PRICEWATERHOUSECOOPERS

International Accounting Standards

Financial Instruments

Understanding IAS 39

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Action needed now…

IAS 39, the new standard on financial instruments, is revolutionary. For companies that are significant investors, borrowers or users of derivatives, the standard raises wider issues than any previous standard in any area of accounting.

- The standard will affect all companies reporting under IAS, not just those using derivatives.
- The standard is effective 1 January 2001 for calendar year-end companies, but must be carefully considered in advance.
- Unlike most other new standards, implementation will require considerable resources, both internal and external. Accounting, treasury, systems and tax expertise will need to be brought together to implement the standard effectively.

The specific issues that companies will need to address include:

1 The use of hedge accounting (deferral of hedging gains and losses) will be subject to strict criteria. In particular, the use of macro, portfolio and internal hedges will be severely restricted.

2 Changes may be required to internal risk management policies, systems, processes and procedures if financial statements are to reflect management's view of the economics of hedging activities. **These must be in place by 1 January 2001.**

3 Classification of assets will need careful consideration. Investments will generally be carried at fair value unless designated as 'held-to-maturity'. Early sale of an asset designated as held-to-maturity may have severe accounting consequences.

4 Companies will need to review all existing financial assets and liabilities and may need to separate and mark- to-market certain derivatives that are currently embedded in other instruments.

5 Extensive new disclosure is required. Systems changes may be necessary to collect the required information.

6 The standard is not applied retrospectively and the accounting for transactions in previous periods is not re-opened. Nevertheless, transitional rules highlight a number of accounting issues that may need to be addressed in the run-up to the adoption date.

- SFAS 133, the US standard on derivatives and hedging, follows similar principles and has a similar implementation date. Companies reconciling to US GAAP should, with careful planning, be able to implement both standards concurrently, avoiding systems duplication and new reconciling items.
- Companies should begin to address the issues now. This is vital for companies with significant investment or trading activities, and those with treasury functions that are actively managing market risk. This includes corporates as well as banks and other financial institutions.

For further information and assistance in applying IAS 39, please contact your nearest PricewaterhouseCoopers office.

Chapter 1

Overview

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IAS 39 was issued in March 1999 and is effective for periods commencing 1 January 2001. Earlier application is encouraged and the standard may be adopted for any financial year that ended on or after 15 March 1999. For many companies, particularly those with large investment portfolios or those using derivatives and other instruments (most commonly to hedge exposures to interest rate and currency risk), the new rules will have a significant impact on reported performance. Companies will need to review investment and hedging strategies, and may need to implement systems changes, so that the required processes and documentation are in place on 1 January 2001.

The implementation process is so complex that few companies are likely to choose early adoption.

The standard sets requirements for a wide range of instruments, including all derivatives, an enterprise's investments in debt and equity securities, financial assets and liabilities held for trading and a company's own debt. It also covers short-term instruments such as trade receivables and payables, although its impact on the way these items are dealt with is unlikely to be significant.

In summary, IAS 39 sets out, for the first time, requirements for the recognition, derecognition and measurement of derivatives, all monetary assets and liabilities on a company's balance sheet and its equity investments. Scoped out of the standard are items such as investments in associates, leases, employee benefits and tax balances that are dealt with in other standards. The standard imposes strict limits on the use of hedge accounting, even for hedges that are economically effective.

Prior to IAS 39, there were virtually no rules in IAS on either the measurement of financial liabilities or hedge accounting. The requirements in IAS 25 for investments were highly flexible. Practice in all these areas was inconsistent.

The main changes to current accounting practices under the new rules are:

- Derivative instruments are recognised on the balance sheet and measured at fair value. Under previous practices, derivatives used for hedging purposes were often not recognised separately but as part of the transaction being hedged.
- Gains and losses arising from changes in fair values of derivatives (and trading assets and liabilities as under current practice) are recognised in the income statement, except when strict hedge effectiveness criteria are satisfied. **Hedging strategies and practices may need to be changed to meet these requirements and many existing hedging strategies will not qualify for hedge accounting under IAS 39.**
- Most investments in equity and debt instruments that were carried at cost or amortised cost under previous practice are measured at fair value under IAS 39. The exceptions are debt securities that are held-to-maturity (the use of this category is tightly

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controlled) and loans originated by the entity. There is a one-off choice of accounting policy as to whether fair value gains and losses on these 'available-for-sale' securities are recognised immediately in income or deferred in equity until the underlying investment is sold.

- The removal of assets and liabilities from the balance sheet (under sale and repurchase agreements, securities lending transactions and asset securitisations, for example) is subject to strict requirements ensuring that control of assets is transferred, and the primary responsibility for liabilities is legally extinguished. Combined with guidance on the consolidation of special purpose entities, the ability to conduct certain activities through vehicles that transfer assets and liabilities off the balance sheet is severely limited.

IAS 39 complements IAS 32, which deals with the classification of financial instruments as liabilities or equity (including 'split accounting' for compound instruments), offsetting of assets and liabilities and disclosures related to interest rate risk, credit risk and fair values of financial instruments, including derivatives. IAS 39 adds disclosures about financial risk management policies, objectives and practices and the accounting policies and assumptions used in this area.

The guidance in IAS on financial instruments is now broadly consistent with US GAAP, although the US guidance is more detailed in its coverage. With a few exceptions, notably debt/equity classification requirements, an enterprise following the financial instruments rules in US GAAP will also comply with the accounting required under IAS. The opposite is not always true. Companies reconciling from IAS to US GAAP will need to make detailed comparisons based on their own transactions and circumstances.

Chapter 2

Purpose of the standard and future plans

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Why do we need standards on financial instruments?

Accounting standards have not kept pace with market derivatives activities. Concern about accounting for derivatives has been heightened by the publicity surrounding large derivative-instrument losses at several companies. In 1993, the Global Derivatives Study Group (G30) proposed certain principles and disclosures, and recommended harmonisation of accounting standards in this area.

The IASC and other standard-setters began developing requirements for financial instruments over ten years ago. The timescale indicates the difficulties involved in reaching agreement. One of the challenges is to develop principles that will survive the test of time by continuing to meet their objectives for the range of new products and structures that continues to develop.

The original concern was that there is an increasing use of an ever-wider range of derivative instruments to manage risk and, perhaps, for speculation. Derivatives are often not recognised on the balance sheet and there is little disclosure about the extent of derivative use, the policies used to manage interest rate and currency risk and the risks to which a company exposes itself through derivatives. One or two examples help to illustrate the problem.

One simple and common use of a derivative is an interest rate swap to convert fixed rate debt (an exposure to fixed future interest payments) to variable interest rates. Often a lower overall financing cost can be obtained using fixed rate debt combined with a swap than through issuing variable rate debt on its own. Current practice is to treat the debt and the swap together as synthetic variable rate borrowing. The amount receivable or payable under the swap each quarter is used to adjust the interest payable on the debt and the net interest is reported in the income statement. The existence of the swap is generally disclosed as part of the terms of the debt.

The accounting is not an issue as long as each swap perfectly matches an underlying exposure, although the swap (by eliminating the exposure to fixed future interest payments) creates an exposure to variable future interest payments. But current accounting and disclosure requirements make it difficult to determine the underlying economics. Hence the call for disclosure of an enterprise's strategy for managing interest rate risk and of the risk (variable or fixed future cash flows) it chooses to accept. The next logical step is to separate the derivative from the underlying host contract and either measure the swap at fair value or disclose fair values to make the risks visible.

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Another common hedging strategy is to borrow in a foreign currency because future revenues are expected in that currency. Current practice would often be to defer gains and losses on the debt to match with corresponding losses and gains on the future revenue stream. In reality the enterprise creates an exposure to foreign currency risk to the extent that the anticipated revenue fails to materialise.

These concerns could perhaps be dealt with through disclosures, as required by IAS 32, except that the range of derivatives in use has expanded to include options, caps, collars, floors, futures, swaptions, butterfly spreads, inverse floaters … and so on … in various combinations and covering an increasing range of underlying indices. At the same time corporate treasury functions have become more sophisticated, using (and creating new demand for) increasingly complex derivatives to manage risk. Increasingly these treasury functions have flexibility to operate within defined risk limits, taking market positions that blur the distinction between risk management and trading. This has led to demands not just for detailed disclosure but also for all derivatives to be marked-to-market.

Requirements for marking derivatives to market naturally lead to similar demands for other financial instruments. Concerns about derivatives are closely linked to concerns about hedge accounting, hence calls for restrictions on the ability to defer hedging gains and losses. The standard-setters' response to these demands, for the present, is IAS 39.

Is IAS 39 the final solution?

No. Having addressed the derivatives issue, both the IASC and many national standard-setters believe that, for consistency, all financial instruments should be carried at fair value and all gains and losses should be recognised in the income statement. IAS 39 goes some way towards this, but one concern is that instruments are classified and accounted for based on management intent. For example, a debt security that is intended to be held to maturity is carried at amortised cost under IAS 39, but a similar security which is available for sale is carried at fair value. Some are concerned that companies will manage profit recognition by changing their apparent intentions and reclassifying such securities.

The IASC is involved in a project to develop a comprehensive and longer-term standard on financial instruments jointly with standard-setters of Australia, Canada, France, Germany, Japan, New Zealand, Nordic countries, the UK and the US. The intention is that this Joint Working Group (JWG) will develop an exposure draft for consideration by each of the participating standard-setters for adoption in their respective countries. An exposure draft is expected in the first half of 2000, but it will be at least two years after that before the IASC issues a standard; almost certainly longer.

The long-term aim of the JWG is to have **all** financial assets and financial liabilities measured in the balance sheet at fair value with all fair value changes in the income statement. Deferral hedge accounting might also be prohibited. It remains to be seen when detailed proposals will be published and whether the world is ready to accept such a model.

IAS 39 seems likely to be in place for some time.

Chapter 3

Scope of the requirements

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IAS 39 covers the following balance sheet assets and liabilities:

Financial investments:

- Listed and unlisted debt securities
- Listed equity securities
- 'Private equity' and other unlisted equity investments

Originated and purchased loans

Repurchase agreements and securities lending/borrowing transactions

Financial assets held for trading

Derivative instruments (whether held for trading or hedging purposes)

Trade and other receivables

Cash and cash equivalents

Trading liabilities (short positions and derivatives with negative fair values)

Trade and other payables and accruals

Current and long-term bank borrowings

Bonds, debentures and notes issued.

IAS 39 will change current accounting practice for some of these items (such as equity investments and derivatives), and standardise practices for others (such as repos, reverse repos and securities borrowing and lending transactions). It will have little effect on current practice for items such as short-term receivables and payables and an enterprise's borrowings. It will have a significant effect on current hedge accounting practices.

Non-monetary assets such as property, intangible assets, inventories and prepayments are not financial instruments and are therefore not covered by this standard.

A number of scope inclusions and exclusions are worthy of further explanation.

Own equity instruments

An enterprise's own equity instruments, including options and warrants issued and purchased and treasury shares, are not financial instruments as defined in IAS 39. The classification of own equity instruments is dealt with in IAS 32, and discussed further in chapter 14.

Insurance contracts

Rights and obligations under insurance contracts (requiring payment based on physical variables) are excluded.

Under these contracts, the payment is typically, but not always, based on the amount of the loss to the enterprise. Without this exclusion, these contracts might be classified as derivatives. The IASC is engaged in a separate project to develop an insurance accounting standard for these contracts.

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Financial guarantees

Guarantee contracts for non-performance of a specified party, including letters of credit and warranty obligations, are scoped out of the standard. Other guarantees based on an 'underlying' price or index are derivative instruments and are included. Essentially, the deciding factor is whether payment under a guarantee is triggered by a specific default event (product failure or default on a loan, for example) or by changes in an index (credit rating moves below AA, for example).

Weather derivatives

These excluded derivatives are insurance-type contracts (requiring payment based on climatic or geological variables). In some cases the payment is based on the amount of the loss to the enterprise, and in some it is not – for example a contract's settlement amount may be based on the number of centimetres of snowfall that occurs in New York's Central Park in January 2001. Trading in certain 'cold weather' derivatives, commonly used by energy suppliers, has begun recently in Chicago.

Commodity contracts

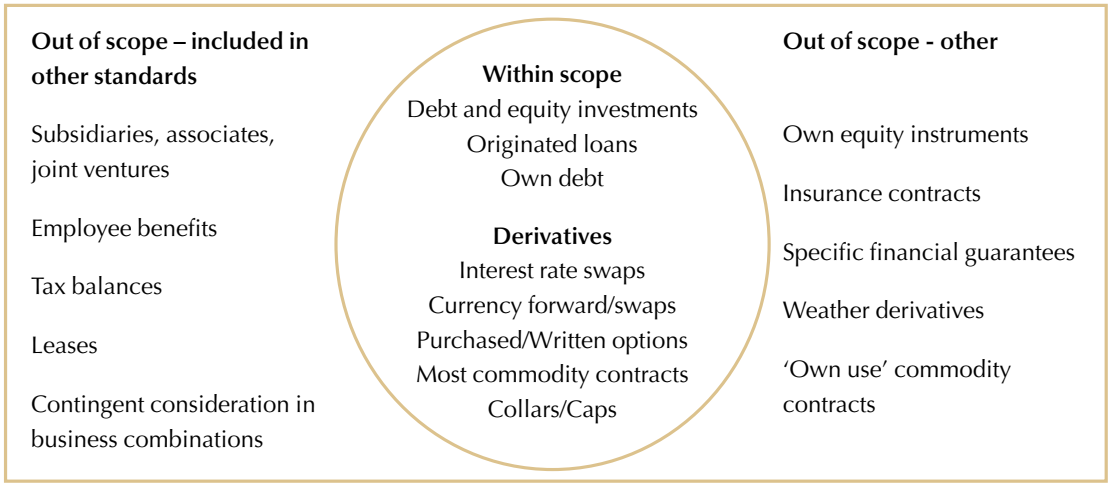
The standard applies to commodity-based contracts that give either party the right to settle in cash or some other financial instrument. However it excludes commodity contracts that cannot be cash settled as well as those that:

a) were entered into and continue to meet the enterprise's expected purchase, sale or usage requirements;

b) were designated for that purpose at their inception; and

c) are expected to be settled by physical delivery.

The following diagram illustrates the kind of instruments that are covered by, and scoped out of, the requirements:



Chapter 4

Introducing derivatives

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What is a derivative?

The standard describes a derivative as an instrument:

- whose value changes in response to changes in an 'underlying' price or index;
- that requires little or no initial net investment (or significantly less than the investment required to purchase the underlying instrument); and
- that is settled at a future date.

A derivative usually has a notional, face value or reference amount which is the 'volume' of the contract. Applying the volume to a change in the underlying price determines the amount to be exchanged at the settlement date. The definition includes both forward contract-type derivatives, where there is a commitment on both sides to a future settlement, and option-type derivatives where one party pays a premium in exchange for the right to a future settlement. In the case of options, the initial premium is usually significantly less than the amount required to purchase the underlying asset, therefore the 'little or no net investment' requirement is met. Forward contracts generally do not require an initial investment.

The standard covers both forward and option-type derivatives whose underlying is, for example:

- an interest rate;
- a security price;
- a commodity price;
- an exchange rate;
- a credit rating; or
- an index of any of the above.

The only exceptions are commodity-based derivatives:

a) whose contractual provisions do not allow net cash settlement; or

b) that permit cash settlement but are expected to be settled by delivering the commodity and are entered into to meet the enterprise's expected purchase, sale or usage requirements.

An example would be a contract entered into by a confectioner to purchase cocoa at a fixed price to meet its manufacturing needs. This is no different from a contract to purchase a piece of equipment which, by convention, is also not treated as a derivative.

Examples of derivatives and their underlying and notional amounts are shown in the table on page 16.

Accounting for derivatives

All derivatives are recognised on the balance sheet. They are initially measured at cost.

Where a forward-type derivative is transacted at market rates, there will be no initial net investment (zero cost), therefore the contract is recognised initially at an amount of zero. Option-type derivatives involve the payment of an initial premium to compensate the risk accepted by the writer and the potential benefit to the holder. The

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premium paid is the original cost to the holder, and the writer of an option will initially record the amount received as a liability.

Subsequently, derivatives are measured at their fair value. Over time, market expectations of the price of the underlying at the settlement date will change. The amount that the market would pay, or accept, to settle or 'close out' a derivative will change and this is its fair value. At the settlement date the fair value of a derivative is the net settlement amount, which is zero for an 'out of the money' option. The carrying amount of a derivative will fluctuate over its life, depending on changing market expectations; the carrying amount could be positive (an asset) or negative (a liability) at various times.

Some markets are highly standardised so that prices are readily available and, for some, the market value may be settled daily through margin calls. Other 'over the counter' (OTC) derivatives are designed and negotiated between the parties. Fair values are then determined by reference to similar traded instruments or using pricing models (see fair value measurement in chapter 6).

The initial cost of a derivative includes direct, external transaction costs, but not internal allocations of cost. Fair values exclude transaction costs. Therefore, when a derivative is marked-to-market through the income statement, transaction costs will be recognised as expenses immediately on initial recognition, when the instrument is first re-measured to fair value.

Under IAS 39, changes in the fair value of derivative instruments are recognised in the income statement as they arise, unless they satisfy the criteria for hedge accounting (see chapter 8). There are two other exceptions to the requirements:

- A derivative whose underlying is an unquoted equity instrument, and whose fair value cannot be measured reliably, is carried at cost until settlement.
- Similarly, any other derivative whose fair value cannot be measured reliably is carried at cost or amortised cost.

These exceptions are intended to be rare, however, as fair values are expected to be estimated using market values for similar instruments, or models, where direct market values cannot be obtained (see 'fair value measurement' in Chapter 6).

Securities markets often, for convenience, establish market rules or conventions under which a transaction is agreed on a 'trade date' and settled several days later (the 'settlement date'). The US terminology 'regular way trade' is used in the standard to describe these conventions. The standard allows initial recognition either at the trade date or at the settlement date. It requires, in most cases, changes in fair value between trade date and settlement date to be recognised. See chapter 16 for further details.

The 'embedded derivatives' issue

IAS 39 aims to ensure that the new requirements for marking derivatives to market are not avoided by 'embedding' a derivative in a host contract that is accounted for differently, either at amortised cost or 'revalued' through equity. The principle is that an embedded derivative should be split from the host contract and accounted for separately if its economics are not 'clearly and closely related' to those of the host contract.

For example, a company might invest in a low coupon corporate bond that is exchangeable for shares in another listed company. The bond is considered to be a debt security with an embedded option to purchase equity shares at a fixed price. Before IAS 39, the instrument would have commonly been accounted for as a single investment, carried at amortised cost. On exchange, the equity shares would be recorded at the carrying amount of the bond. Depending on the policy for equity securities, a gain or loss may have been recognised immediately after exchange.

Under IAS 39, the amount paid for the bond is split between the payment for the fair value of the debt security and the payment for the equity conversion option. If the bond is 'held-to-maturity' it will be measured at

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amortised cost. The discount arising from splitting out the equity derivative will increase interest income, over the life of the bond, to market rates. The equity conversion option is marked-to-market through the income statement. If the share price rises, gains will be recognised over the period before exchange, with no gain or loss arising on the exchange.

The guidance will require many common contracts with embedded derivatives to be separated, including:

- investments in convertible and exchangeable bonds;
- exchangeable bonds issued (IAS 32 already requires split accounting for convertible bonds issued);
- put options embedded in equity instruments held;
- options to extend the maturity date of fixed rate debt (except when interest rates are reset to market rates);
- any debt security or lease with interest or principal amounts linked to commodity or equity prices;
- a call or put option on debt that is issued at a significant discount; and
- any derivative that 'leverages' the payments that would otherwise take place under the host contract.

An example of an embedded derivative falling into the last category is an embedded foreign currency contract where the notional amount is more than the amount of the host contract.

A large number of embedded derivatives will remain with the host contract and will not be separated. These are the derivatives whose characteristics are 'clearly and closely related' to those of the host contract. Common examples of embedded derivatives that will not need to be separated are:

- early settlement (prepayment) options in debt instruments where early settlement would not result in a significant gain or loss;
- interest rate swaps embedded in a debt instrument (floating rate debt is not treated as fixed rate debt with a separate derivative swap, and vice versa);
- an interest rate floor or cap embedded in a debt instrument (where the option is 'out of the money' at inception);
- interest or principal currency swaps embedded in a debt instrument;
- an inflation index or contingent rentals dependent on related sales or interest rates embedded in a lease contract;
- a forward foreign exchange contract that results in payments in either party's reporting currency (see below).

In summary, embedded derivatives need not be separated when they reduce or adjust the risks inherent in a host contract but do not fundamentally change the nature of the risk. Derivatives will be separated from the host contract where the risks of each are different. Derivatives will also be separated where they significantly alter the risks in the original host contract such that the original nature of the host contract is transformed.

The principle of 'clearly and closely related' economics is explained in the standard only by providing lists of examples of contracts that pass and fail the test. It is likely that some flexibility will develop in practice in this area.

Contracts for goods and services in a foreign currency

One area where IAS 39 may have a significant impact is on sales and purchase contracts that are denominated in a foreign currency that is not the reporting currency of either party to the contract. Consider the following example:

A French company sells regularly to customers in Asia and has a price list denominated in US dollars as well as Euros. It agrees a supply contract with a Malaysian customer, with payment specified in US dollars. It might agree to do this, for example, if the Malaysian company has US dollar revenues or simply prefers an exposure in US dollars than one in Euros.
IAS 39 requires the forward contract embedded in the sales agreement to be separated from the host contract and accounted for as a derivative, by both the French and the Malaysian companies.

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This is because the product is not routinely priced in US dollars in international commerce, and the contract is not in the functional currency of either company.

To avoid income statement volatility, either company could hedge this dollar exposure using another derivative. Otherwise changes in exchange rates will cause a direct impact on the income statement. Before IAS 39, practice generally would have been simply to recognise revenue (for the French company) at the spot US dollar rate as each sale is made. It may or may not have hedged the US dollar revenue stream. The exchange risk in the supply contract would have been largely invisible. Under IAS 39 the exchange risk is highly visible and has a direct impact on the income statement. The company might be more inclined to hedge the exposure.

The derivative embedded in the supply contract would not be separated if the sales contract were with a US customer.

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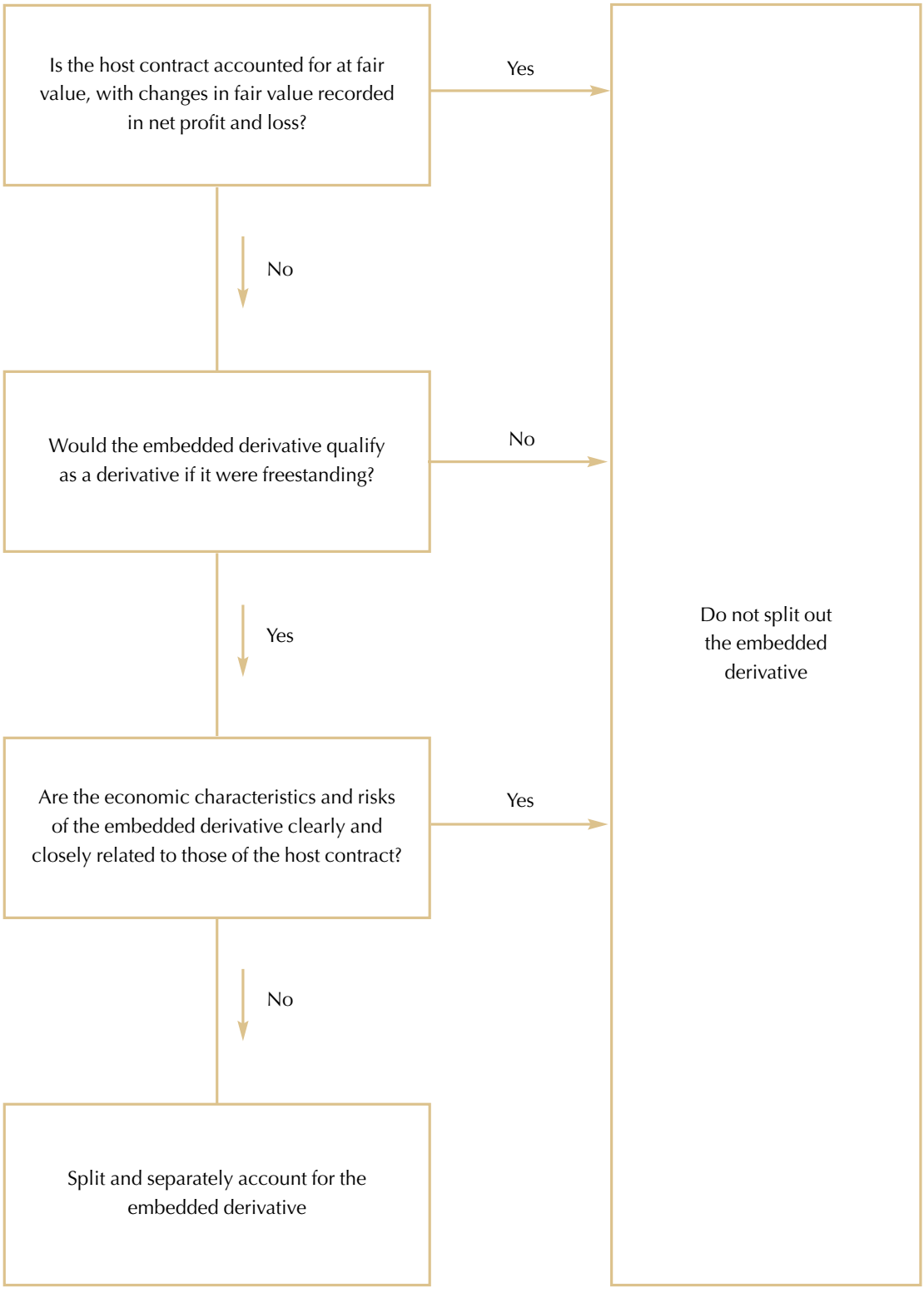
Decision tree for determining whether or not to separate an embedded derivative



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Examples of underlyings and notional amounts

Derivative	Underlying	Notional amount
Stock option	The underlying is the market price of the stock (e.g. price of ABC common shares). The strike price of the option is not the underlying. The variable is the market price of the shares; the strike price is fixed.	The notional amount is the number of shares (e.g. 1,000 shares).
	The settlement amount is a function of the market price, strike price and number of shares as determined by the following formula : (Market Price – Strike Price) x number of shares	
Currency forward	The underlying is the exchange rate (e.g. DM/US$ exchange rate).	The notional amount is the number of currency units (e.g. 200,000 DM).
	Settlement (either gross or net) occurs at the end of the contract term. Net settlement is determined by the following formula: (Forward rate in the contract – Spot rate on the settlement date) x Number of currency units.	
Commodity future	The underlying is the commodity price per unit (e.g. price of wheat per bushel).	The notional amount is a number of commodity units (e.g. 700 bushels).
	Net settlement typically occurs daily and is determined by the change in the expected future price, discounted to reflect the time to maturity.	
Interest rate swap	The underlying is the interest index (e.g. 3-month LIBOR).	The notional amount is the currency amount (e.g. US$1,000,000).
	Net settlement generally occurs periodically throughout the term of the contract based on the following formula: (Current interest index – Fixed rate specified in the contract) x Specified currency amount	
Default swap	Credit index or specific credit rating.	Specified payment amount (may be fixed or variable).

