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ERNST & YOUNG

Quality In Everything We Do

IFRS

Observations on the Implementation of IFRS

This publication provides an overview of how some large multinationals reported their 2005 results using IFRS.

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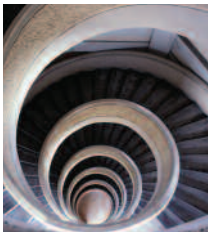
Introduction



2005 saw the implementation of IFRS by more than 8,000 listed companies throughout the European Union and its incorporation into the national accounting standards of other countries such as Australia.

Ernst & Young has reviewed the 2005 financial statements of some of the largest companies in the world to see how they have applied IFRS – in the main for the first time – in their financial statements, to assess the degree of consistency and comparability among companies that has resulted from IFRS adoption, and to ascertain how performance measures based on IFRS have been used in market communications.

Some of the themes and trends that emerged from our review were:

- *The 2005 implementation of IFRS has been a resounding success overall.* The transition to IFRS has involved major change for all companies as IFRS introduced significant new accounting and reporting recognition, measurement and disclosure requirements that had not been part of their previous national GAAPs. On the evidence of our sample, companies were able to address these challenges successfully.

- *IFRS financial statements retain a strong national identity.* The financial statements of a French retailer, for example, look and feel more similar to those of a French manufacturer than to those of a Dutch or UK retailer. This is due in particular to the absence of an adequate IFRS standard dealing with the presentation of IFRS financial statements, combined with the fact that (so far as Europe is concerned) the EC 4th Directive accounts formats are no longer applicable. At the same time, best IFRS practice has yet to evolve internationally, with the result that many companies appear to have adopted IFRS in a way that minimises as far as possible changes in the form of financial reporting that they applied under their previous national GAAPs.

- *IFRS implementation has required extensive judgment to be applied in the selection and application of IFRS accounting treatments and this restricts consistency and comparability.* IFRS is not based on a coherent, integrated set of principles: there are inconsistencies and conflicts within some individual standards as well as between different standards, while some individual standards specifically permit alternative accounting treatments. Also, the IASB and IFRIC have made slow progress in addressing known areas of difficulty, while there is as yet very little industry-related accounting guidance in IFRS. As a result, management judgment plays an important role in the way in which accounting policies are selected and applied and this, in turn, has been a limiting factor in the degree of consistency and comparability that has been achieved to date. However, we believe that, over time as familiarity with IFRS increases and industry practice evolves – and, we trust, greater emphasis is placed by the IASB on fixing anomalies in existing standards and clarifying the intentions behind aspects of the standards – greater consistency and comparability will be achieved. At the same time, though, it should be recognised that there is a fine line between standardisation that genuinely improves comparability, and standardisation that merely appears to improve comparability. In our view, excessive focus on standardisation runs the risk of accounting treatments being imposed that do not reflect the substance of the particular arrangements being accounted for or that result in an item being presented as if it

were a matter of fact when in reality it is largely a matter of judgment. More emphasis needs to be placed by preparers on explaining in their financial statements the key judgments applied in determining amounts reported, including the sensitivities around those judgments.

- *Companies do not seem confident that IFRS financial information is sufficient, or in some cases entirely appropriate, for the purpose of communicating their performance to the markets.* The widespread use of alternative, non-IFRS measures in companies' results announcements and presentations suggests that, in relation to recognition, measurement and disclosure requirements, there is a gap between IFRS and what managements believe is necessary in order to communicate to the markets information which enables underlying performance and sustainable cash flow to be assessed. However, despite the current trend, it may well be that over time, as accounting standards are improved and as the analyst community becomes more familiar with the intricacies of IFRS financial reporting, company managements will feel less need to provide the market with alternative performance indicators.

- *IFRS financial statements are significantly more complex than financial statements based on national accounting standards. This complexity threatens to undermine the decision-usefulness of IFRS financial statements*. There is a real danger that the increasing complexity of the accounting recognition and measurement requirements of IFRS and the increasing number of disclosure requirements will turn the preparation of financial reports into a mere technical compliance exercise for the benefit of regulators, rather than a mechanism for communicating the performance and financial position of companies. We believe that bold measures are needed to reduce the number of required disclosures and to improve transparency and understandability: the information value of disclosures should be assessed in the context of financial statements as a whole rather than on an accounting topic-by topic basis. Like the recognition and measurement requirements, disclosures should be based on principles rather than rules and have regard to the significance of items in the particular circumstances of the company concerned.

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The implementation of IFRS has brought about significantly greater consistency in accounting recognition and measurement and far greater disclosure of information in financial statements. However, 2005 is just the beginning and there is a long way to go before reasonable consistency in all aspects of financial reporting under IFRS will be achieved.

This is due to the fact that, whilst IFRS has been adopted by more than 8,000 companies in Europe alone, no substantial body of custom and practice, of generally accepted ways of applying IFRS – of 'International GAAP' – has yet developed. It will only be after a number of years of full implementation, by a representative cross-section of businesses in a number of countries and industries, that a consensus will emerge over the way that, in practice and in the context of real commercial transactions, IFRS is actually to be applied. Until then, divergent practices and limited comparability and consistency are inevitable.

Introduction *continued*

The survey

Our study is divided into three parts:

Part 1 *Overall observations on the implementation of IFRS and the use of IFRS in communicating financial performance.* Our review of 2005 IFRS financial statements has highlighted some overall themes and trends.

Part 2 *Analysis of accounting topics.* We consider how the 65 companies in our sample addressed issues relating to six accounting topics that are among the most complex in IFRS and involve estimates and judgment.

Part 3 *Analysis of industry-specific issues.* We discuss the results of our review of the financial statements of some of the largest companies in nine industry sectors to identify the ways in which issues specific to each of those industries have been dealt with by the companies concerned.

Our study is based on a survey of the financial statements of 65 companies reporting under IFRS, in the main for the year ended 31 December 2005, selected principally on the basis of the highest market capitalisations from the 2005 *Financial Times Global 500*. However, we did not include any banks or insurance companies in this survey as the entire shape of their financial statements and many of the key accounting issues for banks and insurance companies are unique to those industries and Ernst & Young plans to publish separate surveys of their financial statements. The 65 companies included in this survey are listed in Appendix 1. For the purpose of reviewing industry-specific aspects of the application of IFRS we introduced additional companies from among the largest players in the industry concerned, and these are identified in the relevant sections.

Although we make a number of overall observations about IFRS and its application in this publication, our objective in reviewing 2005 IFRS financial statements was to present facts about the IFRS accounting policies and practices adopted by companies and about their financial statement disclosures, not to make judgments about them. However, summarising the way in which the companies concerned dealt with (or did not deal with) particular matters unavoidably requires a degree of interpretation and it is possible that others reviewing the same financial statements would in some cases form a different view from us.

It should also be borne in mind that although some of the challenges of applying IFRS can be inferred from reviewing the published financial statements of companies, few of the myriad detailed IFRS application issues that have arisen and continue to arise and the manner in which they have been addressed by companies are apparent from published financial statements.

Part 1 Overall Observations on the Implementation of IFRS

In this Part, we discuss themes that have emerged from our review of the 2005 financial statements and results announcements of the 65 companies in our sample.

The 2005 implementation of IFRS has been a great success overall, with companies rising to the challenge of introducing fundamental accounting and reporting changes. Nevertheless, we observe that IFRS financial statements currently retain a strong national identity.

We address some of the respects in which consistency and comparability of financial statements are restricted by the need for preparers of financial statements to apply extensive judgment in the selection and application of IFRS accounting treatments.

The primary media for communication of companies' financial performance to the markets are the results announcement and presentations to analysts and others, rather than the IFRS financial statements. We reviewed these announcements and presentations for the companies in our sample to assess the extent to which the performance measures used by the companies consisted of IFRS information as opposed to measures that involved adjustments to IFRS information.

Finally in Part 1, we express concern that the increasing complexity of IFRS and the increasing volume of disclosures required in financial statements is threatening to undermine the decision-usefulness of financial information.

The 2005 implementation of IFRS has been a resounding success overall.

The transition to IFRS has involved major change for all companies as IFRS introduced significant new accounting and reporting recognition, measurement and disclosure requirements that had not been part of their previous national GAAPs. On the evidence of our sample, companies were able to address these challenges successfully.

Timeliness of 2005 financial statements

Everyone involved in the process of conversion from national GAAP to IFRS knows just how complex and time-consuming was the task: all differences needed to be identified and quantified, new accounting manuals prepared and reporting processes adapted. Some of the changes brought about by IFRS – in such areas as financial instruments, pensions, impairment testing and share-based payments – have significantly increased the complexity of accounting and reporting processes. The successful way in which companies addressed these challenges is reflected in the fact that the 52 companies in our sample that adopted IFRS for the first time in 2005 were able to issue their first preliminary results announcements under IFRS and their first IFRS financial statements within much the same timeframe as the previous year.

Extent of change

As noted above, the transition to IFRS involved major change for all companies as IFRS introduced significant accounting requirements that had not been required by national GAAPs. For example, 9% of all the financial assets and 6% of all financial liabilities reported by the companies in our sample were derivatives, appearing in balance sheets for the first time. The complexity of the accounting and disclosure requirements relating to financial instruments is evident in the section 'Corporate financial instruments' in Part 2. At the same time, more than 90% of the companies reported charges to income for one or a combination of share-based payment plans in respect of which very few of them had even disclosed valuation information in their previous financial statements under national GAAP. The complexity of the grant-date valuation approach to share-based payments is evident in the section 'Share-based payment' in Part 2.

A particularly striking finding from our review was the very high proportion of companies in our sample that recognised impairments in 2005 – almost half the companies reported an impairment of goodwill and over two-thirds reported impairment of tangible assets or intangible assets with finite useful lives. IFRS prescribes more specific processes for identifying and measuring impairment than most national GAAPs and, as we note in the section 'Impairment of assets' in Part 2, although impairment charges depend primarily on the circumstances of the particular company, the frequency of impairment among the companies in our sample also suggests that IFRS may trigger more frequent impairment charges than previous national GAAPs.

IFRS financial statements currently retain a strong national identity.

The main changes in companies' financial reporting brought about by the adoption of IFRS related to the recognition, measurement and disclosure of items in the financial statements (such as financial instruments and share-based payments as referred to above) rather than the form or presentation of the financial statements.

This is due in particular to the absence of an adequate IFRS standard dealing with the presentation of IFRS financial statements, combined with the fact that the EC 4th Directive accounts formats are no longer applicable, and to the diversity of the supplementary information that is either required by local regulation or is customarily presented in different countries.

At the same time, best IFRS practice has yet to evolve internationally and as a result many companies appear to have adopted IFRS in a way that minimises as far as possible changes in the form of financial reporting that they applied under their previous national GAAPs. As a result, the financial statements of, for example, a French retailer look and feel more similar to those of a French manufacturer than to those of a Dutch or UK retailer. Thus the Dutch and UK companies in our sample tended to present more condensed income statements and balance sheets than the French and Spanish companies, while a higher proportion of UK , German, Dutch and Scandinavian companies than French, Italian and Spanish companies analysed costs in their income statements by the 'function' of the item (eg cost of sales, distribution costs, administrative costs) rather than the nature of the expense (eg purchases of materials, employee benefits, depreciation).

Overall Observations on the Implementation of IFRS *continued*

Without exception in our sample, French companies presented a single statement of changes in equity whereas nearly all the UK companies – consistent with UK GAAP – presented a statement of recognised income and expense and a separate statement of (other) changes in equity.

Cash flow statements under IFRS may present cash flows from operating activities using either the direct method, whereby major classes of gross cash receipts and cash payments are disclosed, or the indirect method, whereby profit or loss is adjusted for non-cash transactions, the effects of changes in working capital and for items associated with investing or financing cash flows. All the companies in our sample used the indirect method other than those reporting under the Australian equivalents of IFRS, which mandate the use of the direct method.

As well as presentation and disclosure differences, our survey identified differences in accounting recognition and measurement that appear to be based on national preferences, as referred to below.

Some of the different practices discussed above are merely cosmetic, but in other cases greater consistency would increase the scope for performance comparisons among companies. It will be interesting to see whether market pressure will bring about greater consistency or whether current practice will remain unchanged until such time as a new accounting standard on performance reporting is issued.

IFRS implementation has required extensive judgment to be applied in the selection and application of IFRS accounting treatments and this restricts consistency and comparability.

IFRS is not based on a coherent, integrated set of principles: there are conceptual inconsistencies and conflicts within some individual standards as well as between different standards, while some individual standards specifically permit alternative accounting treatments. Also, the IASB and IFRIC have made slow progress in addressing known areas of difficulty such as service concessions, common control transactions, acquisitions of minority interests and put options held by minority interests and loyalty programmes, while there is as yet very little industry-related accounting guidance in IFRS. As a result, management judgment plays an important role in the way in which accounting policies are selected and applied and this, in turn, has been a limiting factor in the degree of consistency and comparability that has been achieved to date. Some of the areas in which diversity of practice arises from the use of different accounting policies are discussed below.

IFRS 1 exemptions

As a practical matter, IFRS 1 *First-time Adoption of International Financial Reporting Standards* allows companies to use a number of exemptions from the requirements of other standards. Some of these exemptions may have a significant impact on the financial statements for a number of years, in particular an election not to apply IFRS 3 *Business Combinations* retrospectively to past business combinations, or an election to recognise all cumulative actuarial gains and losses in respect of post-employment benefits at the date of transition to IFRS where the 'corridor' approach is used thereafter.

Of the 52 first-time adopters in our sample, all but three used the business combinations exemption. Almost without exception, the first-time adopters opted to recognise all cumulative actuarial gains and losses in their defined benefit pension schemes on transition to IFRS. However, whereas some 40% of these companies adopted a policy of recognising subsequent actuarial gains and losses outside profit or loss in the period in which they occur, nearly 60% of those that used the exemption stated that it is their

policy to use the corridor approach for actuarial gains and losses after transition to IFRS (although two companies disclosed that they would change their policy in 2006 and several others disclosed that they were still evaluating whether to make the change). Substantially all of the UK and Dutch companies in our sample opted to recognise actuarial gains and losses outside profit or loss while almost all of the French and Italian companies opted for the corridor method. Elsewhere practice was more divided.

Differences of interpretation and/or insufficient guidance in existing standards

Several examples of accounting policy differences arising from different interpretations of existing standards and/or insufficient guidance in existing standards are identified in Part 2, for example the different acceptable methods of accounting for the acquisition of minority interests (see the section 'Business combinations') and the classification of derivatives in the balance sheet (see the section 'Corporate financial instruments').

Some of the possible variations in the accounting treatment of transactions and arrangements specific to particular industries are noted in Part 3. For example, some telecoms operators recognised the future benefits granted to customers under their loyalty programmes by deferring part of the revenue received from customers, while others made provision for the cost of providing the goods or services under the scheme (the issue of accounting for loyalty programmes is currently being addressed by IFRIC). Although automotive vehicle manufacturers generally treat the sale of vehicles with buy-back commitments as leases, some classify the vehicles concerned as property, plant and equipment while others classify them as inventories. One international mining company might identify the US dollar as its functional currency as it is the currency in which the commodities it produces are commonly traded. Another might determine that the functional currency is the currency that influences operating costs and therefore that each of its operations has its own functional currency.

Very often these differences in accounting treatment will not be material, but since no information is published about the effect of applying one accounting treatment rather than another, it is not possible to assess how significant the effect is.

Alternative treatments allowed by standards

A number of alternative accounting treatments are specifically allowed by the standards, and this is a further source of inconsistency among companies which, therefore, negatively affects comparability. Some of these alternatives are addressed below.

Proportionate consolidation vs equity method

IAS 31 *Interests in Joint Ventures* allows interests in jointly controlled entities to be accounted for using either proportionate consolidation or the equity method.

Marginally more of the companies in our sample used proportionate consolidation than the equity method to account for their interests in jointly controlled entities. However, there was a clear geographical pattern in this insofar as most French and Spanish companies in the sample used proportionate consolidation whereas almost all the UK, Dutch and Italian companies used the equity method. Elsewhere, practice tended to be more mixed.

Expensing vs capitalisation of borrowing costs

IAS 23 *Borrowing Costs* permits borrowing costs to be expensed as incurred (the 'benchmark treatment') or to be capitalised to the extent that they are directly attributable to the acquisition or construction of an asset.

Overall Observations on the Implementation of IFRS *continued*

Of the companies in our sample that disclosed whether they expensed or capitalised borrowing costs, significantly more expensed rather than capitalised such costs – a noteworthy finding in the light of the IASB's proposal to mandate capitalisation in order to converge with US GAAP. As might be expected, the companies that capitalised borrowing costs tended to be engaged in capital-intensive activities (eg oil and gas, mining, chemicals) although practice varied in some industries (eg utilities, telecommunications, pharmaceuticals, retail).

The cost model vs revaluation model for property, plant and equipment, intangible assets and investment properties

IAS 16 *Property, Plant and Equipment* and IAS 38 *Intangible Assets* allow a company to use the cost model or the revaluation model for a class of property, plant and equipment or a class of intangible asset, while IAS 40 *Investment Properties*, allows a choice between the cost and fair value models for investment properties.

Other than property companies, only one company in our sample used the revaluation model for any class of property, plant and equipment or intangible assets (an interesting statistic given the attraction of fair value measurement to some accounting standard-setters).

Recognition of actuarial gains and losses in respect of post-employment benefits

IAS 19 *Employee Benefits* allows a company to recognise only a portion of actuarial gains and losses in respect of defined benefit post-employment plans as income or expense when certain thresholds are exceeded (the so-called 'corridor' approach), or to recognise all actuarial gains and losses as they occur, either within or outside profit or loss.

As already noted, whilst the majority of the companies in our sample apply the 'corridor' approach to the recognition of actuarial gains and losses, a sizeable proportion has opted for immediate recognition of such gains and losses outside profit or loss.

Early adoption of new or amended standards

Another possible source of accounting differences among companies is the adoption of new standards and interpretations from a date earlier than required, ie early adoption. When a company has not applied a new standard or interpretation that has been issued but is not yet effective, IAS 8 *Accounting Policies, Changes in Accounting Estimates and Errors* requires it to disclose that fact together with known or reasonably estimable information relevant to assessing the possible impact that the new standard or interpretation will have on its initial application.

At 31 December 2005 two new standards , six amendments to existing standards (three of which were amendments of IAS 39 *Financial Instruments: Recognition and Measurement*) and four IFRIC interpretations had been issued but were not yet effective.

In view of the large number of new or amended standards and interpretations concerned and the fact that several of them clearly do not apply to, or have no material impact on many of the companies in our sample, it is understandable that many companies did not refer to certain of them. However, we were surprised to find that a substantial majority of the companies either made no reference to most of the new or amended standards or, where they did mention them, said nothing at all about their expected impact (or even that this had not yet been evaluated).

Among the companies that did explain their approach to the new or amended standards and interpretations, there were relatively few cases of early adoption, with the exception of the amendment to IAS 19 discussed above. Leaving aside the amendment to IAS 19, the incidence of early adoption was highest in the case of IFRS 6 *Exploration for and Evaluation of Mineral Resources*, IFRIC 4 *Determining whether an Arrangement contains a Lease*, and the IAS 39 Amendment *Cash Flow Hedge Accounting of Forecast Intragroup Transactions*.

