAS 133 states that it "…is intended to address the immediate problems about the recognition and measurement of derivatives while the Board's vision of having all financial instruments measured at fair value in the statement of financial position is pursued" (paragraph 216). The FASB has observed in SFAS 133 that:

  > "The Board is committed to work diligently towards resolving, in a timely manner, the conceptual and practical issues related to determining the fair values of financial instruments and portfolios of financial instruments. Techniques for refining the measurement of the fair values of all financial instruments continue to develop at a rapid pace, and the Board believes

that all financial instruments should be carried in the statement of financial position at fair value when the conceptual and measurement issues are resolved. …" (paragraph 334).

- The IASC and Canadian Institute of Chartered Accountants (CICA) entered into a joint project to study accounting for financial instruments in 1989. IASC and CICA issued two exposure drafts (in 1991 and 1994) that proposed mixed cost/fair value measurement approaches. These failed to command sufficient support. As a result a reconstituted IASC Steering Committee was set up to go back to basic accounting and capital markets principles and examine all significant arguments and evidence on the subject. It developed a Discussion Paper [IASC 1997]. The Discussion Paper concluded that fair value is the most relevant measure for financial instruments, and it provided an in-depth analysis of the arguments and evidence that provide the basis for this conclusion. The IASC Board decided to proceed to develop an interim standard on the recognition and measurement of financial instruments, which was completed in 1998 (IAS 39). This standard significantly increases the use internationally of fair values in accounting for financial instruments. At the same time, the IASC is represented on the JWG, and the IASC Board has encouraged it to study further the use of full fair value accounting for all financial assets and liabilities.

- The UK Accounting Standards Board developed a Discussion Paper that also contained an in-depth analysis of the significant issues, as the basis for its conclusion that fair value is the most relevant measure of financial instruments. [Accounting Standards Board 1996]

- The Australian Accounting Standards Board has publicly stated that it believes that all financial instruments should be measured on a fair value basis. It has recently issued a public letter (July 15, 1999) indicating that it will begin deliberations on the development of a standard on accounting for financial instruments that will be based

on the recommendations of the 1997 IASC Discussion Paper and the work of the JWG.

2.8 These bodies have all issued comprehensively reasoned documents for public comment, and have had extensive discussions with many interested parties. A partial list of these documents is set out at Appendix C.

2.9 The JWG recognises that many preparers of financial statements are not persuaded that fair values of all financial instruments are conceptually more relevant than their historical costs. It is very important that standard setters carefully assess the bases for these objections – but they must also take into account the interests of others, notably those in the capital markets who use financial information to make investment and lending decisions. The responses of these other interests have been more mixed, with significant support from notable groups representing investor interests, including leading securities commissions. Examples include the responses of the Association for Investment Management and Research, the Institute of Investment Management and Research (UK), and the SEC to the IASC's 1997 Discussion Paper.

2.10 Further comments on external user demand for current values and performance of financial instruments are set out at paragraphs 2.15 – 2.17.

2.11 In summary, the JWG believes that the case for the general relevance of fair value measurement of financial instruments has been thoroughly made and documented. If banking associations do not agree, then we would ask them to offer us convincing evidence to refute the case that has been made. To be most helpful in this regard, such arguments and evidence need to be specific and directed to the analyses developed by the standard setting bodies.

Some areas of misunderstanding

2.12 Our assessment of comment letters and consultative discussions with banking and other interests indicates that the following issues are particularly sensitive:

- The implications of capital markets and rational investor decision models.
- User demand, information value, and understandability of fair value measures.
- The volatility of fair values.
- The implications of management intention.
- Realisability and liquidity considerations.
- Shortcomings of a mixed-attribute model.

2.13 We offer the following brief comments on each of these matters in the hope that they will help to clear up some misunderstandings and facilitate achieving agreement on the relevance of fair value for the measurement of financial instruments in general purpose financial statements. We emphasise, however, that it is beyond the reasonable purposes of this paper to recount the vast literature on capital markets, financial theories, financial risk management, investment concepts, theories of financial analysis, and so on. For a more comprehensive analysis, reference should be made to the documents listed in Appendix C and sources cited therein.

Capital markets and rational investor decision models

2.14 In their letter of 4 November 1998, the Joint Working Group of Banking Associations said that "the concept of fair value accounting has little support from our countries' capital markets' perspectives". Because we conclude that the body of empirical capital markets research does demonstrate the superior relevance of fair value over cost-based measurements, we would welcome being advised of evidence that leads to the opposite conclusion.

- It is well accepted that capital markets price financial instruments by discounting expected future cash flows using the current rates of return available in the market place for cash flows of commensurate risk and uncertainty. It may be reasoned that rational investment models require information on the current values of financial instruments and the susceptibility of these values to changes in the risk conditions inherent in these instruments. Fair values reflect the effects of changes in economic conditions (affecting interest rates, foreign exchange rates, commodity prices, etc.) as these changes take place. Cost-based figures reflect the effects of conditions as they were when the investments were acquired or debt incurred. They can be, therefore, misleading as the basis for determining current position in making rational decisions to sell, settle or hold existing positions.

- Because fair values embody all available information in an efficient market, they may be expected to provide a better basis for predictions (along with knowledge of current economic conditions and risk attributes of financial instruments) than cost-based figures. However, preparer responses to proposals for fair value accounting have often claimed that amortised cost measures of fixed rate debt instruments provide a superior basis for prediction of future cash flows. It can be demonstrated, both deductively and empirically, that this argument is not sustainable. Cost-based amounts enable only the prediction of the future unfolding of cost amortisation and ultimate maturity amounts, if there is no default, restructuring, or early repayment. Such “predictions” may be expected to have little information value because they merely extend past costs to the future. Cost-based values may confuse prediction and comparisons because they reflect different values for instruments with identical cash flows and risks that have been acquired at different times, and will not be comparable with the current value of those cash flows. [Willis, 1998 uses examples to demonstrate these effects]

The following quotation from a submission to the IASC illustrates a common argument for the predictability of cost-based figures:

> "…Fair value tells you nothing about future cash flows. To illustrate this …point, if you are told that a bank has $100m of loans with a fixed rate of 6% for five years, you can predict the cash flows. However, if you are told that the bank has $102m of fair valued loans, you can't predict the cash flows – it could be $102m due tomorrow, $98m with a fixed rate of 7% due in three years, etc. etc."

This example illustrates that future cash flows are <u>not</u> predictable from cost figures in themselves, but must be supplemented by additional information. In this case, the contracted interest coupon rate and term are provided, on the unstated assumptions that the loan was extended at par, pays interest coupons annually, is not subject to early repayment risk, etc. Fair value measures of financial instruments must also be supplemented with information on the underlying cash flow streams and risk attributes. The JWG agrees that consideration should be given to improving disclosures of cash flows and the terms and risk attributes of financial instruments. One major advantage of fair value over cost is that it consistently weights all future cash flows by their term and current risk attributes, in discounting them to their current fair value – thus providing a consistent measurement base for predicting future income flows and for disclosing their risk volatility.

- Securities regulation is founded on the premise that investors should be expected to accept full responsibility for their investment decisions if they have full and fair current information pertaining to the effects of changes in conditions on value and risk of investee enterprises at the time they make their decisions to buy, sell or hold investments in those enterprises. We note that banking regulators are placing

increasing emphasis on transparency of financial position and results of operations [Basel Committee on Banking Supervision, September 1998], and we are encouraged by this.

- There is evidence (some of which is cited in Appendix C) that the costs of less than full and fair financial information on the effects of current conditions can be very high – in terms of increasing the cost of capital for "information uncertainty", and in exacerbating the volatility of prices in the market place (when investors are forced to use indirect and less certain sources of information, because they do not have reliable direct information on current value and risk). For example, varying estimates of the current value of an institution's loan portfolio, where investors do not have confidence in the institution's reported figures, are likely to lead to volatile stock prices for that institution, especially when investors are trying to assess the implications of a major change in economic conditions.

User demand, evidence of information value, and understandability of fair values of financial instruments

2.15 The Banking Associations' letter stated:

> "It is not clear that the financial statement users would understand fair value measurements or how financial statement users might use the results for analytical purposes."
>
> "Our group unanimously agrees that fair value accounting for all financial instruments would actually mislead users of financial statements."

2.16 These comments are inconsistent with the case for the conceptual superiority of fair values over cost-based measurements noted in the previous section. Certainly there must

be concern that less informed users may not fully understand the power and implications of fair value information. There is clearly a need for education and guidance as to the decision usefulness of fair value information, and the limitations of cost-based measurements. The empirical research cited in Appendix C indicates that users of financial statements are not misled by fair value information. The JWG would welcome being made aware of evidence to the contrary.

2.17 Concerns have been expressed that supplementary fair value information that is required to be disclosed by a number of accounting standard setting bodies and securities regulators has had diminished information value because it has often been prepared on rather approximate bases. Several banks, among others, have warned readers that this fair value information should not be relied upon.

2.18 Despite these concerns, empirical evidence points to the superior information value of fair value measurements of financial instruments. The following evidence may be cited.

- "The academic literature provides consistent evidence suggesting that fair values of (1) investment securities held by financial institutions, (2) derivatives held by banks for asset-liability management, (3) bank net loans, and (4) bank long term debt, should be recognised on the balance sheet. In addition, empirical results support the inclusion of changes in fair values of these financial instruments in income. Finally, the empirical evidence on comprehensive versus partial fair value accounting indicates that, for fair value disclosures to be most useful, comprehensive, rather than partial, fair value accounting should be adopted". [Financial Accounting Standards Committee of the American Accounting Association, March 1998. See citations in this article to specific research in this area. See also Appendix C to this paper.] Much, but not all of this empirical research has been carried out in the US, and much of it relates to banks.

- The Association for Investment Management and Research (AIMR), the major group representing financial analysts around the world, has indicated its strong support for fair value measurement for financial instruments [AIMR 1997].

- The Bankers Associations' letter of November 4, 1998 has misinterpreted the results of a focus group survey conducted by independent consultants on behalf of AIMR, the FASB and Canadian Institute of Chartered Accountants in 1997. The letter states that the survey confirmed that only a minority of participants supported measuring financial instruments at fair value. In fact, users who were defined by the independent consultants as being "knowledgeable and informed about fair value accounting for financial instruments" were evenly divided between those who favoured requiring financial instruments to be recognised and measured at fair value and those that did not. "The clear and prevailing view" of even those who were less informed was the need for more and better information regarding fair values of financial instruments [Sirota, Final Report, 1998, page 5].

The volatility of fair values

2.19 It would appear that a key concern of banks lies with the volatility of fair values. This concern, may, for example, underlie the comments in the Bankers Associations' letter of November 8, 1998 that "the experience with recent market developments indicates that fair value information might create an unfounded sense of relevance or confidence about the values published amongst users of financial statements".

2.20 It is the role of financial accounting to report events and circumstances that have taken place as faithfully as possible. Users of financial statements have shown that they are able to understand current market values of financial instruments, and to act rationally in response to volatility. For example, investors have for many years, used the reported

financial results of mutual funds and other investment enterprises that carry their investments at current market values, to make informed investment decisions.

2.21 In summary, we question the claim that fair value information, appropriately supported by disclosures about the risk attributes of financial instruments, may create “an unfounded sense of relevance or confidence”. We do, however, recognise concerns that estimates of fair values of financial instruments that are not traded in an active market may not be reliable, so that volatility may be a product of variability of estimation or of the parameters of the measurement model selected, rather than reflecting real market conditions. Reliability issues are considered in Part II.

2.22 We also recognise the importance of developing appropriate performance statement reporting of gains and losses by risk and function, etc., particularly in relation to hedging activities. Some significant developments have taken place towards improving the transparency of performance-income reporting in recent accounting standards in several jurisdictions – and the JWG is studying these and other possibilities for improving presentation and disclosure.

