



30 Cannon Street, London EC4M 6XH, England
Phone: +44 (0)20 7246 6410, Fax: +44 (0)20 7246 6411
Email: iasb@iasb.org Website: <http://www.iasb.org>

**International
Accounting Standards
Board**

This document is provided as a convenience to observers at Financial Instruments Working Group meetings, to assist them in following the discussion. It does not represent an official position of the IASB. Board positions are set out in Standards.

Note: These notes are based on the staff paper prepared for the Financial Instruments Working Group Meetings. Paragraph numbers correspond to paragraph numbers used in the Financial Instruments paper. However, because these notes are less detailed, some paragraph numbers are not used.

INFORMATION FOR OBSERVERS

IASB Meeting: Financial Instruments Working Group
Paper: Agenda Paper 8C

Financial Instruments: Due Process Document (DPD)

Unit of account and unit of measurement

PURPOSE OF PAPER

1. This paper discusses the unit of account and unit of measurement for the fair value model in the DPD.

UNIT OF ACCOUNT FOR RECOGNITION

2. Setting a consistent unit of account for recognition purposes would significantly simplify existing accounting. This is an area in which many application issues arise.
3. This paper considers the following possible units of account for recognition purposes:
 - a. A portion of an individual instrument

- b. The individual instrument
- c. A 'linked' (synthetic instrument) approach involving two or more instruments

A portion of an individual instrument

- 4. Historically, we have often required bifurcation of a single element contract to achieve a particular measurement objective (for example, to measure an embedded derivative at fair value). If a single measurement attribute is used for all financial instruments in the scope of the DPD, then this reason would not be relevant with regard to financial instruments.
- 5. In the Insurance project, the IASB has tentatively decided that an insurer shall unbundle an insurance contract into its insurance, deposit, and service components for recognition and measurement purposes unless the components are so interdependent that they can only be measured on an arbitrary basis – in which case the phase II standard on insurance contracts should apply to the whole contract. If the components are not interdependent, the phase II standard should apply to the insurance component and IAS 39 should apply to the deposit component. If the components are interdependent but can be measured separately on a basis that is not arbitrary, IAS 39 should apply to the deposit component. The whole contract would be measured by applying the phase II standard (and consequently, the insurance component would be measured as the difference between the measurement of the whole contract and the measurement of the deposit component).
- 6. By requiring such unbundling (where possible), users of financial statements are arguably also able to better understand how the performance obligation of the insurance company is being discharged.
- 7. That is, another possible reason to permit or require bifurcation of a contract might be for display purposes; to provide decision useful information to the users of financial statements. Of course, depending upon the presentation alternatives,

this could also result in structuring similar rights and obligations in different ways in order to achieve different presentation outcomes.

The individual instrument

8. An alternative is that the appropriate unit of account for recognition is each individual instrument (contract). This is the most practical and straight-forward approach and results in representing “real world” phenomena.
9. However, as with the previous alternative, this may result in similar rights and obligations being structured in different ways in order to achieve different presentation outcomes.

A ‘linked’ approach (synthetic instrument) involving two or more instruments

10. Another approach is to link two or more ‘related’ instruments and recognize them as a single asset or liability. A *linked* approach seeks to achieve consistent accounting for financial instruments, whether they are included in a single contract or in two or more contracts. In the past, this approach has been called synthetic instrument accounting.
11. However, if a single measurement attribute is used for all items in the scope of the DPD, then (similarly to the previous discussion on bifurcation) a *linked* approach is not required for measurement purposes.
12. There may be display related issues that would result in a *linked* approach to recognition providing more decision useful information (for example, to allow users to understand the effect of two or more related instruments). However, a *linked* approach to unit of account would require setting out criteria under which linkage would be required. Such criteria will inevitably be somewhat arbitrary which may reduce or eliminate any benefits to be gained under such an approach. Furthermore, requiring a linked approach to the unit of account will increase, not decrease, the complexity of accounting for financial instruments.

13. Question to members:

- a. **What is most appropriate unit of account for the recognition of financial instruments, and why?**

UNIT OF MEASUREMENT

14. The unit of measurement determines the level at which the recognized asset or liability is aggregated for measurement.
15. This paper considers the following possible units of measurement for items in the scope of the DPD:
 - a. The individual instrument
 - b. A portfolio of instruments.
16. In many circumstances there may be no difference between using different units of measurement (for example, financial instruments traded in deep and liquid markets).
17. Before discussing the different possible units of measurement, it is worth considering the potential causes of possible differences between a portfolio measurement approach vs. aggregating the measurement on a contract by contract basis¹.