IFRS 6 was adopted in 2005 by all the oil and gas and mining companies in our sample since their exploration and evaluation costs might otherwise either be impaired or not meet the definition of an asset in the first place under IFRS.

Approximately 20 % of the companies in our sample reported that they adopted IFRIC 4 in 2005. Most of the early adopters are among the more capital-intensive companies in our sample, although in no individual sector did all companies adopt IFRIC 4 in 2005, and none of the automotive manufacturers adopted it. In only a few cases was the effect of early adoption of IFRIC 4 disclosed – although it should be said that in most of these cases the effect on the financial statements was not significant.

Only one in five of the companies in our sample disclosed that they had opted to apply early the amendment to IAS 39 that facilitated the application of hedge accounting to transactions designed to hedge intra-group transactions. The extent of a company's intra-group trading involving different currencies depends on the nature of its activities and the international structure of its production, distribution and marketing activities. Intra-group trading involving different currencies is less significant in some industries, such as utilities, than in others, such as pharmaceuticals. And the extent to which companies hedge their forecast intra-group transactions depends on the policy of each company. Nevertheless, we might have expected more companies to disclose that they had applied this amendment of IAS 39 in their 2005 financial statements.

Accounting processes that depend upon the use of judgment

Financial statements are based to a far greater extent than is generally appreciated on judgments made by management. Management judgment has the greatest impact in the selection of the valuation methods and assumptions that underlie the measurement in particular of provisions for long term obligations such as onerous contracts, claims and litigation, environmental rehabilitation, share-based payments and pensions, and of non-current assets such as assets acquired in business combinations, revalued assets, and impairment of assets. Frequently, relatively small changes in methods or assumptions can have a material impact on the resulting amount.

IFRS contains more specific requirements than national GAAPs that involve valuations and also leans more than most GAAPs towards fair value. Since few, if any, of a company's non-current liabilities and assets are ever traded or otherwise transferred to third parties, the process of estimating the fair value of such items involves greater use of valuation methods and assumptions than is the case with most GAAPs. Frequently, various different methods or assumptions could appropriately be used and sometimes the range of reasonably possible outcomes is great.

It is therefore appropriate that IFRS recognises the need for users of financial statements to be informed of the nature and extent of estimation uncertainty inherent in the measurement of assets and liabilities. Thus IAS 1 *Presentation of Financial Statements* expects disclosure to be made *inter alia* of the sensitivity of carrying amounts to the methods, assumptions and estimates underlying their calculation, where there is a significant risk of material adjustment to the carrying amounts of assets and liabilities within the next financial year. IAS 37 *Provisions, Contingent Liabilities and Contingent Assets* contains some similar disclosure requirements specifically in relation to provisions, such as the expected timing of payments, an indication of the uncertainties about their amount or timing, and the major assumptions made concerning future events where these are particularly important in measuring a provision.

Overall Observations on the Implementation of IFRS *continued*

However, based on our review of 2005 IFRS financial statements, very few companies disclosed all the specific information called for by IAS 1 and IAS 37 regarding estimation uncertainty. For example, as we point out in the section 'Employee benefits' in Part 2, the assumed rate of mortality will be material to many defined benefit schemes. However, less than a quarter of the companies in our sample disclosed their mortality assumptions, and very few provided any information about the sensitivity of reported amounts to changes in key assumptions.

In relation to provisions, some companies described the basis on which the provision was determined (for example, current technology and current prices in the case of decommissioning provisions) but few gave any indication of the extent or the implications of the measurement uncertainty inherent in their provisions or even of the expected timing of the related cash or other outflows.

As we note in the section 'Impairment of assets' in Part 2, few companies disclosed all the information required by IAS 36 *Impairment of Assets* regarding the basis of calculation and sensitivity to changes in assumptions of the recoverable amount of cash-generating units to which significant goodwill or indefinite-life intangible assets has been allocated.

Compared with disclosures about the nature of measurement uncertainty and sensitivities in relation to assets and liabilities, the companies in our sample seemed to be more concerned to disclose the sensitivity of their reported earnings to changes in variables outside their control. 20% of the companies disclosed the effect of specified changes in exchange rates on their earnings, while 40% of the companies disclosed the effect of an interest rate change (usually 100 basis points) on earnings.

We believe that over time, as familiarity with IFRS increases and industry practice evolves – and, we trust, greater emphasis is placed by the IASB on fixing anomalies in existing standards and clarifying the intentions behind aspects of the standards – greater consistency and comparability will be achieved. At the same time, though, it should be recognised that there is a fine line between standardisation that genuinely improves comparability, and standardisation that merely appears to improve comparability. In our view, excessive focus on standardisation runs the risk of accounting treatments being imposed that do not reflect the substance of the particular arrangements being accounted for or that result in an item being presented as if it were a matter of fact when in reality it is largely a matter of judgment. More emphasis needs to be placed by preparers on explaining in their financial statements the key judgments applied in determining amounts reported, including the sensitivities around those judgments.

Companies do not seem confident that IFRS financial information is sufficient, or in some cases entirely appropriate, for the purpose of communicating their performance to the markets.

We reviewed the results announcements and presentation materials published by the 65 companies in our sample to ascertain the extent to which the performance measures they used in them consisted of IFRS information and the extent to which their measures involved adjustments to information determined in accordance with IFRS (by excluding some amounts or otherwise measuring an item in a way that differs from IFRS).

The widespread use of alternative, non-IFRS measures in companies' results announcements and presentations suggests that, in relation to recognition, measurement and disclosure requirements, there is a gap between IFRS and what managements believe is necessary in order to communicate to the markets information which enables underlying performance and sustainable cash flow to be assessed.

Contents of results announcements and use of non-IFRS measures

The extent of the information provided in results announcements varied significantly. At one end of the spectrum, announcements typically contained a full income statement, balance sheet, statement of changes in equity and cash flow statement, together with selected notes, introduced by a 'highlights' statement and a detailed operating and financial review explaining the company's performance using measures selected by management. This was the case with all the UK companies in our sample and certain other companies. At the other end of the spectrum, announcements were restricted to brief press releases containing selected performance measures. However, although the extent of the information provided in results announcements varied greatly, all the results announcements focused on performance (ie the income statement) rather than financial condition (ie the balance sheet), and for this purpose 75% of the companies in our sample used financial measures other than items that are required to be disclosed in a set of IFRS financial statements. Indeed, one in four of the companies in our sample used no such IFRS measures in their 'highlights' statements at all. Most companies that used non-IFRS measures included reconciliations to IFRS but some 20% did not.

Adjusted earnings measures

The principal non-IFRS performance measure was an adjusted earnings measure designed to reflect what management believed to be the 'underlying' financial performance of the company. Such a measure was most commonly presented by the French and UK companies in our sample but was also presented by some companies from other countries. The adjustments were designed to eliminate what might be regarded as non-recurring or unusual items – which in practice seem almost always to be costs and rarely revenue. The items most commonly added back were impairment of assets, restructuring costs, litigation settlements and gains and losses on disposals of fixed assets. Several companies, principally from the UK, also added back the amortisation of intangibles.

It was not uncommon for French companies to highlight an income measure that excludes the effects of major business combinations (such as depreciation of the fair value adjustment to property, plant and equipment), while some UK companies in our sample presented an income measure from which the effect of measuring financial instruments at fair value had been eliminated (ie effectively as if IAS 39 did not exist).

Adjusted earnings measures were frequently used as the numerator for published alternative earnings per share amounts. Nearly one in three of the companies in our sample presented an alternative earnings per share amount, including almost all of the UK companies and one in three of the French companies in our sample. However, none of the German, Swiss, Italian or Spanish companies in our sample presented such alternative earnings per share amounts.

Despite the current trend, the incidence of non-IFRS performance measures in 2005 results announcements may well not be an enduring feature and over time, as accounting standards are improved and as the analyst community becomes more familiar with the intricacies of IFRS financial reporting and acquires a better understanding of IFRS financial reports, company managements may well feel less need to provide the market with alternative performance indicators.

Overall Observations on the Implementation of IFRS *continued*

IFRS financial statements are significantly more complex than financial statements based on national accounting standards. This complexity threatens to undermine the decision-usefulness of IFRS financial statements.

The 2005 IFRS financial statements we reviewed were generally between 20% and 30% greater in length than the 2004 financial statements of the companies concerned. The financial statements for 2005 in our sample consisted on average of 65 pages and the number of notes to the financial statements increased on average by 10% from the previous year to 37. Every new IFRS increases the volume of required disclosures in financial statements – IFRS 7 *Financial Instruments: Disclosure*, for example, will impose significant additional disclosures in respect of financial instruments from 2007 onwards. For many companies the current disclosure requirements relating to financial instruments are, in our view, already disproportionate to the information value of those disclosures.

Typically, IFRS financial statements include several pages explaining the company's accounting policies. However, these are frequently no more than summaries of the requirements of the relevant accounting standards and do not enable users of the financial statements to understand the implications of the policies applied; the summaries rarely provide any significant insight into the factors that are of particular relevance to the company concerned in applying the accounting policies (such as applicable indicators of impairment or the rationale for the key assumptions applied in accounting for defined benefit pension schemes).

It often seems to be the standard-setters' assumption that more information results in greater transparency and better understanding, and the sweeping comments about decision-useful information in the IASB's *Framework for the Preparation and Presentation of Financial Statements* do not help in any practical way to define the limits. In our view, many of the disclosures required by IFRS have little information value and could therefore be dispensed with where the arrangements and amounts concerned are not significant to the company concerned.

The greater complexity of IFRS financial statements than those based on national accounting standards arises both from the more extensive recognition and measurement rules in IFRS (particularly those based on fair values such as share based payment, business combinations, financial instruments and impairment) and from the far greater number of disclosure requirements in IFRS than in national accounting standards. IFRS has itself become more complex over time – it currently consists of 2,300 pages of text, compared with some 1,200 pages in 2000. IFRS contains some 2,000 disclosure requirements in all, approximately double the number under UK GAAP and under Australian GAAP prior to IFRS, and four times the number under French GAAP.

The stage has been reached where only a small number of technical experts have a sufficiently good understanding of the more complex, fair value-based accounting standards to interpret and apply them properly. Moreover, most of these experts are employed by accounting firms and regulators rather than by preparers or users of financial statements. There is a real danger that the increasing complexity of the accounting recognition and measurement requirements of IFRS and the increasing number of disclosure requirements will turn the preparation of financial reports into a mere technical compliance exercise for the benefit of regulators, rather than a mechanism for communicating the performance and financial position of companies, and that key information will be obscured by the sheer volume of data.

We believe that bold measures are needed to reduce the number of required disclosures and to improve transparency and understandability: the information value of disclosures should be assessed in the context of financial statements as a whole rather than on an accounting topic-by-topic basis. Like the recognition and measurement requirements, disclosures should be based on principles rather than rules and have regard to the significance of items in the particular circumstances of the company concerned.

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The implementation of IFRS has brought about significantly greater consistency in accounting recognition and measurement and far greater disclosure of information in financial statements. However, 2005 is just the beginning and there is a long way to go before reasonable consistency in all aspects of financial reporting under IFRS will be achieved.

This is due to the fact that, whilst IFRS has been adopted by more than 8,000 companies in Europe alone, no substantial body of custom and practice, of generally accepted ways of applying IFRS – of 'International GAAP' – has yet developed. It will only be after a number of years of full implementation, by a representative cross-section of businesses in a number of countries and industries, that a consensus will emerge over the way that, in practice and in the context of real commercial transactions, IFRS is actually to be applied. Until then, divergent practices and limited comparability and consistency are inevitable.

Part 2 Analysis by Topic

We looked at six different topic areas that are among the most complex in IFRS and require the application of judgment and the use of estimates.

Business combinations

Of our sample of 65 companies, 48 had undertaken business combinations during the year. The value of the businesses acquired amounted to more than 5% of shareholder equity in only 35% of these cases. In this section we will refer to aggregate business combinations that are 5% or more of shareholder equity as 'large' and those that are less than 5% as 'small'. Not surprisingly, there is a significant difference in the level of disclosure between the large and small combinations.

Aspects of business combination accounting that we considered were:

- Did entities disclose fair values, book values and pro forma data for acquisitions in accordance with IFRS 3 *Business Combinations*, or did they state that any of these disclosures were impracticable?
- What factors were disclosed that gave rise to goodwill?
- If minority interests were acquired during the period, how are the accounting policies they used disclosed in the financial statements?
- How much summarised information about associates was presented?

Fair values, book values and pro forma results disclosures

Fair value disclosures

One of the basic disclosures in relation to business combinations is the disclosure of 'the amounts recognised at the acquisition date for each class of the acquiree's assets, liabilities and contingent liabilities and, unless disclosure would be impracticable, the carrying amounts of each of those classes, determined in accordance with IFRS, immediately before the combination' [paragraph 67(f) of IFRS 3].

Most companies that undertook a business combination disclosed the fair value of the net assets acquired, regardless of the size of the acquisition – some 90% of the large and 70% of the small.

Business acquired as % of shareholder equity[1]	Fair values disclosed	Fair values not disclosed
5% or more (large)	15	2
< 5% (small)	20	9
Indeterminate	1	1

[1]In two of the 48 cases we were unable to determine the size of the business acquired from the disclosures given.

A typical example of this disclosure can be found in NOVARTIS's financial statements:

NOVARTIS Annual Report 2005, p169

	Fair value USD millions	Revaluation due to purchase accounting USD millions	Acquiree's carrying amount USD millions
Property, plant & equipment	665	52	613
Currently marketed products including trademarks	2 123	2 093	30
In-process research and development	619	619	
Other intellectual property	346	339	7
Financial assets including deferred tax assets	199	4	195
Inventories	692	184	508
Trade accounts receivable and other current assets	409	2	407
Marketable securities, cash and short-term deposits	319		319
Long-term and short-term debts to third parties	-338		-338
Trade accounts payable and other liabilities including deferred taxes	-1 866	-1 037	-829
Net identifiable assets acquired	**3 168**	**2 256**	**912**
Acquired liquidity	-155		
Goodwill	5 531		
Net cash flow from acquisition of businesses	**8 544**		

This style of presentation was followed by most of the companies, although some adopted a narrative style of disclosure when there were fewer categories of assets and liabilities acquired, or where the combination was small:

TOTAL Registration Document 2005, p178

3. Changes in the Group structure, main acquisitions and divestitures

2005

Pursuant to its public offer and takeover bid circular dated August 5, and extended September 2, TOTAL has acquired 78% of Deer Creek Energy Ltd as of September 13, 2005. Its offer was extended in order to acquire the shares which had not been tendered. The acquisition of all ordinary shares was completed on December 13, 2005.

Deer Creek Energy Ltd has an 84% interest of the Joslyn permit in the Athabasca region of the Canadian Province of Alberta.

The acquisition cost, net of cash acquired (0.1 billion euros) for all shares amounts to 1.1 billion euros. This cost essentially represents the value of the company's leasehold rights that have been recognized as intangible assets on the face of the consolidated balance sheet for 1 billion euros.

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Deer Creek Energy Ltd is fully consolidated in TOTAL's consolidated financial statements. Its contribution to the 2005 consolidated net income is not material.

Business combinations *continued*

In one case (SUEZ), the company's decision to give a narrative disclosure relating to an acquisition appeared to stem from the complicated nature of the transaction:

SUEZ Reference Document 2005, p198

The price set for the acquisition of the company's entire share capital was €846.7 million.

The significant effects of this acquisition on the Group's financial statements which could impact year-on-year comparisons are:

- the recognition of a payable due to SNCF, recorded under "Other financial liabilities" in an amount of €499 million, reflecting Electrabel's commitment to purchase the second 40% tranche of SHEM's capital and the put option relating to SNCF's residual 19.6% minority interest;
- the recognition of €230 million in goodwill following the allocation to acquired assets and liabilities, principally to "Property, plant and equipment" and "Deferred tax," in an amount of €456 million.

In respect of non-current assets the impact of this transaction on year-on-year comparability is relatively limited in spite of SHEM's size, due to the Group's decision to elect for the early adoption of IFRIC 4 – Determining Whether an Arrangement Contains a Lease, as from January 1, 2004.

In 2002, prior to the acquisition of shares in SHEM, Electrabel had already entered into an agreement with SNCF, authorizing Electrabel to market SHEM's production capacity. Since this agreement conveys a "right of use" as defined by IFRIC 4 and meets the definition of a "finance lease" as set out in IAS 17 – Leases, the comparative consolidated financial statements for 2004 already include SHEM's property, plant and equipment in an amount of €702 million, recording against liabilities.

Book value disclosures

There was a more pronounced difference in the level of disclosure of book values for large as compared to small combinations. In 21 of the small combinations, the carrying values immediately before the acquisition were not disclosed. Although five of the large combinations (30%) did not provide this disclosure, this still compares favourably with 70% for the small combinations.

Business acquired as % of shareholder equity	Book values disclosed	Book values not disclosed
5% or more (large)	12	5
< 5% (small)	8	21
Indeterminate	–	2

Again, the NOVARTIS example on page 17 is typical of this type of disclosure.

Pro forma results

IFRS 3 introduces new disclosures relating to the financial effect of combinations during the period. In particular it now requires the disclosure of 'the amount of the acquiree's profit or loss since the acquisition date' [paragraph 67(i) of IFRS 3] and also the revenue and profit or loss 'of the combined entity for the period as though the acquisition date for all business combinations effected during the period had been the beginning of that period' [paragraph 70 of IFRS 3].

Business acquired as % of shareholder equity *Disclosed*	Profit since acquisition *Undisclosed*	Profit since acquisition *Disclosed*	Pro forma revenue & profit *Undisclosed*	Pro forma revenue & profit
5% or more (large)	13	4	12[1]	5
< 5% (small)	8	21	9[2]	20
Indeterminate	–	2	–	2

[1]This includes one company that provided the pro forma revenue but not the pro forma profit for the period.
[2]This includes one company that provided the pro forma profit but not the pro forma revenue for the period.

It may be that some companies encountered practical difficulty in being able to provide the profit and pro forma disclosures. IFRS 3 does note that, where disclosure is impracticable, this fact should be disclosed and an explanation of why this is the case given. However, AHOLD was one of only three companies that provided a reason for not including the disclosure:

Business combinations *continued*

AHOLD Annual Report 2005, p105

> The acquired stores contributed EUR 2 to Ahold's net income for the period from October 1, 2005 to january 1, 2006. It is not practicable to disclose the net sales and net income of Ahold including the contribution of the acquired stores for full year 2005, since the required financial information until the date of acquisition in accordance with IFRS is not determinable.

Other observations

We observed that a large number of companies also gave information on business combinations in the comparative period. However, in most cases these were provided in narrative form and did not provide the same level of detail as for the current year.

Factors giving rise to goodwill

Another disclosure required by IFRS 3 is 'a description of the factors that contributed to a cost that results in the recognition of goodwill – a description of each intangible asset that was not recognised separately from goodwill and an explanation of why the intangible asset's fair value could not be measured reliably' [paragraph 67(h) of IFRS 3].

Only five out of the 17 companies (29%) with large business combinations disclosed factors that gave rise to goodwill. The disclosure rate was similar at 30% (eight out of 27) for small business combinations. No goodwill arose for two of the companies that had only small combinations.