Management intention

2.23 Many preparers accept the relevance of fair value in respect of financial instruments that management intends to hold for “trading purposes”, but contend that fair value is not relevant for, possibly identical, financial instruments that management intends to hold for the long term or to maturity.

2.24 Conceptual analysis and empirical evidence on the information value of fair value measures of financial instruments seem not to support this contention. The fundamental reason is that the contracted rights and obligations, and risks and value characteristics, of a financial instrument do not depend on management’s intentions to hold or trade it.

While it is important for users to understand management's investment intentions and risk management policies, the weight of evidence indicates that the relevant measure of management's performance, and the enterprise's risk exposures, is fair value in all cases. Accounting standards setters have extensively addressed the issues of management intention in the sources cited earlier in this document.

Current realisability and liquidity considerations

2.25 Some hold that fair values are only relevant in respect of financial instruments for which the fair value can be realised immediately or in the near term. Again, conceptual and empirical evidence indicates that fair value measurement is more relevant for assessing performance and future prospects than cost-based measures regardless of the timing of realisation. It indicates that the relevance of fair value does not depend on whether a loan or bond will be realised over its term to maturity or will be held or settled immediately, or whether certain of the risks inherent in a financial instrument will effectively be realised by using derivatives such as swaps (for example, to realise interest or foreign exchange gains or losses).

2.26 We do recognise, however, that financial investments for which there is no active market and, in particular, the illiquidity of some private equity investments, may give rise to questions as to the ability to compute reliable fair values; this is a reliability, rather than a relevance issue to be considered in Part II of this paper.

Shortcomings of a mixed-attribute model

2.27 The current accounting standards of the IASC and other national accounting bodies reflect various mixed-attribute models – some financial assets and liabilities measured at fair value and others measured at historical cost. The shortcomings of mixed measurement of financial instruments are well documented (see, for example, IASC

Discussion Paper, 1997, Chapter 5 pages 96-100). The source of these shortcomings lies in the fundamental contradiction of measuring identical assets and liabilities on different bases with different balance sheet and income effects. A basic objective of financial accounting is that like things be recognised and measured in like ways. In other words, it is the fundamental properties of an asset or liability that should be the basis of its accounting. This is not what happens under mixed cost-fair value models.

2.28 Bases for distinguishing which financial instruments are to be carried at cost and which at fair value have rested in some part on management intent to hold or trade, on the nature of the financial instrument (for example, loans are generally carried at cost and derivatives at fair value, although there have been many exceptions), and on the nature of the business activities (banking book vs. trading activities). Because these bases for distinction are not grounded in the essential properties of financial instruments, they are not capable of reliable and consistent application. This has been clearly demonstrated by existing accounting practices over the years, and by standards (including IAS 39 and SFAS 133) that have found it necessary to develop detailed, complex, and necessarily highly arbitrary, rules to try to operationalise these distinctions. (The rules, and exceptions thereto, for classifying debt instruments as "held-to-maturity" investments demonstrate this.) The basic practical shortcomings of mixed measurement models, which result in inhibiting comparability and understandability, include the following as applied to banks:

- The distinction for classifying investments in the banking book versus the trading book may differ from bank to bank, with reclassifications from one period to the next giving the possibility for income management.

- Loans and certain investments are distinguished for measurement on a cost basis because they are generally intended to be held to maturity. But practically this intention may change, and increasingly loans and investments in the banking book are

selectively realised giving rise to gains and losses at management's discretion, rather than when the underlying economic events that gave rise to the gains and losses occurred.

- Significant mismatches occur when some instruments carried at cost are hedged by instruments carried at fair value. Examples include credit risk derivatives used to hedge banking book loans, and interest rate swaps in the trading book used to hedge net interest risk-positions in the banking book. As a result, a mixed measurement model leads to demand for hedge accounting of various types to try to correct for these mismatches. Such hedge accounting must ultimately depend on management's discretion to designate relationships, and highly complex and difficult hedge accounting rules have had to be designed to try to place reasonable limits on practice and make the effects of hedges visible. A full fair value model eliminates any need for hedge accounting in respect of existing financial risk exposures.

2.29 Several banking representatives have criticised a mixed-attribute model for banks and have supported the objective of developing a full-fair-value model for banks. For example, J.P. Morgan said:

> "Overall, we support a fair value accounting model for financial assets and liabilities. At Morgan, we currently use fair value information to manage and assess the performance of our businesses involving market risks." [Comment letter on IASC/CICA Discussion Paper, September 15, 1997]

The Union Bank of Switzerland said:

Banks - management

> "We believe that to account in a profit and loss account and balance sheet for changes in the fair value of all financial instruments is theoretically supportable."
>
> "We agree in principle and acknowledge that this proposal [IASC/CICA Discussion Paper] addresses many of the shortcomings of the mixed measurement approach …".
>
> "We believe that one of the key arguments in support of the fair value for items not held for trading purposes is that it makes transparent the impact on an enterprise for holding a financial instrument." [Comment letter on IASC/CICA Discussion Paper, July 11, 1997]

These institutions cautioned that difficult implementation and change management issues need to be resolved, but they supported the general relevance of comprehensive fair value measurement of financial instruments.

2.30 Significant securities regulators have also supported a full fair value model over a mixed measurement model. For instance, the SEC staff has written:

> "The [IASC] Steering Committee [on Financial Instruments] has made a persuasive case for the conceptual merits of a fair value model for financial instruments and supported its conclusion that a standard based on fair value measurement of financial assets and financial liabilities should be developed as soon as possible." [Comment letter on IASC/CICA Discussion Paper, October 6, 1997]

2.31 Similarly, in a July 31, 1997 letter to the Chairman of the FASB, Federal Reserve Board Chairman Alan Greenspan urged FASB to pursue a full-fair value model rather than a mixed attribute model. He wrote: "If these problems [the need for 'reasonably specific, conservative standards for the estimation of market values'] are eventually resolved, comprehensive fair value accounting – for all financial instruments – coupled with appropriate risk disclosures, feasibly could result in financial statements that better reflect risk exposures and enhance market discipline."

Part II: Feasibility of Reliable Fair Value Measurement

3.1 The Bankers Associations' letter of November 4, 1998 observes:

> "…the markets for many financial instruments are not adequately developed to produce fair value estimates within a narrow range. These deficiencies have not been sufficiently addressed …"

3.2 We agree that there are some important conceptual and practical issues relating to the reliable determination of certain financial instruments and in certain circumstances.

3.3 We are working diligently with accounting standards setting bodies that are represented on the JWG, and in consultation with others, to address two types of issues:

(1) certain conceptual fair value measurement questions, and

(2) areas in which there may be practical problems in estimating fair values in the absence of prices from active markets, and in the feasibility of developing cost effective fair value measurement and control systems on an ongoing basis.

3.4 In addressing these issues, it is important to have a balanced understanding of what is meant by "reliability". In common with most accounting standard setting bodies, the IASC envisages reliability for purposes of external financial reporting in the following terms:

> "Information has the quality of reliability when it is free from material error and bias and can be depended upon by users to represent faithfully that which it either purports to represent or could reasonably

be expected to represent." [IASC Framework for the Preparation and Presentation of Financial Statements, paragraph 31].

3.5 The IASC Framework goes on to emphasise that "in many cases, cost or value must be estimated; the use of reasonable estimates is an essential part of the preparation of financial statements and does not undermine their reliability" (paragraph 86). The reliability of fair values for financial instruments should not be required to be measurable within a narrower range than is accepted in respect of cost-based measures of the same financial instruments.

3.6 Reliability relates to measurement or estimation variability. It should not be confused with volatility. As an example, a foreign exchange rate is likely to be reliably determinable at any point in time, but the rate may be volatile in response to future changes in market conditions and expectations. While reliability concerns do temper the quest for relevance of accounting information, it is not a role of financial accounting to try to smooth out the volatile effects of changes in the values of an enterprise's assets and liabilities that have actually taken place in the market.

3.7 As noted, the JWG has several projects underway that are related to the reliability of fair value measures of financial instruments. Brief comments on the progress and implications of these projects, with particular reference to banking assets and liabilities follow.

1. Conceptual basis for the fair value measurement of demand deposit liabilities

3.8 For there to be a basis for reliable fair value measurement, there must be agreement on the measurement principles. This project is addressing the principles of fair value measurement – whether, for example, the fair value of demand deposits should be an "input" value reflecting the amounts that would currently be negotiated with depositors

for existing deposits, or should be an "exit value" that would be based on the present value of expected cash outflows in respect of current, or current and expected future, deposits. This is an issue being addressed by the FASB, and a summary of the FASB research findings is available on the issues (summarised on the FASB web site http://www.rutgers.edu/Accounting/raw/fasb/project/fairvalue.html). It has very important implications for the application of fair value measurement to banking enterprises. Certain of its implications are addressed in Part III, in relation to issues that are unique to banking enterprises.

2. Loans for which there is no active market value

3.9 Many banks have indicated that it is not feasible for them to determine reliable fair values for loans on an ongoing basis. We have made progress on a project to examine how loans may be measured on a fair value basis. To put the reliability of fair value estimates of loans in perspective, it may be noted that traditional lower-of-cost-and-recoverable-value measurements are subject to very significant variability, borne out by concerns expressed by regulators, over the years, about under-provision for loan losses in some years and over-provision for loan losses in other years. Fair value measurement can improve reliability because it is based on a clear, current economic measurement objective.

3.10 It should also be noted that this is an area in which the theory and practical approaches for fair value measurement have been developing at a rapid pace. We are aware of at least one commercially available system for fair valuing rated loans (Credit Metrics).

3.11 The main obstacles to implementing fair value systems for loans would seem to be that many banks currently lack an adequate statistical basis for implementing a fair value system, and they question the cost-benefit feasibility of developing systems for assigning and monitoring credit risk ratings of loans and translating these into current loan fair

values. The evidence that we have examined indicates that this may be a transitional problem, and that it may be basically a question of how much time may be needed to enable these banks to develop effective fair value-compatible systems. However, our analysis would benefit from more direct access to lending institutions.

3. Behavioural aspects of certain loan arrangements

3.12 To determine the fair value of certain loans and mortgages, it is necessary to predict the effects of various types of pre-payment and other options. In addition, there are practical questions relating to estimating the volatility and other behavioural parameters of these options. A number of submissions from banks have indicated that some loan arrangements have very complex behavioural implications, which they cannot predict within ranges that would be satisfactory for fair value measurement purposes. We plan to examine certain key loans of this nature as part of the reliability survey project described below. As a general observation, we would have thought that banks must be able to make reliable estimates of the timing and amounts of future cash flows of such loans to be able to manage liquidity and interest rate risks, i.e., to be able to reasonably apply the net cash flow gap management methods that banks have consistently told us are central to the management of banking book activities.

4. Reliability survey

3.13 The JWG is carrying out a survey of a cross-section of preparers and others to improve our knowledge of particular types of financial instruments and circumstances for which it may not be practicable to estimate fair values within parameters that are acceptable for external financial reporting purposes. The results of this survey will be used as the basis for determining whether there should be further study of specific types of instruments and circumstances. This may enable us to determine whether there are problems that can be resolved by additional guidance and disclosures, or whether some specific exceptions

should be made, and if so, what should be the basis for them and for accounting for these instruments/situations.

3.14 We believe that the conceptual measurement and practical estimation issues should be of significant interest to banks and other financial institutions, since they are directly relevant to assessing value and risk to enable sound risk management and investment strategies. In addition, much of the expertise pertinent to pricing financial instruments resides in financial institutions, although it is usually not within the accounting function.