Possible factors resulting in different possible portfolio vs. individual contract measures

18. Some have suggested that the following possible factors may cause a different measurement if it is determined for a portfolio than if it is determined individually for each contract and then aggregated (or likewise for a larger portfolio compared to a smaller portfolio):
 - a. *Statistical evidence* – there may be more statistical evidence for valuing a portfolio than for an individual contract. However, arguably all information available should be used whether valuing a portfolio or an

¹ The IASB Discussion Paper *Fair Value Measurements* also discusses this issue. See the Invitation to Comment – Issue 3 (question 12) and Issue 9 (question 20).

individual contract – regardless of how that information originates. That is, the same statistical information should be used whether the portfolio is measured contract by contract or at a higher level of aggregation

- b. *Random statistical fluctuations* – a small portfolio is more exposed than a larger portfolio to random statistical fluctuations. This could affect the risk inputs into any valuation model. Alternatively, some asset pricing models (for example, the Capital Asset Pricing Model) assert that efficient markets do not reward participants for bearing risks that can be diversified, on the grounds that other market participants would quickly arbitrage away those rewards. Under such approaches, risk inputs into any valuation model would not be dependent upon the size of the portfolio.
- c. *Adverse selection (also called moral hazard)* – a large portfolio may provide some protection against adverse selection (that is, the risk that a contract being taken from a portfolio may not have the same risk characteristics as the portfolio). A transferee would arguably rather take the whole portfolio, rather than individual contracts selected by the transferor. Therefore this factor may affect the price that a transferee would require. However, this also suggests that the transferor would only ever contemplate transferring a portfolio rather than individual contracts, because otherwise the price would be very disadvantageous to the transferor. Therefore arguably the only plausible transaction that could occur is a portfolio of contracts to minimize the transferee's fear of adverse selection. This might suggest that the additional risk of adverse selection should not be considered in the price of the transfer of individual contracts.

Possible units of measurement - the individual instrument

- 19. The unit of measurement could be set at an individual instrument level. This would be consistent with current literature regarding the measurement of portfolios of identical instruments traded in an active market (see below).

20. Such an approach would result in all entities measuring financial instruments using a common unit of measurement.
21. However, this approach may be neither the most practicable approach nor provide the most decision useful information to the users of financial statements in all situations.

Possible units of measurement - portfolios of instruments

22. This paper considers three different types of portfolios (there may be other types as well):
 - a. Portfolios (or ‘blocks’) of identical financial instruments traded in an active market (for example, common stock of Citigroup)
 - b. Portfolios of non-identical financial instruments that share broadly similar risks (for example, loans with interest rate, credit and prepayment risk)
 - c. Portfolios of non-identical financial instruments with offsetting separately identifiable risks (for example, certain options and other derivative instruments—where a separately identifiable risk in one instrument in the portfolio may offset the same identifiable risk in another instrument in the portfolio—and the portfolio is therefore measured and managed on the basis of the net position in each separately identifiable risk).

Blocks of Identical Financial Instruments Traded in Active Markets

23. Existing guidance on fair value measurement of blocks of identical instruments traded in an active market does not permit any adjustment for the quantity of instruments held in an entity’s portfolio and the quantity exchanged in observable transactions (normal market size). Such an adjustment is often referred to as a *blockage factor*. *Blockage factors* are not been permitted because adjusting the observable price for the size of the position introduces management intent (that is,

to trade in blocks) into the measurement and hence reduces the reliability and comparability (and hence relevance) of reported estimates of fair value².

24. Adjusting the value of a portfolio to reflect possible benefits arising from a *control premium* raise many similar issues. A *control premium* adjustment would seek to reflect the benefits an investor might gain as a result of the influence over an entity arising from, for example, the voting rights attached to the portfolio of shares held³.

25. However, a *control premium* is different than a *blockage factor*. A *blockage factor* is primarily concerned with the relative liquidity between an individual instrument and a block of identical instruments. A *blockage factor* could either be a discount or premium to the price for the individual instrument.

26. Permitting a *control premium* adjustment for portfolios of identical financial instruments would, however, raise the same issues as for *blockage factor* adjustments.

Non-identical Financial Instruments with Similar Risk Exposures

27. Portfolios of non-identical financial instruments that share broadly similar risks (such as interest rate, credit and prepayment risk) are often measured and managed together.

28. As previously noted, in an efficient market there may be no significant measurement effect from measuring an item individually or as part of a portfolio. Putting aside the issue of adverse selection (also called *moral hazard*), then arguably the U.S. residential mortgage market is an example of an efficient market; the same statistical data will be used to measure an individual contract as would be used to measure a portfolio. However, some markets are inefficient and there may be portfolio measurement effects.

