IAS39: the IASB’s Achilles’ heel?

Rob Bryer,
Warwick Business School, University of Warwick.¹

“A former colleague of mine has been a technical accounting specialist for many years, latterly specialising in financial instruments, and he has also spent a number of years teaching in leading academic institutions. As well as being a chartered accountant, he has both a first degree and a PhD in accounting. He is a very clever man, but recently he decided that IAS39 was beyond his comprehension, and that it was time to switch to another profession that operated within a more secure and intelligible body of knowledge. What is that softer option? He is now retraining with a view to engaging in the cutting edge of research into physics. Exploring parallel universes should be a doddle by comparison with trying to understand IAS 39: except, of course, that they may turn out to be where this standard came from” (Paterson, 2002, p.82).

Introduction

Non-financial companies typically employ most of the capital they raise in non-monetary assets, but, just like specialist financial companies, they may employ capital in a wide variety of financial or monetary assets in addition to debtors, and they may buy the equity of other entities. Non-financial companies may, and today increasingly do, make contracts to issue equity capital (e.g., options, warrants) and to buy or sell monetary (or financial) assets and liabilities (e.g., forward foreign exchange contracts, futures contracts, swaps). Accountants call these contracts ‘derivatives’ as their rights and obligations derive from those attached to the ‘primary’ capital instruments or financial assets and liabilities to which they refer. With the growth and development of the international capital markets since the 1980s, the variety and complexity of primary and derivative financial instruments has grown, and with it the demand for accounting regulation. As IAS32 Financial Instruments: Disclosure and Presentation (IASC, 1995) put it,

“The dynamic nature of international financial markets has resulted in the widespread use of a variety of financial instruments ranging from traditional primary instruments, such as bonds, to various forms of derivative instruments, such as interest rate swaps. The objective of this Standard is to enhance financial statement users’ understanding of the significance of financial instruments to an entity's financial position, performance, and cash flows” (Objective).

In 1988 the IASC began work on a comprehensive standard on the recognition, measurement and disclosure of financial instruments. It issued an exposure draft in

¹ Working notes for lectures at Warwick Business School, November 2003, and at Beyreuth University May 2004.
In 1991 (E40) which largely followed the equivalent US standard, FAS133. In response to comments and criticisms, the IASC decided to split the project into two stages. In 1995 the IASC issued IAS32 and, following the publication of a comprehensive Discussion Paper, ‘Accounting for Financial Assets and Financial Liabilities’ in 1997, in 1998 issued IAS39: Financial Instruments: Recognition and Measurement (IASB, 1998). IAS32 deals with the classification of financial instruments by issuers as liabilities or equity, and the related interest, dividends and gains and losses, offsetting financial assets and liabilities, and the disclosure of information. IAS39 deals with accounting for financial assets and liabilities and derivatives. Consultative meetings on the Discussion Paper revealed that “the IASC face[d] controversies and complexities in seeking a way forward” (IASB, 1998, Introduction, para.7). It therefore decided to issue IAS39 as an interim standard on recognition and measurement and set up a Joint Working Group of Standard Setters (JWG) to work on a comprehensive standard based on the Discussion Paper that published a ‘Draft Standard and Basis for Conclusions: Financial Instruments and Similar Items’ (IASB, 2000). The IASC recognised that “the proposals in its March 1997 Discussion Paper represent far-reaching changes from traditional accounting practices for financial instruments and that a number of difficult technical issues (which were discussed in the Discussion Paper) need to be resolved before standards fully reflecting those proposals could be put in place” (IASB, 1998, Introduction, para.10). After protracted discussions, in 2002 the IASB published proposals to revise IAS32 and IAS39, and, as part of its programme of convergence with international standards by 2005, the ASB published FRED30 - Financial Instruments: Disclosure and Presentation; Recognition and Measurement (Accountancy, September 2002) to coincide with the release of the International Accounting Standards Board’s (IASB) proposals for revision. The two proposed FRSs implement the revised IAS32 and IAS39 with some amendments, and when implemented will withdraw FRS4 and FRS13. In December 2003 the IASB issued the revised version of IAS39 (IASB, 2003), and in April 2004 it issued an exposure draft proposing yet further changes (IASB, 2004).

In what follows, we explain the traditional approach to accounting for financial assets, liabilities and derivatives, and critically analyse the asset-liability approach and some of the major requirements of IAS39 and FRED30. We focus on some fundamental theoretical and practical issues for financial reporting raised by IAS39, not with all of its technical details. The IASB has consulted and debated widely with all concerned, yet these standards remain highly controversial. We argue that this remains the case as, in one way or another, many commentators argue that IAS39 undermines the traditional stewardship objective of financial reporting. As UKGAAP said, “Perhaps surprisingly, there seems to be a high degree of consensus among the major-standard setters and their representatives on the Joint Working Group that fair valuing all financial instruments can be the only ultimate solution (although there is less agreement about what fair value actually means). This is a controversial view that is meeting with considerable resistance. Standard setters in this area appear to have moved considerably ahead of current practice since the proposed solution has not yet commanded acceptance in any country…. The arguments for fair value accounting seem cogent…. But they are nonetheless revolutionary; by the IASC’s own admission, they require the adoption of a new capital maintenance concept (‘current-market-rate-of-
return’) for measuring financial instruments. Although elegant, the proposals do not sit well with widespread perceptions of the role and meaning of accounts’ (2001, p.876).

We argue that the IASB’s standards and the proposals of the JWG, based on the objective of improving investors’ decision-making, do not sit well with the traditional aim of stewardship or accountability for capital. We challenge the IASC’s view that the “traditional realisation and cost-based measurement concepts are not adequate for the recognition and measurement of financial instruments” (quoted in UKGAAP, 2001, p.703). Traditional accountants dismiss this criticism as irrelevant because

“Long ago, accountants and financial statement users came to the realization that, although measurement and reports of economic market values would be very useful, this was not a task for which accountants had a comparative advantage” (1997, p.52).

In short, economic valuation is not an objective of accounting. We conclude that by requiring fair value accounting for financial instruments and derivatives IAS39 seriously undermines accountability for financial capital by undermining the comparability and objectivity of financial statements, and that its rules for hedge accounting introduce spurious income and equity volatility that obscures underlying performance and financial position. We argue that, because of the paradoxes that arise in attempting to reform IAS39 by moving to comprehensive fair value accounting, it will remain a highly controversial, and may possibly be a make or break issue for the IASB. In short, as the most advanced expression of its asset-liability conceptual framework, it is possible that the problems IAS39 creates, will, by revealing its incorrigible ambiguity of the framework, be the Achilles’ heel of the IASB - or at least of its current, notoriously combative chairman, Sir David Tweedie. A review of the conceptual framework is on the IASB’s ‘mist do’ list (IASB Update, March, 2004).

Traditional accounting for monetary assets and liabilities and derivatives

Traditional accounting for financial (or monetary) assets and liabilities and derivatives (collectively, known as ‘financial instruments’) depends on the distinction between monetary and non-monetary assets and liabilities. Expenditures on non-monetary assets give management control of physical use-values, but investment in monetary assets either give it control of money, or enforceable claims to money. Management controls the use-values of a non-monetary asset whose replacement cost it must recover. By contrast, with a monetary asset management controls either money or it controls claims to money, that it must recover. Thus, whereas management values non-monetary assets at replacement cost, in traditional accounting it must value monetary assets at their historical cost as this measures the capital it must recover and maintain.

Just like non-monetary assets, monetary assets can be either productive capital or circulating capital. A productive monetary asset is an enforceable claim to money

2 Achilles was the most famous of the mythological Greek heroes in the Trojan war, whose only vulnerable point was his heel.

3 Using historical cost accounting, this distinction reduces to that between fixed and current assets.
held for the return it offers. Examples are a loan an entity makes to outsiders and a lessor’s long-term debtor. These investments are monetary assets because they are claims for fixed or determinable amounts of money, and are productive because management holds them for their financial return and not for sale on the market. As with all productive assets, management accounts for productive monetary assets at their historical cost, or recoverable amount if lower. For circulating monetary capital (monetary current assets), just as for circulating non-monetary assets (e.g., finished inventories), the rule is the lower of cost and net realisable value - for example, debtors. As management can sell its debtors, management must account for them using the lower of cost or market rule.4

It follows that equity investments are not monetary assets. Investments in the shares of other companies are productive assets that management hold for their use-values, for the expected return and for the rights they give the owner to influence or control an enterprise. Shares are not enforceable claims to pre-determined or determinable amounts of money. The holding company can sell the shares at the current market price, but this possibility does not give it an enforceable claim to cash. Until the sale takes place the cash value is uncertain, i.e., indeterminable. In traditional accounting, therefore, equity investments are non-monetary assets.5 Shares are capital circulating outside the holding company, whose use-values it does not consume and does not need to replace. Management, therefore, accounts for investments in shares using the equity method. That is, management accounts for the cost of the investor’s share of the net assets of the investee at the date of acquisition, plus the profits retained since then measured after maintaining the investee’s non-monetary productive capital and capital of circulation at replacement cost, less losses and dividends.

In traditional accounting, therefore, derivative financial instruments such as forward foreign currency contracts, futures, swaps and options, are not money assets or liabilities because management does not control either money or have enforceable claims to money. Derivative contracts are usually costless at their inception.6 For example, although forward contracts to buy and sell foreign currency are for determined amounts of money, as they do not require management to invest capital they are executory contracts - a promise for a promise - that traditional accountants do not recognise. As the previous IAS39 rightly said, but then ignored,

“assets to be acquired and liabilities to be incurred as a result of a firm commitment to purchase or sell goods or services are not recognised under present accounting practice until at least one of the parties has performed under the agreement such that it is either entitled to receive an asset or is obligated to disburse an asset. For example, an enterprise that receives a firm order does not recognise an asset (and the enterprise that places the order does not recognise a liability) at the time of the commitment but, rather, delays

4 Like other elements of capital of circulation, debtors should be written down to their recoverable amount if this is less than their historical cost - the amount for which they could be sold to a debt factor plus the factor’s profit.
5 See, for example, SSAP20: Foreign currency translation (ASC, 1983).
6 And they are not money capital simply because there is a cost. For example, options have a cost, but while this is an asset it is not a monetary asset. Options give management a non-monetary use-value - the right to buy or sell - not a claim to a determined amount of money.
recognition until the ordered goods or services have been shipped, delivered, or rendered" (IASB, 2000, para.29 (b)).

Traditional accountants argue that only if a purchaser pays in advance or a seller transfers goods does management recognise the transaction, because only then does the purchaser or seller have capital that it controls - an enforceable claim to commodities, or services and money for an advanced payment, and a right to recover the debt and the goods or services for a credit sale.

In contrast to the objectivity and operationality of traditional accounting for money capital, the world’s accounting authorities have for several years vigorously promoted the subjective and non-operational asset-liability definition of money assets based on the idea that financial instruments including derivatives, are assets and liabilities because they are contracts for expected future cash flows. From this viewpoint,

“in the light of the recent growth of derivatives, the trend for companies to actively manage risk on a portfolio basis and the ease with which gains and losses on financial instruments can be realised, all financial instruments have to be measured at current values with all gains and losses recognised as they occur” (ASB, 1996, Summary, para.26).

In what follows we explain asset-liability accounting for financial instruments and contrast its subjectivity with the objectivity of traditional accounting. As Benston says, the FASB-inspired approach is “sharply at odds with some fundamental principles of accounting (notably, the ‘critical event’ and ‘matching’ concepts that govern when income and expenses are recognized)” (1997, p.46). These ‘twin-pillars’ of traditional accounting were, in fact, the target, based on the belief that they “have not been able to cope with the changing environment”, particularly the growing use of financial derivatives (Johnson and Swieringa, 1996, p.113).