3.15 If banks believe that there is compelling evidence that significant financial instruments are not capable of reasonably reliable fair value measurement, we would welcome information with regard to that evidence.

3.16 The JWG believes that, while some significant issues must be resolved, efforts to achieve agreement on a fair value measurement standard for financial instruments should not be unduly delayed until every last measurement issue is fully resolved. As with other aspects of financial accounting, improvements will be facilitated as experience is gained in applying a fair value standard and as financial risk management and capital markets theories and practices continue to evolve.

3.17 We recognise the possibility that extended transitional periods may be needed to enable some enterprises that lack fair value expertise to develop efficient and effective fair value measurement and control systems in respect of some instruments (for example, perhaps, loans) that are now carried on a cost basis.

Part III: Banking Differences

4.1 Most responses from banks have emphasised that banking book activities are different in several significant respects from the activities of other enterprises. We recognise the importance of understanding these differences and the implications they may have for measurement, presentation and disclosure of financial instruments for external financial reporting purposes.

4.2 The following analysis reflects our understanding and perspectives on the key issues. The conclusions we have drawn from this analysis are, of course, subject to obtaining further information and insights from the banking community.

4.3 On the basis of responses from the banking community, we have identified the following broad areas in which banks may be considered to be unique in ways that could affect external financial reporting for financial instruments:

- Banking book management and interest rate gap management practices.
- Banking book intermediation earnings activities.
- Demand-type deposits.
- Implications of external financial reporting for the financial stability of national and global economies.
- Relationship of external financial reporting to banking regulation and capital adequacy.

Banking book management practices

4.4 The Banking Associations' letter of November 4, 1998 notes that "… fair value accounting generally does not reflect how banking institutions are managed and will reduce, rather than improve transparency". It is obviously vital that the basis for this

contention and its implications for appropriate external reporting be fully developed and understood.

4.5 We understand that the banking book is traditionally managed on a “net gap” basis. The net gap approach focuses on comparing the expected timing and amounts of cash inflow streams relating to banking book assets with the expected timing and amounts of cash outflow streams relating to banking book liabilities, along with some assumptions with respect to allocations of equity.

4.6 We understand that, typically, a central, or centrally co-ordinated, “Asset-Liability Management” (ALM) function manages the net positions for all risks, with the exception, generally, of credit risk. The ALM closely monitors the net gaps or mismatches between banking book asset and liability cash flows and decides, within limits set by banking policy, on the extent to which the bank should, for example, take net interest or foreign exchange risk positions, or whether it should transfer the risk to the trading book. The sensitivity of the banking book to net interest, foreign currency and liquidity risks is generally analysed using cash flow gap and earnings-at-risk approaches.

4.7 The claim for this net gap management approach is that it works well within a cost-based accounting system, and does not require calculation of the fair values of financial instruments. A typical bank response to proposals for full fair value measurement of all financial instruments is that “loans and deposits are being effectively managed with tools that are not trading tools”. We are certainly not in a position to question appropriate systems for internal management purposes; our concern is with external reporting purposes. However, we believe that it is vital that a bank’s accounting system be designed not only to meet internal management needs, but also to meet the needs for relevant, full and fair financial reporting to external users. We have the following questions with respect to the appropriateness of historical cost-based net gap reporting for external reporting purposes:

1. While we recognise the uniqueness of the activities of deposit-taking institutions, and the well-established cost-based approaches to reporting these activities, we do not see that a net gap approach to financial risk management is unique to these activities. Any industrial or commercial enterprise may approach the management of financial risk by focussing on estimating the net gap between estimated future cash inflow and outflow streams. Thus, it is difficult for us to see how accounting standard setters could make an exception for banking activities without also excepting any other organisation that has a net gap approach to financial risk management.

2. More fundamentally, we have considerable difficulty in understanding how the net cash flow gaps are estimated in the modern world of finance and complex financial instruments in a way that (a) provides a reliable and transparent basis for external reporting, and (b) does not mix reporting of existing risk positions with future expected risk positions. Following are comments on these two areas of concern:

   (a) <u>Reliability and transparency of net gap estimates</u>. The reliability, consistency and comparability of cash flow gap analysis as between banks and over time depends on assumptions and estimates of loan repayments, investment decisions, and deposit liability withdrawals. The difficulty and variability of these estimates would seem to have increased substantially over the years with the increased complexity of these instruments and their dependency on expectations with respect to future market conditions (for example, with respect to the exercise of prepayment options, etc.) in highly volatile global markets. We understand that there are no standardised estimation models, so that one bank's disclosure of its net banking book gap positions over a reporting period may differ substantially from that of other banks, and may not be consistent from period to period. We noted and raised questions earlier in this paper about contentions from many banks that they cannot predict the behavioural effects of complex prepayment and

other options that are major factors in modern loans. We also note that gap determinations reflect ultimately arbitrary equity allocations, which may differ from bank to bank.

In answer to these concerns, a number of banks have explained to us that they apply conservative estimates, and so believe that their positions are prudently managed, and that disclosures are, therefore, also prudent. But accounting that is subject to varying ranges of conservatism which cannot be evaluated and compared by investors does not meet the needs of capital markets. It is not consistent with transparency or neutrality.

It would seem to us to be important to address these questions. Agreement on standards for realistic and consistent estimation models would seem to be an essential base for reliable and comparable net gap analyses and fair value measurement. In the final analysis, if reliable estimates can be made for effective net gap management, we would expect that they can be made for fair value measurement purposes as well.

Fair value measurement of the financial instruments on both sides of the banking book balance sheet would provide a market-based discipline and check on the value effects of mismatched positions, and would seem to us to hold significant prospects for providing an improved basis for conveying information on current risk exposures and their implications to external users. We understand that some banks have adopted the practice of valuing their entire balance sheets to market on a frequent basis for internal management purposes, viewing this as a necessary check on their gap management.

(b) The mixing of current and future risk positions. Even more fundamental than the reliability estimation issues are the principles for estimating future cash inflow

and outflow streams relating to loans and deposits. We understand, for example, that estimates of the cash outflow streams to result from bank deposits may include expectations as to future deposit transactions. In other words, gap management may be based not only on the risks inherent in existing financial deposit balances, but also build in expectations as to expected future transactions and their implications for net cash flow streams expected in future periods.

This is presumably entirely appropriate for internal risk management purposes, and may provide a useful base for supplementing information on projections beyond the current position in external financial reports. However, the external financial reporting objective is to fairly portray existing asset and liability positions. We have some questions with respect to whether determining existing net interest rate exposures on the basis of expected future deposit transactions is consistent with this objective.

The difficult questions relating to the appropriate basis for estimating future cash flow streams have been demonstrated to us as we have examined possible approaches to fair valuing demand deposits, and credit card receivables. In particular, we are studying the extent to which it may be appropriate to consider expected future deposits from existing depositors, and expected future charges on existing credit card accounts, in determining fair value reflecting the present value of future expected cash flows. This exercise has underlined to us the importance of developing clear and consistent standards for these determinations. Further comments on demand deposit measurement are made below.

3. Accounting based on the net gap approach is inconsistent with an objective of measuring loans at their current values – and we view this as a very important objective of financial accounting. We note that several financial institutions (including the World Bank) believe that accounting should accept this objective and

work diligently towards achieving it. A number of bankers and others have advised us that, increasingly, credit risk will be managed in some respects using tools being developed to enable improved credit risk diversification and reduction, including securitisations and credit derivatives. We note the fundamental inconsistency of carrying loans at cost, while credit derivatives used to manage the risk are carried at fair value. We believe that the objective of improving the measurement of loans raises significant questions with respect to the viability of the historical cost-based net gap risk approach for external reporting purposes.

4. Also of concern is whether it is possible to define the "trading" and "banking" books with sufficient precision that those definitions will be implemented consistently from bank to bank and over time.

4.8 The above summarises the basic questions and concerns we have with respect to the contention of many banks that fair value measurement of banking book assets and liabilities should be rejected because it does not reflect how banks are managed. Specifically, we would like to better understand the basis for the banks' case that the net gap management approach, based on historical costs, is appropriate for external reporting purposes, and that fair value measurement would "reduce, rather than improve, transparency". In our understanding, the opposite would seem to be the case.

4.9 We recognise that some important practical considerations need to be taken into account in addressing these issues. In particular, bankers and others have stressed to us that, regardless of the conceptual and empirical evidence that may be gathered, the plain fact is that net gap management of the banking book, based on historical costs, continues to be considered appropriate within the banking community. Thus, it is reasoned, if it is appropriate for internal risk management, it should be capable of providing a reasonable basis for external reporting. More than this, they believe that fair value measurement would be confusing and inconsistent with the way managements see and manage the

business. Reporting banking book assets and liabilities on a historical cost basis, supplemented by net gap analysis, enables users to see the business "through the eyes of management". Further, there is concern that requiring fair value-based external reporting would cause banks to incur major costs to develop systems for preparing financial information that they believe has little or no value from a risk management perspective.

4.10 The Joint Working Group agrees that these considerations and concerns need to be carefully evaluated in relation to the conceptual and empirical evidence indicating the superiority of fair value over cost-based accounting for financial instruments – and more specifically, with reference to the above-noted questions with respect to the usefulness and information value of historical cost-based net gap accounting for external reporting purposes.

4.11 At the same time, we understand that major changes have been taking place in the management of banking book financial risks by many banks. A number of bankers have told us that they now regularly supplement traditional net gap cash flow management processes with other methods that do involve fair value measures and risk analyses. In particular, we are aware of major developments taking place in credit risk management, and in the management of loan portfolios on bases that utilise current value information on the effects of changes in credit worthiness and interest risk conditions. Several bankers have indicated to us that, in their view, fair valuation of banking book assets and liabilities is the direction of the future for both internal and external reporting purposes – but there needs to be more study of a number of measurement issues, and a period for transition.

4.12 The JWG strongly believes in the importance of studying the issues and has, as noted in Appendix B, been carrying out an extensive work programme. We would welcome input from the banking associations on the issues noted in Appendix B. We are particularly interested in their views on the implications for the future development of financial

accounting for financial instruments of changes taking place in “net gap management” and the growing use of fair values as a key data input to managing interest and credit risks.

Banking book intermediation earnings activities

4.13 A number of bankers have explained to us that banking book activities are fundamentally different from those of the trading book. In particular, banking book activities involve an “intermediation” process that, some contend, is not unlike a manufacturing process. The banking book earnings process includes deposit-taking and deposit servicing activities (including cost of ATM and other facilities), and loan assessment, servicing and collection activities. These activities require significant inputs of employees, systems, and facilities to produce fee revenues and loan interest income.

4.14 We understand that some believe that it is no more appropriate for banking book financial assets and liabilities to be measured on a fair value basis, with unrealised gains and losses recognised in income, than it would be for a manufacturing enterprise’s plant and equipment or raw materials inventories to be so measured and accounted for. They reason that, as with plant, equipment and raw materials, banking book assets and liabilities should be measured on a cost basis with income recognised only as it is earned.

4.15 This does not seem to the JWG to be a valid analogy. Certainly, there can be no quarrel with recognition of fee revenues as the services are rendered. However, a loan portfolio is a very different class of asset than the non-financial assets of a manufacturing enterprise. Unlike plant and equipment and raw materials, which are held for use as inputs into a production process, loan assets represent contractual rights to future cash flows. Income is normally not recognised in respect of manufacturing operations until there is a sale, because the sale is considered to be the critical event evidencing the

creation of income. This critical event results in the contractual right to receive cash (i.e. to receive a financial instrument).