² Paragraphs C72 to C80 of Statement No. 157 discuss these issues in detail. For the convenience of members, those paragraphs are reproduced in the Appendix.

³ The scope of the DPD will exclude investments in consolidated subsidiaries, consolidated variable interest entities (FASB only), and associates (equity method investees in FASB terms) or joint ventures.

29. The staff also notes that often an entity would only transfer portfolios of such instruments (as opposed to individual instruments)⁴ – for reasons including that of adverse selection associated with the transfer of individual contracts (and the associated pricing implications for individual contracts). Possibly, the market in which actual transactions involving the transfers of such instruments are observed should be considered in determining the appropriate unit of measurement.
30. The IASB, in the Insurance project, has tentatively decided that risk margins should be determined for a portfolio of insurance contracts that are subject to broadly similar risks and managed together as a single portfolio. Such a decision is arguably based on practical considerations as opposed to any conceptual considerations.

Non-identical Financial Instruments with Offsetting Risks

31. Similar considerations might appear to apply to portfolios of non-identical financial instruments with offsetting separately identifiable risks (for example, certain options and other derivative instruments).
32. There is, however, at least one difference in the way that such portfolios are measured and managed. The portfolio might be measured on the basis of the separately identifiable risks held by the entity rather than on the basis of the fair values of the individual instruments. The portfolio is then managed by the exposure created for the net position in each separately identifiable risk.
33. Furthermore, typically the instruments within such a portfolio could contain both assets and liabilities. This obviously raises the issue of offset between assets and liabilities.
34. Allowing a portfolio unit of measurement in such a portfolio would result in measuring the separately identifiable risks, rather than measuring the in-exchange fair values of the contracts themselves.

⁴ The most probable outcome for instruments in such portfolios is often that the instrument will be settled with the original counterparty. However, Statement 157 is clear that fair value is a *transfer* and not a *settlement* notion. This is also consistent with the IASB's preliminary views that the term *transfer* more accurately describes the fair value measurement objective already in IFRSs.

35. Another issue is the uniqueness of such portfolios. Instruments in portfolios that share broadly similar risks (as previously discussed) typically form part of an asset class that is relatively homogeneous. However, portfolios of non-identical financial instruments that contain separately identifiable risks that offset each other to some extent are probably unique to the entity. Sales of such portfolios rarely occur. It is difficult to see how a fair value that represents a hypothetical transaction at the portfolio level might be achieved for a portfolio that contains risk positions unique to that entity and where the risk appetites of other market participants are probably not well known.

Defining the unit of measurement

36. In summary, the staff believes that it is difficult to clearly define what should, or should not, be included in a portfolio for accounting measurement purposes - beyond setting some broad criteria (such as a portfolio in which all the instruments are subject to 'broadly similar risks' and all the instruments are managed together).

37. Instead, the decision primarily revolves around which approach (a) is practicable, and (b) provides users with the most decision useful information.

38. Questions to the members:

- a. Is there a material difference between a portfolio measurement and the aggregation of a contract by contract measurement? If so, what causes that difference?**
- b. What is most appropriate unit of measurement for financial instruments, and why?**

Appendix – extract from Statement No. 157 *Fair Value Measurements*

C72. In other FASB Statements (including Statements 107 and 133, and FASB Statements No. 115, *Accounting for Certain Investments in Debt and Equity Securities*, and No. 124, *Accounting for Certain Investments Held by Not-for-Profit Organizations*), the Board decided that for a block, the fair value measurement should be based on the individual trading unit, determined using $P \times Q$. Therefore, those Statements preclude the use of a blockage factor, even if the normal trading volume for one day is not sufficient to absorb the quantity held and placing orders to sell the position in a single transaction might affect the quoted price.

C73. Paragraph 58 of Statement 107 states:

Although many respondents to the 1990 and 1987 Exposure Drafts agreed with the usefulness of disclosing quoted market prices derived from active markets, some argued that quoted prices from thin markets do not provide relevant measures of fair value, particularly when an entity holds a large amount of a thinly traded financial instrument that could not be absorbed by the market in a single transaction. The Board considered this issue and reiterated its belief that quoted prices, even from thin markets, provide useful information because investors and creditors regularly rely on those prices to make their decisions. The Board noted that providing the liquidation value of a block of financial instruments is not the objective of this Statement. The Board also concluded that requiring the use of available quoted market prices would increase the comparability of the disclosures among entities.