Asset-liability accounting for financial instruments

Most scholars and authorities accept the definition of a ‘financial instrument’ in IAS32 that is repeated in IAS39 and in FRED30:

“A financial instrument is any contract that gives rise to both a financial asset of one entity and a financial liability or equity instrument of another entity. A financial asset is any asset that is:

(a) cash;
(b) a contractual right to receive cash or another financial asset from another entity;
(c) a contractual right to exchange financial instruments with another entity under conditions that are potentially favourable; or
(d) an equity instrument of another entity.

A financial liability is any liability that is a contractual obligation:

(a) to deliver cash or another financial asset to another entity; or
(b) to exchange financial instruments with another entity under conditions that are potentially unfavourable.

An equity interest is any contract that evidences an ownership interest in an entity, i.e. a residual interest in the assets of the entity after deducting all of its liabilities” (ASB, 2002, (D&P) para.5).

The essence of the above definition, as the ASB’s discussion paper, Derivatives and other financial instruments put it, is that financial instruments are “contracts for cash flows (i.e. monetary assets and liabilities) and equity instruments” (1996, Summary, (D&P) para.8). Underlying the definition is the view that

“Financial instruments can be distinguished from non-financial assets and liabilities in terms of their nearness to cash. Financial assets generate cash directly whereas non-financial assets generate cash only indirectly, by being used with other inputs to produce goods and services” (ASB, 1996, para.1.2.3).

In other words, financial assets and liabilities are expected future cash flows that differ from non-monetary assets and liabilities only in their ‘nearness’ to cash. ‘Near’ and ‘far’, ‘direct’ and ‘indirect’ are relative terms, incapable of precise definition. Thus, whereas in traditional accounting the absence or presence of controlled use-values strictly distinguishes between money and non-money capital, the best we can say from within the asset-liability framework is that with a financial instrument

“the amount of cash generally does not vary depending on what entity holds the instrument or how it is used. By contrast, the cash generated by a non-financial asset will vary from entity to entity depending on how the asset is used” (ASB, 1996, para.1.2.3, emphasis added).

In saying that the cash generated from a non-financial asset depends on how ‘the asset is used’, how management uses its use-values, the ASB appears to recognise the traditional distinction. As in asset-liability accounting the distinction between non-monetary and monetary assets is the nearness or directness of the route to cash, the amount of cash should never depend on who holds the contract. However, as the amount of cash realised from an equity investment clearly could depend on who holds it - who uses these use-values, and how they use them - and the ASB wants to include equity as a financial asset, it can only say it ‘generally’ does not vary.

To include equity investments as financial assets the ASB relies instead on its core definition of ‘nearness’ to cash, the idea that selling them at the current market value provides a direct route to cash that is independent of the owner’s exercise of their use-values (votes, etc). By contrast, in traditional accounting the distinction between non-monetary and monetary capital is whether management controls a use-value other than money or an enforceable claim to money. Equity investments give management control of use-values, not claims to money. Because they are monetary assets, asset-liability accounting enthusiasts argue that management should mark equity investments and all other financial instruments including costless derivatives, to market prices (or to a valuation model) and take any ‘gains’ or ‘losses’ to the profit
and loss account. In traditional accounting, however, there is no question of management valuing these investments at market values unless they fall below cost.

Recognition

Traditional accounting’s solution to the “main concern…that derivatives can speedily transform the position, performance and risk profile of a company in a way that is not made readily apparent within the present framework” (ASB, 1996, Summary, para.7), is full disclosure of management’s use of derivatives and holding it accountable for realised results, not recognition of executory contracts and unrealised gains and losses on monetary assets and liabilities. By contrast, as the previous version of IAS39 said, from the asset-liability viewpoint, the answer to the concern with derivatives is that

“a forward contract…is recognised as an asset or liability on the commencement date, rather than waiting until the closing date on which the exchange actually takes place. When an entity becomes party to a forward contract, the fair values of the right and obligation are often equal, so that the net fair value of the forward is zero, and only any net fair value of the right and obligation is recognised as an asset or liability. However, each party is exposed to the price risk that is the subject of the contract from that date” (IASB, 2000, para.29 (c)).

In asset-liability accounting, exposure to risks and rewards is the essence of an asset, but this is true for all purchase commitments. To justify recognition of derivatives the IASB again relies on the asset-liability definition of a financial instrument as its ‘nearness’ to cash. Then it can say that the difference between purchase commitments and financial instruments is the latter’s marketability and therefore nearness to cash. However, apart from the fact that ‘nearness’ to cash is not cash, unlike shares and other marketable financial assets and liabilities (e.g., bonds), as Benston says,

“One major problem with this approach is that reliable fair values are not available for many derivatives; and even when these values can be determined, they are subject to almost immediate change. For example, over-the-counter (OTC) derivatives and financial instruments with embedded options usually are not readily convertible into known amounts of cash or claims to cash. Customized derivatives, which often are used as hedges, usually are valued with proprietary mathematical models that are highly sensitive to alternative reasonable assumptions that can greatly affect the estimates of fair value. …The required numbers may be substantially ‘off the mark’, subjecting the estimates to a wide range of reasonable amounts” (1997, p.51; see also, Phillips, 1997, p.959).

The definition of a financial instrument in terms of its nearness to cash is so broad and ill-defined that it can also include traded commodity futures. In traditional accounting no question arises of accounting for commodity contracts as money capital as they are mere promises to deliver commodities at a future date in return for payment. By contrast, in asset-liability accounting
“There are some powerful arguments for addressing commodity contracts along with financial instruments. The distinction between them and cash-settled financial instruments for which the settlement is indexed to commodity prices is arbitrary and has little, if any, economic significance. Furthermore, in certain commodity markets, few participants hold commodity contracts to maturity and take delivery of the physical commodity” (ASB, 1996, para.1.3.2).

Apparently not wishing to require current value accounting for all stocks - and hence current value accounting for production - the ASB draws upon the fuzzy distinction in asset-liability accounting between monetary and non-monetary assets to allow mark-to-market accounting of “those commodity contracts where it is usual market practice to close out the contract before maturity rather than take physical delivery” (ASB, 1996, para.1.3.2). Following this logic, as the previous version put it, management must apply IAS39 to “commodity-based contracts that give either party the right to settle in cash or some other financial instrument” (IASB, 2000, para.6). “If an enterprise follows a pattern of entering into offsetting contracts that effectively accomplish settlement on a net basis, those contracts are not entered into to meet the enterprise’s expected purchase, sale, or usage requirements” (IASB, 2000, para.7), and under IAS39 it must, just as Enron did, account for them as financial instruments and mark them to market or to ‘model’. The revised IAS39 also “shall be applied to those contracts to buy or sell a non-financial item that can be settled net in cash or another financial instrument, or by exchanging financial instruments, as if the contracts were financial instruments” (IASB, 2003, para.5). ‘As if’ accounting is anathema to traditional accounting.

Measurement

Traditional accountants measure financial instruments including derivatives at cost. From the asset-liability view, historical cost is merely the conventional valuation. The reason is that, like non-monetary assets, at the moment of purchase the cost of a monetary asset also equals its expected exit value, current exit value, current cost, and present value at historical and current interest rates (FASB, 1976c, p.211). Thus, in asset-liability accounting, all of these options exist for the valuation of all financial assets including costless derivatives, and it applies the same approach to marketable equity securities for which current value equals current exit value and present value at the current rate of interest. Asset-liability accounting takes it as axiomatic that market values “provides the most useful measure of the economic resources currently available to the enterprise and identifies changes in the value of marketable securities with the periods in which those changes take place” (FASB, 1976c, p.226). If our aim is reporting economic value

“Current values are the best measure of performance and stewardship as they reflect all economic events occurring in the year but not those of other years. …Current values are the best measure of financial position at the year-end. …They also overcome the problem that, because many derivatives have zero cost, they are not recorded in the balance sheet at all in a historical cost system” (ASB, 1996, para.2.3.4).
In traditional accounting, management accounts only for the capital outlay on financial instruments including derivatives - for example, the cost of an option. This was the dominant practice: “[O]nly the initial outlay on the instrument is recorded in the accounts until such time as the instrument is realised by sale or payment of a cash flow. Unrealised gains and losses resulting from changes in value in the interim are ignored” (ASB, 1996, Summary, para.11). By contrast, in asset-liability accounting “cost…is the fair value of the consideration given (in the case of an asset) or received (in the case of a liability) for it”, where fair value of consideration “is determinable by reference to transaction prices or other market prices” (IASB, 2000, para.67). In the case of a forward contract to sell foreign currency, management expects from a debtor, for example, IAS39 requires it to account for the ‘asset’ and ‘liability’ arising from the forward contract at their ‘nominal’ amount, reporting the net asset or liability and subsequent changes as gains and losses.

Carrying the asset-liability definition of ‘cost’ to its logical conclusion, as the previous version of IAS39 put it, “If…market prices are not reliably determined, the fair value of the consideration is estimated as the sum of all future cash payments, or receipts, discounted…using the prevailing market rate(s) of interest for a similar instrument...of an issuer with a similar credit rating” (IASB, 2000, para.67).

“After initial recognition, an enterprise should measure financial assets, including derivatives that are assets, at their fair values” (para.69).

“There is a presumption that fair value can be reliably determined for most financial assets classified as available for sale or held for trading” (para.70).

“Situations in which fair value is reliably measured include (a) a financial instrument for which there is a published price quotation in an active public securities market for that instrument, (b) a debt instrument that has been rated by an independent rating agency and whose cash flows can be reasonably estimated, and (c) a financial instrument for which there is an appropriate valuation model and for which data inputs to that model can be measured reliably because the data come from active markets” (para.96).

Enron was probably pleased to read in IAS39 that ‘marking-to-model’ was fine, and that one of the “Techniques that are well-established in financial markets include…discounted cash flow analysis” (IASB, 2000, para.100). IAS39 allows management this option on the ground that “An enterprise is unlikely to purchase a financial instrument for which it does not expect to be able to obtain a reliable measure of fair value after acquisition” (IASB, 2000, para.102). Enron shows that this was wishful thinking.7

**IAS39: Financial Instruments: Recognition and Measurement**

The previous version of IAS39 summarised its recognition principles, and its override of the traditional view:

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7 The only ‘disadvantage’ the ASB can think of for using current values for financial instruments is that to be comparable all companies should use current values for all assets and liabilities (1996, para.2.3.14).
(a) unconditional receivables and payables are recognised as assets or liabilities when the entity becomes a party to the contract and, as a consequence, has a legal right to receive, or a legal obligation to pay, cash;

(b) assets to be acquired and liabilities to be incurred as a result of a firm commitment to purchase or sell goods or services are not recognised under present accounting practice until at least one of the parties has performed under the agreement such that it either is entitled to receive and asset or is obligated to disburse an asset…;

(c) in contrast to (b) above, however, a forward contract - a commitment to purchase or sell a specified financial instrument or commodity subject to this Standard on a future date at a specified price - is recognised as an asset or a liability on the commitment date, rather than waiting until the closing date on which the exchange actually take place. Where an enterprise becomes a party to a forward contract, the fair values of the right and obligation are often equal, so that the net fair value of the forward is zero, and only any net fair value of the right and obligation is recognised as an asset or liability…;

(d) financial options are recognised as assets or liabilities when the holder or writer becomes a party to the contract; and

(e) planned future transactions, no matter how likely, are not assets and liabilities of an enterprise…” (IASB, 2000, para.29).

While, (a), (b), (d) and (e) are the traditional recognition rules, (c) is a clear departure from them.

IAS39 requires all financial assets and liabilities on the balance sheet as soon as the reporting entity becomes a party to the contractual provisions of the instrument (IASB, 2003, para.14). The UK’s ASB thinks its rules on recognition and derecognition in FRS5 are superior to those in IAS39 and has not included the sections from IAS39 within FRED 30. As recognition is an issue that transcends accounting for financial instruments, we shall not discuss IAS39’s rules here. Instead we focus in what follows on the problems arising with IAS39’s rules on measurement and classification.