The most common factor identified was synergies. Goodwill resulted from synergies for ten out of the 13 companies that gave a reason. In most cases this was the only reason identified. One company that noted other factors was INBEV:

INBEV Annual Report 2005, p85

> - In August 2005 InBev closed the acquisition of 100% of the Tinkoff brewery in St. Petersburg, Russia, for a total cash consideration of 77m euro. Costs directly attributable to the combination represent 1m euro. The amounts recognized at the acquisition date for each class of Tinkoff's assets, liabilities and contingent liabilities are included in the column "2005 Acquisitions" of the above table. The Tinkoff goodwill of 68m euro is justified by i) the immediate alleviation of existing short-term capacity constraints which InBev has faced in Russia, ii) the fact that Tinkoff complements InBev's winning brand portfolio in Russia by adding the leading Russian brand in the fast-growing and highly profitable super-premium segment and iii) further expected growth as a result of leveraging InBev's existing nationwide sales and distribution network. The impact of Tinkoff's result on the 2005 InBev profit is negative for an amount of 1m euro. If the acquisition date would have been 1 January 2005, it was estimated that InBev's revenue and profit would have been higher by approximately 70m and 8m euro, respectively.

Another company that identified other factors than synergies as the contributing factor was GLAXOSMITHKLINE:

GLAXOSMITHKLINE Annual Report 2005, p119

34 Acquisitions and disposals

Details of the acquisition and disposal of subsidiary and associated undertakings, joint ventures and other businesses are given below:

2005

Acquisitions

On 8th December 2005, the Group acquired 100% of the issued share capital of ID Biomedical Corporation, a biotechnology company based in Canada specialising in the development and manufacture of vaccines, particularly influenza vaccines, for a cash consideration of £874 million. This transaction has been accounted for by the purchase method of accounting. The goodwill arising on the acquisition results from benefits which cannot be separately quantified and recorded, including immediate access to additional 'flu vaccines manufacturing capacity, particularly in the event of a pandemic, a skilled workforce and good relations with the US and Canadian governments regarding the supply of 'flu vaccines. ID Biomedical Corporation had a turnover of £30 million (2004 – £23 million) and a loss of £83 million (2004 – loss £17 million) for the year, of which £1 million of turnover and £11 million of loss related to the period since acquisition and are included in the Group accounts.

Two companies, WESTFIELD and CADBURY SCHWEPPES, identified deferred tax arising on acquired assets (property and intangibles respectively) as the factor that gave rise to goodwill.

Although one aim of the disclosure was to highlight instances where intangibles could not be reliably measured, none of the companies in our sample identified such intangibles.

Provisional accounting

Where the initial accounting for a business combination could be determined only provisionally, IFRS 3 allows adjustments to be made for a period of up to twelve months from the date of acquisition. The fact that the initial accounting is provisional must be disclosed 'together with an explanation of why this is the case' [paragraph 69 of IFRS 3].

Of the 48 companies that had a business combination, 17 (35%) disclosed that the initial accounting was provisional. Interestingly, companies with larger combinations appeared to be more likely to identify the initial accounting as provisional since 59% of those companies (10 out of 17) did so, whilst this was the case for only 24% (seven out of 29) of those with smaller combinations.

Where an explanation was given, this usually consisted simply of a statement that fair values could only be determined provisionally. Any further explanation usually related to the proximity of the acquisition to the reporting date as in this disclosure by SAINT-GOBAIN:

SAINT-GOBAIN 2005 Annual Report, p167

The allocation of goodwill relating to the BPB group was not completed at December 31, 2005. As the acquisition only took place in early December, it was not possible to determine the fair value of all of the group's identifiable assets, liabilities and contingent liabilities prior to the balance sheet date. It is therefore possible that these assets and liabilities and the related goodwill included in the Group's consolidated financial statements for 2005 may change during the 12-month period after the acquisition during which fair value adjustments are permitted.

The apparent indifference to this disclosure may have been encouraged by the statement in IFRS 3 that the reasons why the initial accounting may be provisional are that 'either the fair values to be assigned to the acquiree's identifiable assets, liabilities or contingent liabilities or the cost of the combination can only be determined provisionally' [paragraph 62 of IFRS 3]. Most companies appeared satisfied that it was sufficient to note that fair values could only be determined provisionally and that there was no need to

Business combinations *continued*

explain further why that was the case. However, five companies noted that the accounting was provisional without either stating that fair values had not yet been finalised or providing any other explanation.

ARCELOR stated that it had completed the fair value exercise but also noted that this was subject to further modification:

ARCELOR Annual Report 2005, p161

> With respect to Acesita, the determination of the fair value of the identifiable assets and liabilities acquired was completed at the time of the full integration of Acesita (1 October 2005). However, the fair value exercise is not finished as at 31 December 2005, and remains subject to potential modification until 30 September 2006. The fair value of the net assets acquired is EUR 396 million,

This may suggest that companies believe that the 12-month adjustment period will always be available, regardless of whether or not there are specific reasons to believe that fair values have not yet been allocated reliably.

Acquisition of minority interests

IFRS are silent as to how the acquisition of minority interests should be accounted for. Two acceptable methods identified in the Ernst & Young publication *International GAAP 2005* are the parent entity extension method and the entity concept method. Under the first approach, any difference between the cost of acquisition and the minority interest's share of net assets acquired is taken to goodwill, whilst the entity concept method takes that difference directly to equity. In some countries a hybrid approach is practised whereby the difference is part goodwill (measured by reference to current fair values of identifiable net assets acquired) and part equity.

In our sample, 26 companies acquired a minority interest during the current or prior year. In many cases it was difficult to establish definitively what method had been adopted, as most of the 26 companies did not disclose this in their accounting policies note. However, the eight that did give this disclosure, stated that they were using the parent entity extension method and only one stated that it used the entity concept method.

FRANCE TELECOM provided the following description of the parent entity extension method:

FRANCE TELECOM Financial Report 2005, p111-112

> *Acquisitions of minority interests*
>
> These transactions are not addressed in any IAS or IFRS and the Group has therefore applied the French GAAP accounting treatment of acquisitions of minority interests, which consists of recognizing in goodwill the difference between the cost of acquisition of minority interests and the Group's equity in the book value of the underlying net assets, without making any fair value adjustments to the assets and liabilities acquired. Depending on the IASB's decision ("Business Combinations" Phase II), the accounting treatment described above may be changed.

The sole example in our sample of a company explicitly adopting an entity concept policy was ARCELOR as explained in the following extract:

ARCELOR Annual Report 2005, p148

> Subsequent purchases, after the Group has obtained control, are treated as acquisition of shares from minority shareholders: the identifiable assets and liabilities of the entity are not subject to a further revaluation and the positive or negative difference between the cost of such subsequent acquisitions and the net value of the additional proportion of the company acquired is recorded directly in shareholders' equity.

For those companies that did not disclose a policy for acquisitions of minority interests, we attempted to identify the accounting treatment adopted from the information available. Our findings were as follows:

	Parent entity extension method	Entity concept method	Unclear
Policy disclosed	7	1	–
No policy disclosed	14	–	4
TOTAL	21	1	4

Of the 18 companies that did not disclose a policy, it appears that 14 of them were using the parent entity extension method with adjustments taken to goodwill. In some cases, this adopted method was explicitly stated in the description of the acquisition. In other cases, we have inferred that the parent entity extension method was used, based on the fact that the acquisition resulted in an increase in goodwill with no apparent additional equity entry, as would occur under the entity concept and hybrid methods.

In some cases it was not possible to determine exactly which approach was adopted as movements in goodwill, minority interests and equity were not sufficiently disaggregated to be able to identify movements specifically related to these transactions with any certainty. There were four companies for which we could not make a reasonable determination of the method employed.

Nevertheless, we can still conclude that the clear preference overall is to use the parent entity extension method. It is interesting to note in this regard that the revisions to IFRS 3 proposed by the IASB would require the use of the entity concept method in combination with the full goodwill approach.

Financial information about associates

Investors must disclose summarised financial information about associates, including the aggregated amount of assets, liabilities, revenues and profit or loss [paragraph 37(b) of IAS 28]. It is not clear from the standard whether the disclosure that is required is the investor's share of the associates' assets etc (net basis) or the entire associates' balances (gross basis).

In our sample, 59 companies had investments in associates. Out of these 59, 14 companies gave no disclosure of their associates' assets, liabilities, revenues and profit or loss. In some cases this may be because of the relative insignificance of associates, but in two cases these disclosures were not given by companies whose investment in associates was more than 14% of shareholders' equity.

Whilst there was a fairly even split between those disclosing on a net basis and those using a gross basis practice was more consistent in certain industries. For example, all except one of the oil and gas and mining companies in our sample used the net method, and this was also the preferred method for media.

Business combinations *continued*

By contrast, all of the companies in the telecommunications, chemicals and utility sectors in our sample used the gross method.

For 15 of the 20 companies that used the net method, the amounts disclosed agreed to the total investment balance in the company's balance sheet. For the remaining companies, the majority only disclosed material associate balances and, therefore, the amounts of disclosed did not agree to the total investment balance in the company's balance sheet. Very few of the companies using the gross method attempted to reconcile that information back to the total investment balance.

The following is typical of the types of disclosure using the net method:

BP Annual Report and Accounts 2005, p69

30 Investments in associates

The significant associates of the group are shown in Note 51. Summarized financial information for the group's share of the aggregate total of revenues, profit, assets and liabilities of associates is set out below.

$ million	2005	2004	2003
Sales and other operating revenues	6,879	5,509	4,101
Profit before interest and taxation	665	632	513
Finance costs and other finance expense	57	48	42
Profit before taxation	608	584	471
Taxation	143	121	80
Profit for the year	465	463	391
Innovene operations	(5)	(1)	(3)
Continuing operations	460	462	388
Non-current assets	5,514	6,023	5,143
Current assets	2,248	2,212	1,720
Total assets	7,762	8,235	6,863
Current liabilities	1,755	1,988	1,614
Non-current liabilities	2,037	2,171	1,280
Total liabilities	3,792	4,159	2,894
Net assets	3,970	4,076	3,969
Group investment in associates			
Group share of net assets (as above)	3,970	4,076	3,969
Loans made by group companies to associates	2,247	1,410	899
	6,217	5,486	4,868

Similarly, the following illustrates the gross method:

ALCATEL Consolidated Financial Statements 2005, p36

c) Summarized financial information for equity affiliates

Summarized financial information for Thales:

(In millions of euros)

	December 31, 2005 (1)	January 1, 2005 (2)	December 31, 2004
Balance sheet			
Non-current assets		4,323	4,372
Current assets		9,325	9,157
Total assets		**13,648**	**13,529**
Shareholders' equity		1,770	1,630
Non-current liabilities		2,604	2,553
Current liabilities		9,274	9,346
Total liabilities		**13,648**	**13,529**
Income statement			
Revenues		-	10,276
Income (loss) from operating activities		-	590
Net income (loss) attributable to equity holders of the parent		-	339

(1) In view of the timing of the publication of Thales' financial statements, and as this equity affiliate is listed on a securities exchange, the Group's share of net income (loss) is calculated based on the most recently published financial statements under IFRSs. It does not therefore include, due to the rules of communication applicable to listed companies, any possible non-published information between two publication dates that may have been obtained by the directors representing Alcatel on the Thales Board of Directors. As Thales' financial data for 2005 was not available at the date of approving Alcatel's financial statements, the Group's share of net income (loss) has been calculated on the basis of Thales' latest available financial statements at June 30, 2005.

(2) The accounting options made by Thales governing the first-time adoption of IFRSs are similar to those made by Alcatel, except for the timing of the first application of the standards, IAS 32 and 39, relating to financial instruments (Alcatel first applied these at January 1, 2004 and Thales at January 1, 2005). As it is not possible to restate the 2004 accounts of Thales for the impact of the application of these standards, Alcatel's share of the change in shareholders' equity resulting from this first application has been recognized in 2005 in "net income (loss) changes recognized directly in equity".

The ALCATEL example illustrated a common problem for several of the companies trying to give this disclosure. They had difficulty getting access to the relevant information from associates. A number of companies, particularly those that used the gross method, noted this difficulty either directly (as ALCATEL did above in relation to their investment in Thales) or indirectly by stating that the information was taken from the latest available financial statements of the associate.

This difficulty is likely to be most acute for investments in listed associates for the reason outlined above by ALCATEL. Perhaps surprisingly, IAS 28 does not cater for any sort of practicability outlet for this circumstance. However, where companies held a major investment in a listed associate, they were also more likely to provide disclosures separately for those individual associates. For example, RENAULT, with a major 44.3% investment in Nissan, went so far as to disclose a reconciliation between Nissan's reported Japanese GAAP results and RENAULT's IFRS share of Nissan's results:

RENAULT 2005 Registration Document, p193

D – Changes in Nissan equity restated for the purposes of the Renault consolidation

in billions of yen	Dec. 31, 2004[1]	2005 net income	Dividends	Translation adjustment[2]	Other changes[3]	Dec. 31, 2005
Shareholders' equity – Nissan share under Japanese GAAP	**2,287**	**505**	**(106)**	**188**	**8**	**2,882**
Restatements for Renault group requirements:						
– Restatement of fixed assets	522	(28)	-	-	-	494
– Provision for pension and other long-term employee benefit obligations	(477)	273	-	-	(3)	(207)
– Capitalization of development expenses	360	62	-	1	-	423
– Other restatements	(233)	(132)	(8)	(8)	19	(362)
Net assets restated for Renault group requirements	**2,459**	**680**	**(114)**	**181**	**24**	**3,230**
€ million						
Net assets restated for Renault group requirements	**17,609**	**4,965**	**(836)**	**1,342**	**175**	**23,255**
Renault's share	45.8%					45.7%
(before neutralization described below)	8,065	2,275	(383)	615	54	10,626
Neutralization of 44.3% of Nissan's investment in Renault[4]	(962)	-	-		-	(962)
Renault's share in the net assets of Nissan	**7,103**	**2,275**	**(383)**	**615**	**54**	**9,664**

(1) 2004 figures restated for compliance with IFRS.

(2) The €615 million change in translation adjustments essentially reflects the rise of the US dollar and the Mexican peso against the Euro. Operations undertaken by Renault to hedge the portion of Nissan shareholders' equity expressed in yen are included in Renault shareholders' equity.

(3) "Other changes" include Renault dividends received by Nissan, the change in the financial instruments revaluation reserve and changes in Nissan treasury shares.

(4) At December 31, 2005, Nissan held 15% of Renault.

Corporate financial instruments

In this section we discuss the impact of the requirements of IAS 32 *Financial Instruments: Disclosure and Presentation* and IAS 39 *Financial Instruments: Recognition and Measurement* on the companies in our sample. These standards are, arguably, not only the most controversial of the standards but also the most difficult to interpret and apply. One of the key drivers in the adoption of IFRS was the desire to gain greater consistency in reporting, to enable users of accounts to understand better the relative financial position and performance of different companies. However, this has not been completely achieved as regards financial instruments. Because of the difficulties of interpreting IAS 32 and IAS 39, there are undoubtedly variations in the way the more complex aspects of these standards have been applied, making an analysis of the impacts of these standards quite difficult.

Aspects of corporate financial investments that we considered are:

- how companies applied IFRS as at 31 December 2005 to their financial instruments, including a discussion of the types of effect resulting from first-time adoption of IAS 32 and IAS 39
- the breakdown of financial assets and liabilities in balance sheets
- the recognition and presentation methods used for non-derivative financial assets
- the recognition and presentation methods used for non-derivative financial liabilities
- aspects related to the classification of certain financial instruments as liabilities and/or equity
- information provided by companies relating to their financial risks and the use of derivatives, dealing separately with such issues as interest rate risk, foreign exchange risk and commodity risk.

Standards applied as at 31 December 2005

13 companies in our sample of 65 (including five German and three Swiss companies) were not first-time adopters as at 31 December 2005, having adopted IFRS in an earlier year.

The remaining 52 companies in our sample were evenly divided between those companies that applied IAS 32 and IAS 39 with effect from 1 January 2004 and those that chose to apply the option provided under IFRS 1 *First-time Adoption of International Financial Reporting Standards* of not restating comparative financial statements for the period ended 31 December 2004.

Only a small proportion of companies disclosed that they opted to apply early the amendments to IAS 39 which are effective from 1 January 2006, which related to:

- cash flow hedge accounting of forecast intragroup transactions (11 companies)
- fair value option (seven companies)

and one company stated that it had adopted the amendment relating to financial guarantees (unlikely to be relevant to many of the companies in our sample).

Companies that did not opt for early application of these amendments did not include descriptions of the future impact of their application or indicate that they did not expect the impact to be significant.

With regard to IFRS 7 *Financial Instruments: Disclosures* (mandatory application with effect from 1 January 2007) only two companies in our sample stated that they had applied the standard early.

STMICROELECTRONICS included in its accounting policies a detailed discussion of its early application decisions concerning IFRS 7 and the various amendments to IAS 39, as well as the specific impacts of these standards on the company:

STMICROELECTRONICS Statutory Annual Report 2005, p69-70

On August 18, 2005 the IASB issued International Financial Reporting Standard No. 7, *Financial Instruments: Disclosures* ("IFRS 7"), with the main objective of revising and enhancing the disclosures in International Accounting Standard No. 30, *Disclosures in the Financial Statements of Banks and Similar Financial Institutions* ("IAS 30") and International Accounting Standard No. 32, *Financial Instruments: Disclosure and Presentation* ("IAS 32"). IFRS 7 requires disclosure of the significance of financial instruments for an entity's financial position and performance, which incorporate many of the requirements previously in IAS 32. IFRS 7 also requires qualitative and quantitative information about exposure to risks arising from financial instruments, including specified minimum disclosures about credit risk, liquidity risk and market risk. The Standard is effective for annual periods beginning on or after January 1, 2007, with early adoption permitted. The Group will adopt IFRS 7 in 2007 and is currently evaluating the effect of IFRS 7 on its disclosures concerning financial instruments.

In 2005 the IASB issued the following amendments to IAS 39, *Financial Instruments: Recognition and Measurement*:

— IAS 39 (Amendment), *Cash Flow Hedge Accounting of Forecast Intragroup Transactions*, effective from January 1, 2006, which the Group early adopted in 2005. The amendment allows the foreign currency risk of highly probable forecast intragroup transaction to qualify as a hedged item in the consolidated financial statements, provided that: (a) the transaction is denominated in a currency other than the functional currency of the entity entering into that transaction; and (b) the foreign currency risk will affect consolidated profit and loss. This amendment is relevant to the Group's operations, as the Group uses forward contracts to reduce its exposure to U.S.
dollar fluctuations in euro-denominated forecasted intercompany transactions that cover a large part of research and development expenditures and certain corporate expenses incurred on behalf of the Company by subsidiaries. These intercompany transactions are not closely limited to ultimate transactions with third parties and these instruments do not qualify as hedging instruments. The Company also hedged in 2005 and 2004 a portion of its euro-denominated forecasted intercompany purchases of products whose underlying front-end manufacturing production costs of semi-finished goods are incurred in euros. The foreign currency forward contracts used to hedge exposures meet the criteria for designation as cash flow hedges.

— IAS 39 (Amendment), *The fair Value Option*, effective from January 1, 2006. This amendment changes the definition of financial instruments classified at fair value through profit or loss and restricts the ability to designate financial instruments as part of this category. The Group believes that this amendment should not have a significant impact on the classification of financial instruments, as the Group should be able to comply with the amended criteria for the designation of financial instruments at fair value through profit and loss. The Group will apply this amendment from annual periods beginning January 1, 2006.