Chapter 5

Initial recognition

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IAS 39 sets out criteria that must be met for the initial recognition of a financial asset or liability, and the amount at which such a financial asset or liability is initially measured.

A company should recognise a financial asset or liability on its balance sheet **when, and only when, it becomes a party to the contractual provisions of the instrument.**

So a forward contract (e.g. a commitment to purchase/sell a specified financial instrument or commodity on a future date at a specified price) is recognised as an asset or liability on commitment date, rather than waiting until closing date on which the exchange actually takes place.

For 'regular-way' purchases and sales of securities, IAS 39 specifies that purchases of financial assets should be recognised using either trade date accounting or settlement date accounting, but the method used should be applied consistently for each of the four categories of financial assets in IAS 39 (see chapter 6). For sales of financial assets, settlement date accounting should be used. (See chapter 16 for further discussion on this distinction.)

The standard distinguishes between unconditional rights and obligations to receive or pay cash (where one party has performed its contractual obligations) and firm commitments which are conditional on further obligations being performed. For example, a trade receivable can be distinguished from a sales contract. In the second case no asset or liability is recognised until the contractual obligations have been performed by the seller.

Initial measurement is at cost: this is the fair value of the consideration given (in the case of an asset) or received (in the case of a liability).

Transaction costs are included in cost for all financial assets and liabilities. Transaction costs are the incremental costs directly attributable to the acquisition or disposal of a financial asset or liability. Transaction costs include advisers' and agents' fees and commission, duties and levies by regulatory agencies. Transaction costs do not include debt premium or debt discount, or financing costs, or allocations of internal administrative or holding costs.

The transaction costs become part of the carrying amount of the asset or liability. Transaction costs are included within the initial measurement amount and thereafter are treated as part of the historical cost of the asset/liability. **They are not treated as separate assets.** This principle applies to all assets acquired by a company and is not unique for financial assets.

For financial liabilities, the effect of including transaction costs in the initial measurement of the liability will affect the resulting premium or discount.

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The impact of the requirements on transaction costs is that:

- directly related costs of issuing debt (legal fees etc.) are not separately recognised as assets but are deducted from the amount of debt originally recognised, and are then amortised through the income statement over the life of the debt;
- if assets are carried at fair value, the transaction costs are immediately written off, either to income or to equity, depending on the classification of the financial assets (see chapter 6). This is because fair value excludes transaction costs;
- if assets and liabilities are carried at amortised cost, transaction costs are amortised through the income statement over the life of the instrument;
- transaction costs related to the acquisition of a hedging instrument would generally be expensed as 'hedge ineffectiveness'.

(See chapter 6 for an example of measurement using the amortised cost method.)

Chapter 6

Subsequent measurement

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Overview

Once IAS 39 is implemented, many financial instruments will be carried on the balance sheet at fair value. This deceptively simple concept has given rise to much debate and controversy, not least on whether fair value measurement is relevant, or whether a mixed model is more useful. The debate continues on this and other issues; whether unrealised gains and losses should be deferred in equity, for example, and whether they should be 'recycled' into income when realised. Additionally, the question arises as to whether and how fair values can be reliably determined for instruments that are not traded in active, liquid markets. IAS 39 establishes requirements in all these areas.

In summary, non-trading liabilities, assets that are 'held-to-maturity', and originated loan assets are measured at amortised cost. Trading assets and liabilities, including non-hedging derivatives, are measured at fair value with gains and losses recognised immediately in the income statement. 'Available-for-sale' assets, the residual category including all non-trading equity investments, are measured at fair value, with gains and losses recognised, under a one-time policy choice, either in equity or in the income statement. Gains and losses deferred in equity are recycled to the income statement on disposal.

Each category of asset and liability is defined, and specific rules prevent the 'cherry-picking' of profits by transferring assets between categories. There are severe accounting implications for companies that sell or transfer assets that they have classified as held-to-maturity.

Any company with significant investments, particularly equity investments that are currently carried at cost, will need to consider the impact of these changes, including the transitional rules discussed in chapter 12.

This chapter begins by considering the subsequent measurement of financial liabilities. There are only two categories of financial liabilities ('trading' and 'other') and the rules are less complex than those for financial assets. It then moves on to consider the four categories of financial assets and how they should be measured. Other issues related to the measurement of assets, dealt with at the end of this chapter, are as follows:

- Restrictions on transfers of assets and the 'tainting' rules for held-to-maturity assets.
- When is it possible to conclude that fair value cannot be measured reliably?
- What happens when a reliable fair value ceases to be available?
- How should financial assets be tested for impairment?

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Subsequent measurement of financial liabilities

Under IAS 39, all derivatives that are liabilities are remeasured to fair value. Derivatives are liabilities when they have negative fair values, i.e. when settlement would require the company to pay the fair value to the other party.

Trading liabilities are also measured at fair value. A financial liability is held for trading purposes if it was acquired or incurred principally for the purpose of generating a profit from short-term fluctuations in price or dealer's margin. Trading liabilities include short positions in securities (for example securities sold where the underlying security has been borrowed and is not recognised). See chapter 16 for further discussion on the treatment of securities borrowed.

The fact that a liability is incurred and used to fund trading activities does not mean that the liability is classified as held for trading.

All other (non-trading) financial liabilities are carried at amortised cost.

Accounting for the fair value adjustment on financial liabilities

For trading liabilities and other derivative liabilities that are remeasured to fair value, the changes in fair value are included in the net profit or loss for the period.

The above accounting is applied where the instrument is not part of a hedge transaction. Specific rules on income recognition apply in situations where hedge accounting is applied (see chapter 8).

The amortised cost calculation

The carrying amount of a (non-trading) liability is computed as:

- the amount to be repaid at maturity (usually the principal amount or face value); plus
- any unamortised original premium, net of transaction costs; or less
- any unamortised original discount including transaction costs; less
- principal repayments.

Stated another way, the proceeds from issuing the liability, net of transaction costs, are adjusted over the life of the liability so that the carrying amount at maturity is the amount repayable at maturity.

The amortisation is calculated on a yield to maturity basis. This method calculates the discount rate, or rate of interest, that is necessary to discount the stream of principal and interest cash flows to the initial net proceeds. That rate is then applied to the carrying amount at each reporting date to determine interest expense for the period.

In this way, the contractual interest expense in each period is adjusted to amortise any premium, discount or transaction costs over the life of the liability.

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Example of amortised cost using the 'effective interest' or 'yield to maturity' method

Assume a bond with a face value of ¥100,000 and bearing interest at 8% (payable annually) is issued by an enterprise for ¥94,418. Transaction costs on the issue (loan origination fee, legal fees, printing costs) are ¥2,000. The maturity date is five years from date of issue.

The 'effective yield' is the interest rate needed to discount all the cash flows on the bond (principal and interest) to the present value of ¥92,418. In this case, the 'effective yield' is 10% (using a DCF calculation which is not shown here), and therefore the enterprise recognises a finance cost at 10% on the carrying amount in each period.

The journal entries are as follows:

	DR	CR
1 January 2000		
1. Cash/Bank	¥ 92,418	
Bond Discount	7,582	
Debt instrument payable		¥ 100,000
To record the issuance of the bond (note that the transaction costs become part of the bond discount). The discount is shown as a direct deduction from the face amount. The net ¥92,418 is shown on the balance sheet (breakdown is shown in the notes).		
31 December 2000		
2. Interest expense (income statement) (92,418@10%)	9,242	
Bank (interest paid)		8,000
Bond Discount		1,242
To recognise the effective interest expense at 10% on the carrying amount of the liability, (interest of 8% payable on the face value of the bond and the amortisation of the bond discount). The bond is then stated on the balance sheet at ¥93,660.		
31 December 2001		
3. Interest expense (income statement)	9,366	
Bank (interest paid)		8,000
Bond Discount		1,366
To recognise the interest expense at 10% on the carrying amount of the liability.		

At maturity, the discount will be reduced to zero, leaving the carrying amount of the bond at ¥100,000. The interest expense is not constant, but increases in each period as the net carrying amount of the bond increases. In practice, the finance cost would be calculated daily, monthly or quarterly, giving a more precise allocation of interest expense, depending on materiality.

This can be compared to the straight-line method which would show a constant amount of interest expense of ¥9,516 in each period (¥8,000 plus amortisation of the initial discount over five years). The straight-line method is not permitted under IAS 39.

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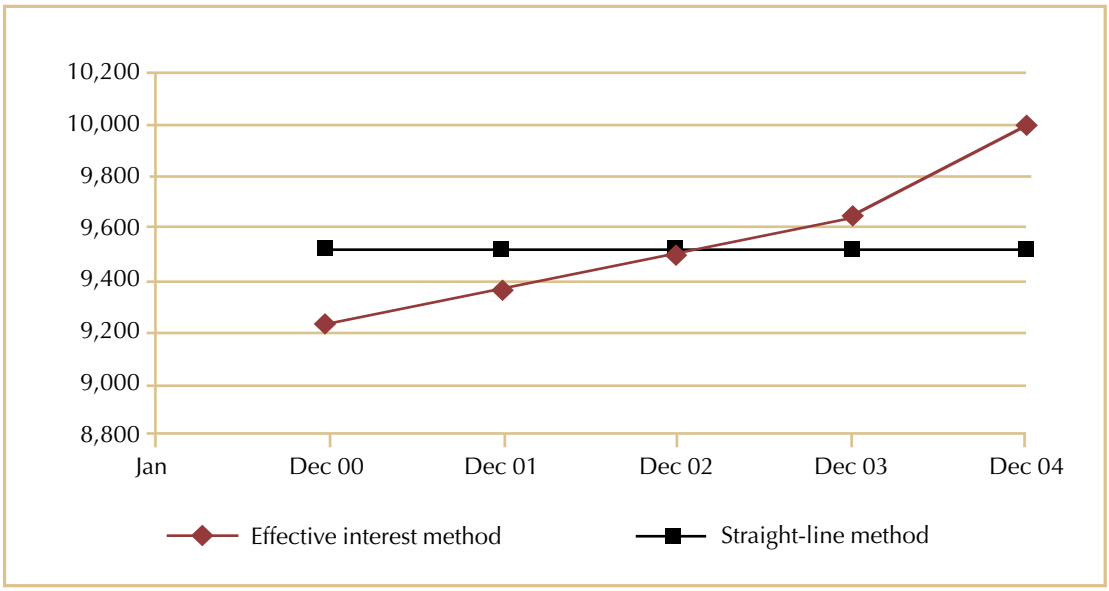
The following graph demonstrates the different income statement expense that would result under the two methods:



Subsequent measurement of financial assets

There are four categories of financial assets defined in IAS 39.10. This classification determines the subsequent measurement of the asset.

1. Financial assets held for trading.
2. Loans and receivables originated by the enterprise.
3. Held-to-maturity investments.
4. Available-for-sale assets.

The rules for measuring financial assets are similar to the equivalent guidance under US GAAP. The diagram below gives an overview:

	Measurement	Changes in carrying amount	Impairment test
Trading	Fair value	Income	No
Originated	Amortised cost	Income	Yes
Held-to-maturity	Amortised cost	Income	Yes
Available-for-sale	Fair value*	Income or equity (one-time choice)	Yes - if changes are deferred in equity

* Unless, in rare cases, fair value cannot be measured reliably.

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1. Financial assets held for trading

A financial asset is held for trading if acquired or originated principally for the purpose of generating a profit from short-term fluctuations in price or dealer's margin. Any financial assets that form part of a portfolio where there is an actual pattern of profit-taking are also classified as 'held for trading'.

Trading assets include debt and equity securities and loans and receivables acquired by the enterprise with the intention of making a short-term profit. Derivatives are always categorised as held for trading unless they are accounted for as hedges (see chapter 8).

All trading assets, including derivatives, are measured at fair value. There is a presumption that fair value can be reliably determined for financial assets that are held for trading. See also the discussion on 'Fair value measurement' on page 31.

These requirements represent a significant change to IAS 25, under which marketable equity security investments could be carried at (a) cost, or (b) market value, or (c) the lower of cost and market value, on a portfolio basis.

Accounting for the fair value adjustment

All gains and losses are included in the income statement in the period in which they arise. Gains and losses include realised gains and losses on disposal of trading assets and unrealised gains and losses arising from changes in fair value of trading assets held.

The above accounting is applied where the instrument is not part of a hedge transaction. Specific rules apply in situations where hedge accounting is used (see chapter 8).

2. Loans and receivables originated by the enterprise

Loans and receivables are originated by the enterprise by providing money, goods or services directly to a debtor, including trade receivables. Loans and receivables originated by the enterprise (and not held for trading) are measured at amortised cost.

A loan acquired as a **participation** in a loan from another lender is considered to be an originated loan as long as it is acquired on the date that the other lender originates the loan. A loan acquired through a **syndication** is an originated loan because each lender shares in the origination of the loan and provides money directly or indirectly to the borrower.

However, the acquisition of an interest in a pool of loans or receivables after they were originated (for example in connection with a securitisation) is a purchase, not an origination.

A transaction that is, in substance, a purchase of a loan that was previously originated by others (for example, a loan to a special purpose entity that uses the proceeds to acquire loans originated by others) is not a loan originated by the enterprise.

A loan acquired by an enterprise in a business combination is considered to be originated provided that it was similarly classified by the acquired enterprise. In other words, the acquisition of a company does not result in originated loans being reclassified as 'purchased'. The originated loans of the company acquired are initially recognised at their cost to the acquirer (ie fair value under IAS 22, Business Combinations) but are classified as 'originated' and subsequently measured at amortised cost.

Loans and receivables **acquired** are classified and accounted for as either held-to-maturity, trading or available-for-sale, in the same way as other financial assets acquired. Originated loans are not subject to the 'tainting' rules for held-to-maturity investments (see page 26).

3. Held-to-maturity investments

Held-to-maturity investments are financial assets with fixed or determinable payments and **fixed maturity** (e.g. debt securities and mandatorily redeemable preferred shares) that an enterprise has the **positive intent and ability** to hold to maturity. This category excludes originated loans (see above).

The impact of these definitions and the limitations on the held to maturity classification are discussed on pages 26 to 28.

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These financial assets continue to be accounted for at amortised cost using the effective interest method, as for financial liabilities (see example on page 21).

Fixed or determinable payments and fixed maturity means a contractual arrangement that defines the amounts and dates of payments to the holder, such as interest and principal payments on debt. **Equity securities cannot be classified as held-to-maturity.**

4. Available-for-sale financial assets

Available-for-sale assets are those financial assets that are not trading, originated or held-to-maturity. All financial assets classified as available-for-sale are carried at fair value.

There is a presumption that fair value can be reliably determined for financial assets classified as available-for-sale.

The available-for-sale category will include all equity securities except those classified as trading. One significant impact of the standard is, therefore, that all investments in equity securities will be carried at fair value.

Accounting for the fair value adjustment

IAS 39 allows an enterprise a one-time choice for recognising unrealised gains and losses on available-for-sale financial assets. Either:

- all changes in fair value are included in the income statement in the period in which they arise; or
- unrealised gains and losses are deferred in equity and 'recycled' from equity into the income statement on disposal or when the asset becomes impaired.

Each enterprise must apply its accounting policy consistently across the whole category.

The standard emphasises that, under IAS 8, a subsequent change in accounting policy should be made only if it will result in a more appropriate presentation of events or transactions in the financial statements. It is clear that the IASC Board believes that this is highly unlikely to be the case for a change from 'income statement' to 'equity deferral' policies.

In practice, many companies may choose equity, at least initially, as a compromise that will reduce income statement volatility and is also consistent with US GAAP. A change from the equity treatment of unrealised gains and losses to income is likely to become acceptable, and therefore more common, as it is consistent with the long-term aim that all financial instruments should be marked-to-market through the income statement. A change in the opposite direction, from 'income statement' to 'equity' treatment will become almost impossible.

The above accounting is applied where the instrument is not part of a hedge transaction. Specific rules on income recognition apply in situations where hedge accounting is applied (see chapter 8).

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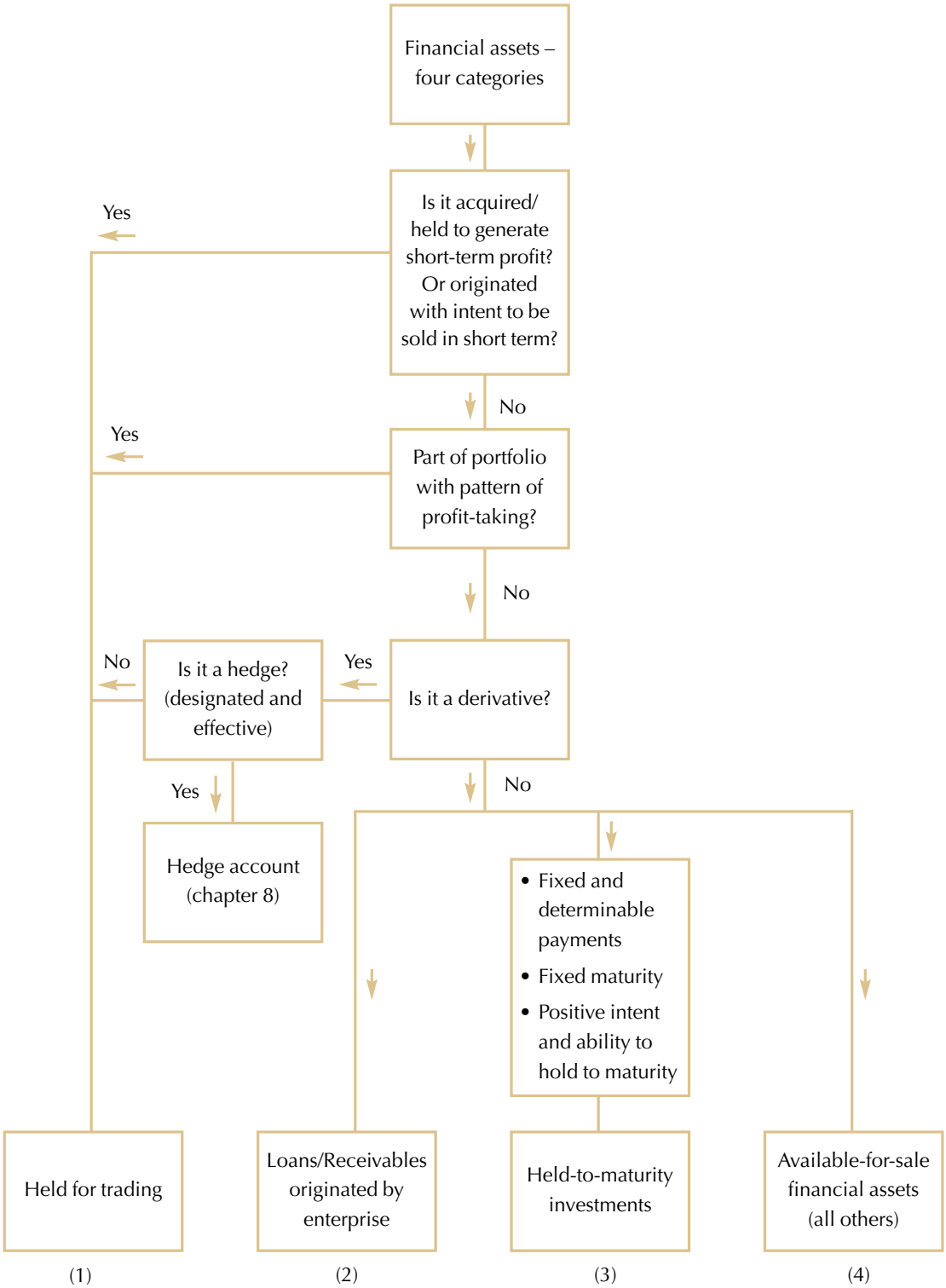
Decision tree for categorising assets



Categories (1) and (4) are carried at fair value.
Categories (2) and (3) are carried at amortised cost.

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Restrictions on the ability to 'manage' the timing of gains and losses

Before IAS 39, companies had relative freedom to manage the timing of gains and losses on investments. Investments could be carried at cost, with inherent gains being largely invisible except in note disclosure. Alternatively, they could be measured at fair value with gains and losses deferred as revaluations in equity. Gains and losses were recognised in the income statement only when investments were sold, or in some cases gains were 'triggered' by transferring investments between categories – into trading, for example.

IAS 39 restricts this flexibility to a large extent by:

- restricting the use of 'amortised cost' categories for financial assets with a residual 'fair value' category;
- restricting the use of the 'held-to-maturity' category by imposing sanctions on sales or transfers; and
- restricting the ability to transfer assets between categories.

Held-to-maturity tightly defined

For most financial assets, the standard regards fair value as a more appropriate measure than amortised cost. The held-to-maturity classification is therefore an exception, and there are strict criteria to be met before assets can be classified as such.

The standard requires 'the **positive intent** and **ability**' to hold a financial asset to maturity. The intent and ability must be assessed not only when the assets are initially acquired, but also at each subsequent balance sheet date. A positive intent to hold assets to maturity is a much higher hurdle than simply having no present intention to sell.

The positive intent cannot be demonstrated if:

a) the enterprise has the intent to hold the financial asset for only an undefined period;

b) the enterprise stands ready to sell the financial asset in response to changes in market interest rates or risks, liquidity needs, changes in the availability of and the yield on alternative investments, changes in financing sources and terms, or changes in foreign currency risk; or

c) the issuer has a right to settle the financial asset at an amount significantly below its amortised cost.

The ability to hold the financial asset to maturity is not demonstrated if the enterprise:

a) does not have the financial resources available to continue to finance the investment until maturity; or

b) is subject to an existing legal or other constraint that could frustrate its intention to hold the financial asset to maturity.

Equity securities cannot be held-to-maturity investments, because they have an indefinite life (such as ordinary shares) and because the amounts the holder may receive can vary in a manner that is not predetermined (eg derivatives such as share options, warrants and rights).

An issuer's right to settle an obligation before maturity does not necessarily prevent the security qualifying as held-to-maturity for the holder. If the holder intends and is able to hold the security until it is called or until maturity, and if the holder would recover substantially all of its carrying amount on early settlement, classification as held-to-maturity is appropriate. The option, if exercised, simply accelerates the asset's maturity.

If the holder would not recover substantially the entire carrying amount, however, the financial asset cannot be classified as held-to-maturity.

A holder's right to require early settlement does not prevent its ability to classify the security as held-to-maturity if the holder has the positive intent not to exercise its option.

Tainting of the held-to-maturity portfolio

When an enterprise's actions have cast doubt on its intent or ability to hold investments to maturity, it is prohibited from using the held-to-maturity classification for a reasonable period of time. In a sense, a penalty is imposed for a change in management's intention. It is forced to reclassify all its 'held-to-maturity' investments as available-for-sale and measure them at fair value until it is able,

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through subsequent actions, to restore faith in its intentions.

Specifically, an enterprise is prohibited from classifying any assets as held-to-maturity if it sells or transfers more than an insignificant amount of assets that it had previously classified as held-to-maturity. However, a sale does not 'taint' the rest of the portfolio if it was:

a) close enough to maturity or exercisable call date so that changes in the market rate of interest could not have a significant effect on the financial asset's fair value;

b) made after the enterprise had collected substantially all of the financial asset's original principal through scheduled payments or prepayments; or

c) due to an isolated event that was beyond the enterprise's control and that was non-recurring and could not have been reasonably anticipated.

The types of isolated events contemplated in the standard include:

a) significant deterioration of issuer's creditworthiness;

b) changes in tax law that significantly reduce the tax-exempt status of interest on the held-to-maturity investment;

c) a major business combination or major disposal (such as sale of a segment) that causes the sale or transfer of held-to-maturity investments to maintain the enterprise's existing interest rate risk position or credit risk policy;

d) changes in statutory or regulatory requirements that significantly modify either what constitutes a permissible investment or the maximum level of certain kinds of investments, thereby causing an enterprise to dispose of a held-to-maturity investment;

e) a significant increase by the regulator in the industry's capital requirements that causes the enterprise to downsize by selling held-to-maturity investments; or

f) a significant increase in the risk weights of held-to-maturity investments used for regulatory risk-based capital purposes.

It was originally proposed that the tainting should affect only the specific portfolio in which an asset is held. IAS 39 confirms that the sale of held-to-maturity securities will call into question management's intent to hold **all** securities in the held-to-maturity category, not just securities of a similar type or within one portfolio.

The prohibition from classifying any financial assets as held-to-maturity expires at the end of the second financial year following the premature sales. When the portfolio becomes cleansed, and it once again becomes appropriate to carry securities at amortised cost, the fair value of the affected assets on that date becomes the new amortised cost.

For example, assume a calendar year reporting company sold held-to-maturity securities in February 2001. Cleansing takes place on 1 January 2004, as long as no further sales or transfers have taken place. The company can reclassify assets as held-to-maturity from that date.