Measurement and classification

8 With the exception of ‘regular way’ contracts. Although ‘regular way’ contracts are financial instruments - in fact, they are forward contracts, derivatives - that require delivery of the asset within the time specified by regulation or convention in the market concerned, IAS39 does not require management to account for them as such: “Because of the short duration of the commitment, such a contract is not recognised as a derivative financial instrument under this Standard” (para.31). For these contracts IAS39 permits recognition at either the trade date or settlement date so long as management is consistent. If management applies settlement date accounting to the purchase of trading or available for sale assets, any change in the fair value of the asset receivable is recognised in the balance sheet and a gain or loss reported according to the treatment for the asset to be received. Clearly, allowing management to choose settlement date or trade accounting reduces comparability, and compounds the loss of comparability caused by the many choices it has to account for financial instruments, as we shall see.
FRED30 follows IAS39’s measurement and classification rules that, as we shall see, introduce subjectivity and reduces comparability:

“When a financial asset or financial liability is recognised initially, an entity shall measure it at cost, which is the fair value of the consideration given (in the case of an asset) or received (in the case of a liability). Transaction costs that are directly attributable to the acquisition or issue are included in the initial measurement of the financial asset or financial liability” ((M&R) para.66).

“For the purpose of measuring a financial asset subsequent to initial recognition, this Standard classifies financial assets into the following four categories…:

(a) loans and receivables originated by the entity;
(b) held-to-maturity investments;
(c) available-for-sale financial assets; and
(d) financial assets held for trading” ((M&R) para.68).

“After initial recognition, an entity shall measure financial assets, including derivatives that are assets, at their fair values, without any deduction for transactions costs it may incur on sale or disposal, except for the following financial assets:

(a) loans and receivables originated by the entity…which shall be measured at amortised cost using the effective interest rate method; and
(b) held-to-maturity investments which shall be measured at amortised cost using the effective interest rate method; and
(c) investments in equity instruments that do not have a quoted market price in an active market and whose fair value cannot be reliably measured…and derivatives that are linked to and must be settled by delivery of such unquoted equity instruments, which shall be measured at cost” ((M&R para.69).

“After initial recognition, an entity shall measure all financial liabilities, other than liabilities that are designated as held for trading and derivatives that are liabilities, at amortised cost using the effective interest rate method. After initial recognition, an entity shall measure financial liabilities held for trading and derivatives that are liabilities at fair value, except for a derivative liability that is linked to and must be settled by delivery of an unquoted equity instrument whose fair value cannot be reliably measured, which shall be measured at cost” ((M&R para.89A).

In December 2000 the JWC proposed that management should have the choice of accounting for almost all financial instruments at fair values with all changes immediately reported in the profit and loss account, by designating the instrument as irrevocably held for trading, the so-called ‘fair value option’. The revised IAS39 implemented this suggestion. It defines a held for trading asset or liability as one that management either ‘designates’ as such, or it is part of a portfolio for which evidence
exists of short-term profit-taking, or management initially acquired the asset or liability to generate a profit through short-term fluctuations in price or dealer’s margins. Management adopts its own definition of ‘short-term’ and must apply it consistently. The revised paragraph 9 of IAS39 now signals that the ‘held-for-trading’ category includes financial assets and liabilities designated using the fair value option (IASB, 2003, para.BC81).

“A financial asset or financial liability at fair value through profit or loss is a financial asset or financial liability that meets either of the following conditions.

(a) It is classified as held for trading. A financial asset or financial liability is classified as held for trading if it is:
   (i) acquired or incurred principally for the purpose of selling or repurchasing it in the near term;
   (ii) part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit taking; or
   (iii) a derivative (except for a derivative that is a designated and effective hedging instrument).

(b) Upon initial recognition it is designated by the entity as a fair value through the profit or loss. Any financial asset or financial liability within the scope of this Standard may be designated when initially recognised as a financial asset or financial liability at fair value through the profit or loss except for investments in equity instruments that do not have a quoted market price in an active market, and whole fair value cannot be reliably measured” (IASB, 2003, para.9).9

The French and Japanese have been particularly outspoken in their opposition to the ‘fair value option’:

“[T]he Japanese and French ASB’s said they were unhappy about how the IASB plans to make IAS39…easier to apply. They do not like the idea of allowing a free choice of which assets and liabilities they account for using fair value.

The French said they were concerned that this approach was open to manipulation and send out a message that the IASB was setting standards that catered to management purposes rather than financial reporting.

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9  FRED30’s wording was essentially the same: “A financial asset or financial liability held for trading is one that upon initial recognition is designated by the entity as held for trading. A financial instrument shall be classified as held for trading if it (a) is acquired or incurred principally for the purpose of selling or repurchasing in the near term, (b) is part of a portfolio of identified financial instruments that are managed together and for which there is evidence of a recent actual pattern of short-term profit-taking, or (c) is a derivative (except for a derivative that is a designated and effective hedging instrument). Any financial instrument may be designated as held for trading when it is initially recognised” ((M&R) para.10).
IASB board member Jim Leisenring said...‘The real ‘option’ here...is to let liabilities in there with assets - originally it was just assets that you had a free choice on - so I would say what we’ve done only continues the free choice that was already there, but we’ve made it easier to understand’” (Accountancy, March 2002, p.20).

In response to the concerns of bankers, securities companies and insurers, the IASB issued an exposure draft in March 2004 proposing a tightening of the fair value option to limit its use and preserve the “key benefits of the option” in simplifying the application of fair value accounting in particular circumstances by (a) limiting the types of financial assets and liabilities to which management can apply the options,10 and (b) “Because designation of fair value through the profit and loss is at the entity’s election”, it “require[es] that the option may be applied only to financial assets and financial liabilities whose fair value is verifiable” (IASB, 2004, para.46; Background, para.4(b)), whereas the test for held-for-trading and available-for-sale is the less “strict” requirement of ‘reliably measured’ (IASB, 2004, para.BC11(b)). The IASB says a fair value is verifiable if the variability of the estimates of possible outcomes is “low” (IASB, 2004, para.48B), an inevitably subjective judgement.

Held-to-maturity investments are financial assets with fixed or determinable payments and a fixed maturity, that management “has the positive intent and ability to hold to maturity” (IASB, 2003, para.9), again a subjective basis for classification. The original IAS39 made clear that it wanted management to only exceptionally use the held-to-maturity classification:

“Under this Standard, fair value is a more appropriate measure for most financial assets than amortised cost. The held-to-maturity classification is an exception, but only if the enterprise has the positive intent and ability to hold the investment to maturity” (IASC, 2000, para.84).

IAS39 lays down detailed implementation guidance to limit the use of the held-to-maturity category (paras.AG16-A25), but it remains essentially subjective. The basic tests for applying the ‘intention’ rule shows this:

“What is an ‘insignificant’ amount? What is ‘close’ to maturity? What is an ‘isolated’, ‘non-recurring’, not ‘reasonably’ anticipated, event?

10 The amended paragraph 9 only allows the fair value option for financial instruments that (i) contain embedded financial instruments that would otherwise be valued separately, (ii) financial liabilities whose value depends on the performance of an identified portfolio of assets, (iii), natural hedges (e.g., a derivative) that need not be accounted for using fair value hedge accounting.
The first version of IAS39 defined *loans and receivables* as

“financial assets that are created by the enterprise by providing money, goods, or services directly to a debtor, other than those that are originated with the intent to be sold immediately or in the short term, which should be classified as held for trading. Loans and receivables originated by the enterprise are not included in held-to-maturity investments but, rather, are classified separately” (para.10).

The main constituents of this category are trade receivables and other debtors, but for banks and other financial institutions they comprise a large proportion of their non-trading assets, particularly loans to customers (UKGAAP, 2001, p.770). The revised IAS39 defines ‘loans and receivables’ as “non-derivative financial assets with fixed or determinable payments that are not quoted in active markets” (IASB, 2003, para.9), and gives management the option of designating the asset as a “financial asset at fair value through the profit and loss, or available for sale” (IASB, 2003, para.AG26).

Management must classify any financial asset as *available-for-sale* if it does not fit any other category.

Other than the category of originated loans, the classification in IAS39 follows FAS115’s definitions that the FASB intended to reduce manipulation, but it has not (Hernandez, 2003a, p.778), as we shall see.

*Reporting ‘gains’ and ‘losses’*

Whereas traditional accounting recognises only realised gains, if the aim is to report economic value,

“Supporters of current value believe that unrealised gains are as important as realised ones. Both have occurred and both leave the entity better or worse off. Thus, both should be reported in the same way. …In addition, some believe that realisation is not a suitable trigger for reporting gains and losses on financial instruments. Such gains and losses are easily realised, often with no more than a telephone call. Hence, realisation, at least in the sense of conversion into cash, is not an economically significant event” (ASB, 1996, paras.2.2.9-2.2.10).

Thus, IAS39 requires

“A gain or loss arising from a change in the fair value of a financial asset or liability that is not part of a hedging relationship…shall be recognised as follows.

(a) A gain or loss on a financial asset or liability classified as at fair value through profit or loss shall be recognised in profit or loss.

(b) A gain or loss on an available-for-sale financial asset shall be recognised directly in equity…until the financial asset is derecognised, at which time
the cumulative gain or loss previously recognised in equity should be included in profit and loss” (IASB, 2003, para.55).
## Summary of the major requirements of IAS39

<table>
<thead>
<tr>
<th></th>
<th>Loans and receivables originated by the enterprise</th>
<th>Held to maturity investments</th>
<th>Financial assets and liabilities at fair value through profit or loss</th>
<th>Available for sale financial assets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recognition</strong></td>
<td>When the entity becomes a party to contractual provisions, etc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Derecognition</strong></td>
<td>When the contractual rights expire or are transferred to another entity, etc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Gain or loss on derecognition</strong></td>
<td>To net profit for the period</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Initial measurement</strong></td>
<td>Cost equals fair value of consideration given or received</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Subsequent measurement</strong></td>
<td>At cost less amortization</td>
<td>At cost less amortization</td>
<td>At fair value</td>
<td>At fair value</td>
</tr>
<tr>
<td><strong>Gain or loss on remeasurement</strong></td>
<td>NA</td>
<td>NA</td>
<td>To profit or loss</td>
<td>To equity</td>
</tr>
</tbody>
</table>
Eliminates cherry-picking?

Supporters of asset-liability often argue that marking to market would eliminate management’s discretion over the timing of sales to allow it to control reported earnings. That “using cost does allow entities to control the volatility of reported profits by choosing when to realise (and thereby report) gains and losses: using current values removes this possibility” (ASB, 1996, para.2.2.8). That “basing profit recognition on realisation allows companies to manage reported profits by ‘cherry-picking’ which gains and losses to realise” (ASB, 1996, para.2.2.11). That is, by choosing to sell particular items of (for example) stock with particular costs management can, within limits, choose the profit they report. In the ASB’s view, “This is a particular problem for financial instruments since gains and losses on them are easily realised” (1996, Summary, para.11 (a)), but from the asset-liability view the cherry-picking problem is endemic (see also, IASB, 2003, para.BC82).

As Whittington says of physical inventories, “if the stock items are truly homogeneous”, that is, if they have the same economic value, under traditional accounting profit will depend on which item is selected for sale “despite the fact that the economic state of the enterprise is unaffected by which items of stock are selected” (1999, p.11). This problem only arises in the asset-liability framework. First, if management follows traditional accounting and values physical inventories at current replacement cost, identification or cost flow assumptions are unnecessary. Second, for assets functioning as capital of circulation such as a portfolio of marketable securities valued at historical cost, although an enterprise’s economic value may be unaffected by cherry-picking, the same is not true of its accountability. Management can choose which gains or losses to realise, but in traditional accounting they are accountable for those choices, accountable for their impact on the rate of return on capital. If accounting is objective, cherry-picking is no problem. The capital markets require management to go cherry-picking all year round. Management must always choose the timing of asset acquisitions and disposals to generate at least the required rate of return on capital in every period.