— IAS 39 and IFRS 4 (Amendment), *Financial Guarantee Contracts*, effective from January 1, 2006. This amendment requires issued financial guarantees, other than those previously asserted by the entity to be insurance contracts, to be initially recognized at their fair value and subsequently measured at the higher of; (a) the unamortized balance of the related fees received and deferred, and (b) the expenditure required to settle the commitment at the balance sheet date. Management considered this amendment to IAS 39 and concluded that it is not relevant to the Group.

Impacts related to the transition to IAS 32 and IAS 39

The main effects of first-time application of IAS 32 and IAS 39 we noted in our survey were as follows:

- cancellation of treasury shares (accounted for as a deduction from equity)
- reclassification as liabilities of minority interests holding put options
- 'split accounting', with the recognition of a separate equity component for compound financial instruments (convertible bonds)
- reclassification as equity of certain instruments previously classified in an intermediate category between equity and liability (for example, bonds redeemable for shares)
- recognition of impairment losses on available-for-sale investments
- revaluation of available-for-sale investments at fair value recognised directly in equity
- revaluation at fair value of all derivatives, including embedded derivatives, with the impact of the change recognised directly in equity for cash flow or net investment hedges

Corporate financial instruments *continued*

- revaluation of financial assets measured at fair value through profit or loss (either designated as such on initial recognition or more rarely held for trading)
- application of the effective interest method for loans, receivables and borrowings.

It is difficult to compare the impact of first-time application of IAS 32 and IAS 39 between different companies, since in most cases only the net impact is reported without a detailed presentation. And the net impact does not reveal all of the consequences of the transition since material positive or negative impacts may offset each other. For example, in the case of FRANCE TELECOM, the net positive impact on total equity of the transition to IAS 32 and IAS 39, amounting to 217 million (compared to an overall negative impact of the transition to IFRS of 1,805 million), consisted primarily of a positive impact of 817 million related to the reclassification of undated bonds redeemable in shares as equity and a negative impact of 661 million related to the reclassification as liabilities of minority interests holding put options.

However, in general, the most significant adjustments our in sample were the result of:

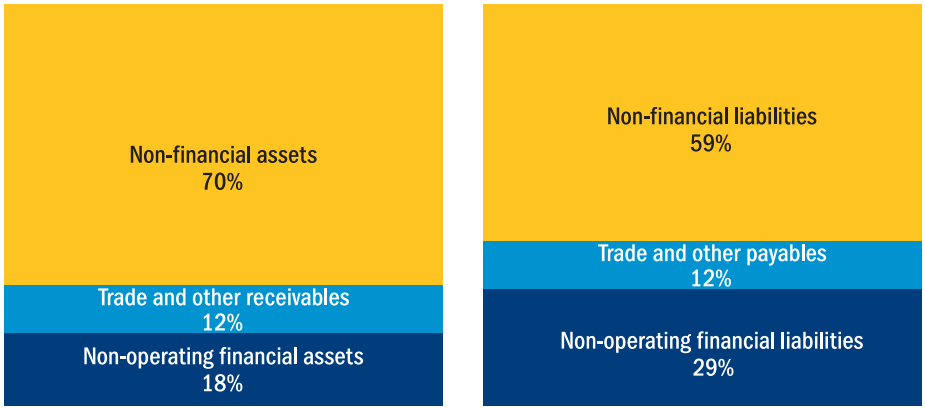
- the cancellation of treasury shares, particularly for French companies (reduction in equity of more than 1 billion at L'ORÉAL and TOTAL)
- the reclassification as liabilities of minority interests holding put options (661 million impact at FRANCE TELECOM and 431 million at VIVENDI UNIVERSAL)
- 'split accounting' of convertible bonds (330 million impact at TELECOM ITALIA)
- the reclassification as equity of certain instruments previously classified as liabilities or in an intermediate category between liabilities and equity (844 million impact from VIVENDI UNIVERSAL's bonds redeemable for shares, 560 million impact from ALCATEL's bonds redeemable for shares, and 817 million impact from FRANCE TELECOM's undated bonds redeemable for shares)
- the reclassification as liabilities of preferred shares previously classified as equity (1,500 million impact at UNILEVER, amounting to 20% of equity prior to the transition to IAS 32 and IAS 39)
- the revaluation of available-for-sale investments (with impacts of more than 500 million each for SUEZ and ROYAL DUTCH SHELL, for example).

The impact of derivatives varied across the sample but they were rarely significant and the impact of recognising cash flow hedges directly in equity was negligible for the sample as a whole. However the impact was greater for a small number of companies in our sample. For example, BP posted a negative impact of 400 million on retained earnings for embedded derivatives and FIAT recorded a positive impact of 450 million for an equity swap.

Classification of financial assets and liabilities in the balance sheet

In our sample, the weighted average of financial assets and liabilities, using balance sheet totals as the weighting factor, represented 30% and 41% of the balance sheet total respectively. After separately weighting trade and other receivables and payables, these proportions fell to 18% and 29% respectively.

Balance sheet of sample companies (weighted average)



As shown in the next table, these proportions were broadly consistent across the sample of companies examined. The high percentage of non-operating financial assets in Germany was attributable to the presence of two companies with a high level of vehicle financing activity, ie BMW and VOLKSWAGEN:

	Total	France	Germany	Italy	Netherlands	Spain	UK	Other
Non-financial assets	**70%**	71%	66%	71%	70%	80%	73%	66%
Trade and other receivables	**12%**	10%	7%	13%	14%	10%	16%	11%
Non-operating financial assets	**18%**	19%	27%	16%	16%	10%	11%	23%
Non-financial liabilities	**59%**	58%	53%	50%	68%	46%	64%	66%
Trade and other payables	**12%**	13%	8%	14%	12%	14%	17%	8%
Non-operating financial liabilities	**29%**	29%	39%	36%	20%	40%	19%	26%

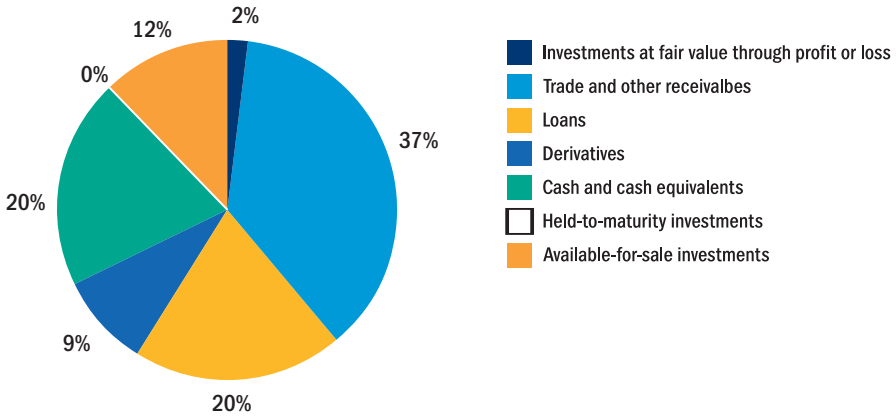
Balance sheet presentation

The companies in our sample provided varying levels of detail in their balance sheets, revealing certain national trends: more condensed balance sheet presentation in the Netherlands (10 lines on average), and more detailed presentation in Spain (19 lines on average), with an average of 14 lines for the sample as a whole. However, the proportion of lines devoted to financial instruments was relatively uniform, with an average of 5 lines out of 14.

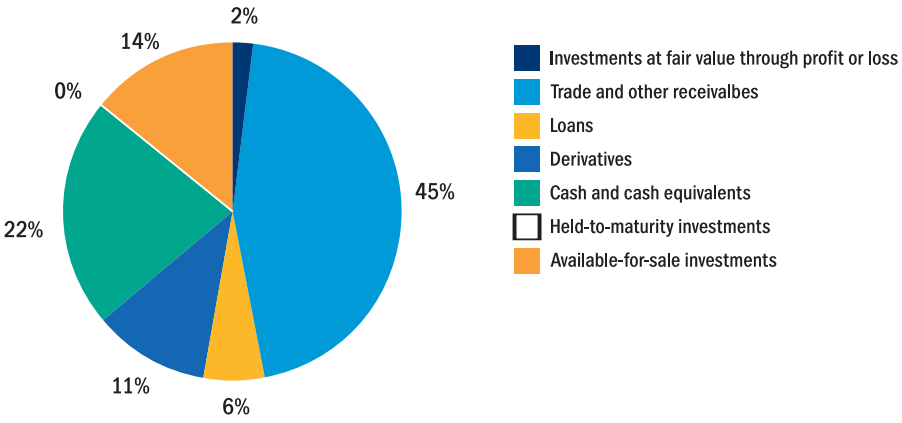
Breakdown of financial assets

In our sample of companies, financial assets could be broken down as follows (average percentages of the total amount of financial assets for each company).

Corporate financial instruments *continued*



When RENAULT, PSA PEUGEOT CITROËN, BMW, VOLKSWAGEN and FIAT are excluded from the sample (their considerable vehicle financing activity distorts the relative proportion of loans for the entire sample), the breakdown of financial assets within the remainder of the sample is as follows:



Different presentation methods were used for financial assets in the balance sheets of our sample companies, and no standard presentation formats emerged from our sample, even at the national level. We presume that each of the companies opted for a presentation format in keeping with its previous financial practice.

The main balance sheet classification and presentation differences upon application of IFRS involved the presentation of the following financial instruments:

- Derivatives: 15 companies, including the majority of UK companies in our sample, presented their derivatives on a separate line of the balance sheet. The other companies included derivatives under the account heading 'other financial assets/liabilities' or under the same account heading as hedged items (the latter was used in particular by Dutch companies).
- Investments measured at fair value through profit or loss, available-for-sale and held-to-maturity: a number of companies grouped financial assets that did not receive the same accounting treatment (for example, available-for-sale investments and loans) in a single balance sheet line item. Only four presented available-for-sale investments as a separate balance sheet line item.

BRITISH AMERICAN TOBACCO adopted a presentation method for financial assets in its balance sheet consistent with IAS 39 categories as follows:

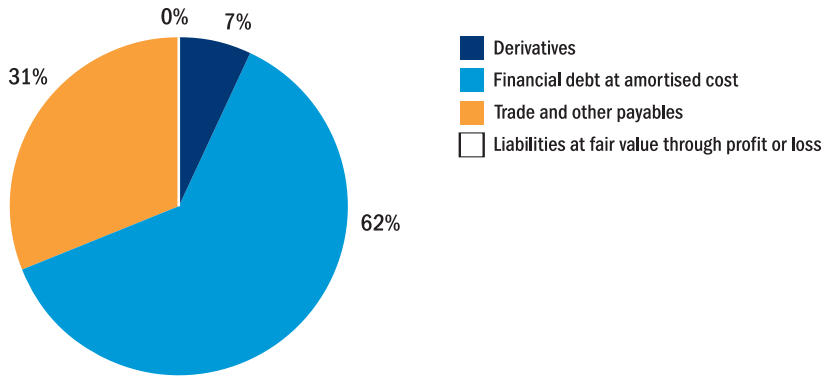
BRITISH AMERICAN TOBACCO Directors' Report and Accounts 2005, p28

	Notes	2005 £m	2004 £m
Assets			
Non-current assets			
Intangible assets	9	7,987	7,700
Property, plant and equipment	10	2,327	2,162
Investments in associates and joint ventures	11	2,193	1,717
Retirement benefit assets	13	35	16
Deferred tax assets	14	290	246
Trade and other receivables	15	197	188
Available-for-sale investments	12	27	14
Derivative financial instruments	21	87	52
Total non-current assets		13,143	12,095
Current assets			
Inventories	16	2,274	2,143
Income tax receivable	17	81	51
Trade and other receivables	15	1,577	1,422
Available-for-sale investments	12	96	86
Derivative financial instruments	21	86	127
Cash and cash equivalents	18	1,790	1,851
Total current assets		5,904	5,680
Total assets		19,047	17,775

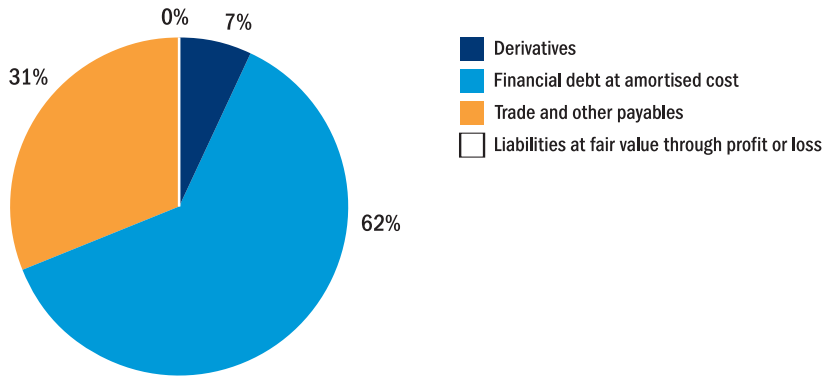
Corporate financial instruments *continued*

Breakdown of financial liabilities

Financial liabilities can be broken down as follows (average percentage of the total amount of financial liabilities for each company).



This breakdown remained virtually unchanged after excluding RENAULT, PSA PEUGEOT CITROËN, BMW, VOLKSWAGEN and FIAT (to provide a comparison with the breakdown of financial assets presented on page 30):



Non-derivative financial assets

Held-to-maturity investments

The category ‘held-to-maturity investments’, which only applies to debt instruments, was rarely significant in companies in our sample. Although 14 companies used this category, it represented on average less than 1% of their total financial assets. Companies may have been discouraged from using the category by the restrictions associated with it, namely that any sale prior to maturity results in the reclassification of all other held-to-maturity investments as available-for-sale, with the former category being prohibited for the two subsequent financial reporting years (the so called ‘tainting rule’).

Available-for-sale investments

The category of ‘available-for-sale investments’ generally includes non-consolidated equity investments and marketable securities. This category was used by almost all the companies in our sample.

Presentation

Most of the companies in our sample did not use the 'available-for-sale investments' heading in their balance sheet presentation, preferring to retain account headings such as 'investments', 'long-term investments' or 'other financial assets' or to use more general account headings used previously such as 'financial assets'. The reader has to refer to the notes to the financial statements to determine the scope of assets falling under this IAS 39 category.

34 companies classified all of these investments as 'non-current assets'. These usually consisted of non-consolidated equity investments. Among the companies that divided their available-for-sale investments into current and non-current assets, we observed:

- a division based on previously used classifications, which distinguished between strategic investments and cash management instruments generally classified respectively as non-current assets and current assets, and often described respectively as 'investments' and 'liquid investments' or 'marketable securities', or
- a division based on an intention to dispose of the investments in the short term (used for example by LVMH, UNILEVER and GLAXOSMITHKLINE).

Accounting treatment

Specific criteria for determining whether objective evidence of impairment exists, particularly the required percentage and/or duration of the decline in value of an investment, were rarely specified. Instead, the accounting policies section usually referred to the provisions of IAS 39 in general terms. ROCHE explained, in more detail then any other company in our sample, the criteria it applied in determining whether an investment is impaired:

ROCHE Finance Report 2005, p34

> Financial assets are assessed for possible impairment at each balance sheet date. An impairment charge is recorded where there is objective evidence of impairment, such as where the issuer is in bankruptcy, default or other significant financial difficulty. Any available-for-sale financial assets that have a market value of more than 25% below their original cost, net of any previous impairment, will be considered as impaired. Any available-for-sale financial assets that have a market value below their original cost, net of any previous impairment, for a sustained six-month period will be considered as impaired. Any decreases in the market price of less than 25% of original cost, net of any previous impairment, which are also for less than a sustained six-month period are not by themselves considered as objective evidence of impairment. Such movements in fair value are recorded in equity until there is objective evidence of impairment or until the asset is sold or otherwise disposed of. For financial assets carried at amortised cost, any impairment charge is the difference between the carrying value and the recoverable amount, calculated using estimated future cash flows discounted using the original effective interest rate. For available-for-sale financial assets, any impairment charge is the amount currently carried in equity for the difference between the original cost, net of any previous impairment, and the fair value.

Only two companies (NOKIA and GLAXOSMITHKLINE) provided details concerning the calculation method adopted to determine the result of a partial disposal of an investment (for example, first-in, first-out, weighted average cost).

Certain available-for-sale investments were measured at cost in the balance sheet, on the basis of the exemption provided by IAS 39 for non-listed securities whose fair value cannot be measured reliably. Although the companies in our sample often referred to the existence of this exemption in the accounting policies section, the amounts concerned were not always specified. Moreover, the extent of information provided in the notes concerning the reasons for maintaining these investments at cost was usually minimal (although DEUTSCHE TELEKOM did indicate the amount of investments sold during the year) and the range of estimates within which fair value is highly likely to lie was never provided (a recommended disclosure under IAS 32, when such information can be obtained).

Corporate financial instruments *continued*

Impacts

The amount of the revaluation reserve in equity for available-for-sale investments was not always specified. Some companies gave no indication of the impact on reserves of revalued available-for-sale investments or cash flow hedges, while others disclosed an overall revaluation impact including cash flow hedges, either net of taxes or before taxes, with disclosure of the overall tax effect. Most companies, however, did disclose the equity movements relating to available-for-sale investments, usually showing the tax effects as a separate element.

For the companies in our sample that provided this information, revaluation reserves for available-for-sale investments represented 2.3% of total equity.

The impact of impairment and/or disposals on profit or loss for the year was rarely presented in detail. NOKIA, however, presented a detailed analysis of equity movements relating to available-for-sale investments, distinguishing between fair value gains and losses recognised in equity and amounts transferred to the profit and loss account on impairment or disposal, providing both gross and after-tax amounts:

NOKIA Form 20-F 2005, pF-38

	Hedging reserve EURm			Available-for-sale investments EURm			Total EURm		
	Gross	Tax	Net	Gross	Tax	Net	Gross	Tax	Net
Balance at December 31, 2002, As revised	**2**	**0**	**2**	**(13)**	**(16)**	**(29)**	**(11)**	**(16)**	**(27)**
Cash flow hedges (Revised):									
Fair value gains/(losses) in period	12	(2)	10	—	—	—	12	(2)	10
Available-for-sale Investments:									
Net fair value gains/(losses)	—	—	—	110	(12)	98	110	(12)	98
Transfer to profit and loss account on impairment	—	—	—	27	—	27	27	—	27
Transfer of fair value gains to profit and loss account on disposal	—	—	—	(84)	20	(64)	(84)	20	(64)
Transfer of fair value losses to profit and loss account on disposal	—	—	—	43	(6)	37	43	(6)	37
Balance at December 31, 2003, As revised	**14**	**(2)**	**12**	**83**	**(14)**	**69**	**97**	**(16)**	**80**
Cash flow hedges (Revised):									
Fair value gains/(losses) in period	—	(1)	(1)	—	—	—	—	(1)	(1)
Available-for-sale Investments:									
Net fair value gains/(losses)	—	—	—	18	(1)	17	18	(1)	17
Transfer to profit and loss account on impairment	—	—	—	11	—	11	11	—	11
Transfer of fair value gains to profit and loss account on disposal	—	—	—	(105)	10	(95)	(105)	10	(95)
Transfer of fair value losses to profit and loss account on disposal	—	—	—	—	—	—	—	—	—
Balance at December 31, 2004, As revised	**14**	**(3)**	**11**	**7**	**(5)**	**2**	**21**	**(8)**	**13**
Cash flow hedges:									
Fair value gains/(losses) in period	(177)	45	(132)	—	—	—	(177)	45	(132)
Available-for-sale Investments:									
Net fair value gains/(losses)	—	—	—	(69)	6	(63)	(69)	6	(63)
Transfer to profit and loss account on impairment	—	—	—	9	—	9	9	—	9
Transfer of fair value gains to profit and loss account on disposal	—	—	—	(5)	—	(5)	(5)	—	(5)
Transfer of fair value losses to profit and loss account on disposal	—	—	—	2	—	2	2	—	2
Balance at December 31, 2005	**(163)**	**42**	**(121)**	**(56)**	**1**	**(55)**	**(219)**	**43**	**(176)**

Loans and receivables

'Loans', as used in the pie chart on page 30 includes loans related to equity investments as well as deposits and collateral. Aside from these items, the specific components of the balance sheet line item 'loans' tended to be defined by each company, and as a rule the level of disclosure for the account heading was limited (maturity, counterparty, type of repayment).