4.16 It is true that significant effort must be expended and costs incurred to monitor, service and collect loans. But, such activities are of a very different order than the manufacturing processes necessary to transform plant, equipment and other inputs into goods and services for sale. The fair value of the contractual cash flows of loan assets is reduced by the amounts that would be demanded in the market place for servicing and collecting the loans. The return for servicing these loans is recorded in income as interest and as changes in their fair value. If a lender is more or less efficient and effective than the market's valuation, it will record a higher or lower return as experience unfolds over the terms of the loans. Fair value measurement should result in reflecting the effects of changes in circumstances and expectations when these changes take place.

4.17 In summary, it would seem to our understanding, that the income earning activities in the banking book can be appropriately represented on a fair value basis.

Demand-type deposits

4.18 Determining realistic fair values for demand deposits is one of the issues that is at the heart of concerns with respect to the implementation of a comprehensive fair value standard for financial instruments of banks.

4.19 The concern is that methods for fair valuing demand deposits will not be compatible with the fair valuation of significant loan assets. The result may be that fixed rate loan assets that are not prepayable will appear to be volatile as interest rate and other market conditions change, while demand deposits will not show reciprocal offsetting fair value changes. This, it is feared, would have a multiplier effect on the volatility of reported equity, given the high leverage of banks. This concern would seem to have been

confirmed by the IASC/CICA Discussion Paper's conclusion that the appropriate fair value measure of demand deposits is likely to be close to their face value, and that, unlike fixed rate loan assets, the fair value of demand deposits is not likely to vary much with changes in interest rates. [IASC/CICA Discussion Paper, 1997, Chapter 5]

4.20 The problem does not arise under traditional historical cost-based accounting for banking book assets and liabilities, because neither side of the balance sheet is adjusted for the effects of changing fair values. But historical cost accounting "solves" the problem by ignoring it. Addressing the fair value measurement issues requires us to consider whether there is, or could be, a real and relevant volatility in a net banking book position that is not being reported.

4.21 The JWG is participating in a project being carried out by the FASB to study possible approaches to fair valuation of demand deposits and like instruments that depend on expectations relating to future transactions. This is still a work in process, and the JWG has not as yet reached definitive conclusions. The work has involved consultations with banking experts and the JWG would welcome input from the Banking Associations.

4.22 The JWG strongly believes that it is extremely important to rigorously address and resolve issues regarding the extent to which future expected events and transactions may be relevant to the determination of the stream of cash flows related to existing demand deposits, as well as certain loan assets. It believes that this is vital not only to determine an appropriate basis for the fair value measurement of deposits and loans, but also, as noted earlier, as a framework for developing reasonable, comparable approaches to net gap cash flow analysis.

4.23 The JWG is most interested in receiving input on these matters, and will continue to actively consult with affected interests in its deliberations.

Broad implications for financial stability

4.24 The commonly expressed concern of bankers and banking regulators has been that fair value accounting for banking book financial instruments would exaggerate volatility by over emphasising the effects of short-term market fluctuations – and that this could undermine public confidence and affect adversely the ability of banks, banking regulators, and governments to implement sound financial policies and achieve economic stability. Bankers have emphasised to us that decisions about banking book transactions and performance should be made, not on the basis of tracking the effects of short-term swings, but on the basis of long-term expectations.

4.25 Some people believe that prudent cost-based accounting is in the best interests of the general public in maintaining sound and stable banking systems. In their judgement, there are relatively predictable economic cycles, and it is prudent practice to provide for possible future losses in good times to be drawn back when times are not so good. In the past, some bank regulators and governments have encouraged some degree of flexibility in accounting to smooth out reported volatility. In some cases, existing losses have not been recognised on the expectation of recovery from what is believed to be a temporary downturn in economic conditions. The overriding concern may be that it is important not to unnecessarily alarm depositors and investors where it may be expected that a bank can work its way out of problems, perhaps with quiet regulator and government support.

4.26 In summary, we have been told by some bankers and regulators that conservative, cost-based accounting, with prudent smoothing of market volatility is essential to maintaining confidence in the vitally important banking sector, and in promoting general economic stability.

4.27 As noted earlier, these views conflict with the objectives of transparency that are central to the efficiency of capital markets – and to the policies of many securities commissions

and other regulators to enforce realistic loan loss provisioning. An example is the recent US SEC decision, published in a joint statement with bank regulators, with respect to the over-provision for losses on loan portfolios by certain financial institutions in the US. Market evidence does not bear out the claims of the beneficial effects of conservative cost-based accounting to smooth out volatility. The reason is that it obscures the facts and exacerbates uncertainty in the market place – and fails to reflect the effects of changes in economic conditions when they take place. Capital markets are then more likely to misallocate and misprice capital.

4.28 Two of the most fundamental qualitative characteristics of financial statements as set out in the IASC Framework (and similar conceptual frameworks adopted in the United States and elsewhere) are faithful representation and neutrality. The IASC Framework states that, "to be reliable, information must represent faithfully the transactions and other events it either purports to represent or could reasonably be expected to represent." If accounting smoothes out real volatility in the market, the accounting information would fail the test of representational faithfulness. And while prudence (the inclusion of a degree of caution in the exercise of judgement in preparing financial statements) is desirable, the IASC Framework notes that "the exercise of prudence does not allow, for example, the creation of hidden reserves or excessive provisions, the deliberate understatement of assets or income, or the deliberate overstatement of liabilities or expenses, because the financial statements would not be neutral and, therefore, not have the quality of reliability." Accounting has an obligation to portray strengths and weaknesses without bias – for banks and other entities.

4.29 A common concern that many banks have expressed to us is that short-term fluctuations of market prices have not necessarily been rational. There is some circularity in this argument, because if capital markets do not have reliable information on the current value and risk characteristics of banks' financial instruments, then market participants do not have the full information they need to make rational decisions.

4.30 We recognise that markets have been volatile and that, on occasion, a sharp downturn has fairly quickly reversed. However, we must ask whether cost-based measures are an improvement on fair values in these situations and whether accountants and business managements are in a position to identify, up front, those market swings that are temporary or irrational. Simply stated, can or should management "second-guess" the market for financial reporting purposes?

4.31 We also recognise the concern that fair values be determined on a prudent and consistent basis where there is no clearly relevant active market price – and our efforts, as noted in Part II, are directed at developing improved bases for achieving this.

Relationship to banking regulation and capital adequacy

4.32 A number of banks and bank regulators have emphasised to us that they believe it important to consider the implications of fair value accounting for banking regulation in general, and capital adequacy requirements in particular. We are most interested in consulting with banking regulators, and various members of the JWG have had several meetings with banking regulators in a number of countries, and with members of the Basel Accounting Working Group in order to further our mutual understanding.

4.33 It is our understanding that effective capital adequacy requirements begin with reliable and consistent measures of the value of financial instruments -—and that the objective is to determine the amount of capital a bank should have against the risk of future losses that could erode the existing value of a bank's assets.

4.34 It may be that some regulators are happy with conservative accounting because an over-provision for loss effectively augments capital. It has the opposite effect, however, in the year(s) of reversal. The net result is to misstate financial condition both in the year of the

provision and the year of the reversal. There would seem to be a potential problem for capital adequacy evaluation if there is not a clear measurement benchmark against which to assess the impact of conservative accounting, and whether it is indeed conservative.

4.35 Several banking regulators have told us that they believe it highly desirable that the measurement bases for financial accounting and for regulatory evaluation purposes be in harmony. They noted that it would be most unfortunate and potentially confusing if a bank provides measures of its assets and liabilities that are inconsistent with what regulators consider appropriate. Others take an opposite point of view. They believe that the objective of bank regulation – safeguarding depositors' accounts – may require some modifications of the assumptions and measurements that are relevant to investors for capital market purposes, much in the same way that measures of taxable income sometimes differ from GAAP income due to different objectives of tax reporting and investor reporting.

4.36 It has also been pointed out to us that most countries' money supply statistical data at present includes aggregated historical cost-based banking book numbers gathered from financial institutions. Some consideration may need to be given to the possible implications of fair value measurement of banking book assets and liabilities for this data and its use in money supply management. We have not considered these implications.

Definition of banks and banking activities

4.37 If special accounting or disclosure standards are to apply to banks or banking activities, how should banks or banking activities be defined? In many parts of the world, activities traditionally thought of as banking activities (taking deposits, offering cheque-writing services, making mortgage and commercial loans, and so on) are increasingly undertaken by entities other than banks. Similarly, banks have moved into areas, including

brokerage, investment banking, and insurance, traditionally undertaken by entities other than banks.

Summary

4.38 The JWG accepts that there are important unique aspects of banking activities that warrant careful consideration in developing relevant and reliable measurement and disclosure standards for financial instruments. The following are among the principal issues that have arisen from the deliberations and consultations of accounting standards setters to date:

Net gap approach to interest and liquidity risk management

4.39 The JWG has difficulties accepting that the net gap approach is sufficiently reliable and transparent to support cost-based accounting for banking book assets and liabilities for external reporting purposes. The net gap approach seems analogous to a macro hedging process. We understand that it is reasoned that asset and liability positions that are considered to be offsetting are appropriately carried on a cost basis because the net positions are not exposed to interest and liquidity risks. The JWG is concerned as to

1. the potential variability of methods for determining existing net gap positions, and whether estimated offsetting future cash flow streams may mix in expected results of future transactions; and
2. how hedge effectiveness and net gap positions are, and can be, measured and disclosed so as to convey understandable, complete and reliable information on outstanding risk positions and income results.

These concerns, when taken with the JWG's working position on the general relevance of fair value measurement of financial instruments, leads it to suggest that the fair value

measurement of all banking book financial assets and liabilities (based on consistent, stated standards) should be the objective – that it holds the best long term promise for providing the appropriate basis for external financial reporting, and for providing a market-based discipline and check on the net gap measures.

Fair value measurement principles and reliability issues

4.40 The JWG recognises that there are some significant issues relating to the reliable measurement of such financial instruments as credit card receivables and demand deposits. It believes that it is extremely important to rigorously address these issues now. This is necessary to improve net gap measures for external reporting purposes as well as fair value determinations. These issues may be best addressed through co-operative efforts combining the knowledge and experience of banking interests and accounting standards setters.

4.41 We would hope that the above analysis prepared from the perspective of accounting standard setters will help to provide a basis for developing common objectives and constructive approaches towards improving the quality and transparency of accounting for financial instruments. We emphasise that we welcome further information and evidence on the issues that could affect the development of appropriate accounting standards for financial instruments and their application to banks.

APPENDICES

A. RESPONSES AND PAPERS FROM BANKING INTERESTS REVIEWED IN PREPARING THIS PAPER

B. THE JOINT WORKING GROUP ON ACCOUNTING FOR FINANCIAL INSTRUMENTS

C. SELECTED EMPIRICAL AND POLICY STUDIES, STANDARD-SETTER PUBLICATIONS AND OTHER REFERENCES

Appendix A

RESPONSES AND PAPERS FROM BANKING INTERESTS REVIEWED IN PREPARING THIS PAPER (Banking papers, response letters, meetings)

Banking Papers and Response Letters Received

Basel Committee on Banking Supervision, *Best Practices for Credit Risk Disclosure*, Consultative Paper, July 1997.

Basel Committee on Banking Supervision, *Credit Risk Modelling*: *Current Practices and Applications*, April 1999.

Basel Committee on Banking Supervision, *Enhancing Bank Transparency*, September 1998.

Basel Committee on Banking Supervision, *Principles for Managing Credit Risk*, Consultative Paper, July 1999.

Basel Committee on Banking Supervision, *Sound Practices for Loan Accounting and Disclosure,* July 1999.

Basel Committee on Banking Supervision, *Framework for Supervisory Information about Derivatives and Trading Activities*. (Joint Report by the Basel Committee on Banking Supervision and The Technical Committee of IOSCO.), September 1998.