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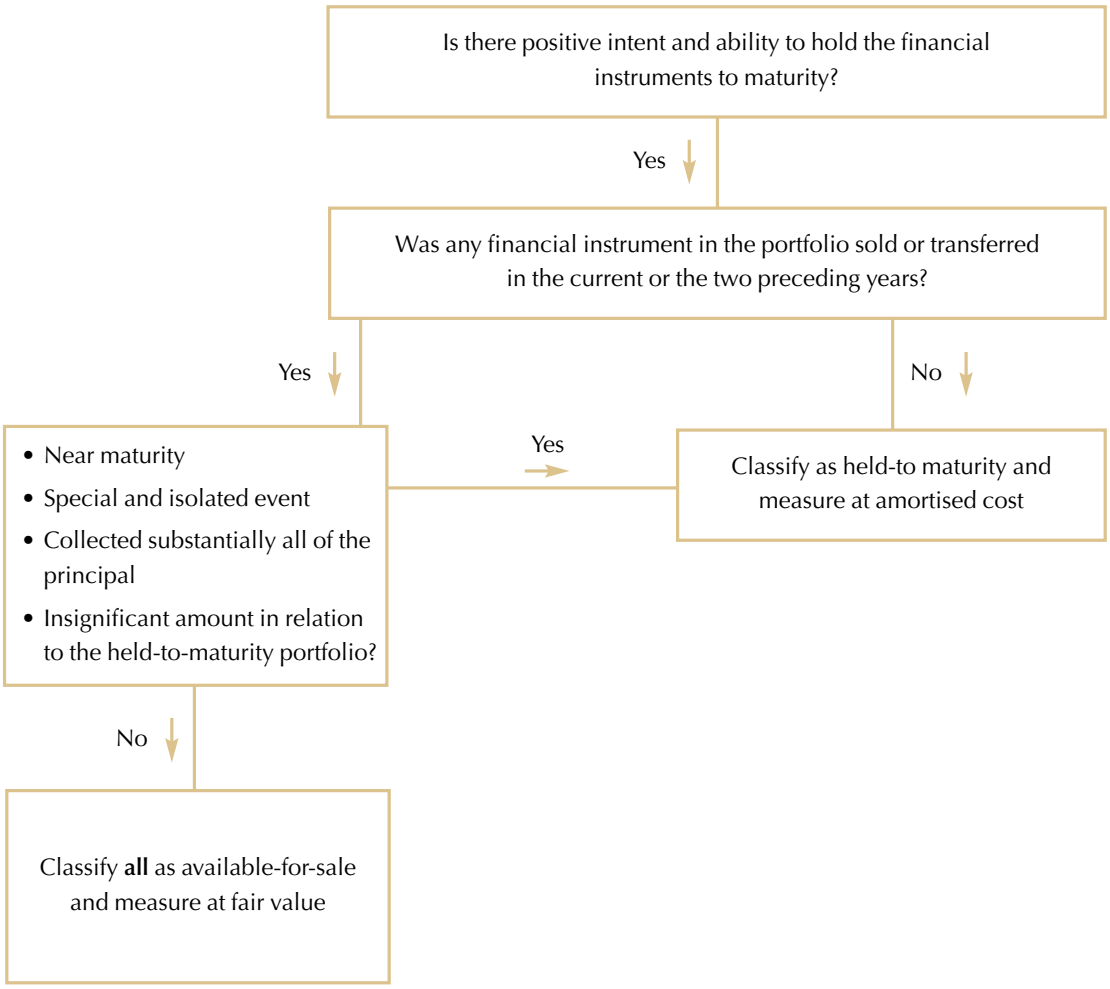
Decision tree for categorising assets as held-to-maturity



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Transfers of assets between categories

Overview

Transfers from the held-to-maturity category should be rare, given the need for 'positive intent' to retain them until maturity. A transfer would 'taint' the portfolio and bring into effect the sanctions discussed above.

Given the nature of a trading security (based on the objective for **initially** acquiring it), transfers out of the trading category should not be possible. Transfers into trading might be appropriate if, for example, buying and selling activity in a portfolio increases considerably and is intended to remain high (a portfolio becomes trading in nature).

The other possibility is a transfer from 'available-for-sale' to 'held-to-maturity' if, for example, an enterprise's intention and ability to hold a debt security to maturity becomes clear. Generally, however, any transfer between categories should be relatively uncommon under the new standard.

Transfers out of held-to-maturity

Assets may be reclassified because there has been a change of intent or ability, or there is evidence of a recent actual pattern of short-term profit-taking. The transfer of assets from held-to-maturity calls into question the original classification and will therefore result in the whole category being 'tainted' (see above).

The instruments should be remeasured to fair value, and the difference between carrying amount and fair value should be taken to profit and loss (if reclassified as trading) or either to profit and loss or into equity (if reclassified as available-for-sale, depending on the policy adopted). All held-to-maturity securities will need to be reclassified as a result of the tainting rules.

Transfer from available-for-sale to held-to-maturity

An instrument may need to be reclassified because:

- there has been a change of intent or ability (in other words it is now intended to be held-to-maturity); or
- the 'two preceding financial years' have now passed, and a tainted held-to-maturity portfolio is 'cleansed'.

In this case it then becomes appropriate to carry a financial asset at amortised cost rather than at fair value. The fair value carrying amount of the financial asset becomes its new amortised cost.

Any unrealised gains and losses already recognised are not reversed. Any previous gain or loss on that asset that has been recognised directly in equity should be amortised over the remaining life of the held-to-maturity investment. Any difference between the new amortised cost and maturity amount of the asset should also be amortised over the remaining life of the financial asset as an adjustment of the yield.

The net income statement effect of amortising the two amounts should be zero, except for the effects of amortising other discounts or premiums.

For example, assume a fixed rate debt security was acquired for A$1m, which is also the amount receivable at maturity (there is no premium or discount on issue and no transaction costs). Initially, the investor is unsure when it might sell the security, and it is therefore classified as available-for-sale. Interest rates fall, and a gain of A$100,000 is deferred in equity under the company's policy for available-for-sale securities. Subsequently, the investor's intention becomes clear – it now intends and is able to hold the security to maturity.

The security is reclassified and subsequently measured at amortised cost. The A$100,000 that was added to the carrying amount as a fair value adjustment becomes a 'premium' which is amortised as reduced interest income over the remaining period to maturity, using the effective interest method. The A$100,000 of unrealised gains, deferred in equity, is amortised through income over the same period. The net effect on income in each period will be zero. In practice, amortisation of both amounts may be classified in the same line in the income statement.

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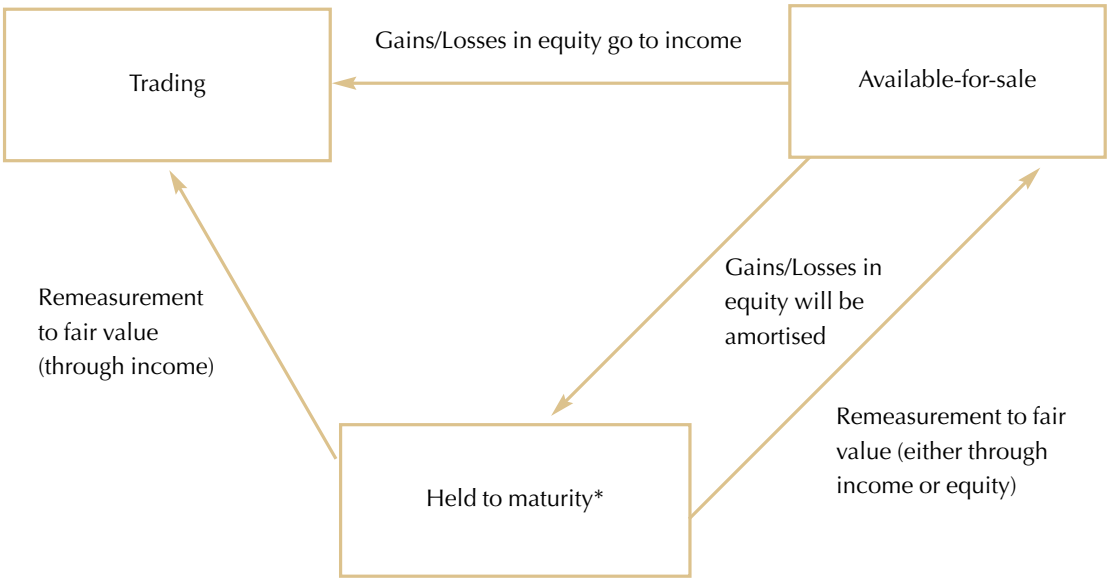
Transfers out of available-for-sale into trading

Any assets reclassified from available-for-sale into trading will already be carried at fair value. Any previous gain or loss on that asset that has been recognised directly in equity should be taken to profit and loss immediately.

Summary of accounting treatments for transfers



* Tainting rules come into effect for any transfer out of this category.

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Other subsequent measurement issues

Fair value measurement

Fair value means the amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm's length transaction. The standard emphasises that fair value is reliably measurable if:

a) the variability in the range of reasonable fair value estimates is not significant for that instrument; or

b) the probabilities of the various estimates within the range can be reasonably assessed and used in estimating fair value.

There is a general presumption that fair value can be reliably measured for all financial instruments (including trading and available-for-sale instruments). The presumption can be overcome for an investment in an equity instrument:

- that does not have a quoted market price in an active market; and
- for which other methods of reasonably estimating fair value are clearly inappropriate or unworkable.

These include an investment that is in substance an equity instrument – such as special participation rights without a specified maturity whose return is linked to an enterprise's performance. The presumption can also be overcome for a derivative that is linked to and that must be settled by delivery of such an unquoted equity instrument.

The emphasis in IAS 39 is on reliable measurement of fair values except in very rare circumstances. The exception seems to be limited to unquoted equity investments. That means there is a presumption that all debt instruments, and almost all derivatives, must be capable of fair value measurement, even if that involves the use of models and other estimation techniques. Companies have disclosed fair values for all financial instruments under IAS 32 even before the adoption of IAS 39, so the assumption must be that fair values can be derived for balance sheet measurement purposes.

In looking for a reliable measure of fair value, the following should be considered:

a) Published price quotations in an active public securities market.

b) Prices of instruments that have been similarly rated by an independent rating agency and whose cash flows can be reasonably estimated.

c) Valuation models for which the data inputs can be assessed reliably because they come from active markets.

d) The market for a similar financial instrument.

In evaluating market prices it is important to consider the level of activity in a market, trading volumes, and how well established the market is.

In most cases, an enterprise will be able to make a reliable estimate of the fair value of a financial instrument. The use of reasonable estimates is an essential part of the preparation of financial statements and does not undermine their reliability. The standard requires disclosure of the methods and significant assumptions applied in estimating fair values.

Assets carried at fair value when a reliable measure ceases to be available

In the rare circumstances when a reliable measure for an asset carried at fair value is no longer available, the fair value carrying amount of the asset at that date becomes its new cost or amortised cost. Any previous gain or loss on that asset that has been recognised in income is not reversed. As a result of this exception, both the held-for-trading and available-for-sale categories may contain assets that are carried at amounts that are neither cost, nor true amortised cost, nor fair value.

When a reliable measure of fair value once again becomes available for such items, the instrument should be remeasured to fair value. The difference between its carrying amount and fair value should be taken to income (if it is classified as trading) or either to income or equity (if it is classified as available-for-sale, depending on the policy chosen).

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Impairment of financial assets

An enterprise should assess at each balance sheet date whether there is objective evidence that a financial asset or group of assets may be impaired. Examples of factors to consider are:

- a substantial deterioration of creditworthiness;
- an actual breach of contract, such as a breach of covenant or default on a scheduled interest payment;
- high probability of bankruptcy or other evidence of significant financial difficulties; and
- disappearance of an active market for an asset due to financial difficulties.

A decline in market value, or the disappearance of a market, that is not accompanied by a decline in creditworthiness or any of the other factors above is not evidence of impairment.

For example, an enterprise has an investment in equity securities of XYZ Enterprises, a publicly quoted company. The enterprise hears that with effect from 31 December, the securities will no longer be publicly traded. The decision to de-list is voluntary. Is there evidence of impairment?

The disappearance of an active market because an enterprise's securities are no longer publicly traded is not evidence of impairment. The reason for the de-listing may warrant further investigation, however.

For example, an enterprise has a holding in equity securities of LMN Enterprises, a publicly quoted company. On 31 December, the market value of the LMN securities fall below their cost. Is there evidence of impairment?

Answer: This is not automatically evidence of impairment. The reporting entity will continue to take losses to the fair value reserve in equity until there is objective evidence of impairment.

A financial asset is impaired if its carrying amount exceeds its estimated recoverable amount. If any evidence of impairment exists, the enterprise should estimate the recoverable amount of that asset or group of assets and recognise any impairment loss. This is accounted for as follows:

a) For financial assets carried at amortised cost:

   The loss is the difference between the asset's carrying amount and estimated recoverable amount (present value of expected future cash flows discounted at instrument's **original effective interest rate**). The use of this rate prevents a market value approach from being imposed for held-to-maturity and originated loans. The carrying amount should be reduced to a recoverable amount either directly or through use of an allowance account. The amount of the loss is included in net profit or loss for the period.

b) For financial assets carried at fair value:

   Recoverable amount is the present value of expected future cash flows discounted at the **current market rate** for a similar asset. If a loss on a financial asset carried at fair value has been deferred in equity, the amount deferred in equity should be removed and recognised in the income statement, even though the asset has not been sold.

Chapter 7

Derecognition

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Derecognition in context

Many corporates, as well as banks, operate or take part in schemes that provide financing by selling portfolios of trade receivables, loans etc. Often, one of the objectives of such schemes is to provide finance that is 'off-balance sheet'. That is, the assets sold are removed from the balance sheet and the funding provided is not recognised on the balance sheet. Examples include debt factoring and securitisation schemes.

Before IAS 39 there was no guidance on the circumstances when assets should be removed from the balance sheet and how resulting gains and losses should be recognised. IAS 39 includes detailed requirements in this area, including principles for:

- derecognition of financial assets;
- partial derecognition (e.g. servicing rights retained); and
- derecognition combined with recognition of a new liability (e.g. credit risk guaranteed).

The standard also covers derecognition of financial liabilities, including the treatment of restructured loans.

The discussion and examples in this chapter are aimed at companies involved with, or contemplating, factoring, securitisation or similar schemes, or restructuring their debt facilities. Other derecognition transactions such as repurchase agreements and securities borrowing and lending, normally undertaken by banks and brokers, are dealt with in chapter 16.

Complete derecognition of an asset

Transfers of financial assets take many forms. A transferor may sell financial assets receiving, in exchange, cash or other assets, with no continuing involvement with the assets sold. The accounting for such transfers as sales with corresponding derecognition of the assets is well established and is unchanged under IAS 39.

For example, company S sells a portfolio of receivables with a carrying amount of Ffr100,000 to company B for a fixed amount of Ffr90,000 with no recourse to S in the case of bad debts. Company B assumes the full risk of collection, which is reflected in the price paid. Debtors are notified of the transfer and directed to send payments to company B.

S has lost control of the asset and B has assumed full risk without recourse to S if any of the debtors defaults. The transaction is treated as an outright sale and the asset is derecognised.

Journal entries in S's books:

	DR	CR
Cash	90,000	
Loss on disposal	10,000	
Receivables		100,000

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No derecognition

At the other extreme is a transaction where the buyer has an unconditional option to return the assets at the original price, usually with interest. It might choose to do so, for example, if a receivable becomes doubtful. Again, the accounting is straightforward. The transaction is treated as a financing, with both asset and liability on-balance sheet, because control of the assets is not transferred.

For example, company T sells certain receivables, due in six months, with a carrying amount of BEF100,000 to company K for a cash payment of BEF95,000 with full right of recourse. Under the terms of the recourse provision, the transferor is obliged to reacquire certain receivables, at the original price plus interest, if company K chooses to return them. Company K has an unconditional put option on the assets transferred.

The seller is obliged to repurchase the receivables transferred on terms that effectively provide the buyer with a lender's return. Consequently, the seller has not lost control of the receivables and is still exposed to the risk of default. The receivables are not removed from T's balance sheet and the transaction should be treated as a collateralised borrowing.

In T's books, the BEF95,000 received is recognised as a liability. It is measured at amortised cost, with interest expense of BEF 5,000 being recognised over its six-month maturity. The receivables continue to be recognised at the lower of cost and net realisable value in the usual way. Cash received (either by the buyer or the seller, depending on the agreement) reduces the receivables balance and is used to repay the liability. If receivables are 'returned' to the seller, the cash paid is also a partial repayment of the liability. The carrying amount of the receivable returned may be impaired.

Between the two extremes are transactions where the seller retains certain interests in the assets transferred. For example, a transferor may pledge financial assets as collateral or may retain servicing rights, or retain some or all of the credit risk in the assets transferred. In recent years such transfers have grown in volume, variety and complexity, frequently raising the issues of whether the assets should be considered to have been sold or to be collateral for borrowings, and whether or not the transfer should be recognised.

Practices in accounting for transfers of financial assets have been inconsistent, causing confusion amongst both preparers and users of financial statements. IAS 39 seeks to eliminate these inconsistencies and to reduce the confusion by establishing principles to distinguish sales from secured borrowings.

The principles in IAS 39

The rules on derecognition focus on whether control of the contractual rights that comprise an asset has been transferred from the seller to the buyer. IAS 39 defines control as the right to receive benefits from the asset and the ability to restrict the access of others to those benefits. The main benefit in a portfolio of receivables, for example, is the right to receive a stream of cash flows in the form of principal amounts and, in some cases, interest. When that right is transferred, in exchange for a single cash payment, there is an assumption that control is transferred unless the other rights and obligations retained are so significant that this assumption is negated.

IAS 39 takes a 'substance over form' approach to determining whether the assumption is negated, by requiring the positions of both the seller and the buyer to be considered. To illustrate the principle of transfer of control, the standard provides examples of circumstances when the rights retained are so significant that derecognition is not appropriate. Examples of circumstances where the assets are not derecognised are:

a) the seller has a right to repurchase the asset at other than fair value;

b) the seller has both a right and an obligation to repurchase the asset on terms that effectively give the buyer a lender's return;

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c) the seller has retained substantially all the risks and benefits of ownership through a total return swap with the buyer, or;

d) the seller has retained substantially all the risks of ownership through an unconditional put option held by the buyer.

Financial assets are generally derecognised only in circumstances in which the buyer can freely sell or pledge the assets, which demonstrates that the control over those assets has been transferred from the seller. Where there are conflicting indicators, however, the position of the seller will generally be the deciding factor.

On derecognition, the difference between the amount received and the carrying amount of the asset is included in the income statement. Any fair value adjustments on the assets formerly reported in equity are 'recycled' to the income statement.

Where derecognition issues involve the transfer of assets to a special purpose entity ('SPE'), consolidation of the SPE becomes a separate issue. The interaction of IAS 39 and SIC-12 in these circumstances is considered in the example on page 37.

Within the concept of control, IAS 39 takes a financial components approach. This means that, as long as control of an asset is transferred, the asset is derecognised. Any components of the asset that are retained (such as servicing rights, or an obligation to reimburse the buyer for credit losses) are recognised and measured separately. Therefore, control can be transferred even if the transferor continues to manage the receivables on behalf of the buyer or if the transferor retains some of the credit risk.

This contrasts with the so called 'risk and rewards' approach adopted in previous IASC exposure drafts and in the UK, for example. Under this approach, all the risk and rewards associated with the asset are considered together, and the asset is derecognised when 'substantially all' the risks and rewards are transferred. This might be described as an 'all or nothing', as compared to the 'components' approach in IAS 39.

In its purest form, the control/components approach in IAS 39 makes it relatively simple to remove a receivable from the balance sheet, leaving on the balance sheet those rights and obligations that are not sold. Certain conditions are placed on the pure 'components' approach. The effect is that derecognition is not permitted when the rights and obligations retained are so significant that they negate the view that control has been transferred. The IASC's 1997 discussion paper explained this more clearly, saying that the components approach should not be open to manipulation by 'financial engineering' so as, for example, to achieve sale treatment for a financial asset transaction that is so constrained by retained derivatives that nothing of real economic substance has happened.

Partial derecognition

If part of a financial asset is sold or extinguished, the carrying amount is split based on the relative fair values of the part retained and the part sold. A gain/loss is recognised based on the proceeds received in exchange for the portion sold.

For example, company C sells a portfolio of receivables with a book value of SK100,000 to company D for a fixed amount of SK80,000 but retains the right to service the receivables (maintain the debtors' ledger, collect the payments, notify the debtors about delays, etc.). The fee for those services is expected to exceed the related costs. Two questions arise:

a) Does the transfer meet the derecognition criteria?

b) How should the seller account for the servicing right if, based on the agreement between the parties, the fair value of the expected profit from servicing has been estimated at SK10,000?

The transfer meets the derecognition criteria and should be treated as a sale. The right to receive the main benefit in the receivables, the cash flows, is transferred. The rights retained are not sufficient to negate the view that control is transferred.

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Servicing is inherent in all financial assets; it becomes a distinct asset or liability only when contractually separated from the underlying assets by sale or securitisation. The servicing fee represents the contractual amount due to company C that would no longer be received if the servicing rights were transferred either to the buyer or to a third party.

Since the servicing fees exceed the related costs, the seller should recognise a servicing asset. The asset is treated as an intangible asset under IAS 38. Recognition of the servicing asset effectively reduces the loss on sale of receivables, reflecting the fact that not all the rights have been sold.

The split between the part of the asset transferred and the part retained is based on their relative fair values. In this case the fair value of the servicing asset is SK10,000 and the fair value of the receivables sold is assumed to be SK80,000 (the agreed price). Based on fair values, one ninth of the SK100,000 book value of the asset is retained (SK11,100) and the remaining SK88,900 is sold. But impairment rules would mean that the asset should not be carried at more than its fair value of SK 10,000.

Journal entries in C's books:

	DR	CR
Cash	80,000	
Loss on disposal	10,000	
Servicing right (intangible asset)	10,000	
Receivables		100,000

If the fair value of the asset retained is not determinable, its initial carrying amount is zero and the entire original carrying amount of the assets is attributed to the portion sold (a cost-recovery approach to profit/loss recognition).

Assume the same circumstances as in the example above, but the fair value of the servicing asset cannot be reliably determined.

Company C has transferred a financial asset, which is derecognised. Potentially, C has retained part of the asset in the form of a servicing right, but because its fair value cannot be reliably measured, that asset is initially recognised at zero. Consequently, C recognises the loss of SK20,000 in the profit and loss account. In other words, C incurs a loss at SK10,000 as in the example above, but the servicing right is also 'written down' to zero.

Disposal combined with recognition of a new liability

Sales and other transfers are frequently structured so that the seller retains some or all of the credit risk in the assets transferred. This is often referred to as 'credit enhancement' and can take the form of deferred consideration, guarantees, put options or the seller taking a subordinated interest in a special purpose entity into which the assets are transferred.

Because IAS 39 is based on the transfer of control, it is possible to transfer control, by selling the right to receive cash flows, even if most or all of the credit risk is retained. The assets are removed from the balance sheet and a new liability is recognised to reflect the fair value of the obligation to reimburse credit losses.

If the fair value of the new liability can be measured reliably, it is initially recognised at its fair value. If the fair value of the new liability assumed cannot be measured reliably, its initial carrying amount should be such that no gain is recognised on the transaction.

For example, Company X sells certain receivables with a carrying amount of HK$100,000 to company Y for a cash payment of $90,000. The portfolio contains a number of large debtors, which are very unlikely to default, but are long dated. The seller has guaranteed up to 10% of the overall receivable balance.

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Actual losses in excess of the amount guaranteed will be borne by the buyer. The fair value of that guarantee is assessed at $2,000. How should this transaction be accounted for?

The seller has transferred control over the receivables. The buyer has a contractual right to receive cash payments from the debtors as well as a guarantee from the transferor. The transaction meets the derecognition criteria and should be treated as a sale.

Company X removes the receivables from its balance sheet, as they were sold to Y.

The guarantee is treated as a new, separate financial liability assumed by the seller on the transfer.

Journal entries in X's books:

	DR	CR
Cash	90,000	
Loss on disposal	12,000	
Receivables		100,000
Liabilities		2,000

In substance, this transaction may appear little different from the earlier one (no derecognition), where credit risk was retained through an unconditional put option. In both cases the seller retains all the credit risk. Whether this is in the form of a put option or a guarantee seems irrelevant to the substance of the agreement, but the accounting treatment is different. The Joint Working Group is considering this issue, and hopefully in time this anomaly should be removed. In the meantime, it seems important that derecognition transactions should be structured so that credit risk is not retained through an unconditional put option!

Securitisation

Securitisation is the process of transforming financial assets into securities. An originator of a typical securitisation transfers a portfolio of financial assets to a special purpose entity (SPE). Common examples are residential mortgages, vehicle leases and trade receivables. The SPE can often obtain a higher credit rating than would be available for a debt issued by the originator and, consequently, it can obtain lower interest rates from the debt-holders.

In a common transaction, receivables are transferred from a company within a corporate group (the seller) to a special purpose entity for cash. The SPE carries only receivables transferred from that specific subsidiary. The SPE is funded by the issue of commercial paper to external investors, and by the issue of subordinated units, intended to cover the entire credit risk specific to the receivables. The seller, or another member of the seller's group, purchases subordinated units in the SPE. Alternatively, the seller can retain credit risk through a guarantee to the SPE.

A sponsoring bank often provides additional credit and liquidity enhancement in the form of guarantees. The seller cannot be required to repurchase receivables transferred; the seller's credit risk exposure arises only from its investment in subordinated units, or its guarantees. However, the seller retains all, or substantially all, the credit risk in the receivables. It also retains the residual interest in the SPE, although the value of this interest may be close to zero.

The appropriate treatment for such schemes depends on the answer to two questions:

- Do the receivables qualify for derecognition under the requirements of IAS 39; and
- Should the SPE be consolidated under IAS 27 and SIC-12?

As discussed above, it is relatively straightforward to remove an asset from the balance sheet under IAS 39, as long as the 'value' of the retained credit risk is recognised separately. However, SIC-12 fundamentally follows a risks and rewards basis. Therefore retaining all the credit risk in the only asset held by an SPE is likely to lead to the conclusion that the SPE should be consolidated.

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In the longer term, the standard-setters' Joint Working Group intends to discuss and resolve the issue. Indications are that the JWG might move towards a purer 'components' approach that might require a change to SIC-12. In the meantime, the conclusion is that many securitisation schemes will result in the assets being removed from the balance sheet of the seller but that the SPE must be consolidated in the group financial statements.

Derecognition of a financial liability

A financial liability is removed from the balance sheet only when it is extinguished, that is when the obligation is discharged, cancelled or expired. That condition is met when the liability is settled by paying the lender or when the borrower is released from primary responsibility for the liability either by process of law or by an agreement with the lender.

On derecognition, the difference between the amount paid and the carrying amount of the liability is included in the income statement.

In-substance defeasance

To achieve in-substance defeasance, an enterprise places cash or other risk-free monetary assets into a structure, typically a trust. The cash inflows arising from the asset are used to make repayments of a specified liability. The possibility that the enterprise will be required to make further payments is usually remote.

Derecognition is not permitted under IAS 39 for an in-substance defeasance because the enterprise has not been legally released from its primary responsibility for the debt. Therefore, both the liability and the asset remain on the enterprise's balance sheet.

Settlement and restructuring of debt

Companies may negotiate with their bankers or bond-holders to cancel existing debt and replace it with new debt on different terms. For example, a company may decide to cancel its exposure to high interest, fixed rate debt, pay a fee or penalty on cancellation, and replace it with variable rate debt. IAS 39 provides guidance to distinguish between:

- the settlement of debt that is replaced by new debt from the same lenders; and
- the restructuring of existing debt.

The distinction is based on whether or not the new debt has substantially different terms from the old debt. Terms are substantially different if the present value of the net cash flows under the new terms is at least 10% different from the present value of the remaining cash flows under the original debt.

This distinction is important for gain or loss recognition. In the first case a gain or loss is recognised on settlement of the old debt. In the second case, any net cash flow on restructuring the debt is an adjustment to the carrying amount of the debt. This impacts the income statement only through amortisation over the remaining life of the debt.