While market values measure the economic value potentially available, management does not control this value until it sells the securities or receivables, while decreases below cost are either losses of circulating capital or falls in the recoverable amount of a productive, long-term security. In traditional accounting, gains or losses on the sale of marketable securities are capital gains or losses, not part of earnings from the circulation of capital through production and distribution.

Embedded derivatives?

IAS39 requires management to separate ‘embedded derivatives’ from their ‘host’ and value them separately at fair values if the hybrid (the host and the embedded derivative) are not fair value accounted with gains and losses to profit and loss:

Example

- Assume that on 1 January, 2001, a convertible bond was issued for 102,
- The par value on the bond is 100.
- An embedded equity option valued at 5.
• The new carrying value of the option is 5.
• The carrying value of the stand alone bond is 102 - 5 = 97.
• The option will thereafter be fair valued with gains and losses in current earnings.
• The bond’s implied discount of 100-97 = 3 will be amortised over the bond’s life to arrive at par by the maturity date.

As traditional accountants do not account for derivatives, there is no need to separate them from their host. In traditional accounting, as convertible debentures are debt because unless and until they are converted into equity they are remunerated by interest, management accounts for convertible bonds at the issue amount of 102, and charges the effective rate of interest until conversion.

**Comparability problems**

Hernandez Hernandez gives the following example of how IAS39’s recognition and classification rules “could result in serious problems of comparability among financial statements from different companies” (2003b, p.78):

- Assume that on January 1, 20x1, four different companies purchase for $1,080 the same debt security that has a face value of $1,000 and a five-year life.
- The debt security pays interest annually at a stated rate of 10 percent.
- At the date of acquisition the effective debt interest rate is 8 percent.
- Company A classifies the debt as held-for-trading.
- Company B classifies the debt as held-to-maturity.
- Company C and Company D classify the debt as available-for sale.
- Company C decides to include fair value changes in income, whereas Company D decides to recognise these changes in equity.

All companies:

January 1, 20x1:

Dr. Investment in debt security $1,080  
Cr. Cash £1,080.

To account for the purchase of the debt.

December 31, 20x1:

Dr. Cash $100  
Cr. Interest revenue $86  
Cr. Investment in debt security $14.

- Assume on December 31, 20x1, market rates of interest changes to 6 percent and the fair value of the debt increases to $1,139, giving rise to an unrealized gain of $73:

<table>
<thead>
<tr>
<th>Carrying amount of the security</th>
<th>Interest income</th>
<th>P&amp;L</th>
<th>Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company A</td>
<td>$1,139</td>
<td>$86</td>
<td>$73</td>
</tr>
<tr>
<td>Company B</td>
<td>$1,066</td>
<td>$86</td>
<td>-</td>
</tr>
<tr>
<td>Company C</td>
<td>$1,139</td>
<td>$86</td>
<td>$73</td>
</tr>
<tr>
<td>Company D</td>
<td>$1,139</td>
<td>$86</td>
<td>-</td>
</tr>
</tbody>
</table>
While Companies A and C report the same amounts for the debt, interest and the unrealised gain in the profit and loss account, this treatment differed from that of Company B and Company D:

“The acquisition of the same security has different effects on the four companies, so, under IAS 39, like transactions can be registered differently in financial statements” (Hernandez Herndandez, 2003b, p.80).

The revised IAS39 removes the option of reporting fair value changes in profit or loss, requiring fair value changes to all available-for-sale financial instruments be accounted for in equity (IASB, 2003, para.BC.77). Now only B is not comparable with A, C or D, and C and D are not comparable with A. As the management of most large companies may often effectively freely choose between these categories, IAS39’s rules retain the potential to reduce comparability if managements make different choices in accordance with their reporting priorities.

**Hedge accounting**

Management often use financial assets and liabilities and derivative financial assets and liabilities to ‘hedge’ (i.e., reduce) risks. Management write a contract called the hedge, whose value or cash flows it expects to be negatively correlated to changes in the value or cash flows of ‘hedged position’ - existing assets and liabilities; commitments under firm contracts; and expected future transactions. For example, an effective foreign currency hedge eliminates the risk of loss from changes in exchange rates on the position being hedged. A foreign currency hedge may involve the use of financial instruments such as foreign currency loans or deposits, forward exchange contracts, options, currency swaps, futures contracts, or a combination of them. Alternatively, management can eliminate foreign exchange risk by agreement between the parties to the transaction on the rate of exchange. In effect, this turns the transaction into one involving only domestic currency as management accounts for all foreign currency transactions covered by a hedge at the forward exchange rate.

As the hedge fixes the exchange rate at the date of the transaction, using this rate measures the current replacement cost of assets, and the historical proceeds of liabilities arising, when the transaction occurs. Any difference between the forward rate and the current rate of exchange is irrelevant to the cost of the forward contract. The banks provide this service because covered interest arbitrage ensures that the difference between domestic and foreign interest rates equals the difference between the current and the forward rate, the latter adjusted for the costs and profit of the banks. The cost of forward cover is analogous to freight-inward insurance. Insurance is a cost of the commodity as it preserves it value to the purchaser. Forward contracts

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11 Although we shall consider only foreign currency forward contracts, exactly the same principles apply to other financial instruments that provide an effective hedge. For example, an option to buy or sell foreign currency at a predetermined rate both eliminates the foreign exchange risk of buying an asset on credit and provides a covered foreign exchange position from which gains may arise.

12 If management enters a forward contract, up to the date when they pay for an asset we determine its replacement cost by the forward exchange rate. If management does not take out a forward contract, we determine its replacement cost by the current rate.
similarly lock in foreign currency transactions transaction prices in domestic currency different from those implied by current spot rates.

Example

Assume on the 30th November a UK company agrees to pay Euros 1 million for some goods delivered on that date from a German manufacturer when the exchange rate is £1.8200 = 1 Euro. The UK company immediately arranges a forward contract to buy 1 million Euros for delivery on 31st March the following year when it will pay for the goods. The forward rate is £1.8050 = 1. Assume there are no other costs in arranging the contract. At the 31st December, the UK company’s year-end, the exchange rate is £1.8000 = 1 Euro, and at the payment date of the 31st March is £1.8100 = 1 Euro.

Traditional accounting

When management gets the goods:

Dr. Goods £1,805,000
Cr. German supplier £1,805,000.

When management exercises the forward contract:

Dr. Forward contract receivable 1,805,000
Cr. Forward contract payable 1,805,000.

Dr. Forward contract payable 1,805,000
Cr. Cash 1,805,000.

When management receives the foreign currency:

Dr. Foreign currency 1,805,000
Cr. Forward contract receivable 1,805,000.

When management pays the supplier:

Dr. German supplier 1,805,000
Cr. Foreign currency 1,805,000.

If management took out the forward contract for speculative purposes (betting on differences between the forward and ultimate spot rate):

At the date management arrange the contract:

Dr. Forward contract receivable £1,805,000
Cr. Forward contract payable £1,805,000.

We retain this valuation at the year end. When management exercises the forward contract:

Dr. Forward contract payable 1,805,000
Cr. Cash 1,805,000.

We book the foreign currency at the spot rate for which management sells it, and use it to eliminate the foreign currency receivable and to recognise the realised gain of £5,000 on the transaction:
If management takes out the forward contract before it acquired the goods it would not recognise the contract receivable and payable until it received the goods, and would book them at the forward rate. If management sold the forward contract before it paid the foreign currency creditor, it would account for the realised speculative gain or loss.

**Asset-liability accounting for hedges**

In traditional accounting, ‘hedge accounting’ is ‘normal’ in that it means the normal practice of not reporting unrealised gains and losses on derivatives in the profit and loss account. By contrast, given that in theory under asset-liability accounting management must account for all financial instruments at current value,

“Hedge accounting’ is a special accounting treatment that alters the normal accounting for a ‘hedge’ so that gains and losses on it are included in the profit and loss account in the same period(s) as those on the ‘hedged position’” (ASB, 1996, para.4.1.4).

Present (traditional) practice is to “Leave the hedge at cost”, but from the asset-liability perspective this “has the disadvantage that many derivatives are not shown in the accounts at all since their cost is nil...[which] is incompatible with...[the view] that all financial instruments should be measured at current value” (ASB, 1996, Summary, para.44). Thus, from the asset-liability perspective, ‘hedge accounting’ is special because it allows management to defer recognition of some or all of the unrealised gains and losses from accounting for derivatives at fair values in the profit and loss account:

“The practice of hedge accounting has grown up whereby gains and losses on an instrument that is classed as a ‘hedge’ are deferred so that they can be included in the profit and loss account in the same period(s) as those on the ‘hedged position’” (ASB, 1996, Summary, para.34).

Traditional accountants argue that if an entity hedges “it has reduced the variability of its cash flows: the accounts should reflect this and should not report volatile profits and thereby imply an exposure to risk that, in reality, does not exist” (ASB, 1996, para.4.2.2). They quite reasonably argue that

“hedging essentially ‘fixes a price’ for a future transaction. This should be reflected by reporting the future transaction at that price even though, in retrospect, management may have suffered an ‘opportunity loss’ in that they could have achieved a better price by not hedging” (ASB, 1996, para.4.2.5).

Asset-liability supporters, by contrast, argue that management should report ‘gains’ or ‘losses’ on the hedge as they occur by accounting for all financial instruments at current values:
“that the company has entered into two transactions, not one, and [they] believe that the accounts should reflect the hedge and the hedged position separately. They point out that the gain or loss on the hedge has occurred at the balance sheet date and could be realised by selling the hedge. Furthermore, gains and losses on hedges are not mere ‘opportunity’ gains and losses but real ones that are enjoyed or suffered by the company and give rise to higher or lower cash flows than if the ‘hedge’ had not been taken out” (ASB, 1996, para.4.2.6).

Calling opportunity gains and losses ‘real’ does not make them realised.

The asset-liability framework only allows ‘hedge accounting’ to remove the ‘anomalies’, from its viewpoint, of accounting for financial instruments at historical cost. IAS39’s hedging rules are complex because, against its better judgement, it allows management to carry loans and receivables originated by the enterprise and held-to-maturity investments at amortized cost. It only requires fair value accounting for financial assets and liabilities held for trading and available for sale, and derivatives. It permits hedge accounting for hedges using derivatives, but only permits hedge accounting using a non-derivative asset or liability to hedge a foreign currency risk.

**IAS39: Financial Instruments: Recognition and Measurement**

*Hedging relationships*

‘Hedging relationships are of three types:

(a) **fair value hedge**: a hedge of the exposure to changes in fair value of a recognised asset or liability or an unrecognised firm commitment, or an identified portion of such an asset, liability, or firm commitment, that is attributable to a particular risk and could affect profit or loss.13

(b) **cash flow hedge**: a hedge of exposure to variability in cash flows that (i) is attributable to a particular risk associated with a recognised asset or liability (such as all or some future interest payments on variable rate debt) or a highly probable forecast transaction (such as an anticipated purchase or sale) and (ii) could affect profit or loss.

(c) **hedge of a net investment in a foreign operation….”** (IASB, 2003, para.86).

FRED30 has problems with IAS39’s use of ‘recycling’:

“IAS39 requires certain gains and losses to be recognised initially outside the profit and loss account (ie in equity) and then, at a later date, recognised in the profit and loss account. In particular:

13 The IASB dismisses the traditional argument that “it is conceptually incorrect to recognise an asset or liability for a firm commitment merely because it has been hedged” on the spurious ground that “the historical cost of a firm commitment is usually zero. It is not a fundamental difference in concept” (IASB, 2003, para.BC152)! On this basis, the failure of HCA to account for anything can justify valuing it at fair value!
(a) fair value gains and losses arising on available-for-sale financial assets are required to be recognised initially in equity and subsequently transferred to the profit and loss account (ie, recycled) when the asset is sold or impaired;

(b) gains and losses on cash flow hedging instruments are required to be recognised initially in equity and subsequently recycled to the profit and loss account as the hedge matures; and

(c) gains and losses on net investments in foreign operations and hedges of those net investments are required to be recognised initially in equity and subsequently recycled to the profit and loss account on disposal of the foreign operation.