As in the case of available-for-sale investments, the criteria used to identify potential impairment and the calculation method for determining impairment for loans and receivables were rarely disclosed, even by companies with significant financing activity.

Companies generally disclosed that the fair value of these items corresponded to their net carrying amount at the balance sheet date.

Cash and cash equivalents

Although significant amounts were often reported against the line item 'Cash and cash equivalents', the information provided in the notes was usually limited. The principal information provided related to:

- the characteristics of these financial assets and the amounts encompassed by the term 'Cash and cash equivalents' (ie bank accounts, term deposits, shares in money market mutual funds etc) and
- the accounting treatment applied (which varied depending on the type of asset: for example short-term deposits carried at amortised cost; shares in money market mutual funds treated in the same manner as available-for-sale assets or recorded at fair value through profit or loss).

Companies specifying the accounting method used for their 'cash equivalents' generally referred to measurement at fair value through profit or loss, or measurement at cost.

Information about the particular items included in 'cash equivalents' was most often provided by French companies that referred to the inclusion of monetary investment funds. PUBLICIS offered a clear presentation of the types of financial assets grouped under 'Cash and Cash Equivalents':

PUBLICIS Form 20-F 2005, pF-13

> ***Cash and Cash Equivalents***
>
> Cash and cash equivalents include cash in bank, petty cash, short term deposits with an initial maturity of less than three months and money market funds and monetary mutual funds subject to an insignificant risk of change in value, i.e., that comply with the following criteria: sensitivity to interest rate risk less than or equal to 0.25 and 12 month historical volatility close to zero.

Corporate financial instruments *continued*

PEARSON also provided a detailed presentation of cash equivalents as follows:

PEARSON Annual Review, Governance and Financial Statements 2005, p76

20 Cash and cash equivalents (excluding overdrafts)

All figures in £ millions	2005	2004	2003
Cash at bank and in hand	393	338	302
Short-term bank deposits	509	123	249
	902	461	551

Short-term bank deposits are invested with banks and earn interest at the prevailing short-term deposit rates.

The currency split of cash and cash equivalents in 2005 is 31% US dollars (2004: 38%), 38% Sterling (2004: 31%), 24% Euro (2004: 12%) and other 7% (2004: 19%).

The fair value of cash and cash equivalents is the same as the carrying value.

Cash and cash equivalents include the following for the purpose of the cash flow statement:

All figures in £ millions	2005	2004	2003
Cash and cash equivalents	902	461	551
Cash and cash equivalents included in assets classified as held for sale	–	141	–
Bank overdrafts	(58)	(58)	(23)
	844	544	528

Financial instruments measured at fair value through profit or loss

The following seven companies referred to the so called 'fair value option' and disclosed the extent to which they had (or did not have) financial instruments accounted for at fair value through profit or loss:

- PSA PEUGEOT CITROËN, which opted for early application of the IAS 39 amendment relating to the fair value option for two categories of operations: 'fixed-rate bonds hedged by interest rate swaps' and 'non-hedged equity investments'.
- TELEFONICA, which applied the fair value option to assets held by its insurance subsidiaries.
- DANONE, which applied the earlier version of the option (without restrictions) to its cash management financial assets.
- AP MOLLER-MAERSK, BASF, ASTRAZENECA and ERICSSON, which merely indicated that their cash management financial assets were not classified as cash equivalents measured at fair value through profit or loss.
- ASTRAZENECA applied this measurement method to some loans and receivables to simplify hedge accounting.

Non-derivative financial liabilities

Non-derivative financial liabilities consisted primarily of debt. Information on company debt was usually very detailed, with a breakdown by:

- category of instruments (bonds, bank borrowings, treasury notes etc)
- maturity
- type of interest rate (disclosing the basis for floating rates and the fixed rates concerned)
- currency.

Financial liabilities at amortised cost

To enable the impact of the effective interest method to be determined from the financial statements, companies would have to disclose the carrying value of the relevant liability at the balance sheet date, its redemption value, the effective interest rate expense and coupon rate (taking into account issue costs and any redemption premium). Only a few companies in our sample provided sufficient information for this purpose.

The method used to determine the effective interest rate was rarely described in precise terms, only a very general discussion of the amortised cost principle being provided by certain companies. However, companies tended to refer specifically to rate calculation methods for hybrid instruments (eg convertible bonds).

The link, between revaluation of the interest rate component of liabilities that qualified as hedged items in fair value hedges and the application of the effective interest method, was never made clear.

ROCHE discussed the impact of a change in the estimated date for the redemption of a bond exchangeable for shares:

ROCHE Finance Report 2005, p83

> ***Reassessment of probable redemption date of 'LYONs V' US dollar exchangeable notes:*** Effective 30 September 2004 the Group reassessed the likely future cash outflows for this instrument and concluded it was appropriate to consider the first call date of 25 July 2007 as the most probable date of cash flows. Accordingly, using the effective interest rate method, the Group recorded a pre-tax expense of 94 million Swiss francs and an increase in debt of the same amount. This reflects an increase in the carrying value of the debt to allow the accreted value to meet the issue price plus accrued original issue discount (OID) at 25 July 2007. There was no cash effect in 2004.

Financial liabilities measured at fair value through profit or loss

None of the companies applied the fair value option to their financial liabilities, although PSA PEUGEOT CITROËN and ROCHE stated that they measure certain financial liabilities at fair value in order to simplify hedge accounting (for interest rate risk). But it should be noted that the use of the fair value option for financial liabilities was prohibited by the European Commission's IAS 39 'carve-out' for companies which did not opt for early application of the IAS 39 amendment on the fair value option.

Embedded derivatives

Five companies in our sample identified embedded derivatives among their financial liabilities. The types of instruments with embedded derivatives included foreign currency convertible bonds, exchangeable notes, revenue-linked debts and bonds redeemable for shares.

Corporate financial instruments *continued*

Three of the companies measured these liabilities at fair value through profit and loss, pursuant to paragraph 11 of IAS 39, which permits this measurement method whenever the embedded derivative cannot be reliably measured. Two of the three provided information on the impact of the revalued liabilities on profit or loss. This was done without separating the impact of their own credit risk despite the requirement under IAS 32 to disclose this information for financial liabilities measured at fair value through profit or loss.

Classification as a liability or as equity

Many companies in our sample have issued financial instruments of a type that frequently raises issues relating to their classification as a liability or as equity.

These instruments included:

- convertible bonds (17 companies)
- bonds redeemable for shares (four companies)
- foreign currency convertible bonds (one company)
- preference shares (six companies).

Despite the complex issues raised by the classification of these instruments, only a few companies described in detail the analysis conducted to determine the appropriate accounting classification. In particular, it was often difficult to determine if the issue that has been referred to IFRIC on the accounting treatment of subordinated bonds, redeemable only at the issuer's option and with no contractual obligation to pay interest, was relevant to the instruments concerned.

The split of hybrid instruments and the classification of the different components were generally provided in a table summarising the effects of the first-time application of IAS 32 and IAS 39.

Convertible bonds

Convertible bonds are separated into their liability component (usually predominant) and their remaining equity component.

Some of the companies in our sample provided very detailed information. This was especially useful for measuring the effect of the accounting treatment on the reported interest expense.

WPP presented a very detailed discussion of this issue:

WPP Annual Report 2005, p173

Convertible bonds
Under UK GAAP, convertible bonds are reported as a liability unless conversion actually occurs, and no gain or loss is recognised on conversion. Under IAS 32, classification of such compound instruments is undertaken based on the substance of the contractual arrangements and, consequently, the Group's compound instruments will be split into liability and equity elements, based on the fair value of the debt component at the date of issue.

The income statement charge for the finance cost will continue to be spread evenly over the term of the bonds so that at redemption the liability equals the redemption value. However, under IFRS the initial recognition of the liability is for a lower amount than under UK GAAP and consequently the finance cost over the period is higher.

At 1 January 2005, the Group had in issue two convertible bonds: £450 million bond maturing in April 2007 and $287.5 million bond maturing in January 2005. The impact on the 1 January 2005 transition balance sheet from these bonds was:
- £98 million reclassification from debt to equity to separately account for the equity element of the convertible bonds (£69 million relating to the £450 million bond and £29 million relating to the $287.5 million bond).
- £66 million adjustment to debt and retained earnings to reflect the cumulative extra amount of financing costs that would have been expensed through the income statement as at 31 December 2004 (£37 million relating to the £450 million bond and £29 million relating to the $287.5 million bond).
- The impact on the income statement for the year ending 31 December 2005 is an increase in interest payable and similar charges of £14 million, in relation to convertible bonds in issue at 1 January 2005 (£13.7 million relating to the £450 million bond and £0.3 million relating to the $287.5 million bond).
- The total interest charges for these bonds under IFRS for the year ending 31 December 2005 was £30 million on the £450 million convertible and £0.5 million on the $287.5 million convertible.

Bonds redeemable for shares

Instruments described as 'bonds redeemable for shares' were mostly identified by the French companies in our sample.

They were separated into equity and liability components. In contrast to other convertible bonds, the liability component was minimal, even reduced to zero in the absence of a coupon; and the major portion of the bond was therefore classified as equity by the issuer.

Some of the companies provided detailed discussions of the impact of this separation at the date of first-time adoption of IAS 32. For example, VIVENDI UNIVERSAL provided detailed information on the accounting treatment used for its bonds redeemable for shares at the date of transition to IAS 32 (and also explained why the liability component of the instrument was nil):

Corporate financial instruments *continued*

VIVENDI UNIVERSAL 2005 Annual Report, p280

(a) Impact on the IFRS transitional Statement of financial position as at January 1, 2004

ORA bonds

In the French GAAP Statement of financial position, the ORA bonds are recognized in Other equity for the nominal amount of the bond issue, i.e. €1,000 million. Under IFRS, due to the advance payment of interest in full on issue, the liability component is nil. The ORA bonds are therefore recognized in equity in the IFRS Statement of financial position at nominal value, net of issue costs and prepaid interest of €844 million, recognized in prepaid expenses as at January 1, 2004 in the French GAAP financial statements. The nominal value (€1,000 million) is recognized in Additional paid-in capital and residual issue costs and prepaid interest (€156 million) are deducted from reserves.

Foreign currency convertible bonds

In contrast to convertible bonds denominated in the company's functional currency, for which the conversion option is frozen in equity at inception, the conversion option implicit in a foreign currency convertible bond is accounted for as a derivative to be measured at fair value through the income statement.

ANGLO AMERICAN chose to explain its accounting policy in this regard:

ANGLO AMERICAN Annual Report 2005, p54

1. Accounting policies continued

Where the embedded option is in a convertible bond denominated in a currency other than the functional currency of the entity issuing the shares, the option is classified as a liability, in accordance with IFRIC guidance issued in their published update following their April 2005 meeting. The option is marked to market with subsequent gains and losses being recorded through the income statement within net finance costs.

Preference shares

The various forms of preference shares issued by the companies concerned were described in their reports, including information on the distribution and redemption features of the instruments. Instruments described specifically as 'preference shares' are principally found in Germany, Netherlands and the United Kingdom.

Under IAS 32 the specific characteristics of these financial instruments must be considered to determine whether they should be classified as equity or as a liability. Only limited information was generally given about the reasons for a particular classification.

UNILEVER provided detailed information on the reclassification of financial instruments consequent upon the adoption of IAS 32 and IAS 39 with effect from 1 January 2005, including an explanation of the reasons why the instruments concerned were required to be reclassified as liabilities according to the provisions of the standards:

UNILEVER Annual Report and Accounts 2005, p79

From 1 January 2005, Unilever has adopted IAS 32 'Financial Instruments: Disclosure and Presentation' and IAS 39 'Financial Instruments: Recognition and Measurement'. IAS 32 requires preference shares that provide for a fixed preference dividend to be classified as borrowings and preference dividends to be recognised in the income statement as a finance cost. IAS 39 requires unrealised fair value gains/(losses) on certain financial instruments to be recognised in equity; when realised, these fair value gains/(losses) are recognised in the income statement. In accordance with the transition rules for first time adoption of IFRSs, 2004 comparatives have not been restated. The impact of the adoption of IAS 32 and IAS 39, which was all attributable to shareholders' equity, is shown in note 23 and is summarised as follows:

	€ million
Equity as at 31 December 2004	7 629
Accounting policy change – preference shares	(1 502)
Accounting policy change – other financial instruments	388
Equity as restated at 1 January 2005	6 515

Management of financial risk and the use of derivatives

Derivatives are typically used by corporate companies to hedge foreign exchange risk, interest rate risk or commodity risk.

Foreign exchange risk

All the companies in our sample disclosed that they had exposure to foreign exchange risk, and nearly all indicated that they managed this risk using derivatives (forwards, swaps and options).

Sources of exposure that were disclosed included forecast transactions, firm commitments, and other balance sheet positions. It was very difficult to compare the extent to which derivatives were used by different companies, as the information disclosed and its presentation format varied from one company to another. The companies did not provide detailed quantitative information (currencies, amounts and maturities for each type of exposure) that would enable the relationship between the derivatives used and the exposures hedged to be seen. In most cases, the time frame disclosed for hedging of forecast transactions was between 12 and 18 months, and only exceeded this for certain specific transactions. The hedged portion of exposures was often expressed in the form of a percentage, but the overall amount of exposure was rarely provided.

INBEV provided a precise description of its net exposure for each currency before and after hedging:

INBEV Annual Report 2005, p105-106

As far as foreign currency risk on firm commitments and forecasted transactions is concerned, InBev's policy is to hedge operational transactions which are reasonably expected to occur (e.g. cost of goods sold and selling, general & administrative expenses) within maximum 15 months. Operational transactions that are certain (e.g. capital expenditure) are hedged without any limitation in time. Dividends are hedged as soon as they are declared unless the functional currency of the subsidiary, receiving the dividend, is considered a weak currency. Non operational transactions (e.g. acquisitions and disposals of subsidiaries) are hedged as soon as they are certain.

Corporate financial instruments *continued*

INBEV Annual Report 2005, p105-106

The table below provides an indication of the company's net foreign currency positions as regards firm commitments and forecasted transactions per 31 December 2005 for the most important currency pairs. The open positions are the result of the application of InBev's risk management policy. Positive amounts indicate that the company is long (net future cash inflows) in the first currency of the currency pair while negative amounts indicate that the company is short (net future cash outflows) in the first currency of the currency pair.

Million euro	Total exposure	Total derivatives	Open position
Brazilian real / euro	66	(66)	-
Canadian dollar / euro	36	(34)	2
Chinese yuan / euro	(632)	628	(4)
Czech koruna / euro	11	(11)	-
Hungarian forint/ euro	14	(14)	-
Pound sterling / euro	43	(43)	-
South Korean won / euro	7	(7)	-
Ukrainian hryvnia / euro	34	-	34
US dollar / Brazilian real	(270)	270	-
US dollar / Canadian dollar	(28)	39	11
US dollar / euro	101	(97)	4
US dollar / Pound sterling	34	(34)	-
US dollar / South Korean won	11	(11)	-
US dollar / Ukrainian hryvnia	(10)	-	(10)

FIAT provided details of its foreign exchange risk by currency and market, specifying the hedging policy associated with each of these exposures:

FIAT Annual Report 2005, p133

- Where a Group company incurs costs in a currency different from that of its revenues, any change in exchange rates can affect the operating result of that company.

  In 2005, the total trade flows exposed to exchange rate risk amounted to the equivalent of approximately 14% of the Group's turnover.

  The principal exchange rates to which the Group is exposed are the following:

  - EUR/USD, relating to sales in dollars made by Italian companies (in particular Ferrari and Maserati) to the North American market and to other markets in which the dollar is the trading currency, and to the production and purchases of the CNH Sector in the euro area;
  - EUR/GBP, principally in relation to sales by Fiat Auto and Iveco on the UK market;
  - EUR/PLN, relating to local costs incurred in Poland regarding products sold in the euro area;
  - USD/BRL and EUR/BRL, relating to Brazilian manufacturing operations and the related import and export flows, for which the company is a net exporter in US dollars.

  The trading flows exposed to changes in these exchange rates amounted in 2005 to about 75% of the total exchange rate risk from trading transactions.

  Other significant exposures regard the exchange rates EUR/CHF, EUR/TRY, USD/CAD USD/AUD, USD/GBP and USD/JPY. None of these exposures, taken individually, exceeded 5% of the Group's total transaction exchange risk exposure in 2005.

  It is the Group's policy to use derivative financial instruments to hedge a certain percentage, on average between 55% and 85%, of the trading transaction exchange risk exposure forecast for the coming 12 months (including that going beyond that date where it is believed to be appropriate in relation to the characteristics of the business) and to hedge completely the exposure resulting from certain contractual commitments.

Exchange rate sensitivity

14 companies in the sample disclosed information about the sensitivity of their financial instruments to a change in the exchange rate of the currencies to which they were exposed. However, it was often not possible to compare one company with another in this respect as different sensitivity calculations were used. Such calculations could be based on a single currency or several currencies combined. The magnitude of variations analysed also varied from one company to another, as did the indicators used (which were not always described). Examples of such indicators included impacts on:

- market value of derivatives (FIAT, CADBURY SCHWEPPES, BOUYGUES, SANOFI-AVENTIS)
- equity on cash flow hedges (DEUTSCHE TELEKOM)
- cash and cash equivalents, short-term and long-term debt and derivatives (REED ELSEVIER)
- liabilities denominated in foreign currencies (FRANCE TELECOM)
- debt, investments and associated derivatives (UNILEVER).

VIVENDI UNIVERSAL provided disclosures on the sensitivity to foreign exchange variations of +/– 5% and +/– 10% of revenue, earnings from operations, net cash flow from operating activities, redemption value of borrowings, and cash and cash equivalents:

VIVENDI UNIVERSAL 2005 Annual Report, p245

26.2.1. SENSITIVITY OF OPERATING INDICATORS AND INDEBTEDNESS TO THE US DOLLAR AND THE DIRHAM

An increase represents the appreciation of the euro against the currency concerned.