British Banking Association, on IAS 39: Recognition and Measurement of Financial Instruments, letter dated March 31, 1999.

Federal Reserve System Task Force, *Credit Risk Models at Major U.S. Banking Institutions: Current State of the Art and Implications for Assessment of Capital Adequacy*, May 1998.

Federation Bancaire de l'Union Europeene, on IAS 39, letter dated January 28, 1999.

Joint Working Group of Banking Associations, letter dated November 4, 1998.

Federation des Experts Comptables Europeene. *Accounting Treatment of Financial Instruments—A European Perspective*. FEE, Brussels, 1997.

Comment letters on IASC Discussion Paper, *Accounting for Financial Assets and Financial Liabilities* London: IASC, March 1997:

- ABN AMRO Bank
- American Bankers Association
- Association Francaise des Banques
- Australia and New Zealand Banking Group

Banks - management

Australian Bankers' Association
Australian Financial Institutions Commissions
Bank of Montreal
Basel Committee on Banking Supervision
British Bankers Association
Bundesverband deutscher Banken
Canadian Bankers Association
Chase Manhattan Corporation
Canadian Western Bank
Citibank
Commonwealth Bank of Australia
Danish Financial Supervisory Authority
Deutsche Bank AG
Dresdner Bank
Federation Bancaire de l'Union Europeenne
Federation of Bankers Associations of Japan
Hang Seng Bank
HSBC Holdings
ING Bank
J P Morgan
London Investment Banking Association
Marine Midland Bank
Mitglied des Vorstandes der Deutsche Bank
National Australia Bank
Netherlands Bankers' Association
New York Clearing House
Office of the Superintendent of Financial Institutions (Canada)
Rabobank Nederland
RMA – Association of Lending and Credit Risk Professionals
Robeco Effectenbank
Schretlen & Co
Societe Generale de Belgique
Swiss Bank Corporation
The Bank of Nova Scotia
Union Bank of Switzerland
World Bank

Comment Letters on IASC Exposure Draft E62, Financial Instruments: Recognition and Measurement, June 1998:

ABN AMRO Bank (Netherlands)
American Bankers Association (USA)
Association Française des Banques (France)
Australia and New Zealand Banking Group (Australia)

Australian Bankers' Association (Australia)
Australian Financial Institutions Commission (Australia)
Bank of Baroda (India)
Basle Committee on Banking Supervision (Switzerland)
British Bankers' Association (UK)
Bundesverband deutscher Banken (Germany)
Commonwealth Bank of Australia (Australia)
Danish Financial Supervisory Authority (Denmark)
Dresdner Bank (Germany)
Dutch Association of Insurers (Netherlands)
Fédération Bancaire de l'Union Europeenne (European Union)
Fédération Française des Sociétés d'Assurances (France)
Federation of Bankers Associations of Japan
Hang Seng Bank (Hong Kong)
ING Bank (Netherlands)
Italian Banking Association (Italy)
London Investment Banking Association (UK)
Mitglied des Vorstandes der Deutsche Bank (Federal Association of German Banks) (Germany)
National Australia Bank (Australia)
Netherlands Bankers' Association
New York Clearing House (USA)
Rabo Securities (Netherlands)
Rabobank Nederland (Netherlands)
Robeco Effectenbank (Netherlands)
Schretlen & Co (Netherlands)
World Bank

Meetings with bankers/banking regulators

Meetings of IASC staff and/or JWG members with bankers and banking regulators on the fair value measurement proposals of the IASC Discussion Paper and JWG deliberations thereon, as they relate to banking operations, have included the following:

April 30, 1997	Task Force on Accounting Issues of the Basel Committee on Banking Supervision, Brussels (Milburn)
May 20, 1997	FEE Extended Banks Working Party, Brussels (Milburn, Hague)
June 12, 1997	Banking and other financial institutions accounting executives, Tokyo (Yamada, Milburn and Hague)

Banks - management

June 27, 1997	Canadian Bankers' Association, Toronto (Milburn and Hague)
September 26, 1997	Canada Trust financial executives, Toronto (Milburn and Hague)
March 24, 1998	Financial Services Authority (UK), London (Cook)
June 9, 1998	Consultative meeting with representatives of financial institutions and business and accounting communities, Frankfurt (Joint Working Group)
June 18, 1998	FEE Extended Banks Working Party, Brussels (Pacter)
October 7, 1998	Presentation to JWG on Bank ALM management by Jean-Francois Lepetit (BNP) and Russell Picot (HSBC) (Joint Working Group)
October 9, 1998	Consultative Meeting with representatives of Dutch banking and industry, The Hague (Gil, Milburn, Hague)
February 18, 1999	Financial Services Authority (UK), London (Cook, Milburn, Hague)
March 17, 1999	British Bankers' Association (Cook, Ebling)
March 18, 1999	Bank of England, London (Cook)
April 21, 1999	British Bankers' Association (Cook, Ebling)
June 10, 1999	Belgian Bankers' Association, Brussels (Pacter)
June 16, 1999	British Bankers' Association (Cook, Milburn, Hague)

July 5, 1999	Bank of England, London (Cook, Ebling)
July 19, 1999	Meeting David Swanney and Jerry Edwards, (members of Task Force on Accounting Issues of the Basel Committee on Banking Supervision), Montreal (Milburn and Hague)
July 26, 1999	Financial Services Authority (UK), London (Ebling)

Appendix B

THE JOINT WORKING GROUP ON ACCOUNTING FOR FINANCIAL INSTRUMENTS

Objectives:
The Financial Instruments Joint Working Group of Standard Setters (JWG) is a partnership of standard setters established in 1997 with the following objectives:

- To develop a proposed comprehensive standard on accounting for financial assets and financial liabilities, supported by a basis for conclusions, and appropriate guidance material and examples.
- The standard is to put in place a coherent framework of principles for the recognition and fair value measurement of financial assets and liabilities, and for the presentation and disclosure of gains and losses and hedging activities.
- The principles that are to be the bases of the standard are those set out in the IASC Discussion Paper, Accounting for Financial Assets and Financial Liabilities, as further developed or amended as a result of the work program and deliberations of the JWG.

Members of the JWG are (name and affiliation):

- Alex Milburn (Chair), IASC
- Wayne Lonergan, PricewaterhouseCoopers, Sydney, Australia
- Patricia Stebbens, Australian Accounting Research Foundation, Melbourne, Australia
- Tricia O'Malley, KPMG, Toronto, Canada
- Ian Hague, Canadian Institute of Chartered Accountants, Toronto, Canada
- Gerard Gil, BNP, Paris, France
- Etienne Boris, PricewaterhouseCoopers, Paris, France
- Jochen Pape, PricewaterhouseCoopers, Dusseldorf, Germany
- Günther Gebhardt, Goethe-Universität, Frankfurt am Main, Germany
- Norbert Breker, PricewaterhouseCoopers, Dusseldorf, Germany
- Shigeo Ogi, Tohmatsu & Co., Tokyo, Japan
- Tatsumi Yamada, Chuo Audit Corporation, Tokyo, Japan
- Mike Bradbury, University of Auckland, Auckland, New Zealand
- Craig Heppleston, Reserve Bank of New Zealand, Wellington, New Zealand
- Erik Mamelund, Arthur Andersen & Co., Oslo, Norway, representing the Nordic Federation of Accounting Standard-Setters
- Allan Cook, Accounting Standards Board, London, U.K.
- Paul Ebling, Accounting Standards Board, London, UK
- James Leisenring, Financial Accounting Standards Board, Norwalk, CT, U.S.A.

Member responsibilities:
It is expected that each member of the JWG will participate in the deliberations of the group on the basis of his or her own views, giving consideration to the evidence presented to the JWG. Each member is expected to keep its standard setting body apprised of the work and deliberations of the JWG, and to convey the views of its standard setting body back to the JWG.

Voting rules:
Individual issues are determined by a simple majority of JWG delegation. The support of two-thirds of the members is necessary to approve the document as a whole.

Work Programme as of August 1999:

Topic 1. Scope - including application to non-public/smaller enterprises

Issues:

- The IASC Discussion Paper, IAS 39, and SFAS 133 indicate a number of instruments or contracts that need to be evaluated for incorporation in, or exclusion from a long-term standard. Examples: certain commodity contracts, leases, insurance contracts.
- Consideration is also to be given to the application of a standard to non-public or smaller organisations (or consideration of the possibility of an extended transition period – Topic 18).
- Some possibilities for improving the definitions of "financial instruments" and "fair value" will be considered in light of knowledge gained on other projects.

Approach and status:

Scope and definitional issues cannot be settled until work on other issues is fairly complete. IASC/Canada prepared a paper identifying issues for initial consideration by the JWG in August. The U.S. is considering insurance related scope issues.

Topic 2. Transfers of financial assets

Issues:

- To consider application of the "control / components" approach proposed in the IASC Discussion Paper to certain complex transfers of financial assets where the transferor retains an interest in the transferred assets that could be considered to amount to retention of control of the assets.
- To assess applicability of conditions for determining whether control has passed and applicability to legal and economic environments outside the U.S.
- To consider typical transactions in various jurisdictions and the applicability of the discussion paper proposals to those transactions.
- To consider FAS 125 implementation matters identified in the U.S.

Approach and Status:

A subcommittee was established to address the issues with the UK as the project leader. Issues have arisen on possible conditions for determining whether control of financial assets has been surrendered in various complex transactions (including certain factoring situations, securitisations, repurchase agreements, and securities lending) and in assessing the implications of such factors as claims in the event of bankruptcy of the transferor, and restrictions on the ability of the transferee to sell or pledge the transferred assets.

Initial JWG input has been received from JWG members on proposed principles and candidate conditions for sales treatment. Further discussions are taking place to try to resolve differences between UK and US members (who have quite different standards in place) on some key conditions, with Canada participating. These discussions are considering an approach that focuses less on the conditions for surrender of control and more on recognising identifiable components that may be created and exchanged in these transactions ("the pure components" approach).

The UK and US prepared a status report and background presentation for the August JWG meeting. The UK is to develop a proposed comprehensive standard with supporting material and examples for the November JWG meeting.

Topics 3/4/5. Methods for determining fair value

Issues:

- To consider whether financial assets and financial liabilities should be measured based on their individual values or whether recognition should be given to differing values from grouping financial instruments. These issues are sometimes referred to as those relating to the "unit of measure" or "more than one market".
- To extend the analysis in the discussion paper to consider further whether the fair value of demand deposits should reflect expected cash flows - a critical issue for banks. Will also consider associated matters such as the treatment of prepayment risk.
- Other issues include bid-ask-midpoint prices; immediate versus expected future settlement approaches to determining fair values, liability valuation as an asset or in settlement, blockage and control factors.

Approach and status:

The FASB is undertaking an in-depth project with a view to completing a Preliminary Views document on the issues by the end of 1999. The JWG has discussed examples as developed for FASB Board discussions and met with the FASB's Financial Instruments Task Force in January 1999. The JWG have not yet reached firm conclusions on these matters.

The FASB is assessing the logical framework for the complete package of their conclusions on individual issues. The JWG initially considered the overall position on these issues in August 99.

Topics 6/7. Debt

Issues:

The working objective of the JWG is to measure debt at fair value. Two major questions have been examined in relation to reasonably implementing this objective:

- Whether there should be an exemption for the issuer's credit risk component of debt.
- Whether there should be an exemption for debt that is intended to finance non-financial assets.

Approach and Status:

On the first issue the JWG examined the possibility of not fair valuing the issuer's credit risk component. Although most of the JWG believe that there is no convincing conceptual case for exclusion under a fair value model, a number have felt that an exception could be desirable on practical grounds. However, on considering the practical implications of trying to exclude the credit risk component from fair valuation, the JWG concluded in April 99 that it should be fair valued. The JWG is considering providing that, as a practical matter, fair value adjustment would only be necessary in respect of private debt when there is clear evidence of a substantial change in the credit worthiness of the issuing enterprise.