(Under FRS3 ‘Reporting Financial Performance’, instead of ‘recognising gains and losses in equity’ the gains and losses involved would be recognised in the statement of total recognised gains and losses)” (Preface, para.24).

In short, the ASB is against ‘recycling’ of gains and losses from equity (or the STRGL) to the profit and loss as, quite understandably, it does not think it helpful to report the same profit or loss twice, and it could be confusing without additional disclosures. It proposes that,

“in the circumstances described above, that:

(a) fair value gains and losses arising on available-for-sale financial assets should be recognised in the statement of total recognised gains and losses and should not be recycled when the asset is sold or subsequently impaired;

(b) gains and losses on cash flow hedging instruments should be reported on the balance sheet amongst assets and liabilities, and described as ‘gains and losses arising on effective cash flow hedges not yet recognised in the profit and loss account’ until the hedge matures; and

(c) gains and losses on net investments in foreign operations and hedges of those net investment should be recognised in the statement of total recognised gains and losses and should not be recycled when the foreign operation is disposed of” (Preface, para.25).

Accounting for fair value hedges

“If a fair value hedge meets the conditions…during the period, it shall be accounted for as follows:

(a) the gain or loss from remeasuring the hedging instrument at fair value (for a derivative hedging instrument) or the foreign currency component of its carrying amount in accordance with IAS 21 (for a non-derivative hedging instrument) shall be recognised in profit and loss; and

(b) the gain or loss on the hedged item attributable to the hedged risk shall adjust the carrying amount of the hedged item and be recognised in profit or loss. This applies if a hedged item is otherwise measured at cost. Recognition of the gain or loss attributable to the hedged risk in profit or
loss applies if the hedged item is an available-for-sale asset” (IASB, 2003, para.89).

In short, management must immediately recognise both the gain or loss from remeasuring the hedging instrument at fair value, and the offsetting loss or gain from remeasuring the hedged instrument, in the profit and loss account.

Consider the above example:

As the receivable equals the payable, we initially record the forward contract at its cost of nil, and bring the goods and the debt to the supplier into the accounts at the current rate:

<table>
<thead>
<tr>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward contract receivable</td>
<td>1,805,000</td>
</tr>
<tr>
<td>Forward contract payable</td>
<td>1,805,000</td>
</tr>
<tr>
<td>Goods</td>
<td>1,820,000</td>
</tr>
<tr>
<td>German supplier</td>
<td>1,820,000</td>
</tr>
</tbody>
</table>

At the year end we translate the forward contract receivable and the debt owed to the German supplier. As both are held for trading, the gains and losses go immediately to the profit and loss account:

<table>
<thead>
<tr>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>P&amp;L - foreign currency loss</td>
<td>5,000</td>
</tr>
<tr>
<td>Forward contract receivable</td>
<td>5,000</td>
</tr>
<tr>
<td>German supplier</td>
<td>20,000</td>
</tr>
<tr>
<td>P&amp;L - foreign currency gain</td>
<td>20,000</td>
</tr>
</tbody>
</table>

When management receive the cash at the forward rate:

<table>
<thead>
<tr>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Forward contract payable</td>
<td>1,805,000</td>
</tr>
<tr>
<td>Cash</td>
<td>1,805,000</td>
</tr>
</tbody>
</table>

Management translate the foreign currency received at the current rate and use it to eliminate the forward contract receivable and to recognise a ‘gain’ on translating the forward contract receivable to the closing rate:

<table>
<thead>
<tr>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign currency</td>
<td>1,810,000</td>
</tr>
<tr>
<td>Forward contract receivable</td>
<td>1,800,000</td>
</tr>
<tr>
<td>P&amp;L - foreign currency gain</td>
<td>10,000</td>
</tr>
</tbody>
</table>

When management pays the supplier we recognise an equal and opposite ‘loss’ from having to pay the supplier, rather than converting the Euros into £s:

<table>
<thead>
<tr>
<th>Dr.</th>
<th>Cr.</th>
</tr>
</thead>
<tbody>
<tr>
<td>German supplier</td>
<td>1,800,000</td>
</tr>
<tr>
<td>P&amp;L foreign currency loss</td>
<td>10,000</td>
</tr>
<tr>
<td>Foreign currency</td>
<td>1,810,000</td>
</tr>
</tbody>
</table>

In contrast to traditional accounting that brings in the goods at their cost of £1,805,000, fair value hedge accounting brings in the goods at £1,820,000 and recognises the difference of £15,000 as profit before management has sold any!

If management hold and hedge an available-for-sale financial asset, under IAS39 gains and losses go initially to equity and would be recycled if it sold the asset or it became impaired, whereas under FRED 30 all gains and losses go to the STRGL.

During year 1 an entity purchases a debt security for £100 and classifies it as available-for sale. At the end of year 1, the fair value of the asset is £110. To protect this value, the investor enters into a hedge by acquiring a derivative with a nil fair value. By the end of year 2, the derivative has a fair value of £5 and the debt security has a corresponding decline in fair value.

Using IAS39 the entity makes the following accounting entries:

Year 1

<table>
<thead>
<tr>
<th>Dr.</th>
<th>£</th>
<th>Cr.</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt security</td>
<td>100</td>
<td>Cash</td>
<td>100.</td>
</tr>
</tbody>
</table>

To account for the acquisition of the security.

<table>
<thead>
<tr>
<th>Dr.</th>
<th>£</th>
<th>Cr.</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt security</td>
<td>10</td>
<td>Equity</td>
<td>10</td>
</tr>
</tbody>
</table>

To account for the increase in the security’s fair value.

Year 2

<table>
<thead>
<tr>
<th>Dr.</th>
<th>£</th>
<th>Cr.</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derivative</td>
<td>-</td>
<td>Cash</td>
<td>-</td>
</tr>
</tbody>
</table>

To record the acquisition of the derivative at nil cost.

<table>
<thead>
<tr>
<th>Dr.</th>
<th>£</th>
<th>Cr.</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derivative</td>
<td>5</td>
<td>Profit and loss</td>
<td>5</td>
</tr>
</tbody>
</table>

To record the increase in the derivative’s value.

<table>
<thead>
<tr>
<th>Dr.</th>
<th>£</th>
<th>Cr.</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>Profit and loss</td>
<td>5</td>
<td>Debt security</td>
<td>5</td>
</tr>
</tbody>
</table>

To account for the decrease in the security’s fair value. The entity would recycle the £10 gain to equity into the profit and loss account if and when management sold the asset or it became impaired.

Using FRED30 the entity makes the following accounting entries:

Year 1

<table>
<thead>
<tr>
<th>Dr.</th>
<th>£</th>
<th>Cr.</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt security</td>
<td>100</td>
<td>Cash</td>
<td>100.</td>
</tr>
</tbody>
</table>

To account for the acquisition of the security.

<table>
<thead>
<tr>
<th>Dr.</th>
<th>£</th>
<th>Cr.</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>Debt security</td>
<td>10</td>
<td>STRGL</td>
<td>10</td>
</tr>
</tbody>
</table>

To account for the increase in the security’s fair value.

Year 2

<table>
<thead>
<tr>
<th>Dr.</th>
<th>£</th>
<th>Cr.</th>
<th>£</th>
</tr>
</thead>
<tbody>
<tr>
<td>Derivative</td>
<td>-</td>
<td>Cash</td>
<td>-</td>
</tr>
</tbody>
</table>
To record the acquisition of the derivative at nil cost.

Dr. Derivative 5
Cr. STRGL 5

To record the increase in the derivative’s value

Dr. STRGL 5
Cr. Debt security 5

To account for the decrease in the security’s fair value.

Comparability problems

As IAS39 requires fair value changes in available-for-sale to go to equity unless management hedge its value when both the gains and losses on the derivative and the underlying go immediately to profit or loss. This can cause comparability problems. Consider the example given by Hernandez Herndandez (2003b, pp.80-81):

- Assume that on January 1, 20X1, Company X and Company Y purchase for $1,080 the same debt security that has a face value of $1,000 and a five-year life.
- The debt security pays interest annually at a stated rate of 10 percent.
- At the date of acquisition the effective debt interest rate is 8 percent.
- Both companies classify the debt as available for sale.
- Company X must recognise the changes in the fair value of the investment in equity.
- Company Y acquires a derivative to protect the value of the debt security and designates it as a hedge of the debt security.
- Assume that on December 31, 2001, the derivative has a loss of $73.

Company X:

Dr. Investment in debt security $73
Cr. Increase in fair value (included in equity) $73.

Company Y:

Dr. Investment in debt security $73
Cr. Increase in fair value (included in income) $73.

Dr. Decrease in fair value of derivative (included in income) $73
Cr. Derivative asset $73.
Assume both companies acquire the same derivative, but only Company Y designates the derivative as a hedging instrument:

Both companies:

Dr. Decrease in fair value of derivative (included in income) $73
Cr. Derivative asset $73.

Company X:

Dr. Investment in debt security $73
Cr. Increase in fair value (included in equity) $73.

Company Y:

Dr. Investment in debt security $73
Cr. Increase in fair value (included in income) $73.

<table>
<thead>
<tr>
<th>Carrying amount of the security</th>
<th>P&amp;L</th>
<th>Equity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Company X:</td>
<td>$1,139</td>
<td>-</td>
</tr>
<tr>
<td>Company Y:</td>
<td>$1,139</td>
<td>-</td>
</tr>
</tbody>
</table>

By not designating the derivative as a hedge and electing to report changes in fair value in equity, Company X shifts the recognition of the ‘gain’ on the debt into the future. This possibility decreases comparability.

会计处理现金流量套期

IAS39要求:

“If a cash flow hedge meets the conditions...it shall be accounted for as follows:
(a) the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge...shall be recognised directly in equity through the statement of changes in equity...; and

(b) the ineffective portion of the gain or loss on the hedging instrument shall be recognised in profit or loss”. ...(IASB, 2003, para.95).

“For cash flow hedges other than those covered by paragraphs 97 and 98 [see below], amounts that had been recognised directly in equity shall be recognised in profit or loss in the same period or periods during which the hedged forecast transaction affects profit or loss (for example, when a forecast sale occurs)” (IASB, 2003, para.100).

By contrast, FRED30 requires:

“If a cash flow hedge meets the conditions...it shall be accounted for as follows:

(a) the portion of the gain or loss on the hedging instrument that is determined to be an effective hedge...shall be reported on the balance sheet among the entity’s assets and liabilities and described as ‘gains and losses arising on effective cash flow hedges not yet recognised in the profit and loss account’; and

(b) the ineffective portion of the gain or loss on the hedging instrument shall be recognised immediately in profit or loss” ((M&R) para.158).

“For all cash flow hedges...that had been reported amongst assets and liabilities shall be included in profit and loss in the same period or periods during which the hedged forecast transaction affects profit or loss (for example, when a sale actually occurs”’ (M&R) para.162).

Example

Suppose that we change the above example so that management arranges forward contract cover for a forecast purchase of goods for 1 million Euros to be delivered on 31st March the following year when it will pay for the goods. The forward rate is £1.8050 = 1 Euro. Assume there are no other costs in arranging the contract. At the 31st December, the UK company’s year-end, the exchange rate is £1.8000 = 1 Euro, and at the payment date of the 31st March is £1.8100 = 1 Euro. The hedge is 100% effective.