C74. Similarly, paragraph 315 of Statement 133 states:

The definition of fair value requires that fair value be determined as the product of the number of trading units of an asset times a quoted market price if available [as required by Statement 107]. . . . Some respondents to the Exposure Draft indicated that the guidance in Statement 107 (and implicitly the definition of *fair value* in this Statement) should be revised to require or permit consideration of a discount in valuing a large asset position. They asserted that an entity that holds a relatively large amount (compared with average trading volume) of a traded asset and liquidates the entire amount at one time likely would receive an amount less than the quoted market price. Although respondents generally

focused on a discount, holding a relatively large amount of an asset might sometimes result in a premium over the market price for a single trading unit. The Board currently believes that the use of a blockage factor would lessen the reliability and comparability of reported estimates of fair value.

C75. For broker-dealers and certain investment companies (investment companies other than registered funds subject to SEC reporting requirements that used blockage factors in financial statements for fiscal years ending on or before May 31, 2000), the AICPA Audit and Accounting Guides for those industries allowed an exception to the requirement of other FASB pronouncements to use $P \times Q$ to measure the fair value of a block. Specifically, the Guides permitted a fair value measurement using a blockage factor, where appropriate.

C76. In developing this Statement, the Board decided to address that inconsistency within GAAP. The Board considered the earlier work completed by AcSEC through its Blockage Factor Task Force, which was formed in 2000 to address issues specific to the use of blockage factors (discounts) by broker-dealers and investment companies. Based on its discussions with industry representatives (broker-dealers, mutual funds, and other investment companies) and a review of relevant academic research and market data, the task force affirmed that discounts involving large blocks exist, generally increasing as the size of the block to be traded (expressed as a percentage of the daily trading volume) increases but that the methods for measuring the blockage factors (discounts) vary among entities and are largely subjective.

C77. In the Exposure Draft, the Board acknowledged the diversity in practice with respect to the methods for measuring blockage factors (discounts). However, the Board agreed that for entities that regularly buy and sell securities in blocks, the financial reporting that would result when using $P \times Q$ to measure the fair value of a block position

would not be representationally faithful of the underlying business activities. In particular, if a block is purchased at a discount to the quoted price, a fair value measurement using P×Q would give the appearance of a gain upon buying the block, followed by a reported loss on subsequently selling the block (at a discount to the quoted price). At that time, the Board understood that for blocks held by broker-dealers, industry practice was to also sell the securities in blocks. In view of that selling practice (in blocks), the Board decided that this Statement should allow the exception to P×Q in the Guides to continue, thereby permitting the use of blockage factors by broker-dealers and certain investment companies that buy or sell securities in blocks.

C78. Many respondents, in particular, broker-dealers, agreed with that decision. However, during its redeliberations, the Board discussed the need for expanded disclosures about blocks measured using blockage factors with representative preparers (broker-dealers) and users (analysts that follow broker-dealers). Through those discussions, the Board learned that for blocks held by broker-dealers, industry practice is often to sell the securities in multiple transactions involving quantities that might be large but that are not necessarily blocks; that is, the securities could be sold at the quoted price for an individual trading unit. Because of that selling practice, the majority of the Board decided that there was no compelling reason to allow the exception to P×Q in the Guides to continue under this Statement, noting that revised IAS 39 includes similar guidance in paragraph AG72, which states that “the fair value of a portfolio of financial instruments is the product of the number of units of the instrument and its quoted market price.”

C79. In reaching that decision, the majority of the Board affirmed its conclusions relating to the prohibition on the use of blockage factors in other FASB Statements. In particular,

the Board emphasized that when a quoted price in an active market for a security is available, that price should be used to measure fair value without regard to an entity's intent to transact at that price. Basing the fair value on the quoted price results in comparable reporting. Adjusting the price for the size of the position introduces management intent (to trade in blocks) into the measurement, reducing comparability. Following the reasoning used in Statement 107, the quoted price provides useful information because investors regularly rely on quoted prices for decision making. Also, the decision to exchange a large position in a single transaction at a price lower than the price that would be available if the position were to be exchanged in multiple transactions (in smaller quantities) is a decision whose consequences should be reported when that decision is executed. Until that transaction occurs, the entity that holds the block has the ability to effect the transaction either in the block market or in another market (the principal or more advantageous market for the individual trading unit).

C80. This Statement precludes the use of blockage factors and eliminates the exception to P×Q in the Guides for a financial instrument that trades in an active market (within Level 1). In other words, the unit of account for an instrument that trades in an active market is the individual trading unit. This Statement amends Statements 107, 115, 124, 133, and 140 to remove the similar unit-of-account guidance in those accounting pronouncements, which referred to a fair value measurement using P×Q for an instrument that trades in any market, including a market that is not active, for example, a thin market (within Level 2). In this Statement, the Board decided not to specify the unit of account for an instrument that trades in a market that is not active. The Board plans to address unit-of-account issues broadly in its conceptual framework project.