For example, company M has issued MR100m in long term bonds bearing interest at 8%. At 30 June 2001 they have a remaining life of five years. Market interest rates have risen by 1.5% since the bonds were issued. In addition, as a result of economic pressures on company M's markets, company M's credit rating has declined. Consequently, the long-term bonds are currently trading at 90% of their face value.

Using a bank as an intermediary, M decides to restructure its debt. It buys back the existing bonds at market value and issues MR100m in new five-year 11% bonds to the same counterparties. The interest rate reflects the yield required by the market and the bonds are therefore issued at par. M pays a fee of MR1m to the bank for arranging the deal.

Is the restructuring an extinguishment of the old debt?

The present value of the existing debt, discounted using the original interest rate of 8% is MR100m.

The present value of the replacement debt, calculated by discounting the future payments of interest and principal using the same discount rate is MR112m.

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Including fees payable, the present value of the remaining cash flows under the new terms is MR113m.

The difference in the present value of old and new cash flows is 13%. Under IAS 39.61, there is a substantial modification in terms and the old bonds should be treated as extinguished.

Company M recognises a gain on extinguishing its existing bonds as the difference between the carrying amount of MR100m and the amount paid on settlement (MR90m) plus the fee paid; a net gain of MR9m. The replacement debt is measured at its fair value of MR100m, the amount received, and the increased future interest charges are recognised as they are incurred.

Note that each element of the above transaction is executed at market value. At first glance it would appear that company M could create a larger gain by structuring a deal to repurchase the old bonds at (say) MR80m and issue new bonds, at par, carrying interest at (say) 13.5%. Bond-holders would be compensated for their loss on the old bonds through an immediate increase in the market price of the replacement bonds.

However, company M should measure the replacement bonds at their fair value of (say) MR110m, even though the proceeds are only MR100m. The result is a loss, which restores the net gain to the same as that under the first scenario. The MR10m premium on the replacement bonds would be amortised over the life of the bonds, effectively reducing the interest cost to the market rate of 11%.

Other consequences

Company M appears to have 'created' a gain of MR9m by realising the change in fair value of its debt. This is the case even though half that gain has resulted from the company's own financial difficulties. In concept, the worse the company's credit rating, the bigger the gain it could realise through restructuring. But there is a downside …

The same factors that led to deteriorating credit quality must also call into question the carrying amounts of its non-financial assets and would trigger impairment testing under IAS 36. Even if company M could demonstrate no deterioration in its expected future operating cash flows, the increase in its incremental borrowing rate should increase the discount factor to be used in the impairment testing. Overall, it is extremely doubtful that company M could 'create' a net gain from a fall in its credit quality, although the impairment losses and the offsetting gain on restructuring debt might be recognised in different periods.

What if the 10% threshold is not met?

Assume the market rate for the replacement bonds was only 10%, with replacement 10% bonds issued at par. The present value of the new bonds, discounted at 8%, is MR108m (including the fee, MR109m) and the restructuring cannot be treated as an extinguishment.

In this case the net proceeds of MR9m (100-90-1) are simply added to the carrying amount of the debt, as a premium received on the issue. The premium is amortised through the income statement over the life of the notes. The resultant effect is that the interest cost remains close to the original 8% level.

Chapter 8

Hedging

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Overview

Previous chapters in this publication describe the accounting that is required for financial instruments in the absence of hedge accounting. IAS 39 sets out a mixed measurement model, with some assets and liabilities measured at cost and some at fair value. For those measured at fair value, some gains and losses are recognised in income and some are deferred in equity.

Hedging, in economic terms, is concerned with the offsetting effect of gains and losses on two transactions that respond in opposite ways to a hedged risk. Hedge accounting reflects that offsetting effect by providing exceptions to the normal rules, which allow the offsetting gains and losses to be recognised simultaneously in the income statement. This chapter and the following chapters deal with the concepts of hedging and hedge accounting, and the restrictive rules in IAS 39 which provide a framework that limits the use of hedge accounting.

Hedging as an economic concept

The vast majority of companies, certainly those above a certain size, are involved in hedging activity of some kind. At its simplest, borrowing in a currency in which a substantial portion of sales are expected is hedging. Many companies make use of foreign currency forward contracts to hedge future sales or purchases (of inventory or plant), or to hedge the impact of currency movements on receivables and payables denominated in a foreign currency. Interest rate swaps are often used to 'convert' fixed rate debt or investments into floating rate, or vice versa.

It is important to distinguish between the **economic concept** of hedging and **hedge accounting.** Companies routinely enter into transactions in foreign currencies that expose their future income and cash flows to volatility as a result of foreign exchange risk. Companies also borrow or invest in variable rate debt which exposes future income to the risk of changes in interest rates. Equity investments create potential income statement volatility from changes in share prices, and commodity transactions create an exposure to commodity price risk.

Companies generate profits for their shareholders by taking risk. Successful companies manage the types of risk described above by deciding to which risks, and to what extent, they should be exposed, by monitoring the actual exposure and taking steps to reduce risk to within agreed limits, often through the use of derivatives.

The process of entering new transactions and establishing relationships between transactions, to provide an effective offset to reduce an economic risk, is **economic hedging.**

IAS 39 describes the various elements of the hedging relationship. The transaction creating the exposure to currency, interest rate, equity or

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commodity risk creates the **hedged item.** The transaction designed and designated to mitigate or offset this risk creates the **hedging instrument.** And the degree to which the two transactions combine to reduce the designated risk, in economic terms, is **hedge effectiveness.**

Hedge accounting

In the past, there were no rules in IAS on hedge accounting. Practice has varied, but typically the impact of hedging has been accounted for by 'synthetic instrument' accounting. The hedging instrument and the item it hedges have been treated as a single transaction – a forward contract hedging future foreign currency sales was accounted for by treating the sales as if they were denominated in the local currency, for example.

Hedge accounting defers or accelerates the income statement recognition of gains and losses on hedged transactions or the derivatives used to hedge them. It therefore matches the impact of the hedged item and the hedging instrument in the income statement. Without hedge accounting, gains and losses on the transaction being hedged and the hedging derivative are recognised separately and independently. The item being hedged may be a future transaction, or a balance sheet item not usually measured at fair value. The hedging instrument is usually a derivative that is marked-to-market through the income statement. Without hedge accounting, income statement volatility can result, even though a hedge might be effective in economic terms. For the first time, IAS 39 establishes requirements governing when, and whether, economic hedging transactions will qualify for hedge accounting.

The new requirements are highly restrictive and all companies with hedging activities will need to consider their impact. In many cases, hedging relationships will no longer qualify for hedge accounting. Where hedge accounting is permitted, companies will need to establish systems and processes to ensure they are properly designated and monitored for effectiveness. To achieve hedge accounting under IAS 39, companies will need to undertake a project to review their existing hedging strategies and procedures and their use of derivatives in various contexts. This review will need to bring together specialists, internal and external, in accounting, treasury, systems and taxation. In some cases companies may decide to change hedging policies as well as procedures. This will depend on the extent to which hedging policies are based on accounting objectives rather than economic objectives.

The tax implications of the requirements add to the complexity of the rules in IAS 39. The impact of these will vary depending on the tax rules in each jurisdiction, but significant deferred tax assets and liabilities may arise in many cases. The impact of taxation has been ignored in the examples in the following chapters.

The need for hedge accounting

In the absence of particular accounting rules for hedging, gains and losses on transactions that provide effective economic hedges might be recognised in income in different periods, creating income statement volatility.

For example, a company may decide that it should borrow at variable interest rates. It may be able to obtain a lower financing cost, however, by issuing fixed rate bonds and using an interest rate swap to 'convert' the liability to floating rates based on Euribor. Assume the Euribor rate increases after the company has entered into the swap. The fair value of the swap changes from zero to negative (an economic loss). The fair value of the bonds falls (an economic gain to the issuer, assuming it could now settle or buy back the bonds at less than face value).

Following the requirements in chapter 6, the swap would be marked-to-market with a loss recognised in the income statement. But the change in fair value of the bonds would not be recognised. In economic terms the loss on the swap represents future cash payments

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which will increase fixed rate interest payments to the market rate. But without hedge accounting, this offsetting effect would not be recognised in the income statement.

Strict criteria for hedge accounting

Hedge accounting is based on management's views as to which transactions are intended to manage which risks. It changes the accounting that would otherwise be required by deferring or, in some cases, accelerating gains and losses in the income statement. There is a concern that accounting based on management's intentions allows scope for 'earnings management' and makes it difficult to make comparisons between companies. To provide a framework that can be applied consistently between companies, IAS 39 sets out strict criteria that must be met before hedge accounting can be used. These include requirements for formal designation of hedging relationships as well as rules on hedge effectiveness.

Designation

To qualify for hedge accounting, each position being hedged and each hedging instrument should be formally documented by management. The risk being hedged should also be designated. Hedge accounting should be applied only from the date of designation. A hedging relationship may be designated between two instruments that are already in existence. However, hedge accounting for that relationship cannot be applied retrospectively.

In the same way, management may choose to 'undesignate' a previously effective hedge. As described further below, if it does so, hedge accounting in respect of the item ceases. Any accumulated deferred gains and losses on the hedging instrument at that time are carried forward and recognised in income at the same time as the offsetting gains and losses on the hedged position. Thus, neither designation nor 'undesignation' is given retroactive effect.

Three categories of hedge

The types of risk that can be hedged include foreign currency risk, interest rate risk, equity price risk, commodity risk and credit risk. In each case the exposure to risk can arise from:

- changes in the fair value of an existing asset or liability (an equity investment, for example);
- changes in the future cash flows arising from an existing asset or liability (variable future interest payments, for example); or
- changes in future cash flows from a transaction that is not yet recognised, either committed or anticipated (highly probable future sales in a foreign currency, for example).

To cover all these possibilities, IAS 39 recognises that hedging relationships are of three types:

a) **Fair value hedges** (covered in chapter 9): the risk being hedged is a change in the fair value of a recognised asset or liability that will affect the income statement. Changes in fair value of the hedged item might arise through changes in interest rates (on a fixed rate loan, for example), foreign exchange rates or equity prices, any or all of which represent risks which could be hedged. The income statement impact of the hedged risk could be immediate (when a foreign currency item is translated at the closing rate or the hedged item is a trading asset, for example), or in later periods, for example when an 'available-for-sale' security is sold.

b) **Cash flow hedges** (covered in chapter 10): the risk being hedged is potential volatility in future cash flows that will affect the income statement. Future cash flows may relate to existing assets and liabilities, for example future interest payments or receipts on variable rate debt, or future transactions, such as an anticipated purchase or sale in a foreign currency. Potential volatility might result from changes in interest rates, exchange rates or inflation rates, all of which represent risks which could be hedged.

c) **Hedges of a net investment in a foreign entity** (covered in chapter 11): specific rules are set out in IAS 21 and continue to apply. IAS 39 builds on these rules by establishing criteria that must be met before hedge accounting is permitted.

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The accounting for the three types of hedge is dealt with in detail, with comprehensive examples, in chapters 9, 10 and 11. To put the rest of this chapter in context, however, a summary of the requirements is as follows:

- In each case the derivative hedging instrument is recognised on the balance sheet and measured at fair value;
- In the case of a fair value hedge, gains and losses on the derivative are recognised in the income statement. The asset or liability being hedged is also adjusted for changes in its fair value due to the hedged risk. Those offsetting changes in value are also recognised in the income statement.
- In the case of a cash flow hedge and a hedge of a net investment in a foreign entity, gains and losses on the derivative are deferred in equity. They are released into the income statement in future periods to match offsetting losses and gains on the item being hedged.

Hedged items

What can qualify as a hedged item?

A hedged item must create an exposure to risk that will affect the income statement.

Any **foreign currency monetary item** could, therefore, be hedged with respect to foreign exchange risk because the change in value attributable to the hedged risk will always be recognised in the income statement. No hedge accounting is required, as offsetting gains and losses will be recognised immediately in the income statement. The same is true for trading assets and liabilities.

A **fixed interest debt security** that is 'available-for-sale' could be a hedged item with respect to interest rate risk because changes in value resulting from interest rate changes will be recognised in the income statement. Equally, it could be a hedged item with respect to foreign exchange risk.

An **originated loan**, although carried at amortised cost, can qualify as a hedged item, for hedge accounting purposes, for both interest rate and currency risk.

An **available-for-sale equity security** could qualify as a hedged item for foreign exchange risk or equity price risk (through a derivative based on a market index, for example) because such changes will affect income, either immediately or when the security is sold.

A **forecast future sale** in a foreign currency could be a hedged item for foreign exchange risk. The amount of future revenue in the reporting currency will vary depending on future exchange rates. In order to qualify for hedge accounting, the transaction must be 'highly probable'.

Further examples are included in the later chapters on fair value and cash flow hedging.

What cannot qualify as a hedged item?

A **held-to-maturity investment** cannot be a hedged item for interest rate risk, although it could be hedged for foreign currency risk and credit risk. By designating the instrument as 'held-to-maturity' the company has stated its intention not to realise any inherent gain or loss in the value of the asset due to changes in interest rates.

An exposure to **general business risks** cannot be hedged, including risk of obsolescence of plant, because the risk cannot be reliably measured. For similar reasons, a commitment to acquire another business in a business combination cannot be a hedged item, except for foreign currency risk.

An investment in an **associate or a subsidiary** cannot be a hedged item because changes in value are recognised through the consolidation principles in other standards. A net investment in a foreign entity can be hedged for foreign exchange risk, however.

A **non-financial asset or liability,** such as inventory, can qualify as a hedged item, but only for either currency risk or the risk of changes in fair value of the entire inventory item. For example, an inventory of tyres can be a hedged item, but the rubber content of that inventory could not qualify as an item to be hedged by, for example, a rubber futures contract. Effectiveness would need to be tested by comparing changes in the rubber price with all changes in the fair value of the inventory. Depending on the rubber content of the overall cost of the tyres, hedge effectiveness may be difficult to demonstrate.

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Hedging portfolios of assets and liabilities

A hedged item can be a single asset, liability or future transaction. A group of assets or liabilities with similar risk characteristics can also qualify as a hedged item. This allows some flexibility, for example to hedge changes in the fair value of a loan portfolio using an interest rate swap. In order to qualify as a hedged item, however, the change in fair value, due to the hedged risk, of each individual item in the group must be expected to be approximately proportional to the overall change in fair value, due to the hedged risk, of that group. This will make it extremely difficult to hedge the equity price risk in a portfolio of equity securities.

For example, assume a company holds a portfolio of French CAC 40 shares, in the same proportions as are used to calculate the French CAC 40 index. The portfolio is 'available-for-sale' with gains and losses normally recognised in equity. The company purchases and designates a number of CAC 40 put options as a hedge of decreases in the fair value of that portfolio. In economic terms that constitutes a near perfect hedge. The change in fair value of the shares will be offset by the change in the intrinsic value of the options. This is a common hedging strategy.

However, the hedged risk is the total change in value of each share in the portfolio. Some share prices will increase and some will decrease. The relationship will not qualify for hedge accounting because changes in individual prices are not 'approximately proportional' to the overall change in the index.

The result is that changes in the fair value of the shares will continue to be deferred in equity, while changes in the fair value of the options will be recognised in income. Income statement volatility will result, over the life of the options and when the shares are sold and the deferred gain or loss is released into income. To qualify for hedge accounting, the company must designate and hedge its portfolios much more narrowly.

Macro-hedging

Many corporates use risk management techniques based on hedging net balance sheet exposures. Large groups use treasury centres to manage and hedge these risks on a group-wide basis. For example, the 'hedged item' for exposure to JPY currency risk might be defined as the net principal amount of all assets, liabilities and derivative instruments whose value changes in response to changes in the JPY exchange rate. This net amount will often be hedged, using one or more forward contracts, for example, to reduce the JPY exposure to the required level.

IAS 39 prohibits hedge accounting for macro-hedging of this type; hedged positions must be designated individually or using narrowly-defined portfolios. In this example gains and losses on monetary items would be recognised in income, as would gains and losses on the hedging derivatives. But gains and losses on available-for-sale JPY equity investments may be deferred in equity, creating a mismatch in the income statement. To achieve hedge accounting, external derivative transactions would need to be put in place to hedge each individual exposure on the group balance sheet.

Where macro-hedging is used to manage interest rate risk or currency risk using group-wide treasury centres, fundamental changes may be necessary to existing systems and procedures if hedge accounting is to be achieved under IAS 39. Many more external hedging transactions may be needed than under current procedures. Even more fundamental for banks is that hedging transactions must be external to the group. Banks cannot achieve hedge accounting using transactions with an internal trading desk – see chapter 16.

There are two paragraphs in IAS 39 that will allow macro-hedging in certain cases, but not without cost. IAS 39.133 suggests, strangely, a practical method to circumvent its own requirement. Although hedging a net balance sheet position is not permitted, a company, in the above example, with a net JPY position of 10 on the asset side can select a specific asset with a carrying amount of 10 as the hedged item. In order to monitor

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effectiveness, however, it will need to establish a procedure to ensure, each day, that the hedged asset or liability position still exists, and redesignate as necessary. This is in addition to its normal risk management processes.

IAS 39.143 permits even more flexibility. It allows a company to assess its net interest rate risk position in a number of separate maturity bands. Again, as long as the net exposure in each band can be allocated to a specific asset or liability, the net position in each 'time bucket' could, in effect, qualify as a hedged item. This will allow banks to use an interest rate gap methodology to manage interest rate risk, though with additional monitoring and systems costs. Many banks are already using more complex statistical models to manage risk. This is discussed in Chapter 16.

Hedging instruments

What can qualify as a hedging instrument?

In most cases only a derivative instrument can qualify as a hedging instrument. IAS 39 imposes this restriction because of the many inconsistencies in measurement that would arise if exceptions were allowed to the measurement rules for non-derivatives.

The standard does allow a non-derivative to be used as a hedging instrument for foreign currency risk. So, for example, a company could designate a foreign currency borrowing as a hedge of either:

a) an equity investment denominated in a foreign currency;

b) the net investment in a foreign entity; or

c) a forecast sale in a foreign currency.

A **written option** cannot generally be designated as a hedging instrument. This is because a written option increases risk. It therefore cannot be effective in reducing risk exposure in the income statement.

The only exception is when the written option hedges a purchased option. In fact, matching will then take place without hedge accounting because both options will be marked-to-market through the income statement. The only time hedge accounting would be necessary is when the purchased option is embedded in a host contract and not separated (see chapter 4).

At first sight the restriction on hedge accounting using written options seems appropriate, but it can produce anomalies. Consider the following common 'covered call' strategy:

A company holds an investment in another listed company, B. It holds the investment for long-term strategic purposes but cannot exercise 'significant influence' so that B is not an associate. The investment is 'available-for-sale', and gains and losses are deferred in equity.

In order to unlock some of the benefit in its investment, the company issues bonds that are convertible into shares of B, at the holder's option, with a conversion 'price' set at today's share price plus 10%. The conversion option allows the company to obtain a favourable coupon interest rate on the bonds issued. If the holders of bonds exercise their conversion right, the company will use part of its investment in B to settle the obligation. Under IAS 39 (see chapter 4) the written call option embedded in the bonds must be split out and accounted for as a separate derivative instrument.

In economic terms, the company has a near perfect hedge of changes in the fair value of its written option, because it holds the underlying shares. But IAS 39 does not permit the written option to be designated as a hedging instrument. The normal IAS 39 rules will apply. The written option will be marked-to-market with gains and losses recognised in the income statement. The investment in B will be measured at fair value with gains and losses deferred in equity. Income statement volatility will result from both gains and losses on the option and, when the option is exercised, from the transfer of accumulated gains on the investment from equity into the income statement.

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A company's own **equity shares,** including options written and purchased on those shares, are not financial assets or liabilities under the standard and therefore cannot be hedging instruments.

Assets and liabilities whose fair value cannot be reliably measured cannot qualify as hedging instruments, except in the case of a non-derivative foreign currency instrument when the foreign currency impact can be reliably measured. For example, an unlisted equity investment denominated in a foreign currency could qualify as a hedging instrument in respect of currency risk.

A hedging relationship must be designated for the entire life of the hedging instrument. So, for example, IAS 39 would not allow an interest rate swap with a two-year maturity to be designated as a hedge of a fixed rate borrowing only for the first year.

Separating components of fair value in a hedging derivative

The standard (IAS 39.144) notes that there is normally a single measure of fair value for a hedging instrument and the factors that cause changes in its fair value are interdependent. Thus, a hedging relationship is normally designated between an entire hedging instrument and a hedged item. It is possible, however (under IAS 39.131), to separate risks within that 'one to one' relationship and designate them as separate hedges.

For example, companies commonly use **combined interest rate and currency swaps** to 'convert' a variable rate investment or borrowing in a foreign currency to a fixed rate investment in the reporting currency. IAS 39 allows the swap to be designated separately as (a) a fair value hedge of the currency risk in the investment or borrowing and (b) a cash flow hedge of the interest rate risk in the investment or borrowing. This is permitted as long as the hedge accounting criteria can be met for both elements of the hedging relationship.

Otherwise, the standard permits components of the change in fair value of a hedging instrument to be separated in only two circumstances. Changes in the intrinsic value of an option can be designated as the hedging instrument, while changes in its time value are excluded and would be accounted for in the income statement. Similarly, changes in the spot rate in a forward currency contract could be designated as the hedging instrument, with the fair value effect of 'amortising' the initial premium being excluded and accounted for separately.

In either case, a company could simply designate the entire change in value of the option or forward contract as a hedge. In most circumstances this will be simpler and will often produce less income statement volatility. But there will be circumstances when excluding the 'premium' element will be necessary to bring expected hedge effectiveness within the required range.

Combining the two exceptions, a company could use a combination of purchased options to reduce its exposure to equity risk in a portfolio of equity shares.

For example, assume a portfolio of 'available for sale' shares is measured at their fair value of Skr100, with gains and losses deferred in equity. In order to reduce its exposure to a fall in the share price, the company purchases a put option which allows it to sell the shares for Skr100. It pays Skr30 for the option. To reduce the cost of this hedge, and because the company is confident the share price will not fall below Skr70, it writes a put option that allows the option holder to sell shares for Skr70. It receives a premium of Skr20. For a net cost of Skr10, the company has eliminated its exposure to potential losses of Skr 30.

For hedge accounting purposes, the company designates changes in the intrinsic value of the purchased put option as hedging two separate risks. At prices below Skr70, the purchased put option is designated as a hedge of changes in the intrinsic value of the written put option.

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At prices between Skr70 and Skr100, changes in the intrinsic value of the purchased put option are designated as hedging changes in the fair value of the equity shares. At prices between Skr100 and Skr70, changes in the value of the shares are recognised in the income statement and not deferred in equity.

Changes in the time value of the two options, representing the initial premiums paid, are recognised in the income statement as a hedging cost over the life of the options, based on market quotes.

Internal hedges

Companies with sophisticated central treasury functions often use internal hedge transactions to 'transfer' interest rate and currency risk to the treasury group. For example, there may be a series of internal forward currency contracts and interest rate swaps which 'convert' all financial assets and liabilities of operating units to variable rate instruments in the reporting currency. The treasury group will assess its exposure to various currencies and to interest rate risk and enter external forward contracts and swaps to manage those risks.

First, to achieve hedge accounting at the operating unit level, each unit will need to ensure it meets the 'one to one' designation requirements discussed above. The treasury group will need to do the same. But to achieve hedge accounting at the group level, this may not be sufficient.

IAS 39.134 notes that these internal forward contract and swap transactions will be eliminated on consolidation. Therefore, to achieve hedge accounting at the group level, the group, through the treasury function, will need to designate hedging relationships between the individual foreign currency and fixed interest rate assets and liabilities on the group balance sheet and external interest rate swaps and forward contracts that hedge those risks.

In many cases, as netting of individual asset and liability positions is not allowed, the treasury group will need to use a greater number of external transactions than would otherwise be necessary, simply to give accounting recognition, at the group level, to the economic hedges it has put in place.

Hedge effectiveness and ineffectiveness

The standard does not require a hedge to be perfectly effective. There is some scope to achieve hedge accounting where the underlying in the hedging instrument and the hedged item are different, for example different currencies, different interest rate indices or equity indices, although the possibilities are severely restricted.

Included in the hedge accounting criteria is a requirement that the hedge is expected to be highly effective and is highly effective in practice throughout the life of the hedging relationship.

IAS 39.146 clarifies that this means:

a) the expectation is that changes in the fair values or cash flows should 'almost fully' offset; and

b) actual results are within a range of 80 to 125%.

The meaning of 'almost fully' is not clear, but it is apparent from the two elements to the requirement that it must mean closer than 80 to 125%, perhaps in the region of 95 to 105%. This will significantly restrict the ability to hedge using instruments where the underlying is different from the underlying of the hedged item.

For example, a Swiss company may wish to designate a Euro borrowing as a hedge of the currency risk in an investment in UK equity securities. Although it may expect the CHF/Euro and the CHF/Sterling exchange rates to move broadly in tandem, certainly within the 80-125% range, it is unlikely that it could meet the requirement that the gains and losses are expected to 'almost fully' offset. To do that, they would need to demonstrate, through back-testing and forward projections, that the Sterling/Euro exchange rate would move within a very narrow (say 95-105%) range.

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One issue not discussed in the standard is whether the actual effectiveness should be 80-125% in each period, or whether this should be assessed cumulatively over the life of the hedging relationship.

For example, a company designates a LIBOR-based interest rate swap as a hedge of a borrowing whose interest is UK base rates plus a margin. UK base rates change, perhaps, once each quarter or less, in increments of 25 to 50 basis points, while LIBOR changes daily. Over a one to two-year period, the hedge should be almost perfect. However, there will be quarters when the UK base rate does not change at all, while LIBOR has changed significantly. Should this mean that the hedge is ineffective?

The FASB's Derivatives Implementation Group (DIG) has recently ruled that similar requirements in SFAS 133 need not be interpreted so restrictively. It seems reasonable to interpret IAS 39 in the same way. That means that hedge accounting should continue to be allowed, as long as, in each period of ineffectiveness, effectiveness is expected to remain within the acceptable range over a two-year period. This 'definition' of effectiveness would need to be built into the hedge documentation.

Another question is how often, and over what period, should 'back-testing' of actual effectiveness be performed? IAS 39 requires testing 'on an ongoing basis' which could be interpreted in a number of ways. Guidance in IAS 39 requires, as a minimum, that effectiveness should be assessed when an enterprise prepares interim or annual reports. Depending on its significance, of course, companies will need to assess hedge effectiveness regularly and rigorously, in order to ensure their risk management processes are effective.

Daily testing of the change in fair value of the two items over 24-hour periods would trigger ineffectiveness at some point in all but the most perfect of hedges. Following the restrictive interpretation of the 'almost fully offset' requirement (above) and the DIG interpretation, it should be sufficient to consider, on a regular basis, the cumulative change in fair value since the inception of the relationship. This might give some scope to continue hedge accounting even when there is short-term ineffectiveness. Again, the method of testing effectiveness should be documented. The method should also be consistent with the company's internal risk management procedures.