Using FRED30:

As the receivable equals the payable, we initially record the forward contract at its cost of nil, and bring the goods and the debt to the supplier into the accounts at the current rate:

\[
\begin{align*}
\text{Dr.} & \quad \text{Forward contract receivable} & 1,805,000 \\
\text{Cr.} & \quad \text{Forward contract payable} & 1,805,000.
\end{align*}
\]

At the year end we translate the forward contract receivable at the current rate of 1.8:
Dr. 'gains and losses arising on effective cash flow hedges not yet recognised in the profit and loss account' 5,000
Cr. Forward contract receivable 5,000

When management receive the cash at the forward rate:
Dr. Forward contract payable 1,805,000
Cr. Cash 1,805,000.

To account for the arrival of the goods at 1.81:
Dr. Goods 1,810,000
Cr. German supplier 1,810,000.

Management translate the foreign currency received at the rate at that date, and use it to eliminate the forward contract receivable and to recognise a 'gain' on translating the forward contract receivable to the closing rate:
Dr. Foreign currency 1,810,000
Cr. Forward contract receivable 1,800,000

Cr. 'gains and losses arising on effective cash flow hedges not yet recognised in the profit and loss account' 10,000.

When management pays the supplier it recognises an equal and opposite 'loss' from having to pay the supplier, rather than converting the Euros into £s and recognise the 'gains and losses arising on effective cash flow hedges not yet recognised in the profit and loss account':
Dr. German supplier 1,810,000
Cr. Foreign currency 1,810,000.

Dr. 'gains and losses arising on effective cash flow hedges not yet recognised in the profit and loss account' ...10,000
Cr. Profit and loss account 5,000

Using FRED30’s method we carry the goods at the exchange rate on the date the goods arrived at £1,810,000 rather than the cost determined by the forward exchange contract of £1,805,000, and recognise the difference of £5,000 as profit when the goods arrive!

By contrast, under IAS39 management accounts for all fair value changes in equity and recycles them to the profit and loss account or, for non-financial assets and liabilities, add them to the carrying value of the asset or liability (paras.97-101). In the above example, management could deduct the £5,000 profit from the asset and account for the stock at its actual cost of £1,805,000 (IASB, 2003, paras.97-99; see below).

To qualify for the special accounting arrangements for hedge accounting, management must meet the following conditions, of which the second and third conditions themselves may cause difficulties and decrease comparability (not discussed here):

- formal documentation of the detail of the hedge exists;
- the hedge is expected to be highly effective;
- for cash flow hedges, a forecasted transaction must be highly probable;
- the effectiveness of the hedge can be reliably measured;
- the hedge is assessed on an ongoing basis and determined actually to have been highly effective throughout the financial reporting period (IASB, 2003, para.88).\(^{14}\)

\(^{14}\) Under FAS133, ‘defining and testing a measure of hedge effectiveness are important and challenging aspects of hedge accounting. …Because SFAS No.133 does not specify a bright line test to distinguish a highly effective hedge from less effective or ineffective hedges, the interpretation of ‘highly effective’
Summary of IAS 39’s main fair value and cash flow hedge accounting rules

<table>
<thead>
<tr>
<th>Change in fair value of hedging instrument</th>
<th>No hedge</th>
<th>Fair value hedge</th>
<th>Cash flow hedge</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recognised immediately in net profit or loss</td>
<td>Recognised immediately in net profit or loss</td>
<td>Recognised in equity</td>
<td></td>
</tr>
</tbody>
</table>

| Change in the fair value of the underlying | NA | • adjust the carrying amount of the hedged item, • recognised immediately in net profit or loss. | • included in equity and recycled to earnings in the same period(s) when the forecast transaction affects earnings. • if a forecasted transaction results in the recognition of a financial asset or liability, include in equity and recycle to profit or loss at the time of recognition of the asset or liability; • if a forecasted transaction results in the recognition of a non-financial asset or a non-financial liability, either: (a) include in equity and recycle into profit and loss, or (b) include in the carrying amount of the asset or liability. |

Comparability problems

1. One comparability problem arises because IAS39 allows management the option of separating the interest element and the spot price of a forward contract (IASB, 2003, para.74 (a)). IAS39 (2000) gave the following example from its Implementation Guidance that deals comprehensively with the very common hedging of foreign currency risk associated with a future sale using a forward currency contract. It shows how such a hedge is initially a cash flow hedge of the future sale and then becomes a fair value hedge of the receivable, the subject of the second comparability problem:

is a matter of judgment” (Finnerty and Grant, 2002, p.97). We do not discuss the subjectivity introduced by the many choices in this testing process (See: Finnerty and Grant (2002) for details).

15 And separating the intrinsic value and time value of an option contract and designating as the hedging instrument only the change in intrinsic value. These separations, based on neo-classical economic theory that concerns itself with ‘opportunity costs’ rather than real costs, are irrelevant to management’s accountability. The IASB accepts that the separation option reduces comparability, but justified it because it allowed greater use of hedge accounting (IASB, 2003, para.BC147)!
Cash flow hedge of forecasted sales and resulting receivable:

Company A has the Reporting Currency (RC) as its measurement currency. On 30 June 2001, it enters into a forward contract to receive (FC) 100,000 and deliver RC 109,600 on 30 June 2002 at an initial cost and fair value of zero. It designates the forward exchange contract as a hedging instrument in a cash flow hedge of a firm commitment to purchase a quantity of paper for FC 100,000 on 31 March 2002 and, subsequently, as a fair value hedge of the resulting payable of FC 100,000, which is to be paid on 30 June 2002. All hedge conditions of IAS39 are met.

<table>
<thead>
<tr>
<th>Date</th>
<th>Spot rate</th>
<th>Forward rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 June 2001</td>
<td>RC 1.072 to FC 1</td>
<td>RC 1.096 to FC 1 (12 months)</td>
</tr>
<tr>
<td>31 December 2001</td>
<td>RC 1.080 to FC 1</td>
<td>RC 1.092 to FC 1 (6 months)</td>
</tr>
<tr>
<td>31 March 2002</td>
<td>RC 1.074 to FC 1</td>
<td>RC 1.076 to FC 1 (3 months)</td>
</tr>
<tr>
<td>30 June 2002</td>
<td>RC 1.072 to FC 1</td>
<td>-</td>
</tr>
</tbody>
</table>

Company A’s rate of interest is 6% throughout the transaction.

Fair values of forward exchange contract:

31st December 2002: \[
\left\{\frac{1.092 \times 100,000}{1.066} - 109,600\right\} = - $388
\]

31 March 2002: \[
\left\{\frac{1.076 \times 100,000}{1.063} - 109,600\right\} = - $1,971
\]

30 June 2002: \[
\left\{\frac{1.072 \times 100,000}{1.06} - 109,600\right\} = - $2,400
\]

(a) Accounting for these transactions if the hedging relationship is designated as being for changes in the fair value of the forward contract:

30 June 2001

<table>
<thead>
<tr>
<th>Date</th>
<th>RC</th>
<th>RC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Forward</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Cr. Cash</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

To record the forward contract at its initial cost, zero.

31 December 2001

<table>
<thead>
<tr>
<th>Date</th>
<th>RC</th>
<th>RC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Equity</td>
<td>388</td>
<td>388</td>
</tr>
<tr>
<td>Cr. Forward - liability</td>
<td>388</td>
<td>-</td>
</tr>
</tbody>
</table>

31 March 2002

<table>
<thead>
<tr>
<th>Date</th>
<th>RC</th>
<th>RC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dr. Equity</td>
<td>1,583</td>
<td>1,583</td>
</tr>
<tr>
<td>Cr. Forward - liability</td>
<td>1,583</td>
<td>-</td>
</tr>
</tbody>
</table>

1,971 - 388 = 1,583.
Dr. Paper (purchase price)  107,400
Dr. Paper (hedging loss)  1,971
Cr. Equity  1,971
Cr. Payable  107,400.

To record the purchase of paper at the spot rate (1.074 x 100,000) and remove the cumulative loss on the forward reported in equity, RC 1,971, and include it in the initial measurement of the purchased paper, giving an initial measurement of the purchased paper of RC 109,371.

30 June 2002

Dr. Payable  107,400
Cr. Cash  107,200
Cr. Income  200

To record the settlement of the payable at the spot rate (100,000 x 1.072 = 107,200) and the associated exchange gain of 200 = 107,400 - 107,200.

Dr. Income  429
Cr. Forward - liability  429
2,400 - 1,971 = 429.

Dr. Forward - liability  2,400
Cr. Cash  2,400

To record the net settlement of the forward exchange contract.

(b) Accounting for these transactions if changes in the spot element of the forward contract only are designated in the hedge:

30 June 2001

Dr. Forward  -
Cr. Cash  -

To record the forward contract at its initial cost, zero.

31 December 2001

Dr. Income (interest element of forward)  1,165
Cr. Equity (spot element)  777
Cr. Forward - liability  388.

The change in the present value of the spot element of the forward exchange contract is a gain of 777 = \{([1.080 x 100,000] - 107,200)/1.06^{5/12}} - \{([1.072 x 100,000] - 107,200)/1.06\}, which is recognised directly in equity. The change in the interest element is the residual of 1,165.

31 March 2002

Dr. Equity (spot element)  580
Dr. Income (interest element)  1,003
Cr. Forward - liability  1,583.

The change in the present value of the spot element is a loss of 580 = \{([1.074 x 100,000] - 107,200)/1.06^{5/12}} - \{([1.080 x 100,000] - 107,200)/1.06^{5/12}\} = 580.

Dr. Paper (purchase price)  107,400
Dr. Equity
Cr. Paper (hedging gain) 197
Cr. Payable 107,400.

To recognise the purchase of the paper at the spot rate (=1.074 x 100,000) and remove the cumulative gain on the spot element of the forward contract that has been recognised in equity (777 - 580 = 197) and include it in the initial measurement of the purchased paper. Accordingly, the initial measurement of the purchased paper is RC 107,203.

30 June 2002

Dr. Payable 107,400
Cr. Cash 107,200
Cr. Income 200

To record the settlement of the payable at the spot rate (100,000 x 1.072 = 107,200) and the associated exchange gain of 200.

Dr. Income (spot element) 197
Dr. Income (interest element) 232
Cr. Forward - liability 429.

To record the change in the fair value of the forward contract, 2,400 - 1971 = 429.

The change in the present value of the spot element of the forward exchange contract is a loss of 197 = \{([1.072 x 100,000] - 107,200) - \{([1.074 x 100,000] - 107,200)/1.06^{3/12}\}.

The change in the interest element of the forward contract (the residual change in fair value) is a loss of 232 = 429 - 197, which is recognised in income.

Dr. Forward - liability 2,400
Cr. Cash 2,400

To record the net settlement of the forward exchange contract.

We can highlight the differences between method (a) and (b) in T-accounts:

(a)

<table>
<thead>
<tr>
<th></th>
<th>Equity</th>
<th>Forward contract</th>
<th>Paper</th>
<th>Cash</th>
</tr>
</thead>
<tbody>
<tr>
<td>388</td>
<td>1583</td>
<td>2400</td>
<td>107,400</td>
<td>107,200</td>
</tr>
<tr>
<td>1971</td>
<td>1583</td>
<td>429</td>
<td>1971</td>
<td>2400</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>107,400</td>
<td></td>
</tr>
</tbody>
</table>

We can highlight the differences between method (a) and (b) in T-accounts:
As UKGAAP said, “there is a significant difference on the income statement - all gains and losses on the forward are initially deferred in equity in part (a) whereas in part (b) changes in the fair value of the interest element of the forward are immediately recognised in income” (2001, p.830). Method (a) loads the so-called exchange losses on to the paper’s cost, whereas method (b) charges them as ‘interest’ through the profit and loss account. In traditional accounting, the cost is determined by the forward contract at FC 109,600, and the so-called ‘gains’ and ‘losses’ are completely spurious.