On the second issue the JWG has concluded that there is no basis for excluding debt from fair value measurement on the grounds that it is financing non-financial assets that are carried on a cost basis. It is reasoned that an enterprise's risk management and hedging and financing strategies are better handled by disclosure than by making exceptions to the fair value measurement model for financial instruments.

Australia is consolidating the evidence and arguments and drafting a basis for conclusions supporting these positions, and is developing practical application guidance.

Topic 8. Loan assets with no observable market value

Issues:

- To extend the general proposals in the IASC Discussion Paper for applying fair value principles to loan assets that do not have a market value.
- To consider adjustments for changes in interest rates; issues relating to measuring credit risk deterioration and impairment (including consideration of present value determinations using

contracted, expected or "certainty equivalent" cash flows); information asymmetry; distinguishing credit risks/impairment, interest and foreign exchange income effects.

Approach and status:

The JWG has concluded that, subject to overcoming any feasibility issues, all loan assets should be measured at fair value. The JWG considered an approach whereby such assets would be adjusted only for interest rate risk and foreign exchange risk. However, it rejected that approach on grounds of the additional complexities it would introduce, as well as the lack of relevance of a number only partially adjusted for changes in fair value.

Australia is drafting a basis for conclusions supporting this position. Australia is also co-ordinating consultations as to the feasibility of the proposal, first in Australia and subsequently in other JWG member jurisdictions.

Topic 9. Banks - management

Issues:

The banking industry has been particularly critical of fair value accounting for financial instruments other than those instruments managed in their trading books. Many bankers indicate that fair values are not relevant to their "banking book" activities and that their use is not consistent with the manner in which these activities are typically managed.

Approach and status:

A paper has been prepared that sets out the JWG's understanding of banking concerns with respect to relevance, reliability and implications of unique aspects of banking activities. JWG representatives have met with a number of banking representatives during the development of this paper. The JWG proposes to use this paper as a basis for further discussion with banking representatives over the coming months.

Topic 10. Reliability of fair values for non-traded instruments

Issues:

A number of respondents to the March 1997 IASC Discussion Paper cited problems with determining reliable fair value measurements for non-traded financial instruments. However, few provided details of the difficulties that would be encountered.

Approach and status:

A survey is underway to gather additional information from constituents regarding difficulties with fair value measurement. This survey work commenced at the end of May in each of the

JWG member jurisdictions, as well as several other IASC member jurisdictions, including the Netherlands, Switzerland and Malaysia. Results are expected in Q3 99. The JWG will then consider whether additional work is necessary, or proceed to draft material for a standard and basis for conclusions.

The FASB is also in the process of developing a paper illustrating means of determining fair values.

Topic 11. Strategic investments

Issues:

It has been suggested that certain investments held for “strategic” purposes should not be measured at fair values. Such investments include “cross-holdings”, common in Japan, and other investments that might be considered to have certain non-financial attributes.

Approach and status:

The JWG has considered a number of examples of such investments to see if some changes in the definition of “financial instruments”, or some exemption from fair value accounting may be necessary to accommodate their unique aspects. The JWG accepted that some investments have non-financial elements that could be distinguished and accounted for as such, and that, in some situations, the substance of an investment is not that of a financial instrument within the scope of this project. For example, investments to be accounted for on an equity basis because significant influence exists, or where the substance is an investment in research and development that should be accounted for as such. The JWG concluded that these situations could be appropriately dealt with through application of defined concepts and fair value principles.

IASC/Canada are to draft (with input from Germany), proposals for demonstrating the application of scope and definitions to these situations. The JWG plans to consider this material in Q3 99.

Topic 12. Embedded instruments

Issues:

If all financial assets and financial liabilities are measured at fair value, with gains and losses presented in the same performance statement, then it is unnecessary to account separately for financial assets and financial liabilities embedded in other financial assets and financial liabilities since the accounting result is the same whether or not components of the instrument are separated. However, it is necessary to consider how financial instruments embedded in non-financial instruments not measured at fair value (for example, leases, certain insurance contracts, purchase orders etc.) should be accounted for.

In these situations some special accounting rules are likely to be necessary to ensure that a financial instrument that is embedded in another balance sheet item is accounted for in the same manner as a stand-alone instrument.

Approach and status:

Canada has prepared a paper analysing the issues for JWG members' consideration. Any matters arising will be considered and draft conclusions developed in Q3 99.

Topic 13. Servicing rights

Issues:

Servicing rights obtained in a securitisation transaction, while not meeting the definition of a financial instrument are so closely linked to financial instruments that it seems logical and relevant to use a similar basis of accounting.

Approach and status:

The JWG has concluded that servicing rights, when obtained in a securitisation transaction, should be treated as financial instruments and, hence, measured at their fair value.

In April 99 the JWG discussed a proposed standard and basis for conclusions based on SFAS No. 125. It was concluded that some simplification of that material might be possible and the U.S. revised material that was considered in August 1999.

Topic 14. Income/equity presentation of gains and losses

Issues:

The JWG is working to demonstrate the usefulness of a fair-value based income statement and also to develop disclosures of key information that provide insights into the causes of fair value changes and the links with an enterprise's risk management policies. This includes considering presentation of unrealised/realised gains and losses, gains and losses on debt, interest income / expense.

Approach and status:

The JWG agrees that gains and losses on changes in fair value should be recorded in the income statement. In addition, some supplemental historical cost based information might be retained in transition. Primary disaggregation of gains and losses would be based on risk characteristics as disclosed in risk management policies. Secondary disaggregation would be based on management reporting and disclosure by business segments.

The UK is preparing material to demonstrate the application of the above conclusions, including disclosure of a fair value based interest number. This material, including illustrations of possible presentation and disclosures will be considered by the JWG in Q3 99.

Topic 15. Hedges

Issues:

Under a fair value accounting model gains and losses on financial instruments hedging other financial instruments will be recognised in income at the same time. To the extent that the hedge is effective the income statement will portray this. However, there remain situations where financial instruments are used to manage risks inherent in non-financial assets and liabilities not measured at fair value, or risks associated with future events that are not recognised for accounting purposes until those future periods.

Approach and status:

In April the JWG agreed to develop for further consideration a position that:

(a) would preclude any form of hedge accounting (either by deferring gains and losses on hedging instruments to "basis adjust" hedged items, or by presentation of gains and losses in a separate component of income or in another performance or equity statement);

(b) but would instead permit note disclosure of intended hedges and gains and losses thereon, within the context of disclosure of the enterprise's financial risk management policies and hedging strategies.

This decision was the result of concluding that hedge accounting cannot be justified on any conceptual basis, and of the inability to agree on any of the income-performance-equity statement presentation compromise possibilities. In respect of the conceptual case for hedge accounting, the large majority of the JWG accepts the reasoning of the IASC Discussion Paper, and are agreed that the practice of deferring gains and losses on the balance sheet to achieve basis adjustment accounting is unacceptable. On the income-performance-equity presentation possibilities, the majority of the JWG conclude that it is clear from its studies and the evidence provided by existing practices and standards (including IAS 39 and SFAS 133), that they require highly complex rules that are costly to implement and create considerable problems for user understanding. As well, despite intricate rules to try to close loopholes, they are open to abuse. In short using a separate component of a financial performance statement to present gains and losses associated with hedging activities is not considered to be a helpful compromise.

IASC/Canada is developing the disclosure only approach, and the case for it, for consideration by the JWG in Q3 99.

Topic 16. Users

Issues:

A lack of user interest in fair values is often cited by critics as a reason for not adopting a fair value measurement approach for financial instruments.

Approach and status:

In late 1997 and early 1998 the FASB, CICA and AIMR jointly sponsored a series of focus group studies on the use of fair values using U.S. and Canadian based samples of AIMR members. A majority of those users participating in the focus groups indicated that information about fair values of financial instruments is important and wanted some improvement in the amount and quality of that information.

Topic 17. Disclosure

Issues:

- To consider how disclosures of financial risk management practices should be expanded[1].
- To consider extent to which additional disclosures of risk exposures and the extent of measurement uncertainty in fair values is necessary to adequately present fair value information.

Approach and status:

UK is considering areas of disclosures identified to date, as well as the possibility of other disclosures that might be necessary, or that might fall away. The JWG will discuss this topic further in Q3 99.

Topic 18. Transition

Issues:

- To consider transitional provisions.

Approach and status:

This topic will be considered in Q3 99, once the principles to which transition is required are sufficiently well developed.

Topic 19. Change Management

[1] Note: Also proposed that non-financial, enterprise risk disclosures might be expanded, but not in this project.

Issues:

A fair value based standard is likely to involve much change to accounting. The JWG is, therefore, considering implications of the proposed standard and means by which it can clearly present the rationale for change.

Approach and status:

JWG representatives have sought out opportunities to inform constituents of the activities of the group through meetings as well as the media. This is an ongoing process that will be accelerated as the time comes to issue a document.

Appendix C

SELECTED EMPIRICAL AND POLICY STUDIES, STANDARD SETTER PUBLICATIONS AND OTHER REFERENCES

Empirical Studies

Ahmed, Anwer S. and Carolyn Takeda. "Stock Market Valuation of Gains and Losses on Commercial Banks' Investment Securities: An Empirical Analysis. *Journal of Accounting & Economics*, Vol. 20, 1995, pp. 207-225.

This study is based on a sample of 152 bank holding companies listed on the NYSE, AMEX, or NASDAQ. "We find that after controlling for interest rate sensitivity of other (on-balance sheet) net assets, change in unrealized gains and losses has a significant *positive* effect on bank stock returns. Furthermore, we find that realized gains and losses have a significantly *positive* effect on bank stock returns in normal periods, but in periods of low capital and earnings [low accounting return on assets before realized gains and losses and low capital ratios before realized gains and losses], the coefficient on realized gains and losses is significantly lower."

Barth, Mary E., Wayne R. Landsman, and James M. Wahlen. "Fair value accounting: Effects on Banks' Earnings Volatility, Regulatory Capital, and Value of Contractual Cash Flows." *Journal of Banking & Finance* No. 19, 1995, pp. 577-604.

This study restated the retained earnings and regulatory capital of certain U.S. banks (those with data on the Compustat Annual Bank Tape), 1971-1990, to reflect the fair values of disclosed investment securities. The number of banks varied each year, and the largest number (1989) was 137 banks. The study found: "(1) Fair value-based earnings are more volatile than historical cost earnings, but share prices do not reflect the incremental volatility. (2) Banks violate regulatory capital requirements more frequently under fair value than historical cost accounting. Fair value-based violations help predict regulatory capital violations, but share prices do not reflect this potential increased regulatory risk. (3) Share prices reflect interest rates changes, even though investment securities' contractual cash flows are fixed."

Barth, Mary E. "Fair Value Accounting: Evidence from Investment Securities and the Market Valuation of Banks. *The Accounting Review, Vol. 69, No. 1, January 1994, pp. 1-25.*

This study is based on U.S. banks whose financial statement data are on the 1990 Compustat Annual Bank Tape. Data covers the period 1971-1990. There were approximately 100 data observations each year. "Fair value estimates of investment securities provide significant explanatory power beyond that provided by historical costs. Strikingly, historical costs provide

no significant explanatory power incremental to fair values. Using a measurement error model, investment securities' fair values are found to have less measurement error than historical costs vis-a-vis the amount reflected in share prices. The findings for securities gains and losses are different. The significance of any incremental explanatory power for fair values beyond historical costs depends on the specification of the estimating equation.... Thus, although fair value estimates of investment securities appear reliable and relevant to investors in valuing bank equity, fair value securities gains and losses do not.