Accounting for hedge ineffectiveness

If a hedge becomes ineffective because testing of actual results or new projections show that the correlation will fall outside the acceptable range, hedge accounting should be discontinued.

However, even when a hedge is effective within acceptable limits, any ineffectiveness in each period will be reflected in reported income. Hedge ineffectiveness could arise for a number of reasons, for example, the hedged item and hedging instrument may:

- be in different currencies;
- use different underlying interest indices, e.g. LIBOR and EURIBOR;
- use different equity indices, e.g. FTSE 100 and FTSE 'All-share';
- use commodity prices in different markets; or
- be subject to different counterparty credit risk.

Alternatively, the hedging relationship may be defined using different definitions of changes in fair value for the hedged item and the hedging instrument, for example:

- the entire change in value of an option may hedge the change in value of a hedged item which reflects only the intrinsic value; or
- the entire change in value of a foreign currency forward contract (based on changes in forward rates) may hedge the effect of changes in spot exchange rates on the hedged item.

In both these cases, the effect of hedge ineffectiveness will be reflected immediately in the income statement. This will give rise to a certain amount of income volatility. Prior to IAS 39 it may have been possible to avoid that volatility by deferring the effect of hedge ineffectiveness.

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In the case of fair value hedges, ineffectiveness is dealt with automatically as the hedged item is adjusted for changes in fair value related to the hedged risk. The change in fair value of the hedging instrument will differ, reflecting hedge ineffectiveness, and both gains and losses are recognised in the income statement.

Returning to the example on page 48 of the Euro borrowing hedging the exchange risk in UK equities (and assuming, now, that the effectiveness criteria can be met), the change in fair value of the equity investment attributable to the change in the CHF/Sterling exchange rate would be recognised in income. The change in fair value of the borrowing reflecting the change in the CHF/Euro exchange rate would also be recognised in income. The two amounts would be different, reflecting hedge ineffectiveness.

For cash flow hedges, only that part of the gain or loss on the hedging instrument that represents an effective hedge is deferred in equity.

For example, a company hedges future changes in interest income on a LIBOR-based investment using a US-Prime-based interest rate swap. The change in value of the swap would be split into two components. The change in value that reflects a change in the LIBOR rate is an effective hedge and is deferred in equity. The change in value that reflects differences between the LIBOR and US-Prime rates is recognised immediately in the income statement.

The only exception to the 'immediate recognition of ineffectiveness' rule is in the case of a hedge of a net investment in a foreign entity, which is further considered in chapter 11.

Discontinuing hedge accounting

Under IAS 39, hedge accounting should cease when either:

a) a hedge becomes ineffective, i.e. fails the effectiveness tests;

b) the hedging instrument is sold, terminated or exercised;

c) the hedged position is settled;

d) management decides to 'undesignate'; or

e) in a cash flow hedge, the forecast transaction is either:

   i) no longer highly probable; or

   ii) no longer expected to take place.

The replacement or roll-over of a hedging instrument into another hedging instrument does not constitute a sale or termination if that is part of the documented hedging strategy.

In each case, except when a forecast transaction is no longer expected to occur, hedge accounting ceases prospectively. In other words future changes in the fair value of the hedging derivative are recognised immediately in the income statement. Future changes in the fair value of the hedged item, and any non-derivative hedging instruments, are accounted for as they would be under the normal rules, without hedging – either not at all, in equity or in the income statement.

If the hedged position is partially settled, any deferred gains and losses on the hedging instrument that relate to the settled portion of the hedged position are recognised as income or expense at that time. If the hedging instrument is partially settled, the accounting for gains and losses on that portion of the hedging instrument is the same as if it had ceased to be effective as a hedge.

When a debt instrument (a non-derivative liability) has been adjusted for changes in fair value under a hedging relationship and hedge accounting is discontinued, the adjusted carrying amount becomes amortised cost. Any 'premium' or 'discount' is then amortised through the income statement over the remaining period to maturity of the liability.

In the case of a cash flow hedge, any gain or loss deferred in equity, in periods when the hedge was

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considered to be effective, remain in equity and are dealt with under the normal rules (see chapter 10). This also applies in the situation when a forecast transaction is expected, but is no longer 'highly probable'. We interpret 'expected' to mean 'more likely than not to take place'. Once a future transaction is no longer expected to take place, however, any gain or loss deferred in equity is released immediately to the income statement.

The tables below summarise the accounting treatment for derivative instruments and hedged items that should be applied when hedge accounting is discontinued:

Fair value hedge	**Hedging instrument**		**Hedged item**	
	Continue mark-to-market accounting	Derecognise from the balance sheet	Derecognise from the balance sheet	Discontinue any future fair value hedging adjustment
Hedge fails the effectiveness test	X			X
Hedging instrument is sold, terminated or exercised		X		X
Hedged position is settled	X		X	
Management decides to 'undesignate'	X			X

Cash flow hedge	**Hedging instrument**		**Amount accumulated in reserves**	
	Continue mark-to-market accounting	Derecognise from the balance sheet	Reclassify to income statement	'Freeze' balance in reserves
Hedge fails the effectiveness test	X			X
Hedging instrument is sold, terminated or exercised		X		X
Forecast transaction is no longer highly probable	X			X
Forecast transaction is no longer expected to take place	X		X	
Management decides to 'undesignate'	X			X

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The SFAS 133 short-cut method

The US standard incorporates a specific 'exception' to the usual requirements for interest rate swap transactions which meet certain criteria. The criteria are complex, but the principle is simple. An interest swap that exactly matches the terms (maturity, size, currency, underlying) of a hedged interest-bearing instrument is assumed to represent a perfect hedge. That means that no further effectiveness testing is needed and the accounting is simplified.

In the case of a cash flow hedge of a variable rate instrument, the accounting follows 'traditional' methods. An income statement adjustment converts interest (receivable or payable) from floating rates to the fixed rate under the swap. The corresponding adjustment is to 'cash', or 'settlement due under swap' depending on the timing of the cash flows. The swap is adjusted to its fair value (balance sheet asset or liability), with a corresponding adjustment to a 'hedging reserve' in equity. By the maturity date of the swap, the asset/liability will have a zero carrying amount and the hedging reserve for the swap will be automatically adjusted to zero. Hedge effectiveness is ignored, as well as the separate amortisation of amounts deferred under the swap.

In the case of a fair value hedge of a fixed rate instrument, the accounting again follows 'traditional' methods. The interest expense is adjusted to the variable rate (variable swap rate plus any 'spread' in fixed rates), with a corresponding adjustment to 'cash' or 'settlement due'. The 'swap asset/liability' balance sheet line item is adjusted to the fair value of the swap. The corresponding adjustment is to the carrying amount of the *hedged item*. Over the life of the swap, these fair value adjustments to the hedged item will net to zero. Again, hedge effectiveness and the separate calculation of the adjustment to fair value of the hedged item are ignored.

IAS 39 does not mention the short-cut method. Instead, it recognises that an enterprise can adopt different risk strategies. It states that one such strategy is to match exactly the principal terms of the hedged item and the hedging instrument, such as amounts, maturities, repricing dates, underlying index in an interest rate swap and a hedged item. It implies, but does not actually say, that an enterprise following that strategy could assume 'perfect' hedge effectiveness (IAS 39.147).

If a company reporting under IAS is following this strategy, we believe it could use the 'short-cut' methodology, since the overall impact of the short-form journal entries is the same. It would, however, need to monitor the effectiveness of the hedge, as with all other hedges, in case, for example, there was a significant change in the credit rating of the swap counterparty which would create ineffectiveness.

The hedging life-cycle

Many hedging transactions and relationships will pass through a 'life-cycle', from expected, to highly probable, to committed future transactions, to on-balance sheet assets and liabilities. The hedging relationship, and the accounting, also passes through a cycle, changing from no hedge accounting to cash flow hedge accounting to fair value hedge accounting. The documentation established to meet the hedge accounting criteria at the inception of the hedge will need to follow this process, with the hedging instrument being designated as part of a cash flow hedge, then a fair value hedge for various time periods.

The accounting for apparently simple hedging transactions, such as the use of a foreign currency forward contract to hedge the purchase of an item of plant, will change dramatically as a result of IAS 39 (see chapter 10).

Chapter 9

Accounting for a fair value hedge

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What is a fair value hedge?

A fair value hedge is a hedge of the exposure to changes in the fair value of a recognised asset or liability arising from a specific risk. Common examples of fair value hedges are:

- a purchased put option hedging changes in value of an available-for-sale equity investment due to equity risk;
- an interest rate swap hedging changes in fair value of a fixed interest rate borrowing due to changes in interest rates;
- a commodity futures contract hedging changes in fair value of a commodity inventory;
- a forward currency contract hedging a foreign currency receivable or payable, including debt.

Accounting

In some cases, no hedge accounting is required. This is true for foreign currency fair value hedges (for example, when the hedged item is a foreign currency debt security, foreign currency debt or other receivables and payables in a foreign currency). But even if the hedged item is carried at cost or marked-to-market through equity, IAS 21 requires the part of the change in fair value that represents translation gains and losses to be recognised in the income statement.

For example, a German company purchases a forward contract as a hedge of changes in the fair value of trade receivables that are denominated in US Dollars. Under IAS 21, the Dollar trade receivables will be translated into Deutschmarks at the spot (closing) rate at each reporting date, with exchange differences taken to the income statement. The forward contract is measured at its fair value based on market quotes. Changes in the fair value of the forward contract are influenced by two factors:

a) Changes in market exchange rates.

b) The initial premium decaying to zero over the life of the contract.

Exchange gains and losses on the receivables and on the forward contract will offset in the income statement without the need for hedge accounting. A certain amount of volatility may arise to the extent that the change in the spot rate differs from the change in the forward rate. The 'amortisation', through market forces, of the premium is also recognised in the income statement as a hedging cost.

In other cases hedge accounting is required. Chapter 8 states that hedge accounting is an exception to normal measurement rules described in the earlier chapters. In the case of a fair value hedge, hedge accounting accelerates income recognition on the hedged item to match the income statement effect of the hedging derivative.

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For example, a Dutch company holds shares in a listed company which are classified as 'available-for-sale'. Gains and losses on available-for-sale securities are taken to equity. To protect itself from a fall in the share price, it purchases an option to sell those shares, at any time in the next two years, for today's market price of NLG100. It pays NLG10 for the option. The option is initially recognised at its fair value of NLG10 (an asset) and is designated as a hedge of changes in the fair value of the available-for-sale securities.

After one year, the share price has fallen to NLG 90 and the fair value of the option has increased to NLG 20. Assume the fall in value does not reflect an impairment. The gain on the derivative is recognised in the income statement in the normal way. The corresponding loss on the securities, which would otherwise be deferred in equity, is also recognised in income.

Splitting the elements of value in the hedged item

Taking another example, the change in fair value of an available-for-sale foreign currency fixed rate debt security is made up of amounts resulting from changes in:

a) interest rates;

b) exchange rates; and

c) the credit rating of the issuer.

Assume an interest rate swap is designated as a fair value hedge of the change in value of the debt security due to changes in interest rates. Gains and losses on available-for-sale securities are normally deferred in equity. With the effective hedge in place, the various elements of the transaction are accounted for as follows:

- The gain or loss on the swap is taken to income under the normal rules.
- The corresponding loss or gain on the security due to changes in interest rates is taken to income.
- The gain or loss due to the change in credit rating of the issuer is deferred in equity.
- The exchange gain or loss on the security is taken to income under IAS 21.

Adjustments to assets and liabilities carried at amortised cost

A fair value hedge adjustment will create a discount or premium on an originated loan, an issued debt instrument or, in limited circumstances, a held-to-maturity investment. As these instruments are measured at amortised cost, such a premium or discount would be amortised, as an adjustment to the finance cost or income, over the remaining maturity of the asset or liability. IAS 39 allows amortisation to be deferred as explained in the example below.

For example, assume an interest rate swap is used to hedge changes in the fair value of a fixed rate borrowing of Ffr100m due for settlement in two years. The terms of the borrowing and the swap exactly match, giving a perfect hedge. Interest rates rise so that the fair value of the borrowing falls to Ffr90m and the fair value of the swap changes from zero to -Ffr10m. Following the rules described above, the swap is carried as a liability of Ffr10m (less any settlement paid). The carrying amount of the borrowing is reduced to Ffr90m. Both the loss and the gain are recognised in the income statement.

Under the amortised cost method, the Ffr90m carrying amount of the liability would be amortised back up to Ffr100m, giving rise to additional finance cost over the remaining period to maturity.

However, the standard allows amortisation to be deferred until hedge accounting is discontinued. If the swap is in place until the maturity date of the borrowing, the carrying amount of the debt will be adjusted back to Ffr100m through further hedge accounting adjustments (the fair value of the liability immediately before settlement must be Ffr100m). No amortisation will be necessary.

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But if the swap is in place only for part of the life of the borrowing, amortisation of the discount or premium will be necessary from the date that hedge accounting is discontinued.

The following examples illustrate in more detail the accounting for fair value hedges under IAS 39.

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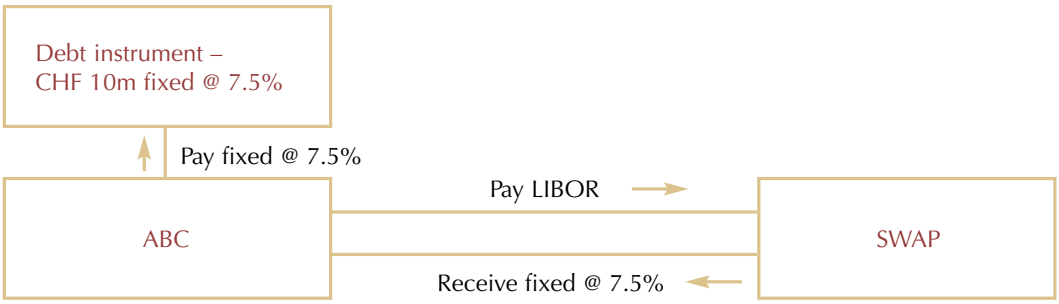
Fair value hedge using an interest rate swap

On 30 June 2001 ABC issues a CHF10m, fixed-interest note at 7.5%, with semi-annual interest payments and a three-year term. On the same day, ABC enters into an interest rate swap to pay LIBOR and receive interest at 7.5%; swap terms include a CHF10m notional principal, three-year term, and semi-annual variable rate reset.

Diagrammatically:



The six-month LIBOR rates set for the first two swap periods are:

1 July – 31 December 2001	6.0%
1 January – 30 June 2002	7.0%

The swap fair values, calculated from market rates, are:

Date	Before settlement asset/(liability)	Settlement paid/(received)	After settlement asset/(liability)
30 June 2001	Nil	Nil	Nil
31 Dec 2001	200,000	(75,000)	125,000
30 June 2002	80,000	(25,000)	55,000

In other words, the market has revised its assessment of interest rates downwards, and now expects to make payments to ABC over the life of the swap. The fair value of the swap represents the present value of the cash flows that ABC expects to receive under the swap.

The interest payments on the fixed rate debt and the net payments/(receipts) on the interest rate swap are as follows for the first two semi-annual periods:

	31 December 2001	30 June 2002
Fixed rate debt	375 000[1]	375 000[2]
Swap receipt	(75 000[3])	(25 000[4])
Net cash payment	300 000	350 000

[1] CHF10m x 7.5% x 6 months
[2] CHF10m x 7.5% x 6 months
[3] (pay LIBOR CHF 10m @ 6.0%) – (receive fixed CHF10 m @ 7.5%) x 6 months
[4] (pay LIBOR CHF 10m @ 7.0%) – (receive fixed CHF10 m @ 7.5%) x 6 months

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Documentation and effectiveness testing

Changes in the fair value of the swap are designated as a hedge of changes in the fair value of the debt due to changes in LIBOR. The principal/notional amounts, currencies, maturity, basis of the variable leg (LIBOR) and variable reset dates of the note and the swap are the same. Therefore, changes in the fair value of the debt and the swap, due to the hedged risk, will exactly offset each other. The swap is assumed to be fully effective.

Accounting under IAS 39

Under IAS 39, the swap contract is separately recognised and measured at its fair value. Initially this is zero. In order to achieve the matching of the hedged fair value changes in the income statement, the carrying amount of the debt is adjusted by the change in its fair value due to changes in LIBOR.

The journal entries are as follows:

	DR	CR
30 June 2001		
1. Cash	CHF10,000,000	
Debt instrument payable		CHF10,000,000
To record the issuance of the note		
(The swap is recognised under IAS 39 but its initial fair value is zero; therefore no journal entries required)		
31 December 2001		
2. Derivative asset (swap)	200,000	
Income statement (gain on hedge)		200,000
To recognise the change in fair value of the swap before settlement		
3. Cash	75,000	
Derivative asset (swap)		75,000
To record the settlement of the semi-annual swap amount received (thereby adjusting the swap asset to its post-settlement fair value of CHF125,000)		
4. Gain on hedge (income statement)	125,000	
Debt instrument		125,000
To recognise the change in fair value of the debt corresponding to the change in fair value of the swap		
5. Interest expense	375,000	
Cash		375,000
To accrue and pay the semi-annual interest expense on the debt at the fixed rate		

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Analysis

The total change in the fair value of the debt is CHF200,000, the same as the change in the fair value of the swap. The fair value of the swap is partially settled by the receipt of CHF75,000 in cash. In the same way, the change in the fair value of the debt is partially 'realised' when interest is paid at above the current market rate in December 2001. It is therefore only the post-settlement change in fair value of the swap that is used to adjust the carrying amount of the liability in journal 4. The combination of journals 2, 4 and 5 gives rise to an interest expense of CHF300,000, reflecting an interest expense at the variable rate.

The effect of journals 2-5 is to recognise a derivative asset of CHF125,000, an increase in the carrying amount of the debt of the same amount and an interest expense at the variable rate of CHF300,000. The same effect on the income statement could be achieved by:

- using synthetic accounting for the swap; or
- adjusting the swap to its post-settlement fair value with a corresponding adjustment to carrying amount of the debt and recognising the swap receipt as an adjustment to interest expense. This is the 'short-cut' method allowed under SFAS 133 but not dealt with in IAS 39 (see chapter 8).

Note that synthetic accounting could not be used because of the impact on the balance sheet. The short-cut method could be used only when the hedge is 100% effective. In this case, the assumption of full effectiveness, permitted under IAS 39, means that the change in fair value of the swap does result in an equivalent adjustment to the carrying amount of the debt.

Although the swap is assumed to be fully effective, testing will be necessary, on an on-going basis, to ensure that changes in the fair value of the swap reflect only changes in interest rates. For example, the fair value of the swap could also reflect changes in the credit risk of the bank providing the swap. Any such change should not result in a corresponding adjustment to the carrying amount of the debt. It should be reflected as hedge ineffectiveness in the income statement. In extreme circumstances, hedge ineffectiveness may be so significant that the criteria for hedge accounting are no longer met and hedge accounting should be discontinued.

Hedge ineffectiveness might also arise if, for instance, the variable leg of the swap was based on an index other than LIBOR. The impact of changes in LIBOR on the fair value of the debt would then be assessed independently of the impact of changes in the index underlying the swap on the fair value of the swap.

Any change in the value of the debt due to factors other than interest rate risk would not be recognised. For example, a change in the credit rating of ABC will result in a change in the fair value of its debt. But this change in fair value is not recognised as it is not hedged. Except for the adjustment for hedge accounting, the liability is measured at amortised cost.

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Fair value hedge of commodity inventory

On 1 October 2001 a metal refining company (the 'Company') has one million ounces of silver carried at an average cost of EU5.00 per ounce (EU5,000,000 total value) in its inventory. To protect the inventory from a decline in silver prices, the Company hedges its position by selling 200 silver futures contracts on the European Exchange. Each contract is for 5,000 ounces of silver at EU5.55 per ounce. The futures contracts mature in March 2002, which coincides with the date for which the Company has scheduled delivery of the silver to a customer at the spot price at that date.

The Company designates the futures contracts as a fair value hedge of its silver inventory (i.e. it is hedging changes in the inventory's fair value). Based on historical data, the Company determines that changes in the fair value of the silver contracts will be highly effective in offsetting all changes in the fair value of the silver inventory.

On 20 March 2002, the Company closes out its futures contracts by entering into offsetting contracts. On that same day, the Company also sells one million ounces of silver for EU5.25 per ounce.

On 31 December 2001 (the Company's fiscal year-end) and 20 March 2002, the cumulative gain on the futures contracts is EU150,000 and EU300,000 respectively, based on changes in the silver-futures prices. On those same dates, the Company determines that the fair value of its silver inventory cumulatively declined by EU160,000 and EU320,000, respectively. The fair value of the silver inventory has declined by more than the silver price because the fair value of the inventory is influenced by other factors such as changes in expected labour and transport costs.

A summary of the silver spot and futures prices on relevant dates is as follows:

	Silver prices (EU per ounce)	
Date	Spot	Futures prices (for delivery on 20 March 2002)
1 October 2001	5.40	5.55
31 December 2001	5.30	5.40
20 March 2002	5.25	5.25

The Company assesses hedge effectiveness by comparing the entire change in the fair value of the futures contracts (i.e. using futures prices) to the entire change in the fair value of the silver inventory. A summary of the hedge's effectiveness is as follows:

Date	Change in FV of futures contracts *gain/(loss)*	Change in FV of inventory based on changes in silver-futures prices and other factors *gain/(loss)*	Effectiveness ratio *for the period*
31 December 2001	150,000[1]	(160,000)	93.75
20 March 2002	150,000[2]	(160,000)	93.75

[1] (EU 5.55 – EU 5.40 per ounce) x 1 million ounces
[2] (EU 5.40 – EU 5.25 per ounce) x 1 million ounces

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Journal entries under IAS 39

	DR	CR
31 December 2001		
1. Futures contracts	EU150,000	
Gain on hedge activity		EU150,000
To record the futures contracts at their fair value		
2. Cash	150,000	
Futures contracts		150,000
Futures contracts are settled daily. This entry summarises the daily journals for each day throughout the quarter		
3. Loss on hedge activity	160,000	
Silver inventory		160,000
To record the change in the fair value of the silver inventory		
20 March 2002		
1. Futures contracts	150,000	
Gain on hedge activity		150,000
To adjust futures contracts to their fair value		
2. Cash	150,000	
Futures contracts		150,000
To record the settlement of the futures contracts that occurred from 1 January to 20 March 2002		
3. Loss on hedge activity	160,000	
Silver inventory		160,000
To record the change in the fair value of the silver inventory		
4. Cash	5,250,000	
Silver inventory sales		5,250,000
To record the sale of the silver inventory at the 20 March 2002 spot price		
5. Cost of sales	4,680,000	
Silver inventory		4,680,000
To remove the silver inventory from the accounting records at carrying value (EU5,000,000 – EU160,000 – EU160,000)		

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Analysis

Through the hedge transaction, the Company has 'locked in' a margin of EU0.55 per ounce, or a cumulative net profit of EU550,000 (EU570,000 gross profit on the sale, less EU20,000 loss on the hedging activity). In this example, the hedge is 93.75% effective and the loss on hedging activity in the income statement reflects the ineffectiveness in the hedge.

Treating this hedge transaction as a fair value hedge produces a matching of changes in the fair value of the derivative hedging instrument and the silver inventory, to the extent that the hedge is effective. The matching is achieved by accelerating the recognition in income of part of the cost of the silver inventory. In other words part of the 'cost of sales' entry that would normally take place on the sale of the inventory is recorded earlier.

Note that the 'write-down' in inventory is not a net realisable value adjustment, it is an accelerated cost of sales entry. The fair value and the net realisable value of the inventory is higher than its carrying amount throughout the period. The result of the hedging adjustment to inventory is that the inventory is carried at an amount that is neither cost nor net realisable value nor fair value. It is cost less a hedging adjustment. The measurement requirement for inventory under IAS 2 is overridden by the hedge accounting rules in IAS 39.

An alternative treatment

The company could have designated the futures contracts as a hedge of the future sales revenue from the inventory – a cash flow hedge. This alternative is illustrated in chapter 10.

Chapter 10

Accounting for a cash flow hedge

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What is a cash flow hedge?

A cash flow hedge is a hedge of an exposure to changes in future cash flows arising from a market-related risk – currency risk, interest rate risk, equity price risk, commodity risk, credit risk. The hedged item in a cash flow hedge can take one of two forms:

a) future cash flows related to a recognised asset or liability; or

b) future cash flows under either a committed transaction or a forecast transaction that is highly probable.

By far the most common example of the first category of hedged items is variable interest rate payments (or receipts) on a variable rate bond. Often this exposure to changes in market interest rates is hedged using an interest rate swap, cap, collar or floor.

Common examples of the second category of hedged items, committed or highly probable future transactions are:

- proceeds from **future sales** in a foreign currency or future sales of a commodity;
- payments for future **purchases of property** or **plant** in a foreign currency;
- payments for future **purchases of goods and services** in a foreign currency or commodity purchases; and
- a forecast issue of variable rate debt or foreign currency debt.

In each case, the hedged cash flow could be either contractually *committed* or *forecast*. To qualify for hedge accounting a forecast transaction must be *highly probable*. The term 'highly probable' is not defined, but based on similar guidance in the US we understand it to mean in the region of 90% probability that the transaction will take place. This concept is illustrated on page 72.

In each case, the hedging instrument might be one of a range of derivatives, depending on the exposure being hedged and whether the company's policy is to retain the potential for gains or hedge against both gains and losses. In the case of a currency hedge, the hedging instrument may be a non-derivative, for example foreign currency borrowings (see chapter 8).

The variability caused by the hedged risk must ultimately affect reported profit. For example, a future purchase of land could not qualify as a hedged item (unless the land will be classified as inventory) because the purchase price is not written off or depreciated through the income statement.

Accounting

Chapter 8 states that hedge accounting is an exception to the normal IAS 39 measurement rules described in the earlier chapters. In the case of a cash flow hedge, hedge accounting **defers the recognition of gains and losses on the hedging instrument.**

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More specifically, gains and losses on the hedging instrument, to the extent that the hedge is effective, are deferred in a separate component of equity. The separate component of equity could be described as a 'hedging reserve', for example. The deferred gains and losses are then released to the income statement in the periods when the hedged item affects the income statement.

To the extent that the hedge is ineffective, gains and losses on the hedging instrument are recognised in income.

It is important that deferred gains and losses on each hedging transaction are released into income at the right time. To achieve this, a company will need to keep separate records of amounts deferred in equity for each hedging transaction. In some cases, the systems requirements to keep track of each separate transaction may be complex. The release of deferred gains and losses could also take place over many years.

These difficulties are eased to some extent in IAS 39 when the hedged item is the purchase of an asset or the incurring of a liability. In that case, the amount deferred in the 'hedging reserve' is adjusted against the initial carrying amount of the asset or liability. In the case of an asset, for example the purchase of property in a foreign currency, the income statement matching of hedged foreign currency gains and losses then takes place automatically through depreciation of the adjusted initial carrying amount. This is illustrated on page 67.