	USD				MAD			
Average exchange rate used over the year	1.2570				11.05			
Change assumptions	+5%	-5%	+10%	-10%	+5%	-5%	+10%	-10%
Revenues	-0.6%	0.6%	-1.3%	1.3%	-0.4%	0.5%	-0.8%	1.0%
Earnings from operations	-0.1%	0.1%	-0.1%	0.1%	-0.9%	1.0%	-1.8%	2.2%
Net cash provided by operating activities	-1.4%	1.4%	-2.7%	2.9%	-1.0%	1.1%	-1.9%	2.3%
	USD				MAD			
Exchange rate used as at December 31, 2005	1.1849				10.89			
Change assumptions	+5%	-5%	+10%	-10%	+5%	-5%	+10%	-10%
Redemption value of borrowings	-0.1%	0.1%	-0.1%	0.2%	-0.4%	0.5%	-0.8%	1.0%
Cash and cash equivalents	-0.1%	0.1%	-0.2%	0.2%	-1.1%	1.2%	-2.1%	2.6%

Hedges of foreign exchange risk

Most of the companies in our sample made use of all three types of hedging relationships – fair value hedges, cash flow hedges, and net investment hedges – that quality for hedge accounting under IAS 39. The foreign exchange exposures that were most frequently hedged were those associated with inter-currency loans and third party debt (fair value hedges), and highly probable transactions (cash flow hedges) while net investment hedging was commonly used to hedge the translating risk arising from companies net investment in their foreign operations.

Corporate financial instruments *continued*

PPR provided a clear, detailed description of its foreign currency hedges, breaking down the notional amounts of its derivatives by:

- currency (12 currencies identified)
- type of hedge (cash flow hedge, fair value hedge, not classified)
- type of instrument (forward, swap, option)
- direction of the position (call or put)
- maturity (< 1 yr and > 1 yr).

The type of transactions hedged and the related hedging relationship were also disclosed. The amount of balance sheet exposure (receivables, loans, investments, financial and operating debt) was broken down by currency, with gross balance sheet exposure presented before and after hedging the foreign exchange risk. Finally, a sensitivity indicator was provided in respect of derivatives not classified as hedges.

PPR 2005 Reference Document, p209

PPR Group uses instruments with the following outstanding notional amounts to manage foreign exchange risk:

(in € million)	**12.31.2005**	12.31.2004
Currency forwards and currency swaps	(1,058.3)	(1,032.5)
Currency options	(294.1)	(733.0)
Total	**(1,352.4)**	**(1,765.5)**

The Group primarily uses forward currency contracts and/or currency swaps to hedge commercial import/export risks and to hedge the financial risks stemming in particular from inter-company refinancing transactions in foreign currencies.

The Group can also be required to implement simple options strategies (purchase of options or tunnels) to hedge future exposures.

Pursuant to application of IAS 39, these financial instruments were analysed with respect to hedge accounting eligibility criteria.

As of December 31, 2005, documented and non-documented financial instruments were as follows:

29.2. Exposure to foreign exchange risk

(in € million)	**12.31.2005**	CHF	EUR	GBP	HKD	HRK	JPY	KRW	NOK	PLN	SEK	TWD	USD	Other
Cash flow hedge														
Forward purchases & forward purchase swaps	772.8		20.6	39.5	62.9		110.9						538.9	
Forward sales & forward sale swaps	(1,243.6)	(26.3)	(26.1)	(244.9)	(136.6)			(22.5)	(49.4)		(18.8)	(48.7)	(652.0)	(18.3)
Currency options - purchases of export tunnels	(454.3)						(423.4)						(30.9)	
Fair value hedge														
Forward purchases & forward purchase swaps	180.8	14.2	2.3	16.9	3.8	6.8	65.5						66.8	4.5
Forward sales & forward sale swaps	(738.9)	(241.4)	(12.0)	(93.6)	(9.7)	(47.6)	(40.3)	(6.3)				(4.2)	(266.4)	(17.4)
Not documented														
Forward purchases & forward purchase swaps	132.2	98.1	5.3	1.5			1.6						24.8	0.9
Forward sales & forward sale swaps	(161.6)	(12.7)		(1.0)	(0.2)		(2.2)			(18.2)	(0.4)		(126.9)	
Currency options - purchases	168.7	2.6		21.0	4.4				3.8				136.9	
Currency options - sales	(8.5)												(8.5)	
Maturity														
Less than one year														
Forward purchases & forward purchase swaps	1,083.6	112.3	28.2	57.9	66.7	6.8	178.0						628.3	5.4
Forward sales & forward sale swaps	(2,129.4)	(280.4)	(38.1)	(339.5)	(146.5)	(47.6)	(42.5)	(24.9)	(49.4)	(18.2)	(17.4)	(44.4)	(1,044.8)	(35.7)
Currency options - purchases of export tunnels	(395.5)						(364.6)						(30.9)	
Currency options - purchases	162.6	1.9		18.1	4.4				1.3				136.9	
Currency options - sales	(8.5)												(8.5)	
More than one year														
Forward purchases & forward purchase swaps	2.2												2.2	
Forward sales & forward sale swaps	(14.7)							(3.9)			(1.8)	(8.5)	(0.5)	
Currency options - purchases of export tunnels	(58.8)						(58.8)							
Currency options - purchases	6.1	0.7		2.9					2.5					
Currency options - sales														

PPR 2005 Reference Document, p208–210 (continued)

Foreign exchange derivative instruments are recognised in the balance sheet at their market value at the year end.

Derivatives qualifying as cash flow hedges hedge highly probable future flows (not yet recognised) based on budgets for the current period (season or catalogue, quarter, half-year, etc.) or certain future flows not yet recognised (firm orders).

Derivatives qualifying as fair value hedges hedge items recognised in the Group balance sheet at the year end or certain future flows not yet recognised (firm orders). These hedges mainly concern the Luxury Goods Division in the case of hedges of items recognised in the balance sheet and some Retail Division brands in the case of firm commitments.

Some foreign exchange derivatives classified for management purposes as being of a hedging nature are not documented for the purposes of hedge accounting under IAS 39 and as such fair value movements in respect of these derivative instruments are recorded in finance costs.
These derivatives mainly hedge balance sheet items and future flows which do not satisfy the highly probable criteria required by IAS 39.

Based on market data at the year end, foreign exchange instruments not qualifying for hedge accounting would have an impact of €0.5 million on finance costs in the event of a 1% change in foreign exchange rates.

As of December 31, 2005, the exposure to foreign exchange risk on the balance sheet is as follows:

(in € million)	12.31.2005	CHF	EUR	GBP	HKD	HRK
Money market assets	1,272.7	295.0	17.9	140.1	9.7	40.2
Money market liabilities	(1,002.7)	(112.2)	(29.9)	(189.0)	(4.2)	
Group exposure in the balance sheet (before hedging)	270.0	182.8	(12.0)	(48.9)	5.5	40.2
Group exposure in the balance sheet (after hedging)	(335.9)	40.8	(17.0)	(127.2)	0.6	

(in € million)	JPY	KRW	NOK	PLN	SEK	TWD
Money market assets	39.2	6.3	1.6	18.0	6.1	4.2
Money market liabilities	(396.2)				(4.7)	
Group exposure in the balance sheet (before hedging)	(357.0)	6.3	1.6	18.0	1.4	4.2
Group exposure in the balance sheet (after hedging)	(355.0)				1.4	

(in € million)	USD	Other	12.31.2004
Money market assets	678.2	16.1	510.0
Money market liabilities	(259.1)	(7.4)	(800.1)
Group exposure in the balance sheet (before hedging)	419.1	8.7	(290.1)
Group exposure in the balance sheet (after hedging)	127.4	(6.9)	(418.3)

Money market assets comprise loans and receivables, bank balances, investments and cash equivalents with a maturity of less than three months at the acquisition date.
Money market liabilities comprise borrowings, operating payables and other payables.

Translation exposure – net investment hedges

Translation exposure arises from consolidating the foreign currency-denominated financial statements of a group's foreign subsidiaries.

A substantial number of companies specified that they sought to maximise natural hedges through their foreign subsidiaries, matching the currency of revenue, costs and financing.

24 companies in the sample stated that they had set up net investment hedges, although most of them provided little information on the strategy and hedging characteristics.

Corporate financial instruments *continued*

RWE gave more information than most:

RWE Consolidated Financial Statements 2005, p152-153

> ***Hedges of a net investment in a foreign entity.*** RWE hedges a significant portion of the foreign currency risks of net investment in foreign entities using bonds with various terms in the appropriate currency as well as with interest rate currency swaps. Every hedge is assigned to an underlying transaction. Exchange rate changes from bonds used for hedging purposes and changes in the fair value of interest rate currency swaps are subsumed under the currency translation adjustment disclosed under other comprehensive income.

CRH provided the following description of its risk management and hedging policy on translation risk:

CRH Annual Report 2005, p91–92

> *Foreign currency risk*
> Due to the nature of building materials, which in general exhibit a low value to weight ratio, CRH's activities are conducted primarily in the local currency of the country of operation resulting in low levels of foreign currency transaction risk; variances arising in this regard are reflected in operating costs or cost of sales in the Income Statement in the period in which they arise.
>
> Given its presence in 25 countries worldwide, the principal foreign exchange risk is translation-related arising from fluctuations in the euro value of the Group's net investment in currencies other than the euro. The Group's established policy is to spread its net worth across the currencies of its various operations with the objective of limiting its exposure to individual currencies and thus promoting consistency with the geographical balance of its operations. In order to achieve this objective, the Group manages its borrowings, where practicable and cost effective, to partially hedge its foreign currency assets. Hedging is done using currency borrowings in the same currency as the assets being hedged or through the use of other hedging methods such as currency swaps.

Embedded foreign currency derivatives in non-financial contracts

Although not required to do so, some companies in the sample disclosed that they had foreign currency embedded derivatives in non-financial contracts. For example Suez and CADBURY SCHWEPPES identified such derivatives in commodity contracts, and EADS identified them in purchase and lease contracts. Changes in the value of embedded derivatives were generally disclosed in the notes to the financial statements but their characteristics were not specified, therefore it was difficult to determine the potential impact of embedded derivatives. However, in each of these cases the fair value of the embedded foreign currency derivatives was not significant in the context of the company concerned.

Interest rate risk

Risk management policy

Virtually all of the companies specified that they use derivatives to manage their interest rate risk. A number of companies explained their interest rate risk management policy, and differences in strategy could be identified from the financial statements of those which gave more detailed information. Some companies stated they were no longer exposed to interest rate risk when all of their debt was set at a fixed rate, whereas others stated they were not exposed when they had only floating rate debt – an interesting philosophical difference. Among the companies that specified their interest rate management policy:

- nine chose to combine fixed and floating rate in a balanced manner (eg PPR, SANOFI-AVENTIS, CRH and HEINEKEN)
- six had a policy which aimed to manage fixed interest rates (eg DANONE, BOUYGUES and PUBLICIS)
- five gave precedence to floating rate exposure (BP, ASTRAZENECA, ERICSSON, NOVARTIS and RIO TINTO)
- three stated that they had a policy of reducing the portion of fixed-rate borrowings over time (REED ELSEVIER, UNILEVER and CADBURY SCHWEPPES).

The presentation format of the interest rate and maturity profile of debt varied widely from one company to another. Variations included gross or net debt, either before or after the effect of hedging. Some described each of their financial instruments in a fairly discursive manner. However, most of the companies summarised all their financial instruments in tables. There was a wide range of formats which did not present the same type of information, and hedging transactions were not always explicitly taken into consideration. Consequently the strategies, the use of derivatives, and the impact on the companies' interest rate risk profile were often difficult to compare.

RIO TINTO presented a clear debt profile table before and after taking account of the effect of interest rate swaps and other relevant derivatives:

RIO TINTO Annual Report and Financial Statements 2005, p136–137

C) INTEREST RATES

i) Interest bearing financial assets and financial liabilities

The interest rate composition of the Group's interest bearing financial assets and liabilities is shown below. This table deals with the carrying values of the financial instruments in the balance sheet, with the values of derivatives shown separately.

	Floating rate	Fixed interest rates Amounts falling due in: 1 year or less	1-2 years	2-3 years	3-4 years	4-5 years	5 years or more	**Total 2005**
		US$m	US$m	US$m	US$m	US$m	US$m	**US$m**
Financial liabilities								
Borrowings	(1,061)	(893)	(1,146)	(630)	(9)	(11)	(223)	**(3,973)**
Bank overdrafts	(12)	–	–	–	–	–	–	**(12)**
Interest rate swaps (a)	(2,213)	886	1,138	265	(76)	–	–	**–**
Derivatives related to net debt	(24)	–	–	(1)	(3)	–	–	**(28)**
	(3,310)	(7)	(8)	(366)	(88)	(11)	(223)	**(4,013)**
Financial assets								
Loans to jointly controlled entities (b)	384	–	–	–	–	–	–	**384**
US Treasury bonds	–	109	–	–	–	–	–	**109**
Other investments	275	–	–	–	–	–	–	**275**
Derivatives related to net debt	316	–	–	–	–	–	–	**316**
Cash and cash equivalent and liquid resources	2,384	–	–	–	–	–	–	**2,384**
	3,359	109	–	–	–	–	–	**3,468**

(a) These are the notional principal amounts which swap the fixed rate liabilities into floating rate, and certain floating rate swaps into fixed rate.
(b) Loans to jointly controlled entities include amounts of US$225 million, which are not expected to be repaid and so form part of the Group's net investment in the jointly controlled entity.
(c) Interest rates on the great majority of the Group's floating rate financial liabilities and assets will have been reset within six months. The interest rates applicable to the Group's US dollar denominated floating rate financial liabilities and assets did not differ materially at the year end from the three month US dollar LIBOR rate of 4.5 per cent (2004: 2.5 per cent).
(d) The above table excludes US$72 million of equity shares and quoted funds, which are not interest bearing.
(e) As at 31 December 2004, under UK GAAP, the Group's total carrying values of financial liabilities and financial assets other than trade and other receivables and payables were US$4,393 million and US$645 million respectively. The financial liabilities consisted of US$758 million fixed rate, US$3,385 million floating rate; and US$250 million non interest bearing liabilities, which were presented in the financial statements on a discounted basis using a discount rate of 3.8 per cent. The financial assets consisted of US$87 million fixed rate and US$558 floating rate assets.

(ii) Fixed rate liabilities after swaps

The remaining US$703 million (2004: US$923 million) of fixed rate liabilities comprise gross liabilities at fair value of US$2,912 million (2004: at face value of US$2,835 million) less amounts converted to floating rate by means of interest rate swaps of US$2,346 million (2004: US$2,270 million), plus amounts converted into fixed rate of US$137 million (2004 US$358 million) by means of interest rate swaps. These fixed rate liabilities are summarised below.

Maturity	Principal US$m	Average fixed rate % p.a.	**2005 Excess of fair value over principal US$m**	Principal US$m	Average fixed rate % p.a.	2004 Excess of fair value over principal US$m
Less than 1 year	7	9.6	**(3)**	229	7.1	(10)
1 to 5 years	473	4.0	**16**	462	4.0	(6)
More than 5 years	223	8.9	**(32)**	232	8.9	(40)
Fixed rate liabilities	703	5.6	**(19)**	923	5.9	(56)

(a) As a consequence of acquisitions during 2000, the Group holds a number of interest rate swaps to receive US$ floating rates and pay US$ fixed rates which have been included in the total of fixed rate debt shown above.
(b) The Group has US$112 million of finance leases (2004: US$133 million), the largest of which has a principal of US$60 million, a maturity of 2018 and a floating interest rate.
(c) The carrying value of the Group's fixed rate debt totals US$703 million and has a weighted average interest rate of 5.6 per cent and a weighted average time to maturity of five years (2004: US$923 million with a weighted average interest rate of 5.9 per cent and a weighted average time to maturity of five years).

(iii) Fixed rate assets

Total fixed rate financial assets for the Group at 31 December 2005 were US$109 million, with a fair value of US$108 million (2004: US$87 million with a fair value of US$87 million). The average fixed rate per annum for 2005 was 3.5 per cent (2004: 2.1 per cent).

Corporate financial instruments *continued*

Interest rate sensitivity

Sensitivity to interest rate risk was more frequently disclosed than sensitivity to foreign exchange risk, with twice as many companies disclosing this risk (27 companies). The most common indicator presented was the impact of a change of 100 basis points on finance costs and/or on the fair value of fixed-rate financial assets and liabilities. In general, the impact of hedging derivatives was not disclosed separately. However, the sensitivity of interest rate derivatives that did not qualify for hedge accounting was sometimes disclosed separately (eg DEUTSCHE TELEKOM).

ASTRAZENECA provided the following presentation of the sensitivity of financial instruments to interest rate and foreign exchange rate risk:

ASTRAZENECA Annual Report and Form 20-F Information 2005, p101

Sensitivity analysis

The sensitivity analysis set out below summarises the sensitivity of the market value of our financial instruments to hypothetical changes in market rates and prices. Changes to the value of the financial instruments are normally offset by our underlying transactions or assets and liabilities. The range of variables chosen for the sensitivity analysis reflects our view of changes which are reasonably possible over a one year period. Market values are the present value of future cash flows based on market rates and prices at the valuation date. For long term debt, an increase in interest rates results in a decline in the fair value of debt.

The sensitivity analysis assumes an instantaneous 100 basis point change in interest rates in all currencies from their levels at 31 December 2005, with all other variables held constant. Because all our debt was hedged effectively to floating rates in 2005, changes in interest rates will not change the carrying value of debt after interest rate swaps. Based on the composition of our long term debt portfolio as at 31 December 2005, a 1% increase in interest rates would result in an additional $10m in interest expense being incurred per year. The exchange rate sensitivity analysis assumes an instantaneous 10% change in foreign currency exchange rates from their levels at 31 December 2005, with all other variables held constant. The +10% case assumes a 10% strengthening of the US dollar against all other currencies and the -10% case assumes a 10% weakening of the US dollar.

31 December 2005

		Market value change favourable/(unfavourable)			
	Market value 31 December 2005	Interest rate movement		Exchange rate movement	
		+1%	-1%	+10%	-10%
	$m	$m	$m	$m	$m
Cash and fixed deposits	6,528	–	–	(46)	46
Long term debt, net of interest rate swaps	(1,062)	–	–	–	–
Foreign exchange forwards	10	–	–	(45)	45
Foreign exchange options	–	–	–	–	–
		–	–	(91)	91

Value at Risk

Three companies in the sample presented Value at Risk calculations: BP, SUEZ and NOKIA. METRO, EDF and RWE mentioned that this indicator was used but did not disclose any details of how they applied it.

Classification of interest rate risk hedges

It was not always possible to identify the type of hedging relationship involved in interest rate hedges.

Among companies that clearly communicated this information, most disclosed that they used the fair value hedge classification (referring to hedges contracted in respect of borrowings that were originally issued at a fixed rate). Only three companies disclosed that they used cash flow hedges to hedge interest rate risks (SANOFI-AVENTIS, HEINEKEN and WESTFIELD).

PSA PEUGEOT CITROËN, ROCHE and ASTRAZENECA applied the fair value option to some of their fixed-rate assets or liabilities that are being hedged economically but do not qualify for hedge accounting.

Approximately one third of the companies in the sample specified that some of their economic hedges of interest rate risk did not qualify for hedge accounting.