"One interpretation for these findings is that although estimation error in disclosed fair values is small enough that investment securities' fair values appear value-relevant, when the annual fair value estimates are used to calculate securities gains and losses, the effect of the combined estimation errors renders securities gains and losses value-irrelevant. Another plausible interpretation is that securities gains and losses might be offset by unrecognised correlated gains and losses on other assets and liabilities. Why this affects securities gains and losses but not investment securities is an unresolved question. Evidence from supplemental analyses gives more credence to the first interpretation than to the second."

Barth, Mary E., William H. Beaver, and Wayne R. Landsman. "Are Banks' SFAS No. 107 Fair-Value disclosures Relevant to Investors?" ***Bank Accounting & Finance*****, Summer 1997, pp. 9-15.**

This study examined the banks on the 1992 and 1993 Compustat bank tapes. The assets of those banks accounted for more than 90% of total bank assets and total bank deposits in the U.S. The study found that "bank market values of equity do reflect fair value disclosures," "investors place less weight on loans' fair values for less healthy banks than for more healthy banks," and "fair-value estimates disclosed under SFAS No. 107 provide significant explanatory power for bank share prices beyond that provided by book values for three of the five major asset and liability categories disclosed, most notably, loans.... As investors and bank managers become more familiar with the disclosures and develop more sophisticated techniques for estimating fair values, the ability of fair values to explain bank share prices should increase."

Barth, Mary E., Wayne R. Landsman, and James M. Whalen. "How Does Fair-Value Accounting for Investment Securities Affect Earnings Volatility, Regulatory Capital, and Value of Contractual Cash Flows?" ***Bank Accounting & Finance*****, Winter 1995/1996, pp. 17-25.**

Using data from the 1990 Compustat bank tapes, the researchers found:

- Fair value accounting increases the volatility of earnings and on average results in lower reported earnings.
- The additional volatility arising from fair-value earnings is not associated with a reduction in the earnings multiple assigned by investors; our estimate of its effect is virtually zero.

- Banks that meet regulatory capital requirements in the current year under historical cost but not under fair-value accounting are five times more likely to violate regulatory capital in year-plus-one.

Barth, Mary E., William H. Beaver, and Christopher H. Stinson. "Supplemental Data and the Structure of Thrift Share Prices." *The Accounting Review*, Vol. 66, No. 1, January 1991, pp. 56-66.

This study is based on a sample of 165 publicly traded thrift institutions. It found that supplementary disclosures with respect to default risk (information about nonperforming loans) is relevant to the valuation of the share prices of thrifts.

Barth, Mary E., William H. Beaver, and Wayne R. Landsman. "Value-Relevance of Banks' Fair Value Disclosures under SFAS No. 107." *The Accounting Review*, Vol. 71, No. 4, October 1996, pp. 513-537.

This study is based on a sample of 136 banks in 1992 and 1993. "This study provides evidence that fair value estimates of loans, securities, and long-term debt disclosed under SFAS No. 107 provide significant explanatory power for bank share prices beyond that provided by related book values.... We consistently find incremental explanatory power for loans' fair values. Relatively stronger findings are obtained using a set of significant conditioning variables, including nonperforming loans, and interest-sensitive assets and liabilities."

Barth, Mary E., William H. Beaver, and Mark A. Wolfson. "Components of Earnings and the Structure of Bank Share Prices." *Financial Analysts Journal*, May-June 1990, pp. 53-60.

This study is based on a sample of 150 banks on the 1987 Compustat Bank Tape. The study examined two major components of bank earnings – income before reported (realised) securities gains and losses and the amounts of realised securities gains and losses. The study found that "[realised] securities gains and losses behave in a manner consistent with smoothing earnings. That is, investors apparently believe that reported gains and losses in banks' investment securities are timed by bank managements to offset losses and gains in other earnings."

Beaver, William, Carol Eger, Stephen Ryan, and Mark Wolfson. "Financial Reporting, Supplemental Disclosures, and Bank Share Prices. *Journal of Accounting Research*, Vol. 27, No. 2, Autumn 1989, pp. 157-178.

This study, based on a sample of 149 banks with financial statement data on the 1983 Compustat tape, found that investors attempt to make their own fair valuations of loan portfolios in the absence of fair value data reported by banks. "Our results suggest that supplemental data regarding default risk and interest-rate risk explain variation in banks' market-to-book ratios of common equity, over and above the explanatory power provided by the allowance for loan losses and conventional valuation variables.... The capital market's assessment of the market value of such loans is below the reported book value."

Bernard, Victor L., Robert C. Merton, and Krishna G. Palepu. "Mark-to-Market Accounting for Banks and Thrifts: Lessons from the Danish Experience." *Journal of Accounting Research*, Vol. 33, No. 1, Spring 1995 pp. 1-31.

This study examined mark-to-market accounting by 71 banks and 131 savings banks (mutuals) in Denmark in 1989. Danish banks have used mark-to-market accounting for many years. "Our first result concerns the reliability of mark-to-market accounting systems, particularly their susceptibility to management manipulation. We find no compelling evidence in the Danish system that price adjustments, which include the major realized and unrealized gains and losses on investments and some off-balance sheet positions, are manipulated.... [There is some] concern that mark-to-market accounting for loans in Denmark does not entirely overcome managers' tendency to delay reporting of credit risks. Nevertheless, on the key question of whether the mark-to-market accounting system is managed to avoid regulatory intervention, our tests produce no reliable affirmative evidence.

"We found other indications that the Danish mark-to-market accounting system produces numbers that are more reliable indicators of value than the historical-cost numbers reported in the U.S. system. First, stock prices track book values more closely for Danish banks than for either U.S. banks or U.S. thrifts. Second, in contrast to the U.S. experience, banks sold as a result of regulatory intervention have typically fetched prices close to or higher than final reported book value."

Carroll, Thomas J. and Thomas J. Linsmeier. "Fair Value Accounting: Evidence from Closed-End Mutual Funds." Working Paper, June 1996.

This study examined the valuation-relevance of fair value (market value) accounting for investment securities held by closed-end mutual funds. "Our results suggest that investors consistently view investment securities' fair value data as being valuation-relevant. We document a statistically significant association between stock prices and fair values of

investment securities after controlling for historical costs. In addition, we find a consistent and statistically significant association between stock returns and fair value estimates of securities gains and losses."

Eccher, Elizabeth A., K. Ramesh, and S. Ramu Thiagarajan. "Fair Value Disclosures by Bank Holding Companies. *Journal of Accounting & Economics*, Vol. 22, 1996, pp. 79-117.

This study examined the value relevance of fair value data disclosed under SFAS 107 by banks for 1992 and 1993. Collectively, the evidence suggests differences between fair and book values of financial instruments are associated with market-to-book ratios. However, fair value disclosures for financial instruments other than securities are value-relevant only in limited settings."

Levites, Jim B. "Mark-to-Market: Freddie Mac's Fourth Financial Statement." *Journal of Accountancy,* October 1990, pp. 78-87.

Mr. Levites, assistant controller of the Federal Home Loan Mortgage Corporation (Freddie Mac), reports on mark-to-market (MTM) accounting at his institution. "Management believes that disclosure of MTM information for Freddie Mac was both possible and necessary to provide a complete picture of corporate performance."

McAnally, Mary L. "Banks, Risk and FAS 105 Disclosures". *Journal of Accounting, Auditing and Finance*, Summer 1996, pp. 451-490.

This study examines whether FAS 105 footnote disclosures of off-balance sheet instruments provides risk-relevant information. A theoretical model relates market and industry risk measures to FAS 105 disclosures. Empirical tests of the model reveal that these disclosures do provide risk-relevant numbers although the results are not uniformly strong.

Mengle, David L. "Market Value Accounting and the Bank Balance Sheet." *Contemporary Policy Issues*, Vol. 8, April 1990, pp. 82-94.

This study examined all U.S. commercial banks in 1988. It noted that loans rage from 51 per cent of the assets of small banks and more than 60 per cent of the assets of large banks. The study found that "for most banks in the United States, market value accounting might have little practical effect on the balance sheet. It would, however have a significant effect on income statements." The study concluded: "It is difficult to understand why one would prefer irrelevant book values to less precise but clearly relevant market values."

Nelson, Karen K. "Fair Value Accounting for Commercial Banks: An Empirical Analysis of SFAS No. 107". ***The Accounting Review,*** **Vol. 71, No. 2, April 1996, pp. 161-182.**

This is a study of the 200 largest U.S. bank holding companies in 1992. "The results suggest that only the reported fair values of investment securities have incremental explanatory power relative to book value. No reliable evidence of incremental explanatory power is found for the value disclosures of loans, deposits, long-term debt or net off-balance sheet financial instruments."

Olson, Ronald L. "SFAS No. 107: The Challenge of Disclosing Fair Values." ***Bank Accounting & Finance,*** **Spring 1992, pp. 3-12.**

"Fair value disclosures may have a silver lining.... [It] reveals the mistakes of bank managers, which have been hidden by inaction and with historical-cost accounting. Fair value disclosure will force decision-makers to react to problems, not delay."

Petroni, Kathy Ruby and James Michael Wahlen. "Fair values of Equity and Debt Securities and Share Prices of Property-Liability Insurers." ***Journal of Risk and Insurance*****, 1995, Vol. 62, No. 4, pp. 719-735.**

Based on a sample of 56 publicly traded property-liability insurers for the period 1985-1991, the study found "that property-liability share prices can be explained by fair values of equity investments and U.S. Treasury investments, even after controlling for historical costs."

Pfeiffer, Ray J. Jr. "Market Value and Accounting Implications of Off-Balance-Sheet Items." ***Journal of Accounting and Public Policy,*** **Vol. 17, 1998, pp. 185-207.**

The author studied all publicly traded U.S. firms for which mortgage banking is the primary line of business to determine whether (1) stock prices reflect estimates of off-balance-sheet assets derived from information available in the notes and (2) firms enter into transactions designed to manage their reported income and financial position in response to perceived undesirable effects of GAAP for certain transactions. The research findings suggest "yes" answers on both points: "The evidence suggests that despite the absence of originated [mortgage] servicing rights in the balance sheet, they are priced by investors. Regarding the earnings management assertion, the evidence suggests that firms facing net losses before recognizing gains on sales of servicing are more likely to recognize discretionary gains, ceteris paribus."

Pozdena, Randall J. "Bank Failures, Danish Style." Federal Reserve Board of San Francisco Weekly, August 3, 1990.

"A policy of relying on mark-to-market valuation of bank portfolios and prompt closure of capital deficient institutions has two important advantages. First, it gives incentives to bank owners and managers to manage the risk of their institutions, since mismanagement can result in abrupt loss of the bank charter.... Second, prompt closure at positive 'market value' net worth provides a way of ensuring that losses will be borne primarily by equity holders, and not by depositors....

"The behavior of the Danish banking system suggests that Danish regulatory policy [based on mark-to-market accounting] has been effective. Danish bank portfolios reflect a heightened sensitivity to risk on the part of the managements of individual banks.

Pozdena, Randall J. "Danish Banking: Lessons for Deposit Insurance Reform." ***Journal of Financial Services Research,*** **Vol. 5, 1991, pp. 289-298.**

The author, a former vice-president of the Federal Reserve Bank of San Francisco, presents statistics on the Danish banking system and concludes: "In contrast to a U.S. policy of concealing the true commercial condition of weak institutions, the Danes have constructed a system [of mark-to-market accounting] in which regulation obviates the need for an insurance fund and bank shareholders are the most aggressive resolvers of banking problems."