2. The designation choice also effects the accounting, again reducing comparability. Hwang (2002) analyses three cases in which “[a]lthough the same instrument is used to hedge risk…, it becomes apparent that different financial results are possible during interim periods depending upon the designation of the derivative (or by a decision not to designate the derivative)” (pp.232-233). Consider the following example from Hernandez Hernandez (2003a):

**A fair value hedge of a note payable using an interest rate swap:**

- Company A borrows $1,000,000 on a 3-year 6% note on 2 January, 2001.
- Company A also has $1,000,000 in 3-year, variable rate bonds.
- The variable rate on these bonds is determined annually at the London Interbank Offer Rate (LIBOR) each 31 December.
- On 2 January 2001, Company A enters into a 3-year interest rate swap on $1,000,000 notional amount.
- The swap is settled annually at the net amount of the difference between the rate exchanged and the rate received, Company A is to receive 6% (which is LIBOR on 2 January 2001) and pay LIBOR.
- Assume LIBOR is 6.5% on 31 December 2002 and 5.5% on 31 December 2003.
- Company A designates the interest rate swap as a hedge of the changes in the fair value of the note payable attributable to changes in market interest rates.
- The hedge is fully effective:

**Borrow**

$1m, 3-year note and pay 6%.
Lend

$1m, 3-year and receive LIBOR.

Swap

Receives 6%
Pays LIBOR

In short, Company A pays and receives 6%, and pays and receives LIBOR.

However, under IAS39 (following FAS133), all changes in the fair value of the note payable and the interest rate swap will be reported in earnings:

**Effects of the fair value hedge**

<table>
<thead>
<tr>
<th>Note payable</th>
<th>Interest rate swap</th>
<th>Expense</th>
<th>Net payment</th>
</tr>
</thead>
<tbody>
<tr>
<td>$1,000,000</td>
<td>0</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2 January 2001

Interest accrued (60,000) Payments (receipts) 60,000 Effect of changes in rates 9,103

31 December 2001

Interest accrued (60,000) Payments (receipts) 60,000 Effect of changes in rates 9,103

- Since the fixed and variable rates were the same in 2001, no cash is exchanged on 31 December.

- If we assume Company A expects to pay $5,000 for the next two years [$1,000,000 x (6.5% - 6%)], on 31 December the swap would be recorded as a liability at its present value of $9,103 [PVS_{0.065/2} x $5,000 = $9,103].

- $990,897 = PVS_{0.065/2} x $60,000 + PV_{0.065/2} x $1,000,000.

<table>
<thead>
<tr>
<th>Interest accrued</th>
<th>Payments (receipts)</th>
<th>Amortization of basis adjustments</th>
<th>Effect of changes in rates</th>
</tr>
</thead>
<tbody>
<tr>
<td>60,000</td>
<td>60,000</td>
<td>4,408</td>
<td>9,434</td>
</tr>
</tbody>
</table>

- $4,408 = [PV_{0.065/1} x $60,000 + PV_{0.065/1} x $1,000,000] - $990,897.

- $1,004,739 = PV_{0.055/1} x $60,000 + PV_{0.055/1} x $1,000,000.

<table>
<thead>
<tr>
<th>Interest accrued</th>
<th>Payments (receipts)</th>
<th>Amortization of basis adjustments</th>
</tr>
</thead>
<tbody>
<tr>
<td>60,000</td>
<td>1,060,000</td>
<td>4,739</td>
</tr>
</tbody>
</table>

- $5,000 = $1,055,000 - (55,000) - 1,000,000.

31 December 2002

• Assume now that Company A designates the interest rate swap as a cash flow hedge of the variable-rate interest receipt on the bonds. The risk designated as being hedged is the risk of changes in cash flows attributable to changes in market interest rates.

**Effects of the cash flow hedge**

<table>
<thead>
<tr>
<th>Date</th>
<th>Swap debit (credit)</th>
<th>Equity debit (credit)</th>
<th>Earnings debit (credit)</th>
<th>Cash debit (credit)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 January 2001</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
<td>$0</td>
</tr>
<tr>
<td>Payments (receipts)</td>
<td>(60,000)</td>
<td>60,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effect of changes in rates</td>
<td>(9,103)</td>
<td>9,103</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>31 December 2001</td>
<td>(9,103)</td>
<td>9,103</td>
<td>(60,000)</td>
<td>60,000</td>
</tr>
<tr>
<td>Payments (receipts)</td>
<td>5,000</td>
<td>(65,000)</td>
<td>60,000</td>
<td></td>
</tr>
<tr>
<td>Changes in fair value of swap</td>
<td>8,842</td>
<td>(8,842)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reclassification of earnings</td>
<td>(5,000)</td>
<td>5,000</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 December 2002</td>
<td>4,739</td>
<td>(4,739)</td>
<td>(60,000)</td>
<td>60,000</td>
</tr>
<tr>
<td>Payments (receipts)</td>
<td>(5,000)</td>
<td>(55,000)</td>
<td>60,000</td>
<td></td>
</tr>
<tr>
<td>Changes in the fair value of swap</td>
<td>261</td>
<td>(261)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reclassification of earnings</td>
<td>5,000</td>
<td>(5,000)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>31 December 2003</td>
<td>0</td>
<td>0</td>
<td>(60,000)</td>
<td>60,000</td>
</tr>
</tbody>
</table>

Clearly, under IAS39, as for FAS133, there are problems of comparability because “derivatives can be accounted for in different ways, depending on whether they have been designated as hedging instruments and, if so, the type of hedge they have been designated for” (Hernandez Hernandez, 2003a, p.784). In the above example the ultimate impact of the hedge on earnings is the same (expenses are $5,000 higher in 2002 and $5,000 lower in 2003), but the components differ. Furthermore, designating the swap as a fair value hedge leads management to account for the current value of the debt, whereas designating it as a cash flow hedge leads management to account for the debt at the amortised cost.\(^{16}\) Unfortunately, as Johnson and Swieringa admit,

“The distinction between fair value and cash flow exposures is not always clear. For example, it is possible to hedge the market value of existing inventory (a fair value exposure) or hedge its eventual sales price (a cash flow exposure)” (1996, p.114).

\(^{16}\) See Chen (2003) for further examples of the inconsistency in hedge accounting because “fair value is not required to be used in accounting for liabilities” (p.339).
Is comprehensive fair valuing accounting the solution to IAS39’s problems?

The IASB admits in its Basis for Conclusions that “Some of the complexity in existing requirements is inevitable in a mixed measurement model based in part on management’s intentions for holding financial instruments and given the complexity of finance concepts and fair values estimation issues” (IASB, 2003, para.BC12). Can the IASB deal with the problems of comparability arising from the ‘mixed valuation’ approach to fair value and hedge accounting that allow management discretion by moving to comprehensive fair value accounting? Accountants with traditional leanings think not. For example, Paterson thinks:

“The trouble [with IAS39] is that it is based on a series of compromises that no one really finds satisfactory. A number of standard setters had previously argued that all financial instruments should be stated at fair value, with all movements in value reported in the profit and loss account. But this view has proved completely unsaleable to the business community. Among the main objections are that:

- no form of hedge accounting would be permitted, so that all hedges of future transactions would be treated as if they were speculative ventures; and
- all liabilities would be stated at fair value, with the result that a troubled company with a collapsing credit rating would report profits because it was perceived to be less likely to pay back its lenders” (Accountancy, August 2002, p.82).

The absence of comprehensive current values for financial instruments inevitably produces spurious income and equity volatility. However, comprehensive fair values are even less palatable to the investing community and many accountants, as we shall see.

Spurious income and equity volatility

Many commentators warned the FASB that fair value accounting for financial instruments would obscure the results of most companies by creating spurious income and equity volatility. For example, the US Federal Reserve Board could see no widespread demand for market value accounting to become the basis of the primary financial statements…[because]…[its] application…to business strategies when it is not appropriate, and particularly when applied on a piecemeal basis, may lead to increased volatility or fluctuation in reported results and actually obscure underlying trends or developments affecting a firm’s condition and performance. …This volatility could be artificial…. As a result, there could be accounting volatility that bears little relation to an institution’s overall risk position” (Phillips, 1997, pp.957, 959).

Under IAS39 and FAS133, the main causes of income and equity volatility are (a) fair valuing derivatives that do not qualify for hedge accounting; (b) booking actual hedge
ineffectiveness in income; and (c) booking cash flow hedge gains in equity. Some US share analysts are not impressed with the results of FAS 133.17

**Example: Fannie Mae**

US mortgage lender Fannie Mae was highly affected by FAS 133 in 2001. Fannie Mae uses derivatives only for hedging purposes and does not speculate in derivatives nor trade in them for its own accounts.

**Non-qualifying hedges**

Fannie Mae has investment portfolios of originated mortgage assets and mortgage-backed securities that are classified as held-to-maturity. Derivatives hedge these portfolios but they do not qualify for hedge accounting. FAS 133 thus requires fair value accounting for the derivatives but not for the corresponding hedged items. For example, a loss on derivatives used as economic hedges must be recognised but corresponding gains in the hedged investment portfolio cannot be recognised until realised. The asymmetry in accounting treatment creates earnings volatility.

**Qualifying cash flow hedge: derivatives as substitute for non-callable debt**

Fannie Mae uses derivatives to replicate non-callable and callable debt cash flow structures. It uses interest rate swaps (pay-fixed, receive-floating) as a substitute for non-callable debt. These interest rate swaps convert short-term discount notes into longer-term fixed-rate liabilities that better match the expected maturity of their fixed-rate mortgage assets. Economically there is little difference between this interest rate swap and the issue of a fixed-rate not or bond over the same period of time. However, FAS133 requires that Fannie Mae fair value the interest rate swaps, but not the non-callable bond nor the offsetting mortgage assets. The swap gains and losses, primarily arising from the fixed leg, will increase or reduce the equity position, and any hedge ineffectiveness will impact earnings. The equity fluctuations are not good indicators of the economic risk, since they arise from risk reduction. The earnings fluctuations...reflect the extent to which the derivative’s risk is more volatile than the risk of the hedged item.

**Qualifying cash flow hedge: derivatives as substitute for non-callable debt**

Instead of issuing a long-term fixed-rate bond with an embedded call right, Fannie Mae sometimes issues a shorter noncallable note, and purchases an option on a pay-fixed interest rate swap for the remaining period. Although in economic terms the two strategies are nearly the same, they are treated differently under FAS 133. Callable debt is not carried at fair value. However, under the second strategy, the swaption is designated as a cash flow hedge to fixed the rate of borrowing on the company’s anticipated debt issuance. The derivative is fair valued with the effective hedging gains and losses deferred in equity. The time value gains and losses on the swaption plus any hedge ineffectiveness are recognised in current earnings. This different treatment creates volatility in earnings and in equity which, if the purchased option is held until maturity, will net to zero over the life of the hedge. The volatility arises from accounting timing issues only. The information is confusing and does not, in our opinion, provide meaningful economic information to investors. Most analysts will likely want to exclude it from their analysis.

All three major rating agencies in the US (Standard & Poor’s, Moody’s, and Fitch Ratings) “have said they focus on operating income, which is adjusted to exclude the impact of FAS 133, instead of the income figure using FAS 133. The same can be said for the analysis of the capitalisation of a company” (Will, 2002). Several US companies are voluntarily disclosing a separate set of figures excluding the effects of FAS 133.

17 See Thinggaard (1996) for a contrary view from Danish financial analysts, but before they had experience of FAS133 and IAS39.
18 From Will (2002).
In Europe, the banks and insurance companies are fiercely resisting the proposed implementation of IAS39 in 2005 along with other IAS without concessions to reduce or eliminate the spurious volatility they expect it will inject into their accounts.\textsuperscript{19} The banks complain that although IAS39 requires the derivatives that banks use to hedge their interest rate risk on demand deposits and savings to be accounted for at fair values, but the liabilities for the deposits must remain at their historical amount (see below). Insurance companies complain because while IAS39 requires them to likewise account for their assets at fair values, it does not allow them to use fair value hedge accounting because it does not allow them to account for their liabilities at fair values (IAS39, para.2 (d)).