In the case of a liability, a similar matching effect is achieved through the amortisation of the premium or discount that arises through this adjustment.

For example, a company that expects to issue variable rate debt at a future date might use a swaption (an option to enter into an interest rate swap) to protect itself against increases in market interest rates in the period until the debt is expected to be issued. A gain on the swaption would be deferred in equity, then added to the initial carrying amount of the debt. The additional credit would be amortised through the income statement over the life of the debt, reducing interest expense to reflect the economic impact of the swaption.

The following examples illustrate in more detail the accounting under IAS 39 for a cash flow hedge.

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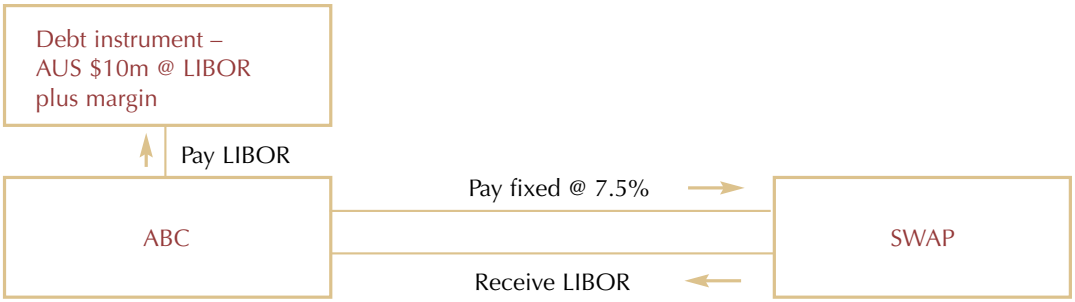
Cash flow hedge using an interest rate swap

On 30 June 2001 ABC issues an AUS$10m, variable-interest note based on LIBOR, with semi-annual interest payments and semi-annual variable rate reset dates, and a three-year term. On the same day, ABC enters into an interest rate swap to pay 7.5% fixed, semi-annually, and receive LIBOR; swap terms include a $10m notional principal, three-year term, and semi-annual variable rate reset.

Diagrammatically:



The six-month LIBOR rates that apply for the first two swap periods are:

1 July – 31 December 2001	6.0%
1 January – 30 June 2002	7.0%

The swap fair values, calculated from market rates, are:

Date	Before settlement asset/(liability)	Settlement paid/(received)	After settlement asset/(liability)
30 June 2001	Nil	Nil	Nil
31 Dec 2001	(200,000)	75,000	(125,000)
30 June 2002	(80,000)	25,000	(55,000)

The interest payments on the variable rate debt and the net payments/(receipts) on the interest rate swap are as follows for the first two semi-annual periods:

	31 December 2001	30 June 2002
Variable rate debt	300,000[1]	350,000[2]
Swap payment	75,000[3]	25,000[4]
Total cash payment	375 000	375 000

[1] $10m x 6.0% (LIBOR) x 6 months
[2] $10m x 7.0% (LIBOR) x 6 months
[3] (receive LIBOR $10m @ 6.0%) – (pay fixed $10 m @ 7.5%) x 6 months
[4] (receive LIBOR $10m @ 7.0%) – (pay fixed $10 m @ 7.5%) x 6 months

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Documentation and effectiveness testing

Changes in the fair value of the swap are designated as a hedge of the variable future cash interest payments on the note. The principal/notional amounts, currencies, maturity, basis of the variable leg (LIBOR) and variable reset dates of the note and the swap are the same. Therefore, over the life of the swap, its cash flows (represented by changes in its fair value) will exactly offset the impact of interest rate changes on interest payments. The swap is therefore expected to be 100% effective in offsetting the hedged risk.

Accounting under IAS 39

Under IAS 39, the swap contract is separately recognised and measured at its fair value. The fair value represents the present value of the expected cash flows under the swap which hedge the variable interest cash payments on the note. In order to achieve the matching of the hedged cash flows in the income statement, changes in the swap's fair value are deferred in a 'hedging reserve' in equity, then released to the income statement to achieve the matching effect.

Because the swap value is the PV of expected future cash flows, a swap settlement has an immediate impact on future cash flows and therefore on the value of the swap. For example, on 30 December 2001 (before settlement) the swap has a fair value of $200,000, representing the present value of expected future payments under the swap. The payment of cash on 31 December 2001 adjusts the fair value of the swap to $125,000.

The journal entries are as follows:

		DR	CR
30 June 2001			
1. Cash	AUS$	10,000,000	
Debt instrument payable			10,000,000
To record the issuance of the note			
(The swap is recognised under IAS 39 but its initial fair value is zero; therefore no journal entries required)			
30 December 2001			
2. Hedging reserve (equity)		200,000	
Derivative liability (swap)			200,000
To recognise the change in fair value of the swap before settlement and defer the gain in equity as a cash flow hedge			
31 December 2001			
3. Interest expense		300,000	
Cash			300,000
To accrue and pay the semi-annual interest expense on the debt at the variable rate ($10m x 6.0% x 6 months)			
4. Derivative liability (swap)		75,000	
Cash			75,000
To record the settlement of the semi-annual swap amount payable (and thereby adjusting the swap asset to its post-settlement fair value)			
5. Income statement-loss on hedge		75,000	
Hedging reserve			75,000
To release the loss from within the hedging reserve to income to reflect the 'matching' impact of the hedge.			

Analysis

Chapter 9 deals with an interest swap that is used as a fair value hedge. The analysis that follows that example, covering hedge ineffectiveness and the short-cut method under FAS 133, is also relevant to this example.

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Forward exchange contract hedging a future purchase of plant

A German company's financial year ends on 31 December 2001. It intends to renovate part of its plant and enters into an agreement with a Swiss supplier on 30 September 2001 to purchase an improved version of the equipment for CHF1m. The equipment is to be delivered on 31 March 2002 and the price is payable on 30 June 2002. In order to hedge the commitment to pay CHF1m, the company enters into a forward exchange contract on 30 September 2001 to purchase CHF1m on 30 June 2002 at a fixed exchange rate. Exchange rates are as follows:

Date	*Spot*	*Forward exchange rate* (30 June 2002)
30 September 2001 (CHF1 = DEM…)	1.22	1.23
31 December 2001	1.23	1.24
31 March 2002	1.25	1.25
30 June 2002	1.26	N/A

The fair value of the forward-exchange rate contract on 31 December 2001 and 31 March 2002, as determined from published market rates, is DEM9,500 (asset) and 19,700 (asset). The fair value at 30 June 2002 is DEM30,000 (asset), the amount that is due to be settled at that date.

Management assesses and documents hedge effectiveness based on the difference between changes in the value of the forward exchange contract and the DEM equivalent of the firm commitment; both being calculated based on changes in forward rates from the inception of the hedge. Since the critical terms (amounts, dates and currencies) for both contracts are identical, management determines that there would be no hedge ineffectiveness.

Accounting pre-IAS 39

Prior to IAS 39, practice on entering into the forward exchange contract would be to record nothing. When the equipment is installed, one common practice was to record the transaction at the contracted rate:

DR Equipment (at the agreed forward rate)
CR Payable (at the agreed forward rate)

This defers any foreign currency gain/loss (between the time of the commitment and installation) within the cost of the asset, including the initial premium on the forward contract. Over time, the depreciation on the asset would transfer the deferred foreign exchange gains/losses to the income statement.

Alternatively, some companies may have separated the premium as follows:

DR Equipment (at spot rate at inception of the forward contract)
DR P&L (premium)
CR Payable (at the agreed forward rate)

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Accounting under IAS 39

A hedge of an unrecognised firm commitment to buy an asset at a fixed price is a cash flow hedge. This transaction results in the recognition of a non-financial asset (the equipment).

The accounting entries are as follows:

			DR	CR
30 Sept 2001				
1. Forward contract asset			-	
Cash				-
Journal for illustration only. The hedging instrument is recognised under IAS 39 but its initial fair value is zero				
31 December 2001				
2. Forward contract asset		DEM	9,500	
Hedging reserve in equity				9,500
Recognising the gain on the forward contract, reflecting the change in its fair value since 30 September 2001				
31 March 2002				
3. Equipment asset			1,250,000	
Payables				1,250,000
The equipment is delivered and recognised at the spot rate				
4. Forward contract asset			10,200	
Hedging reserve in equity				10,200
Recognising the gain on the forward contract, reflecting the change in its fair value since 31 December 2001				
5. Hedging reserve in equity			19,700	
Equipment asset				19,700
The gains deferred in equity are included in the carrying value of the asset				
30 June 2002				
6. Payable			1,250,000	
Income statement			10,000	
Cash				1,260,000
The equipment is paid for at the spot rate and the exchange loss on the payable since March 2002 is recognised				
7. Forward contract asset			10,300	
Income statement				10,300
Recognising the gain on the forward contract for the period. The gain is recognised directly in the income statement to offset the loss on the payable				
8. Cash			30,000	
Forward contract settlement				30,000
Net settlement under the forward contract				

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Analysis

By entering into the forward exchange contract, the Company has locked in the cost of the equipment at DEM1,230,300. This is very close to the result that would have been achieved under the 'pre-IAS 39' accounting described above. The difference is that the market value of the forward contract reflects influences other than simply the change in forward exchange rates.

Note that the gain of DEM30,000 under the forward contract is based on changes in forward rates which includes the effect of the initial premium reducing to zero. In other words there is a gain of DEM40,000 based on changes in the spot rate, offset by the initial premium inherent in the contract. In the above journals, virtually all of the premium is capitalised as part of the asset value.

An alternative method of designation

The example above assumes the hedge was designated as comparing the entire change in fair value of the forward contract with changes in the 'value' of the future purchase based on changes in forward exchange rates.

The company could designate the hedge based on changes in the spot rate over the life of the contract. This would have resulted in a deferral of a DEM30,000 gain in equity, based on the change in spot rates from 1.22 to 1.25 in the six months to March. This would be adjusted against the cost of the asset to give an initial carrying amount of DEM1,220,000. The remaining change in the fair value of the swap up to that date (a loss of DEM10,300) would be taken to income as a hedging cost.

Cash flow hedge becomes a fair value hedge

Once the equipment asset is delivered and recognised on the balance sheet, the cash flow hedge becomes a fair value hedge. The exchange risk changes from a risk of changes in future cash flows, to a risk of changes in the fair value of the amount payable for the equipment. This demonstrates the 'life-cycle' concept described in chapter 8.

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Commodity futures hedging an anticipated future commodity sale

Assume that the facts in the fair value hedge example (example on page 59) also apply here, except that the company decides to designate the silver futures contracts as a cash flow hedge of the anticipated sale of the inventory. The company does not have a contract to sell the silver in March, but believes it is highly probable that the sale will occur, based on its sales history with this customer. The Company is hedging its exposure to changes in cash flows from the anticipated sales.

On 31 December 2001 and 20 March 2002, the following journal entries (excluding any margin deposit for the futures contracts) would be recorded for this cash flow hedge:

	DR	CR
31 December 2001		
1. Futures contracts	EU150,000	
Equity		EU150,000
To record the futures contracts at their fair value		
2. Cash	150,000	
Futures contracts		150,000
Futures contracts are settled daily. This journal entry records the settlement of the futures contracts that occurred each day throughout the quarter		
20 March 2002		
1. Futures contracts	150,000	
Equity		150,000
To adjust futures contracts to their fair value		
2. Cash	150,000	
Futures contracts		150,000
Futures contracts are settled daily. This journal entry summarises the daily journals that record the settlements from 1 January to 20 March 2002		
3. Cash	5,250,000	
Sales		5,250,000
To record the sale of silver inventory at the 20 March 2002 spot price		
4. Cost of sales	5,000,000	
Silver inventory		5,000,000
To remove the silver inventory from the accounting records at its carrying value		
5. Equity	300,000	
Revenue		300,000
To reclassify as income the gains on futures contracts that were deferred in equity		

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Analysis

Through the hedge transaction the Company has 'locked in' a cash inflow of EU5.55 per ounce of silver (EU5,250,000 + EU300,000). As demonstrated by the above journal entries, the gain on the futures contract is deferred until earnings are impacted by the sale of inventory on 20 March 2002.

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Currency borrowing hedging a future revenue stream

IAS 39 will severely restrict the flexibility that has previously been available to designate foreign currency liabilities as hedges of anticipated revenue streams. It will be extremely difficult to demonstrate that future revenue streams are 'highly probable' except in the short term, perhaps two to three years. Even then, detailed forecasting, based on past experience and realistic future assumptions, will be required to achieve the required degree of certainty. Even when the 'highly probable' criterion can be met, it is likely to be supportable for only a portion of a company's revenue in a particular currency in each period. The following example illustrates the accounting for such a hedge:

A European airline has revenue streams in Euros, US Dollars and Sterling and reports in Euros. On 31 December 1999 it purchases a number of new aircraft. Because it expects future revenues in US Dollars it decides to finance the purchase using a new USD borrowing of $100m, repayable over 10 years. It will use the cash from USD revenues to repay principal and interest when due under the loan. It will apply IAS 39 from 1 January 2000.

The airline uses sophisticated models based on past experience and forecast economic data to project its revenues for the next 10 years in various currencies. Its USD revenues are approximately $20m each year from which it expects to pay principal and interest on the loan of $15m each year. Although it is sufficiently confident in the forecast USD revenues to borrow in that currency, it cannot demonstrate that these are 'highly probable'. It determines that USD revenues of $10m each year for the first three years are 'highly probable'.

It designates 3 x $10m of the USD borrowing as a hedge of these highly probable revenues in 2000 to 2002, determining that the hedge will be highly effective. Assume that, at the end of 2000, it is determined that a further $10m of revenue expected in 2003 is now 'highly probable'. In other words, a rolling total of $30m of future revenues qualifies to be hedged in each year. Exchange differences on the equivalent amount of the borrowing can be deferred in equity each year.

Also in each year, the cumulative exchange differences that have been deferred in respect of that period's revenues are released from equity into the income statement.

The Euro/$ exchange rates are as follows:

31 December 1999	1.2
1 January 2000 and throughout the year	1.5
1 January 2001 and throughout 2001	1.4

For simplicity, assume the $15m paid in each year represents $10m principal and $5m interest.

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The journals required under IAS 39 are as follows:

	DR	CR
31 December 1999		
1. Aircraft	EU120,000,000	
USD Debt		120,000,000
To recognise the purchase of aircraft for USD100m financed by USD borrowings		
31 December 2000		
2. Income statement – exchange loss	21,000,000	
Currency hedging reserve (equity)	9,000,000	
USD Debt		30,000,000
To recognise exchange loss on retranslating debt, of which part (exchange loss on USD30m) is deferred as a hedge of future cash flows		
3. Cash	30,000,000	
Revenue		30,000,000
To recognise $20m of revenues of which $10m is hedged		
4. Income statement – exchange loss	3,000,000	
Currency hedging reserve		3,000,000
To transfer deferred exchange loss on the first tranche of debt (USD10m) to income to offset exchange 'gain' on hedged revenues		
5. Interest expense	7,500,000	
USD Debt	15,000,000	
Cash		22,500,000
To recognise interest and principal repayment for the year		

Analysis

'Expected' USD revenues for 2000, based on the 1999 exchange rate, were EU24m (USD 20m @ 1.2). Actual revenues were EU6m higher at EU 30m, as a result of the exchange rate movement. This economic 'gain' was partially offset by a 'natural' hedge on the interest expense which was EU1.5m higher than expected. It was also offset by the release of deferred exchange differences on the first tranche of debt designated as a hedge of year 2000 revenues (EU3m).

The net impact of the change in exchange rates on the income statement is:

- a 'gain' of EU1.5m on the remaining $5m of revenues that did not qualify to be hedged; and
- an exchange loss of EU21m on the portion of the US debt which could not be designated as a hedge of future revenues.

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	DR	CR
31 December 2001		
1. USD Debt	EU9,000,000	
Income statement – exchange gain		6,000,000
Currency hedging reserve (equity)		3,000,000
To recognise an exchange gain on retranslating remaining $90m debt, of which the gain on $30m is deferred as a hedge of future revenues		
2. Cash	28,000,000	
Revenue		28,000,000
To recognise $20m of revenues of which $10m is hedged		
3. Income statement – exchange loss	2,000,000	
Currency hedging reserve		2,000,000
To transfer cumulative deferred exchange loss on the second tranche of debt (EU3m loss for 2000 offset by EU1m gain for 2001) to income to offset exchange 'gain' on hedged revenues		
4. Interest expense	7,000,000	
USD Debt	14,000,000	
Cash		21,000,000
To recognise interest and principal repayment for the year		

Analysis

US Dollar revenues for 2001 are EU4m higher than originally anticipated in 1999, as a result of the exchange rate movement from 1.2 to 1.4. Half this gain, the gain on $10m of revenue, is offset by cumulative exchange losses on the second tranche of hedging debt released from equity. The 'loss' arising from USD interest charges being higher than originally expected provides a natural hedge against 'gains' on a further $5m of revenue.

The net income statement impact is a gain of EU1m representing the gain on the remaining $5m of unhedged revenues. However, the income statement is also impacted by EU6m of exchange gains on the debt that could not be designated as a hedge of future revenues.

This example demonstrates two of the main features of cash flow hedge accounting under IAS 39:

1. The complexity that is involved, particularly in keeping track of the amounts deferred in equity. Systems will be required to record the amounts deferred for each aircraft, for each period and in respect of each tranche of hedged future cash flow in order to calculate the amounts to be released to income in each period. In practice, monthly or quarterly data may well be required.

2. The difficulty in demonstrating that forecast revenues are 'highly probable' over anything other than a short period, even if budgets and forecasts are considered reliable. The impact is that the hedge only partly qualifies for hedge accounting, resulting in income statement volatility.

Faced with these difficulties, and the limited hedge accounting that can be achieved, many companies may choose to abandon hedge accounting for future revenue streams. They may prefer instead to explain the volatility that arises in income and the economic hedges that they have in place to reduce the long-term risk.

Chapter 11

Hedging a net investment

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What is the impact of IAS 39?

Many companies hedge against foreign exchange differences arising on their net investments in foreign entities. For example, many companies borrow in a range of currencies which match the currencies in which their investments are denominated.

IAS 21: The Effects of Changes in Foreign Exchange Rates, allows hedge accounting for translation differences arising on a foreign currency liability that is accounted for as a hedge of an enterprise's net investment in a foreign entity. IAS 21, however, contains no guidance on what qualifies, for accounting purposes, as a hedge, or how effectiveness should be measured. IAS 39 provides the missing guidance, and both standards therefore need to be considered when accounting for items that hedge a net investment in a foreign entity.

Following the basic principle in IAS 21, exchange differences on a foreign currency borrowing are recognised in the income statement. Exchange differences on translating the financial statements of a foreign entity are classified as equity. In the absence of hedge accounting, volatility would result. Therefore IAS 21 allows exchange differences on a foreign currency borrowing accounted for as a hedge of the net investment in a foreign entity to be recognised in equity.

IAS 39 applies the same restrictive requirements on designation and effectiveness to a hedge of a net investment as it does to other hedging relationships. Companies that currently use hedge accounting for these relationships will therefore need to consider the new requirements carefully. They will need to determine whether their existing arrangements qualify for hedge accounting under IAS 39, and consider restructuring and designating these hedging relationships where necessary to achieve hedge accounting in the future.

Criteria for hedge accounting

All of the hedge criteria of IAS 39 (see chapter 8) must be met. The position to be hedged (the investment in the foreign entity) should be specifically identified, the loan should be specifically designated as a hedge of the investment in the foreign entity and there should be a high degree of correlation between gains and losses on the investment and gains and losses on the borrowing.

If the borrowing is repayable on demand or has a short maturity, for example commercial paper, it would likely not be considered effective as a hedge of a net investment because the timing of repayment would be out of the hands of the reporting enterprise. Short-term debt might be considered effective as a hedge of a net investment only if it was backed by an agreed long-term financing facility and it is likely that any short-term debt would be 'rolled-over'.

A company may borrow funds in a foreign currency subsequent to the acquisition of the subsidiary and

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still achieve hedge accounting. Hedge accounting would apply only prospectively, however.

To be effective as a hedge, the foreign currency borrowings should not exceed the total amount of cash that the net investments are expected to generate, whether from future dividends or the future disposal of the investment. Exchange gains and losses on any 'surplus' borrowing would be recognised in the income statement.

Sometimes a net investment in a foreign entity is financed by means of an issue of shares by the investor. As an enterprise's own equity securities are not financial assets or financial liabilities under IAS 39, they cannot be hedging instruments. An alternative hedging instrument will need to be found if the company wishes to hedge the currency risk in the net investment.

Hedge accounting

Under IAS 39, the net investment is viewed as a single asset, as opposed to several individual assets and liabilities that comprise the balance sheet of the subsidiary. In chapter 8 it was pointed out that IAS 39 envisages three types of hedges: fair value hedges, cash flow hedges and hedges of net investments in foreign entities. The accounting for the latter type of hedge follows rules similar to those for cash flow hedges. That is, exchange gains and losses on the hedging instrument are recognised in equity.

There is, however, a slight difference in the accounting treatment depending on whether the hedging instrument is a derivative or a non-derivative.

Hedging with a derivative

An example of a derivative hedging instrument would be a forward exchange contract or a foreign currency swap. The notional amount would be equal to or part of the amount of the net investment in the foreign entity.

Hedges of a net investment in a foreign entity should 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 should be recognised directly in equity through the statement of changes in equity.

b) The ineffective portion should be reported immediately in net profit or loss.

The gain or loss on the hedging instrument relating to the effective portion of the hedge should be classified in a separate foreign currency translation reserve in equity, along with the corresponding loss or gain on translating the financial statements of the foreign subsidiary.

Hedging with a non-derivative

Under the hedge accounting rules of IAS 39, the only time that a non-derivative financial asset or liability may be designated as a hedging instrument is where that non-derivative is hedging a foreign currency risk.

Take the case of an Australian parent company with a net investment in a South African subsidiary. It borrows South African currency of an amount equal to, or less than, its net investment in the foreign entity. It then designates the borrowing as a hedge of the South African investment. If the carrying amount of the net investment declines because of a weakening of the South African Rand against the Australian Dollar the loss is made up by an equal gain on the South African Rand denominated borrowing. When the net investment is translated into Australian Dollars, any loss on translation is offset by a gain on the translation of the Rand borrowing into Australian Dollars.

Non-derivative hedges of a net investment in a foreign entity should be accounted for in the same way as hedges using derivatives, except that hedge ineffectiveness is not accounted for separately in the income statement. Both effective and ineffective portions of the gain or loss on the borrowing are taken to equity.

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Using two different currencies for the hedging instrument and the hedged position

Conceptually, it does seem possible to use a borrowing in one foreign currency to hedge a net investment in another currency and any ineffectiveness could be deferred in equity. The practical difficulty is that before hedge accounting is allowed, the hedge must meet the requirements that:

- gains and losses are expected to 'almost fully offset'; and
- in practice, the degree of offset falls in the 80 - 125% range (see chapter 8).

'Almost fully offset' should be interpreted strictly, so it is unlikely that hedge accounting would be achieved unless the two currencies are so closely linked that the range of movement between them is, and will be, very small, perhaps within a 95 – 105% range.

Chapter 12

Transitional rules

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Prospective application

IAS 39 is applied prospectively. Retrospective application is not permitted. A company is not therefore required or permitted, on initial adoption, to redesignate hedging relationships, adjust asset carrying values and equity, and recognise the cumulative net impact through retained earnings as if it has always followed IAS 39. It would be inappropriate, for example, to recreate the accounting impact of a hedging strategy under IAS 39 when the appropriate documentation would not have been in place. Instead, previously designated hedges are deemed to be effective up to the date the new standard is adopted.

All accounting adjustments are therefore made from the beginning of the year in which IAS 39 is first applied, not at the beginning of the earliest period presented, as would normally be the case. Comparative figures are not restated. For calendar year companies that are not adopting IAS 39 early, the date of adoption will be 1 January 2001. At that date:

- assets and liabilities should be reclassified to conform with the new requirements. Embedded derivatives should be identified and separated when required by the standard.
- assets and liabilities should be remeasured as necessary, for example available-for-sale assets and all derivatives at fair value. Adjustments are booked against retained earnings except for cash flow hedging instruments (see below).
- any previous hedge accounting should be discontinued at that date, but the effectiveness of previous hedges is not called into question. Amounts deferred under previous cash flow hedges continue to be deferred unless the hedged transaction is no longer expected to take place.
- any gains and losses on cash flow hedging instruments, either not recognised or deferred as liabilities and assets under previous policies, should be recognised and transferred to a hedging reserve in equity. They will be released to the income statement to match the corresponding losses and gains when the future transaction affects income.
- any hedged items under previous fair value hedges should be remeasured using the principles in IAS 39, without regard to the effectiveness of those hedges previously. Gains and losses should be taken to retained earnings, where they will offset cumulative losses and gains now recognised on the hedging instruments.
- hedging relationships should be reassessed, designated and documented using the criteria in IAS 39. Hedge accounting from this date will depend on meeting the effectiveness requirements in IAS 39.
- any previous securitisations, transfers or other derecognition transactions should not be reversed even if they would not meet the criteria for derecognition in IAS 39.

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Applying the rules in practice

Prospective application of IAS 39 is best illustrated by straightforward examples based on common pre-IAS 39 practices. The examples show broadly the impact of the transitional provisions and highlight certain accounting issues that should be addressed in the run-up to adopting the new standard.

Classification and valuation of investments

Company H holds 10% of the ordinary shares in the Company A. The investment was acquired several years ago for ¥10,000 with the intent to develop a long-term operating relationship. The investment was recorded at cost. At the adoption date, the market value of the shares is assessed at ¥25,000.

Journal entries analysis:

	Before transition	DR/(CR) Adjustments	After transition
Investments (available-for-sale)	10,000	15,000	25,000
Retained earnings	-	(15,000)	(15,000)

Following the transitional rules, the management of Company H transfers the investment into an 'available-for-sale' category and remeasures it to fair value with an adjustment to retained earnings.

Any future unrealised gains or losses on the investment valuation will be recognised in equity until the investment is disposed of.

Split accounting for embedded derivatives

The Company owns an equity-indexed note with a principal of AU$100,000, carried at cost. The embedded equity-indexed derivative instrument is not closely related to the host contract and under IAS 39 should be separated. The fair value of the derivative instrument is assessed at AU$30,000 and the fair value of the combined instrument is AU$120,000. The host contract is classified as available for sale. Journal entries analysis:

	Before transition	DR/(CR) Adjustments	After transition
Investments (available-for-sale)	100,000	(10,000)	90,000
Derivative	-	30,000	30,000
Retained earnings	-	(20,000)	(20,000)

At the adoption date the Company splits the contract into the host contract (equity) and the derivative instrument. The derivative is then remeasured to fair value with a corresponding adjustment to retained earnings.