Robb, Sean W. G. "Market Value Accounting in Financial Institutions." ***Accounting Enquiries*****, Vol. 6, No. 1, August 1996, pp. 44-83.**

The study imputed fair values of bank loans from "unambiguous, market-determined assertions of overall bank value." The researcher concluded: "The difference between the observable book value of an asset and its implicit unobservable market value is a source of incremental value-relevant information that is not available in our present historical cost measurement system.... Book-to-market coefficient estimates are similar across balance sheet accounts. However, implied market values differ significantly from reported book values, suggesting that bank balance sheets are inflated."

Simonson, Donald G. and George H. Hempel. "Running on Empty: Accounting Strategies to Clarify Capital Values." ***Stanford Law and Policy Review,*** **Spring 1990, pp. 92-101.**

"Market value accounting is essential if regulators are to effectively monitor financial institutions....

"Indeed, it is easy to make the case that it is historical cost accounting that is truly misleading. Market valuations reveal a great deal more about the prospects for future earnings than do historical values. Also, market values remove the perverse incentives, characteristic of historical cost accounting, that cause bankers to avoid recognizing real losses by riding losers (underwater assets) and to pursue gains trading. In addition, market value accounting is a basic requirement for comprehensively measuring institutions' interest rate risk."

Sweeney, Richard J., Arthur D. Warga, and Drew Winters. "The Market Value of Debt, Market Versus Book Value of Debt, and Returns to Assets." ***Financial Management,*** **Vol. 26, No. 1, Spring 1997, pp. 5-21.**

This study examines the book-value and market-value measures of the capital structures of 15 industry portfolios of equity securities for the period 1978-1991. The authors conclude that their study "documents how book value measurements of debt distort debt-equity ratios and cost of capital calculations."

White, Lawrence J. ***The S&L Debacle: Public Policy Lessons for Bank and Thrift Regulators.*** **New York and Oxford: Oxford University Press, 1991.**

"The accounting system that generates the basic financial information for bank and thrift regulation must be changed. This is the most important reform. Generally accepted accounting principles (GAAP), the framework that is standard for banks and thrifts, is inherently flawed, because it is a historical, cost-based, backward-looking system of registering value, rather than a current-value-based system. The structure and orientation of the information system is crucial because net worth (capital) is calculated from this financial information."

"The institution of market value accounting would mean a major change in focus and ethos for the accounting profession, as well as for the bank and thrift industries. All parties would have to re-orient themselves away from the tracing of historical costs and toward the measurement of current market value. This re-orientation will not be easy, and there will be costs. But the benefits surely exceed the costs. It is a vital reform."

Policy Studies

Cates, David C. "The Case for a New Model of Financial Performance." ***Bank Accounting & Finance,*** **Fall 1997, pp. 21-28.**

The author, a banking consultant, argues that banks are managed on a mark-to-market basis but publish historical cost based financial statements: "A dichotomy this extreme, of course, violates two basic rules of good investor relations policy: (1) A publicized corporate story should be lived

internally; (2) the main themes of corporate strategy should be clearly visible in the simplest financial summary or discussion thereof.... Bank reporting needs more than just new footnotes accumulating within the same old framework. It needs a new framework."

Clarke, David G. and Michael J. Mattson. "FASB #107: Why It Is More than Just a Compliance Issue." Ibbotson Associates, 8 South Michigan Avenue, Chicago, IL 60603, USA. [Date and publication(?)]

The paper "shows the practical benefits of market value accounting.... Market value accounting provides benefits that go well beyond simply providing another source of information about an institution. It is one of the more useful tools management can employ to both accurately monitor and improve the bank's performance."

Clarke, David G. and Michael J. Mattson. "Why Market Value Accounting Could Be Good for Banks." Bank Management, December 1992, pp. 50-53.

"While many bankers seem wary of market-value accounting because of its 'subjectivity' and their belief that it will result in highly volatile earnings, bank management should realize that many investors already consider the market value of banks' assets and liabilities in pricing bank stocks. The major impact that this information will have on stock prices will be in investors' ability to refine their current perceptions of banks' market value....

"The bulk of the benefits related to FASB 107 accrue somewhat to bank regulators but mostly to bank management. Bank management should know the market value of its assets and liabilities and how these values change with changing interest rate levels.

"This knowledge is critical to the successful management of a bank. Moreover, it would not really be prudent for bankers to admit that they do not know the market value of their assets and liabilities. This admission would probably have a far greater (negative) effect on the value of a bank stock than the disclosure of market value information, because it would reduce investors' confidence in bank management."

Mengle, David L. "The Feasibility of Market Value Accounting for Commercial Banks." Working Paper 89-4, Federal Reserve Bank of Richmond, October 1989.

This paper argues that depository institutions should adopt market value accounting and it is feasible for them to do so. Reasons why:

- The relevance of economic values to decisions.
- It would establish an economically meaningful standard for determining solvency.
- Capital adequacy regulation would be more meaningful.

- Reduce perverse incentives under the historical cost system for gains trading and income management.
- It would result in all financial assets and liabilities being recognised (ones with zero cost could no longer be ignored).

Merrill Lynch Accounting Bulletin #10. "Fair Value Disclosure Required: Bad News for Weak Financial Institutions." Merrill Lynch, Pierce, Fenner & Smith, January 2, 1992. and
Merrill Lynch Accounting Bulletin #12. "Mark-to-Market Accounting for Banks: Accounting and Valuation Implications." Merrill Lynch, Pierce, Fenner & Smith, 1992.

"In Accounting Bulletin No. 10, 'Fair Value Disclosure Required: Bad News for Weak Institutions', we took the position that the 1992 fair value disclosures required by FAS 107 will:

- Lead to the disclosure of valuation relevant corporate information not previously available to the public. These data will be useful to investors seeking to identify both strong and weak financial institutions.
- Provide opportunities for knowledgeable and creative financial analysis to gain new insights into the strategies, operations, and value of corporations.
- Be impounded in stock prices. Its influence on valuation will vary from company to company.
- Change corporate behavior, since managements can no longer hide behind non-disclosure to keep private its financial instrument mistakes, excessive risk taking, and dubious public valuations. Detecting corporate behavior changes will be important to investors, since shifts in corporate behavior may lead to valuation changes."

"Any future requirement by the FASB to require in a company's primary statements mark-to-market accounting for marketable securities and related liabilities will further ensure that these consequences will occur, since many managements and investors appear to take information on the face of primary statements more seriously than when the identical information is only disclosed in notes. Astute investors know this is a mistake, but then not every investor is astute."

Morris, Charles S. and Gordon H. Sellon, Jr. "Market Value Accounting for Banks: Pros and Cons." ***Federal Reserve Bank of Kansas City Economic Review*, March/April 1991, pp. 5-19.**

"If a bank is exposed to interest rate risk, market value accounting will lead to increased volatility of earnings and capital. However, an accounting system that reflects this volatility is good, not bad, because it reveals a bank's true exposure to changes in interest rates.... Imprecise estimates of market value may still provide better information than accurate, but irrelevant, book values.... Inaccuracy is most likely to be a significant problem in the early stages of using a market value framework and for instruments that require complex valuation models. As banks

and regulators gain more experience and develop better valuation models, this source of inaccuracy is likely to become less important."

National Commission on Financial Institution Reform, Recovery and Enforcement. *Origins and Causes of the S&L Debacle: A Blueprint for Reform*. Report to the President and Congress of the United States, Washington, D.C., July 1993.

"Accounting issues played a major role in creating the perverse incentives which produced the S&L debacle" – in particular delayed recognition of credit losses.

U.S. General Accounting Office. *Bank Insurance Fund: Additional Reserves and Reforms Needed to Strengthen the Fund.* Report to Congress, September 1990, B-114831.

"Reliance on bank financial reports may hinder early warning of problem banks. Regulators' efforts to strengthen both on-site and off-site monitoring systems are hindered by unreliable information in the quarterly reports of financial condition that banks prepare for regulators. GAO found instances where banks' reports did not reflect their true financial condition; their accuracy seemed to be dependent on whether there had been a recent on-site examination by the bank regulators."

Selected standard setting authority publications pertaining to fair valuing financial instruments

IASC

IASC, Discussion Paper Accounting for Financial Assets and Financial Liabilities (London: 1997).

IASC, IAS No. 39, Financial Instruments: Recognition and Measurement (London: IASC, 1998).

IASC, IAS No. 32, Financial Instruments: Disclosure and Presentation (London: IASC, Revised 1998).

IASC, IAS No. 30, Disclosures on the Financial Statements of Banks and Similar Financial Institutions (London: IASC, Reformatted 1994).

US

AICPA, Audits of Investment Companies, With Conforming Changes As Of May 1, 1996 (New York; AICPA, 1996), Section on "Basic Methods of Valuing Securities", pars. 2.27-2.86.

FASB, SFAS 107, Disclosures About Fair Value of Financial Instruments (Norwalk: FASB, 1991), especially Appendix A, "Examples of Procedures for Estimating Fair Value".

FASB, SFAS 115, Accounting for Certain Investments in Debt and Equity Securities (Norwalk: FASB, 1993)

FASB, SFAS 125, Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities (Norwalk: FASB, 1996), pars. 42-46.

FASB, SFAS 133, Accounting for Derivative Instruments and Hedging Activities (Norwalk: FASB, 1998), especially pars. 217-231, 312-319 and 331-334.

FASB, Discussion Memorandum, An Analysis of Issues Related to Recognition and Measurement of Financial Instruments (Norwalk: FASB, 1991).

FASB, Proposed Concepts Statement, Using Cash Flow Information and Present Values in Accounting Measurements, Revised Exposure Draft (Norwalk: FASB, March 1999).

UNITED KINGDOM

Accounting Standards Board, Discussion Paper, Derivatives and Other Financial Instruments (London: The Accounting Standards Board Limited, 1996).

Accounting Standards Board, FRS 13, Derivatives and Other Financial Instruments: Disclosures (London: The Accounting Standards Board Limited, 1998)

Other Selected References

American Accounting Association's Financial Accounting Standards Committee, Response to a Discussion Paper Issued by the IASC/CICA Steering Committee on Financial Instruments, "Accounting for Financial Assets and Financial Liabilities", in *Accounting Horizons*, March 1998 pp. 90-97. This paper overviews empirical and conceptual research on the relevance and information value of fair values of financial instruments.

Association for Investment Management and Research, Comment letter of July 24 1997 on IASC Discussion Paper, "Accounting for Financial Assets and Financial Liabilities".

Institute of Investment Management and Research (UK),Comment letter of July 17 1997 on IASC Discussion Paper, "Accounting for Financial Assets and Financial Liabilities".

International Actuarial Association, Comment letter of July 15 1997 on IASC Discussion Paper, Accounting for Financial Assets and Financial Liabilities".

Securities and Exchange Commission, Comment letter of October 6 1997 on IASC Discussion Paper, "Accounting for Financial Assets and Financial Liabilities".

Rahman, M. Z., *The Role of Accounting Disclosure in the East Asian Financial Crisis: Lessons Learned?* Paper for the United Nations Conference on Trade and Development, December 1998.

Sirota Consulting, *Investment Community Interest in Reporting the Fair Values of Financial Instruments in Financial Statements – A Focus Group Summary: Final Report*, June 3, 1998.

Treacy, W.S. and M.S. Carey, "Credit Risk Rating at Large U.S. Banks", *Federal Reserve Bulletin*, November 1998.

Willis, Diana W., *Financial Assets and Liabilities – Fair Value or Historical Cost?* FASB Status Report, August 18, 1998, pp.5-10.

Wright and Houpt, "An Analysis of Commercial Banks' Exposure to Interest Rate Risk," *Federal Reserve Bulletin*, February 1996, pp. 115-128.