\textit{Current values for debt?}

Requiring or allowing companies to account for all debts at fair values would eliminate much of the hedging induced volatility, but this remains unacceptable to traditional accountants, some managements and many users of accounts. As David Damant, chairman of the Financial Instruments Task Force of the Association for Investment Management and Research and chairman of the accountancy advocacy committee of the UK Society of Investment Professionals (a strong supporter of fair value accounting) said,

“If long-term debt for example, in a company’s balance sheet is left at historic cost, and the fact that that debt has been swapped into another currency at a different interest rate is not disclosed, the balance sheet in its traditional historic cost mode is a delusion. So we move the derivative to fair value. Do we leave the long-term debt at historic cost? Obviously not if one is to understand the relationship between debt and derivative, and what is happening and what might happen in the future. \textit{But the revaluation of an enterprise’s own long-term debt is something which the large majority of users of the traditional accounts find very difficult to accept}” (quoted in the Financial Times, 20 June 2002, emphasis added).

This may “explain... why it has proved so difficult to produce rules that more than a handful of theoreticians will accept” (Robert Bruce, Financial Times, 20th June 2002). Fair valuing debt is unacceptable to many preparers and users because its consequences are paradoxical and counter-intuitive. As the IASB says, one of the concerns of bankers, securities regulators and insurers was that “if an entity applied the fair value option to financial liabilities, it might result in the entity recognising gains or losses in profit or loss for the changes in its own credit-worthiness” (2003, Background, para.3(c)).

\textsuperscript{19} See, for example, Financial Times, 31st March 2004; 13th April, 2004; 23rd April, 2004;
Example

Consider a company that issues debt that raises £1,895,393. Management is to pay off the debt in five equal annual instalments of £500,000 starting in one year. The debt carries an effective rate of interest of 10% per annum:

<table>
<thead>
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<th>Year</th>
<th>Amount</th>
<th>Discount rate</th>
<th>Present Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>500,000</td>
<td>0.909</td>
<td>454,545</td>
</tr>
<tr>
<td>2</td>
<td>500,000</td>
<td>0.826</td>
<td>413,223</td>
</tr>
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<td>3</td>
<td>500,000</td>
<td>0.751</td>
<td>375,657</td>
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<tr>
<td>4</td>
<td>500,000</td>
<td>0.683</td>
<td>341,507</td>
</tr>
<tr>
<td>5</td>
<td>500,000</td>
<td>0.621</td>
<td>310,461</td>
</tr>
</tbody>
</table>

|             | -----------------|
|             | 1,895,393        |

Assume that immediately after management raise the loan the company cannot repay the loan as scheduled, and it defers repayments for two years. If the market interest rate applied to the company’s debt is unchanged, its present value falls to:

<table>
<thead>
<tr>
<th>Year</th>
<th>Amount</th>
<th>Discount rate</th>
<th>Present Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>-</td>
<td>0.909</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
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<td>0.826</td>
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</tr>
<tr>
<td>3</td>
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<td>0.751</td>
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<td>310,461</td>
</tr>
<tr>
<td>6</td>
<td>500,000</td>
<td>0.564</td>
<td>282,237</td>
</tr>
<tr>
<td>7</td>
<td>500,000</td>
<td>0.513</td>
<td>256,579</td>
</tr>
</tbody>
</table>

|             | -----------------|
|             | 1,566,441        |

Thus, from the asset-liability point of view, the ‘gain’ arising from the negotiation is £1,895,393 - £1,566,441 = £328,952.

From the asset-liability point of view this fall in the market value of the debt represents an increase in equity interest and is therefore a ‘gain’. However, “The paradox that might arise would be that the more troubled the company’s financial position the higher the discount rate that would be applied, and consequently the larger the gain that would be recorded in the company’s accounts” (Chopping and Skerratt, 1997, p.402). In other words, there may be no economic gain to equity at all. While asset-liability supporters argue that if management also values assets at fair values it will have to charge an equal and opposite loss, fair value accounting for all assets has also proved unsaleable to the investing and business community. From the traditional viewpoint the paradox does not exist because we should continue to record the debt at the amount raised, lowering the company’s effective rate of interest to that where the present value of the payments equals the capital raised of £1,895,393. Lower returns are, after all, what the debt holders have agreed to in agreeing to restructuring the repayment of the debt. However, in response to concerns about this paradox, in its hearings in July 2003 the IASB

“tentatively concluded that the fair value of an entity’s liabilities should reflect the credit risk of the instruments, but additional disclosures will be required of
the amount of change in the fair value that is not due to changes in the benchmark risk-free rate.

When an entity take the option to designate liabilities as held for trading, permissible under the exposure draft, then its profit or loss will include the effect of changes in its own credit risk. Hence, if the entity performs badly it may, counter-intuitively, report a profit as its liabilities decline in value.

This disclosure requirement will at least explain the extent to which the profit has benefitted from changes in the credit-worthiness of the entity” (Derivatives Week, 2003).

Although it is true that we may explain how much of the ‘profit’ is down to falling credit-worthiness - “the amount of the change in the fair value that is not attributable to changes in a benchmark interest rate” (IASB, 2003, para.BC4) - this does not explain why it is a ‘profit’ in the first place.20

**Fair values for demand deposits?**

Another paradox is highlighted by the frustration of the banks in being unable to use fair value hedge accounting for their hedges of the interest rate risk on demand deposits which they must account for at their historical proceeds, and having to account for the derivative as a cash flow hedge thereby inducing spurious volatility in their equity.21 The revised IAS39 specifically prevents bankers from valuing demand or ‘core’ deposits at fair value:

“The fair value of a financial liability with a demand feature (eg a demand deposit) is not less than the amount payable on demand, discounted from the first date that the amount required could be required to be paid” (IASB, 2003, para.49).

European bankers are not happy with this exclusion. As Paul Chisnall (Executive Director of the British Bankers’ Association, and Chair of the Accounting Committee of the European Banking Federation) said, after the IASB’s revisions to IAS39 to allow bankers to more easily use fair value hedge accounting with offsetting entries in the profit and loss account,22 one remaining

“area of disagreement is demand deposits, such as current accounts and savings accounts, with the IASB arguing that they must be based on their contractual on-call maturity and not their expected maturity. As a result, when it comes to the risk exposure arising in the period between the contractual maturity and the expected maturity, banks will not be able to use fair value hedge accounting.

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20 It is easy to show that the change in fair value attributable to the change in the benchmark rate of interest is not a ‘gain’ either as, to distribute it and maintain capital, the entity must borrow at the new benchmark rate.

21 Banks, pension funds and insurance companies make extensive use of cheap interest rate futures to sell a financial instrument at a fixed price to avoid paper losses that might otherwise occur when interest rates unexpectedly increase and the price of the financial instrument falls, including customer loans.

22 The IASB agreed to allow ‘macro-hedging’ for portfolios of financial assets or liabilities, rather than recognising only hedges set up against a single asset or liability.
Banks dependent on demand deposits for a core part of their funding will therefore be obliged to adopt cashflow hedging and will have to endure the false volatility in their equity that this brings with it" (Accountancy, October 2003, p.83).

The paradox that Chisnall avoids mentioning is that, while it is true that bankers will rub their hands at receiving a new deposit even though the depositor could withdraw the money at any time, on demand, because the banker quite reasonably expects to hold onto it for sometime and earn interest on it, and according to the IASB’s conceptual framework this means the bank should account for the initial liability below the value of the assets it receives from the depositor, at its expected value, and report an immediate ‘gain’, to prevent this the IASB had already accepted the traditional view that “the fair value of such a liability is not less than the amount repayable on demand” (Thompson, 2003, p.85). “[T] board believes” allowing banks to recognise this as ‘gain’ would be “inappropriate” (IASB, 2003, para.BC95), but does not explain why. 23 Perhaps it fears that allowing this would open the door to comprehensive fair value accounting? 24

In January 2004 the IASB rejected a plea by the European banks for the right to use fair value hedge accounting on derivatives that cover demand deposits (Financial Times, 2nd February, 2004, p.28). The IASB has agreed to consider a proposal from the European banking federation, but it is unlikely that the IASB will agree to change.

Conclusions and future prospects

Asset-liability accounting for financial assets and liabilities is confusing, complex, and, from the traditional viewpoint, harmful to accountability. As Paterson says,

“IAS39…is the stuff of nightmares…. IAS39’s main difficulties are in its tortuous rules on measurement and hedging, which would baffle a Philadelphia lawyer” (Accountancy, August 2002).

So long as the theoretical basis of accounting continues to be the asset-liability approach, difficulties with these standards will continue. Benston is right that they attempt the impossible, and on a relatively unimportant issue from the economic valuation perspective:

“Financial accounting generally has not been designed to - and is finally incapable of - measuring and reporting on the kind of price risks that arise from, and can be hedged with, derivative instruments. [However,]…[i]t…should be recognized that financial statements as presented now and in the past do not inform investors about much more important risks, such as the probability that a new product will fail, that competitors will erode

23 Although it notes that “in many cases, the market price observed for such financial liabilities is the price at which they are originated between the customer and the deposit-taker - ie the demand amount” (IASB, 2003, para.BC94), in some cases it is not and the IASB does not explain why bankers should not account for these deposits at fair values.

24 The IASB claims that it does not want to be seen to giving in to ‘political’ pressure, but this argument is disingenuous because the IASB has not theoretically addressed the banker’s concerns.
the firm’s market position, that costs will increase substantially, or that the firm’s research will not result in new successful innovations or products” (1997, p.58).

Traditional accountants believe that financial accounting is designed to provide accounts of stewardship, not to help investors value companies. IAS39 not only fails to achieve this aim, but in the process reduces objectivity and comparability. Here are some ways it does this:

- it requires subjective judgements to classify instruments accounted for at cost and fair values;
- it allows and encourages the use of insufficiently reliable fair values;
- it allows mismatches between assets stated at fair value and liabilities at cost;
- it has complicated derecognition rules that do not always make clear when a sale takes place;
- it has complicated hedge accounting rules requiring management to make subjective judgements of ‘effectiveness’ and choices over what is hedged and how, therefore, management account for the transaction.

Although in revising IAS39 the IASB has conceded the banks’ case to be allowed to use hedge accounting when they hedge interest rate risks on a portfolio basis (FRED30 Supplement, Accountancy, October 2003), it has not compromised the fundamental principles of the standard, and fundamental hostility to it remains in some quarters, particularly the European banks about their inability to use fair value hedge accounting for core deposits. However, the hostility to IAS39 in Europe runs deeper than the problem of core deposits, as Damant says:

“It is a bigger question than technical issues like core deposits. The heart of the matter is that there are large forces on the continent who do not like transparency, fair values and the general principles which the IASB set out in their work programme” (Financial Times, 23rd February, 2004).

That is, hostility to the IASB’s asset-liability framework itself, that is not confined just to the continent of Europe. However, it is true that the focus of opposition has become the European Commission, for who it has become a make-or-break issue. For example, “Mr Bolkestein’s spokesman…warns that the IASB could lose the EU, its biggest sponsor, if the Commission cannot endorse IAS 39. ‘Who is the IASB going to make standards for?’ he asks. ‘The Solomons Islands?’” (Financial Times, 31st March, 2004). Whether the EU will endorse IAS39 as part of the 2005 package or, if so, in what form, remain open questions. However, it has become clear that, if not the IASB’s Achilles heel, IAS39 could be the Achilles Heel of its chairman, Sir David Tweedie:

“Friends of Sir David say he could lose his job over the affair. His five-year term as chairman ends in 2006 and he may find it hard to secure another mandate if the Commission is hostile” (Financial Times, 31st March 2004).

References