Derecognition of assets prior to the adoption date

In the past, the Company sold a portfolio of receivables, which fall due in six months after the adoption date. Those receivables were removed from the Company's balance sheet. Given the overall condition of the debtors, it is not expected that any of them might default, however, the Company had guaranteed up to 10% of the total transferred balance of FrF50,000.

Under the transition rules, there is no adjustment for the pre-adoption transaction: the assets remain off-balance sheet and no liability is recognised for the guarantee. In similar situations, following the implementation of IAS 39, recognition of a new liability at fair value would be required.

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Reassessment of fair value hedges

1. The Company has a coffee futures contract outstanding with a deferred loss of £10,000 recognised in 'other assets'. The contract is intended to hedge changes in inventory prices and meets the fair value hedge criteria of IAS 39. The carrying amount of inventory is £100,000, its fair value is £130,000 and the change in its fair value since the inception of the hedge is assessed at £9,000 (increase).

   Journal entry analysis:

	Before transition	DR/(CR) Adjustments	After transition
Inventory	100,000	9,000	109,000
Other assets	10,000	(10,000)	-
Bank	(10,000)	-	(10,000)
Retained earnings	-	1,000	1,000

   The loss on the hedging instrument is recognised in retained earnings and the gain on the hedged item adjusts the carrying value of the inventory, with a corresponding entry to retained earnings. In the future the gains and losses on both hedging instrument and hedged item will be recognised in the income statement.

   Note, as a result of hedge accounting the inventory component subject to hedging will be carried at an amount that is neither cost nor fair value. For further information see page 59.

2. The Company has an investment in a fixed rate debt security with a carrying amount of £100,000 (cost) and a fair value of £94,000. The Company also has a swap contract outstanding that converts the fixed rate investment into a variable rate investment. The swap contract has a fair value of £6,000 (asset). The swap is not recognised on the balance sheet. Swap settlements are recorded by adjusting the interest received from fixed to floating each period. At the adoption date the Company classifies the investment as 'available-for-sale'.

   Journal entry analysis:

	Before transition	DR/(CR) Adjustments	After transition
Investment – AFS	100,000	(6,000)	94,000
Swap contract - asset	-	6,000	6,000

   At the adoption date the Company recognises the swap contract on balance sheet at fair value and the gain is reported in retained earnings along with the change in fair value of the investment (loss). In the future, differences from remeasurement of both investment and swap are recognised in the income statement.

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Reassessment of a cash flow hedge

The Company has a foreign currency forward exchange contract outstanding, which has a fair value of $15,000 (gain). The contract meets the cash flow hedge criteria of IAS 39 and is intended to hedge the foreign currency exposure on a commitment to pay foreign currency for imported equipment. The derivative is not recognised on the balance sheet.

Journal entry analysis:

	Before transition	DR/(CR) Adjustments	After transition
Forward contract asset	-	15,000	15,000
Hedging reserve (equity)	-	(15,000)	(15,000)

In accordance with the transitional rules, the Company includes the gain on the forward exchange contract in equity until the equipment is received and the asset is recognised.

A non-qualifying hedge

The Company has a foreign currency forward exchange contract outstanding, which does not meet the criteria for an effective hedge. The contract was intended to hedge the foreign currency exposure on a forecast sale transaction, which is still expected to occur, but is not 'highly probable'. The contract was not recognised on the balance sheet, but its fair value is DM6,000 (loss).

Although the hedge is not effective in IAS 39 terms, previous hedging relationships are not reassessed. The hedge is assumed to have been effective in previous periods. The loss on the forward contract up to 31 December 2000 remains deferred but is reclassified into equity.

Journal entry analysis:

	Before transition	DR/(CR) Adjustments	After transition
Forward contract liability	-	(6,000)	(6,000)
Hedging reserve	-	6,000	6,000

At the adoption date the Company discontinues hedge accounting. The cumulative deferred loss is recorded separately in equity until the forecast transaction occurs; then it is 'recycled' to the income statement. Subsequent to the adoption date, the contract is measured at fair value and the resulting adjustments are reported in the income statement.

The loss would be written off to retained earnings at 1 January 2001 (rather than placed in the hedging reserve) only if the forecast foreign currency sale is no longer expected to occur.

Chapter 13

Disclosures

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IAS 32 already requires disclosures on the nature and extent of financial instruments used, the main terms and conditions, maturities, currencies, as well as information on interest rate risk, concentrations of credit risk and fair values.

IAS 39 retains all these requirements, except that fair value disclosures are not required when financial instruments are carried at fair value on the balance sheet. In addition, it requires extensive additional disclosures, the most significant of which are described on the next page.

Up until now, with the possible exception of the large European banks, disclosures around financial instruments, the exposure to financial risk, management, hedging transactions and the use of derivatives have been, despite the best efforts of IAS 32, a relatively small component of the annual reports of companies reporting under IAS. Companies have complied with the letter of IAS 32 by disclosing, within the relevant balance sheet notes, interest rates, maturities, currencies and other terms and conditions of significant investments and borrowings. Many have disclosed that the fair values of assets and liabilities are not significantly different from their carrying amounts. Few have been prepared to disclose meaningful information on interest rate risk.

IAS 39 will change that by forcing companies to consider disclosures from the top-down – starting with risk exposures and risk management policies, moving through hedging and hedge accounting policies and practices and ending with details about the hedging transactions and their impact on the financial statements. For the first time, risk management and financial instruments disclosures will become a main focus in the annual reports of most large groups.

The extent of disclosure required will vary from company to company, depending on the nature and extent of its investment, derivatives, hedging and securitisation activities. For any company involved in hedging activities, however, the additional disclosure will be significant and systems will need to be in place to collect the necessary data for financial reporting purposes.

Set out on the following pages, to illustrate the requirements, are some extracts from the accounting policies and hedging notes for a company with moderate use of financial instruments and simple but widespread hedging activity. Generally, however, the nature of the information does not lend itself to 'boilerplate' disclosures. Any illustrative disclosures are therefore of limited use.

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Summary of required disclosures

1. **Recognition and measurement**

a) The methods and assumptions used in estimating fair values, separately for each class of asset and liability, including discount rates, credit loss and prepayment adjustments.

b) The policy for recognising gains and losses on available-for-sale assets (income or equity).

c) For each category of financial asset, whether trade date or settlement date accounting is used.

d) Movements on the 'available-for-sale revaluation reserve' in equity.

e) Details, amounts and explanations for why fair values cannot be reliably determined for any available-for-sale or trading assets carried at cost.

f) Reasons for transferring assets into the held-to-maturity category.

g) The nature and amounts of impairment losses and reversals recognised, separately by class of asset.

2. **Hedging**

a) Risk management objectives and policies.

b) The policy for hedging each type of forecast transaction.

c) For each type of fair value, cash flow and net investment hedge:

i) a description of the hedge;

ii) a description of the hedging instruments and their fair values;

iii) the nature of the risks being hedged;

iv) the periods in which forecast transactions are expected to take place, and when they will impact profit; and

v) any hedged forecast transaction that is no longer expected to take place.

d) Details of movements on the 'hedging reserve' in equity.

3. **Income statement.** Disclose separately significant income, expenses, gains and losses, including:

a) Historical cost interest income and expense.

b) Unrealised gains and losses on available-for-sale assets.

c) Realised gains and losses on disposal of available-for-sale securities, including those 'recycled' from equity.

d) Unrealised interest income on impaired loans.

4. **Repurchase agreements and securitisations in the current period**

a) The nature and extent, description of collateral, and assumptions used to determine carrying amounts of retained interests.

b) Whether the assets have been derecognised.

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ABC AG - Extracts from accounting policies and financial statement footnotes…

Adoption of IAS 39 – adjustments to opening balances

The Company adopted International Accounting Standard 39 (IAS 39), Financial Instruments: Recognition and Measurement, on 1 January 2001. In accordance with the transitional provisions of IAS 39, the Company recorded a cumulative adjustment of XX (gain/loss) in Retained Earnings to recognise at fair value all derivatives that are designated as fair value hedging instruments. The Company also recorded a cumulative adjustment of XX (gain/loss) in Retained Earnings to recognise the difference (attributable to the hedge risks) between the carrying values and fair values of related hedged assets and liabilities.

The Company recorded an adjustment of XX in Other Assets and an adjustment of XX in Other Liabilities to recognise at fair value all derivatives that are designated as cash flow hedging instruments. The Company also recorded a corresponding cumulative adjustment of XX in Hedging Reserve (equity) to recognise the difference between the carrying values and fair values of the hedging instruments.

Upon the adoption of IAS 39 the Company also recognised in its balance sheet other derivatives, either as assets or liabilities, and measured them at fair value. This recognition resulted in the adjustments of XX in Other Assets and XX in Other Liabilities, respectively. The Company recorded a corresponding cumulative adjustment of XX (gain/loss) in Retained Earnings to recognise the difference between the carrying values and fair values of these derivatives.

The Company classified XX of its investment securities as 'available-for-sale' and XX as 'trading'. It remeasured these securities to fair value and recorded a cumulative adjustment of XX (gain/loss) in Retained Earnings.

Other investments of XX have been designated as 'held-to-maturity', as management has both the positive intent and the ability to hold them to maturity.

Financial risk management

The Group has operations in over 30 countries and sells machinery and equipment to automotive manufacturers in over 100 markets. Nearly 50% of the Group's revenues are generated from international customers. The Group's activities expose it to a variety of market risks, including the effects of changes in foreign currency exchange rates, interest rates and commodity prices. The Group's overall risk management programme focuses on the unpredictability of financial markets and seeks to minimise the adverse effects on the financial performance of the Group.

Risk management is carried out by a central Treasury Group under policies approved by the Board of Directors. Group Treasury identifies, evaluates and hedges financial risks in close co-operation with the business groups. The Board provides principles for overall risk management, as well as policies covering specific areas, such as foreign exchange risk, interest rate risk, commodity price risk, use of derivative financial instruments and investing excessive liquidity.

Foreign exchange risk

The Group is exposed to foreign exchange risk arising from various currency exposures. Subsidiaries are encouraged, but not required, to use forward contracts and currency options, transacted with Group Treasury, to hedge their exposure to foreign currency risk in the local reporting currency. Group Treasury hedges the net exposures in each currency using external forward contracts and options.

For financial reporting purposes, each subsidiary designates the internal contracts as fair value or cash flow hedges, as appropriate. At the group level, external foreign exchange contracts and options are designated as hedges of foreign exchange risk on specific assets, liabilities or future transactions that represent the overall net position. Assets and liabilities in foreign currencies, as well as hedged future transactions in foreign currencies, are listed in note XX.

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The Group hedges between 60 and 75% of anticipated export sales in each major currency for the following 12 months. In 2001, approximately 40 to 50% of projected sales in each major currency qualified as 'highly probable' and therefore achieved hedge accounting. Gains and losses on derivative instruments that provide effective hedges of future sales, but do not qualify for hedge accounting, are reflected in the net profit for the period.

Additionally, the Group hedges the foreign currency exposure of its firm commitments to purchase certain production parts from Switzerland and Brazil. The forward contracts used in its programme mature in 18 months or less, consistent with the related purchase commitments. The Group generally hedges between 60 and 80% of its total firm commitment purchase contracts.

The Group has a number of investments in foreign subsidiaries, whose net assets are exposed to currency risk. Currency exposure to the net assets of the Group's Latin American subsidiaries is managed primarily through borrowings denominated in the relevant foreign currencies. The Group also enters into foreign currency forward exchange contracts to hedge the foreign currency exposure of its Asian subsidiaries. These agreements are in place for each subsidiary and have contract terms of nine months to one year.

Interest rate risk

The Group's income and operating cash flows are substantially independent of changes in market interest rates. The Group policy is to maintain approximately 75% of its borrowings in fixed rate instruments. To obtain the most favourable overall finance cost, the Group borrows substantially at variable rates and uses interest rate swaps as cash flow hedges of future interest payments, effectively converting borrowings from floating to fixed rates. The Group has no significant interest-bearing assets.

Commodity price risk

The manufacturing of certain of the Group's products requires a significant volume of copper and aluminium. The value of the Group's inventory of copper and aluminium raw materials changes daily, consistent with price movements in the respective commodity markets. Price fluctuations in copper and aluminium cause market value of inventory to differ in relation to cost, and actual cash outlays for the purchase of metal to differ from anticipated cash outlays. The Group uses futures and options contracts to manage price risks associated with this inventory and generally hedges 70 to 75% of its total value.

Accounting for derivative instruments and hedging activities

All derivatives are recognised on the balance sheet at their fair value. On the date a derivative contract is entered into, the Group designates the derivative as (1) a hedge of the fair value of a recognised asset or liability (fair value hedge), (2) a hedge of a forecasted transaction (cash flow hedge), or (3) a hedge of a net investment in a foreign entity. Certain derivative transactions, while providing effective economic hedges under the group's risk management policies, do not qualify for hedge accounting. Derivative instruments are not entered into for trading or speculative purposes.

Changes in the fair value of a derivative that is highly effective, and that is designated and qualifies as a fair value hedge, are recorded in the income statement, along with the change in the fair value of the hedged asset or liability that is attributable to the hedged risk.

Changes in the fair value of a derivative that is highly effective, and that is designated and qualifies as a cash flow hedge, are recognised directly in equity (hedging reserve). Amounts deferred in equity are included in the income statement in the same periods during which the hedged firm commitment or forecasted transaction affects net profit or loss.

Hedges of net investment in foreign entities are accounted for similarly to cash flow hedges.

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Changes in the fair value of derivatives that do not qualify for hedge accounting are recognised in the income statement. The net loss on such derivatives, which management believes provide an effective hedge against changes in the value of future sales, was XXX.

The Group formally documents all relationships between hedging instruments and hedged items, as well as its risk management objective and strategy for undertaking various hedge transactions. This process includes linking all derivatives designated as hedges to specific assets and liabilities or to specific firm commitments or forecasted transactions. The Group also formally assesses, both at the hedge inception and on an ongoing basis, whether the derivatives that are used in hedging transactions are highly effective in offsetting changes in fair values or cash flows of hedged items.

Details of the nature and amounts of various derivative instruments used for hedging purposes are disclosed in note XX. Movements on the hedging reserve are shown in note XX.

Financial instruments

The Group's financial instruments include derivative instruments, cash and cash equivalents, investments, receivables, accounts payable and borrowings.

Investments

Investment securities that are acquired for the purpose of generating a profit from short-term fluctuations in price are classified as trading securities. Securities intended to be held for an indefinite period of time, which may be sold in response to needs for liquidity or changes in interest rates, are classified as available-for-sale. Investments with fixed maturity that the management has the intent and ability to hold to maturity are classified as held-to-maturity. Management determines the appropriate classification of its investments at the time of the purchase and re-evaluates such designation at each balance sheet date.

Marketable securities held for trading and investments available-for-sale are carried at fair value.

Held-to-maturity investments are carried at amortised cost, less any adjustment necessary for impairment.

All purchases of investments are recognised at the trade date. Sales of securities are recognised at the settlement date. Gains and losses arising from changes in the fair value of trading securities are included in the income statement in the period in which they arise. Gains and losses arising from changes in the fair value of securities available-for-sale are recognised in equity. When the financial assets are disposed of or they are impaired, the related fair value adjustments are included in the income statement.

Movements on the investment revaluation reserve are disclosed in note XX. Details of impairment losses recognised are disclosed in note XX. An analysis of income, expenses, gains and losses on financial instruments, recognised in the income statement, is given in note XX.

Fair value estimation

The fair value of publicly traded derivatives, securities and investments is based on quoted market values at the balance sheet date.

In assessing the fair value of non-traded derivatives and other financial instruments, the Group uses a variety of methods and assumptions that are based on market conditions and risk existing at each balance sheet date. Quoted market prices or dealer quotes for the same or similar instruments are used for the majority of securities, long-term investments and long-term debt. Other techniques, such as option pricing models, estimated discount value of future cash flows, replacement cost and termination cost, are used to determine fair value for the remaining financial instruments.

The carrying amounts of financial assets and liabilities with a maturity of less than one year are assumed to approximate their nominal amounts.

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The fair value of liabilities, for disclosure purposes, is estimated by discounting the future contractual cash flows at the current market interest rate available to the Group.

Securitisation

During the period, subsidiaries of the group in France, Germany, Switzerland and Japan transferred receivables balances carried at DMXXXX to a bank in exchange for cash. The group retains a portion of the credit risk in these receivables through guarantees. The guarantees are recognised as financial liabilities, measured at their fair values based on the present value of expected credit losses covered by the guarantees. The carrying amount of such guarantees on the group balance sheet totals XXXX. Of these, XX relate to receivables transferred in the previous year and not yet realised in full.

Note XX: Movements on the hedging reserve

The table below shows movements on the hedging reserve during the year:

Balance at 31 December XX	XXX
Transition adjustment	XXX
	XXX
Increase:	
- gains and losses on hedging instruments in cash flow hedges	XXX
Decrease:	
- gains and losses on hedging instruments in cash flow hedges reclassified to income statement	(XXX)
- gains and losses on cash flow hedges included in the carrying amounts of hedged assets and liabilities	(XXX)
Closing balance	XXX

The balance reclassified to the income statement includes gains/losses of ____ on a forward exchange contract that had been designated to hedge forecasted sales that are no longer expected to occur.

Note XX: Movements on the available-for-sale equity reserve

The table below shows movements on the AFS equity reserve:	
Balance at 31 December XX	XXX
Transition adjustment	XXX
	XXX
Increase:	
- gains on remeasurement to fair value	XXX
Decrease:	
- losses on remeasurement to fair value	(XXX)
- gains and losses reclassified to income statement on derecognition	(XXX)
- gains and losses written off to income statement due to impairment	(XXX)
Closing balance	XXX

Chapter 14

Liability/equity classification

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Overview

For the first time, IAS 39 establishes rules for the recognition, derecognition and measurement of financial liabilities. An enterprise's own equity instruments are excluded from its scope. It therefore becomes increasingly important to establish clear boundaries between what is and what is not a liability, particularly in borderline cases where instruments have characteristics of both liabilities and equity. For the same reason it is equally important to be able to distinguish a financial asset from an equity instrument, although the range of 'borderline' instruments is rather narrower.

IAS 32 has already established principles for distinguishing between liabilities and equity. In summary, an instrument is a liability when it contains an obligation on the issuer to deliver to the holder either cash or another financial asset, either mandatorily or at the holder's option. An instrument is classified as equity when it represents a residual interest in the net assets of the issuer. Compound instruments such as bonds that are convertible into equity shares, either mandatorily or at the option of the holder, must be split into liability and equity components. Each component is accounted for separately.

Preference shares should be classified as liabilities under IAS 32, with one or two rare exceptions.

IAS 39, together with a recent SIC interpretation, provides additional classification guidance, specifically in the areas of:

- liabilities that can be settled using either cash or the issuer's own shares, at the issuer's option;
- liabilities where settlement in cash or shares depends on a contingent future event.

In both cases, the result of the new guidance is that instruments that might have been interpreted as equity under IAS 32 are confirmed as liabilities. They will therefore be subject to the measurement rules in IAS 39.

IAS 32 also provides guidance which states that a purchased call option on 'own shares' is an equity instrument and not an asset. Similarly, written call options on own shares are equity instruments, not liabilities. A recent SIC interpretation clarifies that an enterprise's own shares held (treasury shares) as well as purchased options on own shares, are equity instruments and not financial assets. This is regardless of whether options are settled or may be settled in cash or by physical delivery.

The following paragraphs summarise the recent guidance on the distinction between liabilities and equity.

Liabilities that can be settled using 'own shares'

Building on the IAS 32 principles, IAS 39 clarifies that since an enterprise's own equity instruments do not represent financial assets of that enterprise, an obligation to deliver own equity instruments is not a

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financial liability, but rather another form of equity instrument. But IAS 39 emphasises that, for equity classification, the holder must also be exposed to equity risk.

Consider a contractual obligation with a fixed amount payable at maturity, but where that amount can be settled either in cash, or by the entity using its own equity shares with the same market value. IAS 39 confirms that such an instrument is a liability because it does not expose the holder of the obligation to the risk of price fluctuations of the securities. In other words, to be classified as equity, an instrument must expose the holder to equity risk. In this example, the holder simply receives either cash or marketable equity shares of the same value.

The same is true for an instrument that is mandatorily convertible into equity shares. If the number of shares issued at maturity depends on the market value at maturity, the instrument is a liability. If the conversion factor is fixed at the date the instrument is issued, the holder bears equity risk and the instrument is an equity instrument. Following the same principles, the present value of an obligation to pay interest or dividends prior to maturity is a liability.

As was always the case under IAS 32, an instrument where the holder has an option to receive either cash or shares is a liability in the balance sheet of the issuer, regardless of the conversion factor.

Contingent settlement provisions

SIC-5 addresses situations where the rights and obligations regarding the manner of settlement depend on the outcome of uncertain future events or circumstances that are beyond the control of the issuer. Examples include contingencies such as market factors (changes in a stock market index or consumer price index) or factors specific to the issuer (such as revenue levels, total assets etc.).

In these circumstances, a financial instrument should be classified as a liability, unless the possibility of cash settlement is remote at the time of issuance. If the possibility of cash settlement is remote, the contingent settlement provision should be ignored and the instrument should be classified as equity. All relevant features of a financial instrument nevertheless need to be considered when classifying the instrument in accordance with the substance of its contractual arrangements.

Summary

The following chart illustrates the decision process for determining whether an instrument should be classified as a liability or as equity:

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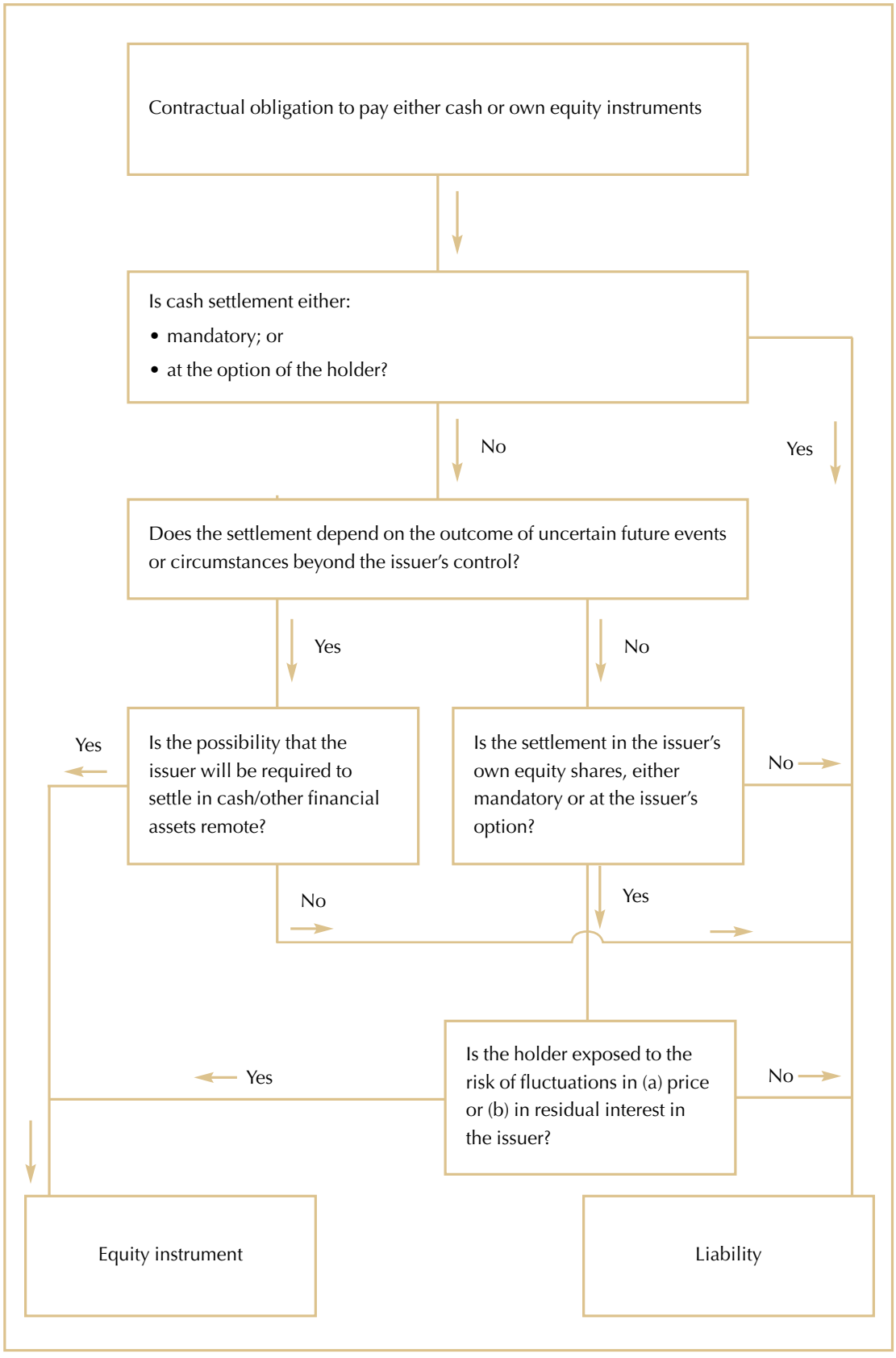

Chapter 15

IAS 39 and US GAAP compared

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IAS 39 was largely based on the equivalent US GAAP covering the same areas. As is usually the case in comparing IAS with US GAAP, the requirements of IAS 39 contain similar principles but far fewer detailed application rules than are found in US GAAP. In particular, the IAS 39 requirements on derivatives and hedging closely follow the principles, although not always the detail, in SFAS 133.

SFAS 133 is effective for accounting periods beginning on or after 15 June 2000. IAS 39 is effective for accounting periods commencing 1 January 2001. For calendar year reporting companies that report using both IAS and US GAAP, therefore, IAS 39 and SFAS 133 will need to be implemented at the same time.

The FASB has established a Derivatives Implementation Group (DIG) to identify issues and issue guidance on SFAS 133. It may ultimately issue up to 200 interpretations of the US standard, each of which will be reviewed and endorsed by the FASB. The IASC is establishing a similar implementation group. Both standards are still being interpreted and practice is developing in this area. The differences in interpretation between IAS and US GAAP may well broaden in some areas and narrow in others, as the two standards are implemented.

The table overleaf sets out, at the broadest level, the similarities and differences in principles between the two groups of standards. The discussion following the table focuses on some of the detailed differences that may be significant in practice to those companies reporting under both IAS and US GAAP.