Commodity risk

27 companies in the sample stated that they used derivatives to manage their exposure to market risk in respect of commodities. Eight of these (TOTAL, EDF, SUEZ, BP, RWE, ENEL, ROYAL DUTCH SHELL and to a lesser extent IBERDROLA) referred to commodity trading activities, suggesting that commodity derivatives may have had a significant impact on the financial statements of these companies. Of the companies that disclosed quantitative information regarding the impact of commodity derivatives qualifying for hedge accounting, 21 stated they had implemented hedge accounting for commodity derivatives, and most of them classified these derivatives as cash flow hedges, with the fair value hedge category used by only two companies.

Commodities contracts falling outside the scope of IAS 39

Contracts to buy or sell a non-financial that can be settled net in cash or another financial instrument (rather than by physical delivery) are within the scope of IAS 39 except for 'own use' contracts undertaken in the 'ordinary' course of business of a company, in accordance with its expected purchase, sale or usage requirements.

As a consequence, companies that have commodity transactions – particularly forward purchases and sales giving rise to physical delivery – must analyse whether such contracts fall within the scope of IAS 39. For example, the criteria applied in order to qualify the commodity contracts of the company as 'own use' or derivatives in the scope of IAS 39, allocation of contracts to different portfolios corresponding to specific management strategies, and methods of subsequent monitoring were not disclosed. 20 of the 27 companies referred to above did not discuss this issue at all and the extent of the information disclosed by the other seven was variable.

SUEZ explained how the concept of 'own use' applied to its own commodity activities:

SUEZ 2005 Reference Document, p198

The price set for the acquisition of the company's entire share capital was €846.7 million.

The significant effects of this acquisition on the Group's financial statements which could impact year-on-year comparisons are:

- the recognition of a payable due to SNCF, recorded under "Other financial liabilities" in an amount of €499 million, reflecting Electrabel's commitment to purchase the second 40% tranche of SHEM's capital and the put option relating to SNCF's residual 19.6% minority interest;
- the recognition of €230 million in goodwill following the allocation to acquired assets and liabilities, principally to "Property, plant and equipment" and "Deferred tax," in an amount of €456 million.

In respect of non-current assets the impact of this transaction on year-on-year comparability is relatively limited in spite of SHEM's size, due to the Group's decision to elect for the early adoption of IFRIC 4 – Determining Whether an Arrangement Contains a Lease, as from January 1, 2004.

In 2002, prior to the acquisition of shares in SHEM, Electrabel had already entered into an agreement with SNCF, authorizing Electrabel to market SHEM's production capacity. Since this agreement conveys a "right of use" as defined by IFRIC 4 and meets the definition of a "finance lease" as set out in IAS 17 – Leases, the comparative consolidated financial statements for 2004 already include SHEM's property, plant and equipment in an amount of €702 million, recording against liabilities.

Corporate financial instruments *continued*

Embedded derivatives

Six companies disclosed the existence of embedded derivatives in commodity contracts:

- SAINT-GOBAIN stated that contracts were analysed on a regular basis to identify the existence of embedded derivatives, and that there was no material impact at group level as of 31 December 2005.
- EDF disclosed the impact of embedded commodity derivatives at the transition date.
- ROYAL DUTCH SHELL disclosed in the notes to its financial statements the existence of embedded derivatives, but without specifying the type of contracts concerned or the type of underlying concerned, and without giving specific quantitative data.
- CADBURY SCHWEPPES disclosed the existence of foreign currency derivatives embedded within commodity contracts, and it also presented the total fair value of embedded derivatives recognised in the balance sheet.
- BP and SUEZ provided the most extensive information in this regard, both in qualitative and quantitative terms (particularly with regard to the breakdown by maturity date of the notional amount and the fair value of derivatives embedded in commodity contracts). An extract from Note 35 to the financial statements of BP is shown on the next page.

Seven other companies included the general definition and accounting treatment of embedded derivatives in commodity contracts in the accounting policies note. However, these companies did not present any information on the nature of actual embedded derivatives in their commodity contracts or any quantitative data regarding embedded derivatives.

BP disclosed the following in respect of its embedded derivatives:

BP Annual Report and Accounts 2005, p77

35 Derivative financial instruments *continued*

EMBEDDED DERIVATIVES HELD FOR TRADING

Prior to the development of an active gas trading market, UK gas contracts were priced using a basket of available price indices, primarily relating to oil products. Post the development of an active UK gas market, certain contracts were entered into or renegotiated using pricing formulae not directly related to gas prices, for example, oil product and power prices. In these circumstances, pricing formulae have been determined to be derivatives, embedded within the overall contractual arrangements that are not clearly and closely related to the underlying commodity. The resulting fair value relating to these contracts is recognized on the balance sheet with gains or losses recognized in the income statement.

These contracts are valued using price curves for each of the different products that are built up from active market pricing data and extrapolated to 2018 using the maximum available external pricing information. Additionally, where limited data exists for certain products, prices are interpolated using historic and long-term pricing relationships.

The fair values of embedded derivatives are included on the balance sheet within the following headings.

$ million

	2005		
	Current	Non-current	Total
Prepayments and accrued income	330	257	587
Accruals and deferred income	(953)	(2,175)	(3,128)
	(623)	(1,918)	(2,541)

Embedded derivatives have the following maturities:

$ million

	2005	
	Fair value asset	Fair value liability
Within one year	330	(953)
1 to 2 years	176	(703)
2 to 3 years	76	(502)
3 to 4 years	5	(237)
4 to 5 years	–	(180)
Over 5 years	–	(553)
	587	(3,128)

Embedded derivative assets are denominated in the following currencies:

$ million

	2005				
	Currency of denomination				
	US dollar	Sterling	Euro	Other currencies	Total
Functional currency					
US dollar	79	–	–	–	79
Sterling	–	508	–	–	508
	79	508	–	–	587

Embedded derivative liabilities are denominated in the following currencies:

$ million

	2005				
	Currency of denomination				
	US dollar	Sterling	Euro	Other currencies	Total
Functional currency					
US dollar	(30)	–	–	–	(30)
Sterling	–	(3,098)	–	–	(3,098)
	(30)	(3,098)	–	–	(3,128)

Embedded derivative assets held for trading have the following contractual or notional values and maturities:

$ million

	2005						
	Less than 1 year	1-2 years	2-3 years	3-4 years	4-5 years	Over 5 years	Total fair value
Natural gas embedded derivatives							
Fair value	330	176	76	5	–	–	587
Notional value	425	484	465	450	429	2,367	4,620

Embedded derivative liabilities held for trading have the following contractual or notional values and maturities:

$ million

	2005						
	Less than 1 year	1-2 years	2-3 years	3-4 years	4-5 years	Over 5 years	Total fair value
Natural gas embedded derivatives							
Fair value	(953)	(703)	(472)	(237)	(180)	(553)	(3,098)
Notional value	740	870	1,097	832	767	4,257	8,563
Interest rate embedded derivatives							
Fair value	–	–	(30)	–	–	–	(30)
Notional value	–	–	150	–	–	–	150

Corporate financial instruments *continued*

Fair value disclosures of commodity derivative contracts

The companies in our sample disclosed financial information about commodity derivatives and their exposure to related market risks in different ways.

The 27 companies that used commodity derivatives provided varying levels of information about the fair value of these instruments. The breakdown of the fair value of these derivatives between the assets and the liabilities (unrealised gains or losses) was not always disclosed. The disclosures varied by the type of underlying commodity concerned, the type of derivative (forwards, swaps, futures, options), the direction of exposure (purchaser/seller), and the period to maturity.

Both BP and SUEZ presented detailed information on the fair value of their commodity derivatives. In particular, these companies distinguished between the different sources of valuation (prices quoted on an active market/prices from other external sources/prices based on models or other valuation techniques):

SUEZ 2005 Reference Document, p254-255

Fair value

The following table shows the fair values of derivative instruments used in energy trading activities at December 31, 2005 and December 31, 2004 (as published in the notes to the 2004 consolidated financial statements prepared under French GAAP).

In millions of euros	Fair value at Dec. 31, 2005*	Fair value at Dec. 31, 2004
Natural gas and electricity	55.3	21.8
Fuel, gas oil and heating oil	36.0	2.6
Crude oil	(7.0)	(0.4)
Environment (CO_2)	21.3	-
TOTAL	**105.6**	**24.0**

(*) Foreign currency impacts relating to trading transactions, representing a negative €1.9 million in 2005, are not shown in the table.

These fair values are not representative of probable future cash flows because the underlying positions are sensitive to price movements and may also be modified by new transactions.

The table below shows the fair values of derivatives held by the Group at December 31, 2005 as part of its energy trading activities, analyzed by valuation method and maturity.

Fair value calculation method	Fair value of contracts at December 31, 2005						Total fair value
In millions of euros	2006	2007	2008	2009	2010	> 5 years	
Price quoted on an organized market	83.1	30.0	(0.2)	(0.4)	(0.5)	1.7	113.7
Price obtained from other external sources	(1.6)	(20.5)	3.1				(19.0)
Price based on valuation models or other techniques	19.6	(1.6)	(6.6)	(1.2)	(1.2)		9.0
TOTAL	**101.1**	**7.9**	**(3.7)**	**(1.6)**	**(1.7)**	**1.7**	**103.7**

BP Annual Report and Accounts 2005, p74-75

DERIVATIVES HELD FOR TRADING

The group maintains active trading positions in a variety of derivatives. This activity is undertaken in conjunction with risk management activities. Derivatives held for trading purposes are marked-to-market and any gain or loss recognized in the income statement. For traded derivatives, many positions have been neutralized, with trading initiatives being concluded by taking opposite positions to fix a gain or loss, thereby achieving a zero net market risk.

The following table shows the fair value at 31 December of derivatives and other financial instruments held for trading purposes. The fair values at the year end are not materially unrepresentative of the position throughout the year.

Derivatives held for trading have the following maturities: $ million

	2005	
	Fair value asset	Fair value liability
Within one year	9,487	(8,924)
1 to 2 years	2,019	(2,155)
2 to 3 years	685	(677)
3 to 4 years	455	(278)
4 to 5 years	145	(121)
Over 5 years	192	(154)
	12,983	(12,309)

Derivative assets held for trading are denominated in the following currencies: $ million

	2005				
	Currency of denomination				
	US dollar	Sterling	Euro	Other currencies	Total
Functional currency					
US dollar	10,232	137	–	4	10,373
Sterling	–	1,106	1,504	–	2,610
	10,232	1,243	1,504	4	12,983

Derivative liabilities held for trading are denominated in the following currencies: $ million

	2005				
	Currency of denomination				
	US dollar	Sterling	Euro	Other currencies	Total
Functional currency					
US dollar	(9,223)	(110)	–	–	(9,333)
Sterling	–	(1,453)	(1,523)	–	(2,976)
	(9,223)	(1,563)	(1,523)	–	(12,309)

Derivative assets held for trading have the following contractual or notional values and maturities: $ million

	2005						
	Less than 1 year	1-2 years	2-3 years	3-4 years	4-5 years	Over 5 years	Total fair value
Currency derivatives							
Fair value	28	6	1	1	1	4	41
Notional value	358	73	51	28	32	92	634
Oil price derivatives							
Fair value	2,476	225	37	19	8	–	2,765
Notional value	52,260	3,378	676	45	35	–	56,394
Natural gas price derivatives							
Fair value	4,509	1,194	528	292	125	188	6,836
Notional value	113,897	17,562	8,560	4,021	2,068	2,686	148,794
Power price derivatives							
Fair value	2,474	594	119	143	11	–	3,341
Notional value	19,149	5,049	857	535	196	–	25,786

Corporate financial instruments *continued*

BP Annual Report and Accounts 2005, p74-75 (continued)

Derivative liabilities held for trading have the following contractual or notional values and maturities:

$ million

	Less than 1 year	1-2 years	2-3 years	3-4 years	4-5 years	Over 5 years	2005 Total fair value
Currency derivatives							
Fair value	(12)	(4)	(1)	(1)	–	–	(18)
Notional value	1,013	177	119	170	67	141	1,687
Oil price derivatives							
Fair value	(2,486)	(275)	(26)	(20)	(19)	–	(2,826)
Notional value	49,732	2,276	446	35	35	–	52,524
Natural gas price derivatives							
Fair value	(3,967)	(1,319)	(591)	(187)	(89)	(154)	(6,307)
Notional value	90,916	25,269	6,457	2,903	1,577	1,208	128,330
Power price derivatives							
Fair value	(2,459)	(557)	(59)	(70)	(13)	–	(3,158)
Notional value	20,030	4,990	778	625	195	–	26,618

The following table shows the net fair value of derivatives held for trading at 31 December 2005 analysed by maturity period and by methodology of fair value estimation.

$ million

	Less than 1 year	1-2 years	2-3 years	3-4 years	4-5 years	Over 5 years	2005 Total fair value
Prices actively quoted	(100)	(86)	46	42	33	(8)	(73)
Prices sourced from observable data or market corroboration	660	(48)	(41)	60	(11)	–	620
Prices based on models and other valuation methods	3	(2)	3	75	2	46	127
	563	(136)	8	177	24	38	674

Prices actively quoted refers to the fair value of contracts valued in whole using prices actively quoted, for example, exchange-traded and UK National Balancing Point (NBP) contracts. Prices provided by other external sources refers to the fair value of contracts valued in part using active quotes and in part using observable, market-corroborated data or internal inputs, for example, swaps and physical forward contracts. Prices based on models and other valuation methods refers to the fair value of a contract valued in part using internal models due to the absence of quoted prices, including over-the-counter options. The net change in fair value of contracts based on models and other valuation methods during the year is a gain of $130 million.

BP and Suez were the only companies in the sample to disclose an analysis of changes in the fair value of commodity derivatives for the period, including the impact of changes in valuation techniques and of changes based on observable market data.

BP Annual Report and Accounts 2005, p75

The following tables show the changes during the year in the net fair value of derivatives held for trading purposes for 2005.

$ million

	Fair value exchange rate contracts	Fair value oil price contracts	Fair value natural gas price contracts	Fair value power price contracts
Fair value of contracts at 1 January 2005	(54)	(171)	558	177
Contracts realized or settled in the year	23	175	(735)	76
Fair value of new contracts when entered into during the year	–	–	24	10
Fair value of over-the-counter options at inception	–	(73)	(65)	(9)
Change in fair value due to changes in valuation techniques or key assumptions	–	–	–	–
Other changes in fair values	54	8	747	(71)
Fair value of contracts at 31 December 2005	23	(61)	529	183

The following table shows the fair value of 'day one profit' deferred on the balance sheet.

$ million

	Fair value natural gas price contracts	Fair value power price contracts
Fair value of contracts not recognized through the income statement at 1 January 2005	(15)	–
Fair value of new contracts at inception not recognized in the income statement	(14)	(10)
Fair value recycled from equity into the income statement	–	–
Other changes in fair values	–	–
Fair value of contracts not recognized through profit at 31 December 2005	(29)	(10)

SUEZ 2005 Reference Document, p255

Changes in fair value

Commodity derivatives	Dec. 31, 2005 Changes in fair value *(in millions of euros)*	Dec. 31, 2004 Changes in fair value *(in millions of euros)*
Opening balance sheet	24.0	19.6
Contracts unwound or settled during the year	(34.5)	(23.7)
Initial fair value of new contracts [a]	-	
Changes in fair value due to changes in valuation techniques [b]	3.1	(0.5)
Other changes in fair value [c]	121,6	28.6
Other [d]	(10.5)	
TOTAL	**103.7**	**24.0**

(a) Energy trading contracts with unrealized gains or losses at inception.

(b) Including changes in valuation techniques, changes in methods of calculating correlations, volatilities and volume forecasts, market changes, and changes in the characteristics of historical data and source/type of assumptions.

(c) Changes in fair value due to market fluctuations (prices, volatility, etc.).

(d) Representing mainly a reclassification of the fair value of contracts under the "Other commodity derivatives" line in accordance with IAS 39.

18 of the 27 companies that reported using commodity contracts provided information on the notional amounts (gross or net) of their commodity derivatives. The notional amounts were also broken down depending on the type of underlying commodity contract, type of derivative, currency, direction of the exposure (buyer/seller), maturity period and accounting category (hedge/held for trading).

In its note on financial instruments related to commodity contracts, TOTAL explained the basis of the notional value of the different types of contract.

TOTAL Registration Document 2005, p213

B. Financial instruments related to commodity contracts

These financial instruments are recognized at their fair value and recorded under the "Accounts receivable and other current assets" or "Accounts payable and other creditors" depending whether they are assets or liabilities.

As of December 31, 2005 (in millions of euros) **ASSETS/(LIABILITIES)**	**Notional value - assets** [1]	**Notional value - liabilities** [1]	**Carrying amount**	**Fair Value**
Commodities instruments on crude oil, petroleum products and freight rates				
Petroleum products and crude oil swaps [1]	5,474	6,356	13	13
Forward freight agreements	46	47	-	-
Forwards [2]	4,839	5,156	(14)	(14)
Options [3]	5,426	3,770	79	79
Futures [4]	627	2,045	(35)	(35)
Options on futures [3]	398	178	13	13
Total - Commodities instruments on crude oil, petroleum products and freight rates			**56**	**56**
Commodities instruments on gas and power				
Swaps [1]	1,205	1,017	28	28
Forwards	7,656	9,080	(623)	(623)
Options [3]	60	41	-	-
Futures [4]	177	43	35	35
Total - Commodities instruments on gas and power			**(560)**	**(560)**
Total			**(504)**	**(504)**
Total of fair value not recognized in the balance sheet				-

(1) Swaps (including "Contracts for differences"): the "Notional value" columns correspond to receive-fixed and pay-fixed swaps.

(2) Forwards: contracts resulting in physical delivery are accounted for as derivative commodity contracts and included in the amounts shown. The 2004 figures have consequently been adjusted.

(3) Options: the "Notional value" columns correspond to the nominal value of options (calls or puts) purchased and sold, valued based on the strike price.

(4) Futures: the "Notional value" columns correspond to the net purchasing/selling positions, valued based on the closing rate on the organized exchange market.

Corporate financial instruments *continued*

The quantitative data disclosed by companies on their exposure to the risk of price changes in commodities would not be expected to take into consideration commitments relating to contracts excluded from the scope of IAS 39 ('own use' contracts). However, several companies disclosed information about the extent of their commitments in respect of 'own use' commodity contracts, for example:

- ANGLO AMERICAN disclosed the quantity of gold sold forward under what it described as normal sales contracts, and the maturity and fair value of those contracts at the reporting date.
- BASF presented a maturity analysis of purchase commitments beyond one year for commodities with fixed or determinable prices.
- SUEZ presented a maturity analysis of firm purchase and sale commitments of commodities, fuel, and services valued at closing spot rates (or contract price where relevant) and discounted based on the yield on investment grade corporate bonds.