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Subject	IAS	US GAAP
Investments	Depends on classification of investment - if held-to-maturity then carry at amortised cost, otherwise at fair value. Gains/losses on trading securities go to income statement and on available-for-sale investments can go either to equity or income.	Comparable to IAS, except gains/losses on available-for-sale securities go to Other Comprehensive Income.
Derecognition of financial assets	Recognise and derecognise assets based on control, following a components approach. Legal isolation is not a requirement for derecognition.	Comparable to IAS. Legal isolation of assets even in bankruptcy necessary for derecognition.
Derecognition of financial liabilities	Derecognise liabilities when extinguished.	Comparable to IAS.
Derivatives and other financial instruments – measurement of hedges of foreign entity investments	Gains/Losses on hedges of foreign entity investments recorded in equity and matched with translation differences on the underlying net investment.	Comparable to IAS.
Derivatives and hedging activities	Measure derivatives at fair value; take changes in fair value to income statement except for effective cash flow hedges where they are taken to equity until effect of transaction goes through income, then transferred to income statement. Deferred amount recognised in initial measurement of asset/liability for cash flow hedges of future transactions (basis adjustment).	Comparable to IAS, except no 'basis adjustment' on cash flow hedges of future transactions. Hedges of firm commitments are fair value hedges. Many differences in detail.

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Scope

There are some differences in the approach of the two standards, but the differences are also obscured by the use of the same terminology, but with different meanings (e.g. a cash flow hedge is not the same under the two standards).

The first notable difference between the International and the US approach is that most topics are addressed in only two IASs - IAS 32 and IAS 39. The US has many standards, besides SFAS 133, which deal with various aspects of financial instruments, such as:

- SFAS 105: Disclosure of Information about Financial Instruments with Off-Balance Sheet Risk and Financial Instruments with Concentrations of Credit Risk.
- SFAS 107: Disclosures about Fair Value of Financial Instruments.
- SFAS 114: Accounting by Creditors for Impairment of a Loan.
- SFAS 115: Accounting for Certain Investments in Debt and Equity Securities.
- SFAS 118: Accounting by Creditors for Impairment of a Loan—Income Recognition and Disclosures.
- SFAS 119: Disclosure about Derivative Financial Instruments and Fair Value of Financial Instruments.
- SFAS 125: Accounting for Transfers and Servicing of Financial Assets and Extinguishments of Liabilities.

Unrecognised firm commitments

IAS 39 considers hedges of unrecognised firm commitments to buy or sell an asset at a fixed price (in the reporting currency) to be cash flow hedges; for example a forward exchange contract to cover the future purchase of plant in a foreign currency (IAS 39.137b). It recognises that a hedge of a firm commitment in an enterprise's own reporting currency is not a hedge of a cash flow exposure but rather of an exposure to a change in fair value.

The standard rationalises that, nonetheless, such a hedge is accounted for as a cash flow hedge under IAS 39, rather than as a fair value hedge, to avoid recognising as an asset or a liability a commitment that otherwise would not be recognised as an asset or liability under current accounting practice.

SFAS 133.21a includes hedges of unrecognised firm commitments within the definition of a fair value hedge.

IAS 39 does not alter the practice that firm commitments are not recorded on the balance sheet. SFAS 133 requires that firm commitments are partially recognised on the balance sheet, to the extent that changes in fair value have been effectively hedged.

Under SFAS 133, the result will be items on the balance sheet that represent the fair value effect of the hedged risk on the underlying commitments (note that the amounts recognised represent neither the cost nor the fair value of the underlying commitments). Broadly similar amounts under IAS 39 will be deferred in equity. The impact of the two requirements on the income statement will be similar.

Basis adjustment

IAS 39.160 requires fair value adjustments relating to cash flow hedges of forecast transactions to be deferred in equity until the future transaction occurs. When the forecast transaction results in the recognition of an asset or liability, then the deferred amount is incorporated into the initial measurement of the asset or liability.

SFAS 133 similarly requires deferral of gains/losses on a cash flow hedge (those deferred are taken to 'Other Comprehensive Income') but does not permit any 'basis adjustment'. Deferred gains and losses remain in Other Comprehensive Income (equity) and are amortised from there. The US standard therefore requires more attention to be given to the scheduling of gains and losses deferred in equity to ensure that they are released in the correct periods.

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Non-derivative hedging instruments

Provided the hedge criteria are met, IAS 39 does not restrict the circumstances in which a derivative may be designated as a hedging instrument, for hedge accounting purposes. However, a non-derivative financial asset or liability may be designated as a hedging instrument only for a hedge of a foreign currency risk (a foreign currency fair value hedge, cash flow hedge or hedge of net investment in a foreign entity – IAS 39.122).

So non-derivatives such as held-to-maturity investments carried at amortised cost, may be effective hedging instruments with respect to risks from changes in foreign currency exchange rates.

Under the US standard, non-derivative financial instruments can hedge foreign currency risk only for:

- a net investment in a foreign entity; or
- a fair value hedge of an unrecognised firm commitment in a foreign currency.

For example, SFAS 133 would not permit hedge accounting for a borrowing in a foreign currency to be designated as a hedge of future (uncommitted) revenues. It would also not allow a foreign currency available for sale investment to be accounted for as a hedge of a future purchase of inventory or plant in a foreign currency. IAS 39 would allow both (see chapter 10).

Hedge of a net investment in a foreign entity

While IAS 39 reverts to the guidance of IAS 21 for the hedge of a net investment, it extends the criteria that must be present before hedge accounting can be applied. Under IAS 39, provided the hedging instrument is a non-derivative, and meets the hedging criteria, any hedge ineffectiveness is carried in equity.

The US standard specifically retains the normal foreign currency translation rules of SFAS 52. Under US GAAP, any hedge ineffectiveness is taken to income.

Hedging of held-to-maturity investments

Under IAS 39.127, a 'held-to-maturity' security cannot be hedged with respect to interest rate risk because, as long as it is held-to-maturity, changes in market interest rates will not impact profit. However, such a security could be hedged with respect to changes in foreign currency exchange rates.

Under US GAAP (SFAS 133.21d) if the hedged item is all or part of a debt security (or a portfolio of similar debt securities) that is classified as held-to-maturity, the designated hedged risk may not be the risk of changes in its fair value (or cash flows) attributable to market interest rates or foreign exchange rates.

Available-for-sale securities

IAS 39 allows the company the option of taking unrealised changes in fair value of available-for-sale securities either to equity or to income. SFAS 115 requires that unrealised changes in fair value of available-for-sale securities go to Other Comprehensive Income.

Foreign currency risks

SFAS 133 is much more restrictive in the items that can be designated as hedged items for foreign currency risk. In each of the following cases, the item could qualify as a hedged item, for currency risk, under IAS 39, but would not qualify under SFAS 133:

- A non-financial asset, such as inventory.
- A committed or highly probable purchase or sale of a financial asset.
- A committed or highly probable purchase of a subsidiary in a business combination.
- A committed or highly probable purchase of an associate.
- Future receipts or payments of foreign currency denominated interest on a recognised asset or liability.

In addition, a foreign currency denominated investment or borrowing cannot be designated as a

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hedged item for the entire change in its fair value under SFAS 133. For example, a combined currency and interest rate swap that converted a fixed rate foreign currency borrowing into a floating rate borrowing in the reporting currency could not be designated as a hedge of that borrowing. Instead, the company would have to use separate interest rate swaps to hedge interest rate risk and forward contracts to hedge the currency risk. Hedge accounting for combined interest rate and currency swaps is permitted under IAS 39.

Range of risks that can be hedged

IAS 39 is more flexible in what can be designated as the hedged risk. This is one area of difference that might be narrowed by future guidance. SFAS 133 restricts this to the entire risk of changes in fair value, or the entire interest rate risk, currency risk or counterparty credit risk in a hedged item. IAS 39 does not specify what can qualify as hedged risk. Any sub-component of each type of risk could be hedged as long as the impact can be measured reliably.

An example is an interest rate swap hedging changes in the fair value of an available-for-sale security, where changes in the fair value of the security are deferred in equity:

- SFAS 133 requires the hedged risk to be defined to include all 'changes in fair value of the security due to changes in interest rates'. That includes changes in fair value that result from changes in the company's own credit rating, for example.
- IAS 39 allows the hedged risk to be defined more narrowly, for example 'changes in the fair value of the security due to changes in LIBOR'. Any change in fair value due to changes in the enterprise's own credit risk would be excluded from the assessment of hedge effectiveness.

The impact of changes in the company's own credit risk represents hedge ineffectiveness under SFAS 133 because the interest rate swap does not hedge this risk. Under IAS 39 the effect of changes in the company's own credit risk is simply part of the unhedged change in fair value which would continue to be deferred in equity.

There may be a two-fold effect arising from this difference. First, SFAS 133 will create volatility in the income statement due to the hedge ineffectiveness. Under IAS 39, defining the hedged risk more narrowly means that the same amounts are not 'hedge ineffectiveness'.

Taken a step further, the hedge ineffectiveness created under SFAS 133 may be so significant that hedge accounting is precluded as the hedge fails the 'highly effective' criterion. The same hedge, because it is more narrowly defined, may achieve hedge accounting under IAS 39.

Treasury centres

As discussed in chapter 8, IAS 39 raises significant issues for groups which undertake hedging activities through separate treasury centres. Nevertheless, IAS 39 is more flexible than SFAS 133. The latter requires the company with the risk to be a party to the hedging transaction and external hedges must be pushed down through internal transactions between the treasury centre and each operating subsidiary.

IAS 39 simply requires one-to-one hedging relationships to be designated at the group level. A treasury centre can simply collect information on the risk exposures from each subsidiary, group those transactions as they will appear on the group balance sheet and hedge each of those assets and liabilities (or narrow groups of assets or liabilities) externally.

This is an important difference between the two standards for companies with large central treasury departments.

IAS 39 is also more flexible in allowing a net position to be identified with a single asset or liability and designating these as hedged items (see chapter 8). SFAS 133 would not permit such netting. Although the flexibility will be attractive to many companies, taking advantage of this flexibility will not be without cost.

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Other differences

A feature of a derivative as defined under IAS 39 is that the instrument must be settled at a future date. Under SFAS 133 derivatives must be required or permitted to be settled 'net'. There may therefore be some derivatives that fall within the scope of IAS 39 but not SFAS 133. Currency swaps where principal amounts are exchanged at inception and settlement would be one example.

IAS 39 excludes from its scope commodity contracts that cannot be cash-settled under the terms of the contract. SFAS 133 includes such contracts if there is a separate market settlement mechanism or if the commodity is readily marketable.

Under IAS 39 a written option cannot be a hedging instrument, except of a purchased option. US GAAP under SFAS 133 is more detailed, but does allow written options as hedging instruments when strict criteria are met.

IAS 39 and IAS 32 require convertible bonds and other instruments with both liability and equity components to be split and the two elements classified and accounted for separately. SFAS 133 does not permit such split accounting in the balance sheet of the issuer unless the conversion option can be cash-settled.

Any tainting of the held-to-maturity category is automatically cleansed after the end of two years after the tainting under IAS 39. SFAS 115 does not specify the period for which the portfolio is tainted. In practice, however, the US approach is the same as that now specified by IAS.

IAS 39 sets out requirements in respect of accounting for transaction costs. Transaction costs are not dealt with under SFAS 133. In practice, we understand that US GAAP typically results in transaction costs being treated consistently with IAS 39.

Chapter 16

Mainly for banks

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Why are banks different?

Many of the issues discussed in other chapters are relevant to banks. But banks are also involved in activities that are different from those of corporates, such as repos and reverse repos and securities lending and borrowing transactions. These activities are financed, to a greater or lesser extent, by customer deposits, which pose their own significant fair value measurement issues. Risk management is also fundamental to the activities of a bank because a substantial part of a bank's income arises from accepting interest rate, currency and equity price risk within agreed parameters. The use of derivatives, both for trading and risk management, is significant. Risk management and hedging activities are commonly carried out on a 'macro' level, increasingly using 'value at risk' techniques, so that the one-to-one links between hedged item and hedging instrument are blurred. Banks sometimes undertake their hedging transactions not with another bank but with an internal trading desk, which is unlikely to pass that risk directly to an external party.

Some of the issues that banks have raised are being considered by the standard-setters' Joint Working Group on financial instruments, and proposals can be expected on several including:

- The fair value of loans with no clear market value.
- The fair value of own debt, including the effect of changes in credit risk.
- Hedging within a fair value model.
- The application of fair value concepts to 'banking book' activities.
- The treatment of securitisations.
- Reliability of fair values for non-traded instruments.
- Servicing rights.
- The presentation of income in a fair value model.

Tentative proposals on these issues can be expected in the second quarter of 2000. Other issues are dealt with in IAS 39 and some are discussed below. They apply mainly to banks but will also be relevant to other enterprises with significant trading activity.

Repos and securities borrowing and lending

Most repo and securities borrowing and lending transactions are, in substance, secured borrowings which give the 'buyer/borrower' of securities a lender's return on the cash advanced to the 'seller/lender' of securities. IAS 39 requires such transactions to be treated as secured lending/borrowing transactions. The seller/lender retains the securities on its balance sheet and recognises a liability to return the cash 'proceeds' received. The buyer/borrower recognises an asset for the right to receive the cash 'lent' in return for the securities.

IAS 39 also requires the buyer/borrower of securities to recognise the security, together with an obligation to return it, when the buyer/borrower is free to sell

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or pledge the security without constraint. We understand that many standard repo/borrowing agreements do allow the buyer/borrower unrestricted use of the securities, and that a significant grossing up of the balance sheet will result. The transferee will recognise a receivable for the cash paid, as well as the asset purchased/borrowed and the obligation to return it.

We also understand that many banks in the US have renegotiated all their repo/lending agreements with counterparties to allow other assets to be substituted at short notice. Under IAS 39, such a clause would be sufficient to prevent the balance sheet grossing-up that would otherwise arise.

IAS 39 is unclear on how the securities received as collateral and the obligation to return them would be measured on the balance sheet of the buyer. The securities would presumably be classified as trading and therefore carried at fair value. Although non-trading liabilities would normally be carried at amortised cost under the standard, it seems unlikely that the IASC intended to create income statement volatility in this way. The obligation to return the securities should therefore also be carried at fair value (i.e. the fair value of the securities held).

Internal hedging using a trading desk

The issues of portfolio and macro hedging, discussed in chapter 8, are equally relevant to banks. Banks will need to address the one-to-one hedging issue, identify and designate individual asset or liability positions on the group balance sheet as hedged items that represent the net position to be hedged. In order to achieve hedge accounting under IAS 39, banks will need to establish a process, possibly separate from the internal risk management processes, to achieve this as asset and liability positions change.

An even greater impact is the fact that derivative contracts, such as interest rate swaps, between the treasury and trading desk will not qualify as hedging instruments. Banks will need to ensure there are external transactions in the trading book that can be designated as hedging instruments for the asset and liability positions designated as hedged items. In many cases that will mean either the trading desk or the treasury desk undertaking equal and opposite, back-to-back interest rate swaps with other banks.

This is in addition to a bank's usual risk management policy, monitoring and hedging processes that are already designed to provide effective economic management of risk. Considerable systems changes and additional resources will be necessary to achieve this, and everything must be in place by 1 January 2001, the implementation date of IAS 39.

The alternatives may be unpalatable for many banks. A bank could unwind and redesign its internal risk management processes to put in place a system based on one-to-one external hedges. Most banks, particularly those using value at risk and other statistical risk management models, would see that as a significant step backwards in the way they run their businesses. The other option is to abandon hedge accounting for financial reporting purposes. This is the direction that we understand the standard-setters would like to take in the long term. But the income statement volatility that could result is causing considerable concern in the banking industry.

Recognition of interest income

IAS 39 does not address the recognition of interest income on financial assets that are carried at fair value. It simply gives a choice for available-for-sale assets, to take gains and losses either to the income statement or to equity. The discussion paper that preceded IAS 39 did address the issue and proposed that interest income should be calculated by applying the current market rate to the current fair value of the asset.

For example, assume the market rate applicable to a CHF10m, 10% fixed rate debt security is 12% at the end of year 1 and 8% at the end of year 2. The fair value of the asset averages CHF9.8m for year 1 and CHF10.2m for year 2. Interest income would be calculated at CHF9.8m x 12% in year 1 and CHF10.2m x 8% in year 2.

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The change in fair value in each period is split into two parts. The adjustment necessary to interest income (the variable rate income calculated above less CHF1m fixed income accrued) is adjusted through the interest income line. The remaining change in fair value is either deferred in equity or recognised elsewhere in the income statement depending on which policy is adopted for available-for-sale securities.

An alternative method is simply to recognise interest income at the fixed rate of 10% on the nominal amount of the security, adjusted for amortisation of any discount or premium initially recognised. All changes in fair value would be recognised in either the income statement or in equity. Either method is acceptable under IAS 39.

IAS 39 does not deal with the classification of interest and dividend income, or interest expense, related to trading activities. European banks often present an 'all inclusive' trading profit line, whereas US GAAP requires these items to be excluded from trading income and presented in interest and dividend income/expense lines. Either approach is currently accepted under IAS, although the IASC is about to begin a project to revise IAS 30, which may, in time, give more guidance.

Trade date or settlement date accounting?

IAS 39 permits either trade date or settlement date accounting for 'regular way' purchases. However, if settlement date accounting is used, the standard requires changes in the value of the asset between trade date and settlement date to be recognised in the same way as post-settlement gains and losses will be recognised. That means, no recognition of gains and losses for assets that will be classified as held-to-maturity; gains and losses recognised in income for assets that will be trading assets; and gains and losses either in equity or in income (depending on the policy adopted) for assets that will be classified as available-for-sale.

IAS 39 requires settlement date accounting for 'regular way' sales of securities. This change may have a significant impact on systems for many European banks which currently use trade date accounting for both purchases and sales.

Transfers out of and into the trading portfolio

The definition of trading assets (see chapter 6) is based on the purpose for which the assets were originally acquired. It will therefore be extremely difficult to justify transferring assets out of the trading category, even if they are no longer held for trading purposes, or if they are carried at an amount that differs from fair value because no reliable measure of fair value can be obtained. Banks will need to reconsider their balance sheet classifications, rewrite their accounting policies and consider separate disclosure, within the trading line item, of items that are not expected to be sold in the short term and/or are not carried at fair value because no fair value measure can be obtained.

It appears that transfers into the trading category will be less restrictive, as the standard states that an asset should be classified as trading when it is part of a portfolio for which there is evidence of recent trading activity. Considerable care will be required, however. If the asset was previously designated as held-to-maturity, the entire portfolio may become tainted (as discussed in chapter 6).

List of examples and illustrations

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The table below lists the practical illustrations, comprehensive examples, decision trees and other diagrams included in this publication. Companies seeking guidance on specific transactions and issues may find the examples helpful. However, companies should consult with their professional advisers before reaching conclusions on specific transactions.

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Available-for-sale security
Those financial assets that are not (a) loans and receivables originated by the enterprise, (b) held-to-maturity investments, or (c) financial assets held for trading.

Basis risk
Basis risk refers to the risk associated with using different indices for the hedging instrument and the hedged item. The risk is that movements will be less than perfectly correlated.

Call option
A call option provides the holder the right to acquire an asset at an exercise or strike price, throughout the option term (American option) or at expiration of the contract (European option). The holder pays a premium for the right to benefit from the appreciation in the underlying.

Compound instrument
A financial instrument that, from the issuer's perspective, contains both a liability and an equity element.

Credit risk
This is the economic loss an end user of a contract would suffer if the counterparty fails to meet its financial obligations under the contract.

Currency risk
This is the risk that the value of financial instrument will fluctuate due to changes in foreign exchange rates.

Derecognise
Remove previously recognised assets or liabilities from the financial statements.

Embedded derivative
A derivative embedded in a non-derivative host contract, the effect of which is that some of the cash flows from that instrument vary in a similar way to a stand-alone derivative.

Equity security
Any contract that evidences a residual interest in the assets of an enterprise after deducting all of its liabilities.

EURIBOR
EURO Interbank Offer Rate.

Financial assets or liabilities held for trading
Acquired or incurred principally for the purpose of generating profit from short-term fluctuations or dealer's margin.

Forward contract
A contract to purchase and sell a specific quantity of a commodity, foreign currency or financial instrument at a specified price, with delivery and/or settlement at a specified future date. Because such a contract is not formally regulated by an organised exchange, each party is subject to the default of the other party.

Forward rate agreement (FRA)
A contract in which two parties agree on the interest rate to be paid on a notional amount at a specified future time. Principal amounts are agreed upon but never exchanged, and the contracts are settled in cash. The 'buyer' of a FRA is the party wishing to protect itself against a rise in rates, while the 'seller' is a party protecting itself against an interest rate decline. FRAs have symmetrical risk profiles identical to swaps.

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Futures contract
A forward-based contract to make or take delivery of a specified financial instrument, foreign currency or commodity during a specified period, at a specified price or yield. The contract often has provisions for cash settlement and is settled daily. A futures contract is traded on a regulated exchange and as a result has less credit risk than a forward contract.

Held-to-maturity investment
Financial asset with fixed or determinable payment and fixed maturity that an enterprise has the positive intent and ability to hold to maturity, other than loans and receivables originated by the enterprise.

Interest rate cap
An interest rate cap is an option with the following characteristics: (a) If interest rates rise above a certain level, the cap holder receives the excess of the reference interest rate over a designated interest rate level (the strike or cap rate), based on the notional principal amount. (b) The cap-holder's loss is limited to the premium paid to the cap writer. (c) The cap writer has unlimited risk from potential increases in interest rates above the specified cap rate. A cap purchaser can use interest rate caps to limit exposure to increasing interest rates on its variable rate debt.

Interest rate collar
A collar is an option that combines the strategies of a cap and a floor, whereby: (a) the buyer acquires a cap and writes a floor and (b) the writer of a collar writes a cap and buys a floor. Collars fix the rate a variable-rate lender will receive or a borrower will pay between two levels (the cap and floor rate levels). Collars help reduce the cost of buying outright a cap or floor. Because a borrower or lender is usually only interested in protecting against movements in interest rates in one direction, the premium received for writing a cap or floor serves to reduce the cost of the cap or floor purchased.

Interest rate floor
An interest rate floor is an option with the following characteristics: (a) If rates decline below a specified level, the floor-holder receives cash payments equal to the excess of a given rate (known as the strike or floor rate) over the reference rate, based on the notional principal amount. (b) The buyer pays the writer a premium to receive this right. (c) The floor writer faces significant risk from potential decreases in interest rates below the specified strike rate. A floor purchaser can use interest rate floors to limit exposure to decreasing interest rates on its variable rate investments.

Interest rate risk
Interest rate fair value risk is the risk that the market value of a debt instrument will change due to changes in interest rates. Interest rate cash flow risk is the risk that future interest cash flows will vary as a result of changes in market interest rates.

Inverse floater
A bond with a coupon rate of interest that varies inversely with changes in specified general interest rate levels or indices.

Intrinsic value of derivative instrument
The intrinsic value of a derivative instrument is the excess of the fair value of the underlying financial instrument over the price at which the underlying instrument is to be acquired, issued, sold or exchanged.

Legal risk
This relates to losses due to a legal or regulatory action that invalidates or otherwise precludes performance by the end-user or its counterparty under the terms of the contract.

LIBOR
London Interbank Offer Rate.

Market risk
This relates to economic losses due to adverse changes in the fair value of a derivative, or other financial instrument, due to changes in interest rates, foreign exchange rates or other market factors.

Notional amount
A number of currency units, shares, bushels, pounds or other units specified in a contract to determine settlement. The volume of a derivative contract.

Private equity
Unlisted equity shares. Also described as 'venture capital'.

Put option
A put option provides the holder with the right to sell the underlying at an exercise or strike price, throughout the option term (American option) or at the expiration of the contract (European). The holder gains as the market price of the underlying falls below the strike price.

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Recourse
The right of a transferee of receivables to receive payment from the transferor, most commonly for a failure of debtors to pay when due.

Securitisation
This is the process by which financial assets are transformed into securities, often by the issue of units or other securities by a special purpose entity.

Settle net
To make a cash payment based on the change in fair value of two offsetting derivatives. This contrasts with gross settlement (or physical delivery) where the two 'legs' of a derivative are exchanged separately.

Spot rate
Spot rate refers to the prevailing rate of interest on a zero-coupon instrument for a given maturity. Spot price in the market refers to immediate, as opposed to future, delivery.

Swap
A swap is a forward-based contract or agreement generally between two counterparties to exchange streams of cash flows over a specified period in the future.

Swaption
A swaption is an option on a swap that provides the holder with the right to enter into a swap at a specified future date at specified terms (free-standing option on a swap) or to extend or terminate the life of an existing swap (embedded option on a swap).

Underlying
A specified interest rate, security price, commodity price, foreign exchange rate, index of prices or rates, or other variable. An underlying may be a price or rate of an asset or liability but is not the asset or liability itself.

Yield curve
Yield curve refers to the relationship between interest rates and time to maturity (also referred to as the term structure of interest rates). It is a graph of the relationship between the yield on Treasury securities or some other homogenous group of fixed-income securities and the time to maturity.

Yield-to-maturity
Yield-to-maturity is the internal rate of return, which is the rate of interest that equates the estimated periodic future cash inflows of an instrument with its cost or cash outflows at acquisition.

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PricewaterhouseCoopers publications on International Accounting Standards

As the leading professional services firm in the development of implementation guidance on International Accounting Standards, PricewaterhouseCoopers have produced a number of publications. These include:

Understanding IAS: Analysis and Interpretation of International Accounting Standards

The world's first practical guide on International Accounting Standards written by an accounting firm, designed to give practical information to assist companies to interpret and apply IAS consistently. It significantly differs from other books in the market place in that it treats International Accounting Standards as an accounting framework in its own right, not something to be interpreted in the light of any national GAAP.

International Accounting Standards - Similarities and Differences – IAS, US GAAP and UK GAAP

A comparative study of recognition and measurement principles and disclosure requirements.

International Accounting Standards – Illustrative Financial Statements

Specifically designed to help companies view the future presentation of their financial statements. Two versions are available – corporate or bank.

International Accounting Standards – Disclosure Checklist

The checklist includes the requirements of all International Accounting Standards and Interpretations.

International Accounting Standards – A Pocket Guide

International Accounting Standards – Practice Aids

Practice aids, including questions and interpretative responses, have been published for the following standards:

- IAS 12 – Income Taxes
- IAS 19 – Employee Benefits
- IAS 29 – Financial Reporting in Hyperinflationary Economies
- IAS 34 – Interim Financial Reporting

International Accounting Standards – Financial Instruments: Understanding IAS 39 is designed for the information of readers. While every effort has been made to ensure accuracy, information contained in this publication may not be comprehensive or may have been omitted which may be relevant to a particular reader. In particular, this publication is not intended as a study of all aspects of International Accounting Standards, nor as a substitute for reading the actual Standards when dealing with specific issues. No responsibility for loss to any person acting or refraining from acting as a result of any material in this publication can be accepted by PricewaterhouseCoopers. Recipients should not act on the basis of this publication without seeking professional advice.

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