Four companies in the sample (BP, CADBURY SCHWEPPES, TOTAL, and SUEZ) provided quantitative information about the sensitivity of their results to the effect of a change in commodity prices on their net commodity positions:

- CADBURY SCHWEPPES presented an indicator of sensitivity to adverse changes in market prices based on the average of historical monthly changes in commodity prices over a two-year period:

CADBURY SCHWEPPES Report and Accounts 2005, p129

> The commodities futures contracts held by the Group at the year-end exposes the Group to adverse movements in cash flow and gains or losses due to the market risk arising from changes in prices for sugar, cocoa and aluminium traded on the LIFFE (London International Financial Futures and Options Exchange), LME (London Metals Exchange) and CSCE (Coffee, Sugar and Cocoa Exchange, Inc). Applying a reasonable adverse movement in commodity prices to the Group's net commodity positions held at year end would result in a decrease in fair value of £6.8 million (2004: £11.6 million). The price sensitivity applied in this case is estimated based on an absolute average of historical monthly changes in prices in the Group's commodities over a two year period. Stocks, priced forward contracts and estimated anticipated purchases are not included in the calculations of the sensitivity analysis. This method of analysis is used to assess and mitigate risk and should not be considered a projection of likely future events and losses. Actual results and market conditions in the future may be materially different from the projection in this note and changes in the instruments held and in the commodities markets in which the Group operates could cause losses to exceed the amounts projected.

- TOTAL presented information on the 'Value at Risk' for their commodity trading activities:

TOTAL Registration Document 2005, p214

> To measure market risks related to the prices of oil and gas products, the Group uses a "value at risk" method. Under this method, for the Group's crude oil and refined products trading activities, there is a 97.5% probability that unfavorable daily market variations would result in a loss of less than 7.7 M€ per day, defined as the "value at risk", based on positions as of December 31, 2005. Over the year 2005, the average value at risk was 9.7 M€, the lowest value at risk was 4.2 M€, the highest value at risk was 17.6 M€.

In addition, BP provided information on the sensitivity of the fair value of its embedded derivatives to changes in key assumptions:

BP Annual Report and Accounts 2005, p78

Sensitivity analysis Detailed below for the embedded derivatives is a sensitivity of the fair value to immediate 10% favourable and adverse changes in the key assumptions.

	At 31 December 2005
Remaining contract terms	3 to 13 years
Contractual/notional amount	8,220 million therms
Discount rate – nominal risk free	4.5%
Fair value asset (liability)	$(2,590) million

$ million

	Natural gas price	Gas oil and fuel oil price	Power price	Discount rate
Favourable 10% change	408	30	(63)	34
Unfavourable 10% change	(427)	(45)	58	(34)

These sensitivities are hypothetical and should not be considered to be predictive of future performance. Changes in fair value generally cannot be extrapolated because the relationship of change in assumption to change in fair value may not be linear. Also, in this table, the effect of a variation in a particular assumption on the fair value of the embedded derivatives is calculated independently of any change in another assumption. In reality, changes in one factor may contribute to changes in another, which may magnify or counteract the sensitivities. Furthermore, the estimated fair values as disclosed should not be considered indicative of future earnings on these contracts.

The trading result of embedded derivatives held for trading is shown below.

$ million

	2005 Net gain (loss)
Natural gas embedded derivatives	(2,034)
Interest rate embedded derivatives	(13)
	(2,047)

General observations on derivatives (hedging documentation, presentation and impacts)

Information disclosed by companies in the sample on the documentation, and monitoring of hedging relationships was very general, and the methods used for effectiveness tests were rarely specified (for example, the frequency of prospective and retrospective effectiveness tests, the exclusion – or not – of the discount/premium on forward contracts or of the time value of options, and method of calculating the hedged risk component and the ineffective portion).

Information on the documentation of hedging relationships

16 companies provided some information about how they applied effectiveness tests but this information was for the most part very generalised. For example, only five companies specified that they excluded the discount/premium on forwards and the time value of options from their effectiveness tests.

DEUTSCHE TELEKOM described how it tests the effectiveness of cash flow hedges and net investment hedges respectively:

DEUTSCHE TELEKOM 2005 Financial Year Report, p193

Cash flow hedges – USD.

The effectiveness of the hedging relationship is calculated prospectively using the critical terms match method set out in IAS 39.AG108. An effectiveness test is carried out retrospectively using the cumulative dollar-offset method. For this, the changes in the fair values of the hedged item and the hedging instrument attributable to spot rate changes are calculated and a ratio is created. If this ratio is between 80 and 125 percent, the hedge is effective.

Corporate financial instruments *continued*

DEUTSCHE TELEKOM 2005 Financial Year Report, p194

Net investment hedge.
The effectiveness of the hedging relationship is tested using prospective and retrospective effectiveness tests. In a retrospective effectiveness test, the changes in the fair value of the USD bonds since the inception of the hedge resulting from spot rate changes are compared with the proportionate changes in the value of the interests due to changes in the spot rate. The prospective effectiveness test is performed using the critical terms match method set out in IAS 39.AG108. As both the nominal volumes and the currencies of the hedged item and the hedging transaction are identical, a highly effective hedging relationship is expected.

DEUTSCHE TELEKOM also described in some detail of its effectiveness tests with regard to fair value hedging relationships:

DEUTSCHE TELEKOM 2005 Financial Year Report, p193

Fair value hedges.
The effectiveness of the hedging relationship is prospectively tested using the critical terms match method set out in IAS 39.AG108. An effectiveness test is carried out retrospectively at each reporting date using the dollar-offset method. This method compares past changes in the fair value of the hedged item expressed in currency units with past changes in the fair values of the interest rate swaps expressed in currency units. The changes in the fair value of the two transactions are calculated on the basis of the outstanding cash flows at the beginning and end of the test period and are adjusted for accrued interest. All hedging relationships were effective within the range of the ratios of the two past changes in value (between 80 and 125 percent) as specified in IAS 39. When the effectiveness was being measured, the change in the credit spread was not taken into account for calculating the change in the fair value of the hedged item. For fair value hedges entered into from 2005, the effectiveness of the hedging relationship is tested by means of statistical methods using a regression analysis. This involves defining the performance of the hedged item as the independent variable and the performance of the hedging transaction as the dependent variable. A hedging relationship is classified as effective, when $R^2 > 0.96$ and, depending on the actual realization of R^2, factor b has a value between –0.85 and –1.17. All hedging relationships, with their effectiveness having been tested using statistical methods, were effective at the reporting date.

Balance sheet presentation

IFRS does not specifically address the question of how derivatives should be classified in the balance sheet. For derivatives that did not qualify as hedges, some companies opted to classify them as 'current assets or liabilities', which is consistent with the 'default' classification of derivatives as 'held-for-trading' instruments under IAS 39, while others opted for a current/non-current classification based on the maturity of the derivative and/or hedged item. However, only a few companies described the classification criteria they applied. Derivatives that qualified as hedges were most often classified on the basis of the maturity of the derivative and the hedged item.

None of the companies in the sample referred to the practice of breaking down derivatives (eg swaps) between a current portion (cash flows falling due in less than one year) and a non-current portion.

The presentation of derivatives in the balance sheet varied widely from one company to another:

- Some companies aggregated their asset and liability derivative positions respectively in specific lines of the balance sheet.
- Others aggregated and netted them in one line, 'other financial assets/liabilities' (with the detail presented in the notes to the financial statements).
- Others divided their derivatives across several lines of the balance sheet based on the type of underlying risk or the eligibility for hedge accounting; in some of the cases, it was difficult to assess the total derivative positions.

PSA PEUGEOT CITROËN presented details of derivatives which allow the reader to see the impact of hedging on each balance sheet line:

PSA PEUGEOT CITROËN 2005 Reference Document, p194

B. Details of the balance sheet value of hedging instruments

Dec. 31, 2005 (in millions of euros)	**Total**	Other receivables (note 23.1)	Non-current financial assets (note 17)	Current financial assets (note 24)	Other payables (note 33.1)	Non-current financial assets (note 30)	Current financial assets (note 30)
Currency risk							
Hedges of commercial transactions							
- Fair value hedge	**(1)**	6	-	-	(7)	-	-
- Cash flow hedge	**23**	23	-	-	-	-	-
Hedges of forecast commercial transactions							
- Fair value hedge	**3**	-	20	-	-	(17)	-
Interest rate risk							
Hedges of financial transactions - borrowings							
- Fair value hedge	**381**	-	390	2	-	-	(11)
- Trading[1]	**12**	-	-	12	-	-	-
Hedges of financial transactions - investments							
- Trading[1]	**8**	-	-	12	-	-	(4)
Total	**426**	**29**	**410**	**26**	**(7)**	**(17)**	**(15)**

(1) Corresponding to the fair value of forward financial instruments designated as economic hedges of debt or investments accounted for using the fair value option.

Corporate financial instruments *continued*

Half of the companies in our sample drew a clear distinction between derivatives that qualified for hedge accounting. 34% of asset derivatives and 45% of liability derivatives (based on fair value) did not qualify as hedges for accounting purposes. Three companies in the sample disclosed on the face of the balance sheet the fair value of instruments that were hedging debt (TOTAL, BOUYGUES and RIO TINTO).

Income statement presentation

IFRS provides no guidance on the income statement presentation of amounts relating to derivatives, so companies have defined their own accounting policies. However, only a small number of companies identified the precise income statement lines that included results in respect of derivatives activities. Most companies emphasised their symmetrical treatment for hedging gains or losses and hedged items.

The effective hedge portion of interest rate derivatives was generally included in the cost of net debt.

With regard to foreign currencies:

- Most companies divided the foreign exchange gains and losses on foreign currency denominated monetary items between operating result and financing in the income statement.
- Most companies that disclosed how the effective portion of cash flow hedges was reclassified from equity to profit or loss stated that it was classified within operating profit.
- 16 companies in the sample indicated that they include the gain and loss on cash flow hedges of forecast transactions in the initial cost or other carrying amount of the hedged non-financial asset or liability (the so called ‘basis adjustment’ option provided by IAS 39).

Information on the classification of the ineffective portion of hedges (interest rate and exchange rate) was rarely provided, but the most commonly observed practice was classification within finance costs.

SANOFI-AVENTIS was one of the few companies that explained in detail the income statement classification of the impacts of derivatives:

B.8.3. Derivative instruments

Derivative instruments not designated as hedges of operating transactions are initially and subsequently measured at fair value with changes in fair value recognized in the income statement, under ***Financial income/ Financial expenses***, in the period when they arise.

B.8.4. Hedging

- Fair value hedge

A fair value hedge is a hedge of the exposure to changes in fair value of a recognized asset or liability or unrecognized firm commitment that could affect profit or loss.

Changes in fair value of the hedging instrument and changes in fair value of the hedged item attributable to the hedged risk are recognized in the income statement, under ***Other current operating income*** for hedges of operating activities and under ***Financial income/Financial expenses*** for hedges of investing or financing activities.

- Cash flow hedge

A cash flow hedge is a hedge of the exposure to variability in cash flows attributable to a particular risk associated with a recognized asset or liability, or a highly probable forecasted transaction, that could affect profit or loss.

Changes in fair value of the hedging instrument attributable to the effective portion of the hedge are recognized in equity, under ***Items recognized directly in equity***.

Changes in fair value attributable to the ineffective portion of the hedge are recognized in the income statement under ***Other current operating income and expenses*** for hedges of operating activities, and under ***Financial income/Financial expenses*** for hedges of investing or financing activities.

Cumulative changes in fair value of the hedging instrument previously recognized in equity are transferred to the income statement when the hedged transaction affects profit or loss. These transferred gains and losses are recorded under ***Other current operating income and expenses*** for hedges of operating activities and ***Financial income/Financial expenses*** for hedges of investing or financing activities.

When a forecasted transaction results in the recognition of a non-financial asset or liability, cumulative changes in the fair value of the hedging instrument previously recognized in equity are included in the initial measurement of the asset or liability.

- Hedge of a net investment in a foreign operation

A hedge of a net investment in a foreign operation is accounted for in the same way as a cash flow hedge. Changes in fair value of the hedging instrument attributable to the effective portion of the hedge are recognized in equity, under ***Items recognized directly in equity***. Changes in fair value attributable to the ineffective portion of the hedge are recognized in the income statement under ***Financial income/ Financial expenses***. When the investment in the foreign operation is sold, or wholly or partially liquidated, the changes in the fair value of the hedging instrument previously recognized in equity are transferred to the income statement under ***Financial income/Financial expenses***.

Corporate financial instruments *continued*

Use of derivatives and quantified impacts

As stated previously, it was very difficult to compare the extent to which derivatives were used by different companies as the disclosures varied widely from one company to another. No two companies adopted the same format for analysing their derivatives between different types of risk and hedges. Some companies gave precedence to the notional amount of the instruments, while others emphasised information on the fair value of derivatives. Notional amounts do not always reflect the actual exposure, as two derivatives with an opposite impact can be double-counted in the total notional amount. Certain companies presented gross notional amounts, while others presented them on a net basis.

Fair value information reflects exposure and market prices at a point in time, which could vary significantly over time, from one company to another, based on the date on which the contracts were entered into or the maturity of the instruments. Sensitivity measures, such as the impact on the market value of derivatives and on hedged positions of a specified percentage change in the underlying (interest rate, exchange rate, commodity or equity prices), are helpful in assessing the extent of exposure to financial risk. As stated above, this information was provided by many companies for interest rate derivatives but by far fewer companies for exposure to exchange rate changes, including exposure in respect of foreign currency derivatives.

NOVARTIS adopted a presentation format for its derivatives that is reasonably clear and that aggregated all of the information previously mentioned:

NOVARTIS Annual Report 2005, p158-159

DERIVATIVE FINANCIAL INSTRUMENTS
The following tables show the contract or underlying principal amounts and fair values of derivative financial instruments analyzed by type of contract at December 31, 2005 and 2004. Contract or underlying principal amounts indicate the volume of business outstanding at the balance sheet date and do not represent amounts at risk. The fair values are determined by the markets or standard pricing models at December 31, 2005 and 2004.

DERIVATIVE FINANCIAL INSTRUMENTS

	Contract or underlying principal amount		Positive fair values		Negative fair values	
	2005 USD millions	2004 USD millions	2005 USD millions	2004 USD millions	2005 USD millions	2004 USD millions
Currency related instruments						
Forward foreign exchange rate contracts	9 536	5 771	149	65	-223	-281
Over the counter currency options	44	3 987	1	6		-3
Cross currency swaps	1 092	1 226	231	296	-18	
Total of currency related instruments	**10 672**	**10 984**	**381**	**367**	**-241**	**-284**
Interest rate related instruments						
Interest rate swaps	2 479	3 820	3	11	-3	-7
Forward rate agreements	1 386	9 219		6	-1	-6
Interest rate options		100				
Total of interest rate related instruments	**3 865**	**13 139**	**3**	**17**	**-4**	**-13**
Options on equity securities	**9**	**268**		**15**		
Total derivative financial instruments included in marketable securities and in current financial debt	**14 546**	**24 391**	**384**	**399**	**-245**	**-297**

NOVARTIS Annual Report 2005, p158-159

The contract or underlying principal amount of derivative financial instruments at December 31, 2005 are set forth by currency in the table below.

	CHF USD millions	EUR USD millions	USD USD millions	JPY USD millions	Other currencies USD millions	Total 2005 USD millions	Total 2004 USD millions
Currency related instruments							
Forward foreign exchange rate contracts	1 818	2 211	4 194	956	357	9 536	5 771
Over the counter currency options			1	43		44	3 987
Cross currency swaps		1 068	24			1 092	1 226
Total of currency related derivatives	**1 818**	**3 279**	**4 219**	**999**	**357**	**10 672**	10 984
Interest rate related instruments							
Interest rate swaps	381	1 898	200			2 479	3 820
Forward rate agreements		1 186	200			1 386	9 219
Interest rate options							100
Total of interest rate related derivatives	**381**	**3 084**	**400**			**3 865**	13 139
Options on equity securities			**9**			**9**	268
Total derivative financial instruments	**2 199**	**6 363**	**4 628**	**999**	**357**	**14 546**	24 391

DERIVATIVE FINANCIAL INSTRUMENTS EFFECTIVE FOR HEDGE ACCOUNTING PURPOSES

	Contract or underlying principal amount 2005 USD millions	Fair values 2005 USD millions
Anticipated transaction hedges		
Forward foreign exchange rate contracts	2 003	-38
Total of derivative financial instruments effective for hedge accounting purposes included in other current assets and liabilities	**2 003**	**-38**

All of the hedging instruments used for anticipated transactions mature within twelve months and were contracted with the intention of hedging anticipated transactions which are expected to occur in 2006. At December 31, 2004 there were no derivative financial instruments effective for hedge accounting purposes.

For fair value hedges, companies rarely disclosed the gains or losses on the hedging instruments or on the hedged items. Therefore, the net impact on the profit for the year could rarely be identified. This information, which should allow the ineffective amount recognised in income to be assessed, will be required by IFRS 7.

Only 11 companies in the sample referred to the symmetrical impacts due to fair value hedge accounting. Approximately half of them mentioned that the ineffectiveness recognised was either nil or not material, whereas the other half of them disclosed the gains or losses on the hedging derivatives and hedged items in a specific table.

REED ELSEVIER provided a table presenting the impacts of fair value hedges:

REED ELSEVIER Annual Report 2005 and Financial Statements, p88

The gains and losses on the borrowings and related derivatives designated as fair value hedges for the year ended 31 December 2005, which are included in the income statement, were:

	1 January 2005 £m	Fair value movement gain/(loss) £m	Exchange gain/(loss) £m	31 December 2005 £m
USD interest rate swaps	5	9	1	15
USD debt	(5)	(9)	(1)	(15)
	–	–	–	–
Euro to USD cross currency interest rate swaps	152	(62)	15	105
Euro debt	(151)	62	(15)	(104)
	1	–	–	1
CHF to USD cross currency interest rate swaps	87	(41)	8	54
CHF debt	(86)	41	(8)	(53)
	1	–	–	1
Total	2	–	–	2

For cash flow hedges, the amount recognised in equity was not always disclosed and was identifiable only in half of the financial statements in the sample. Companies presented either combined movements arising from cash flow hedges, the revaluation of available-for-sale investments and/or net investment

Corporate financial instruments *continued*

hedges, or they provided a detailed analysis of all movements, identifying separately the tax effect. The tax effect often made it difficult to reconcile different items of information relating to cash flow hedges, with amounts disclosed on a gross basis in certain tables and on a net basis in others.

PHILIPS consolidated statements of changes in stockholders' equity shows the impact on equity of cash flow hedges and available-for-sale investments, including the tax effects:

PHILIPS Annual Report 2005, p130

Consolidated statements of changes in stockholders' equity of the Philips Group
in millions of euros unless otherwise stated

					accumulated other comprehensive income (loss)						
	out-standing number of shares in thousands	common stock	capital in excess of par value	retained earnings	currency trans-lation differences	unrealized gain (loss) on available-for-sale securities	additional minimum pension liability	change in fair value of cash flow hedges	total	treasury shares at cost	total stock-holders' equity
Balance as of December 31, 2002	1,275,978	263	14	16,738	(1,712)	265	(353)	11	(1,789)	(1,307)	13,919
Net income				695							695
Net current period change					(1,680)	297	(13)	17	(1,379)		(1,379)
Income tax on net current period change							4	(10)	(6)		(6)
Reclassifications into income					28	(146)		7	(111)		(111)
Total comprehensive income (loss), net of tax				695	(1,652)	151	(9)	14	(1,496)		(801)
Dividend paid				(463)							(463)
Purchase of treasury stock	(44)									(1)	(1)
Re-issuance of treasury stock	4,752		12							52	64
Share-based compensation plans			45								45
Balance as of December 31, 2003	1,280,686	263	71	16,970	(3,364)	416	(362)	25	(3,285)	(1,256)	12,763
Net income				2,836							2,836
Net current period change					(93)	205	(118)	4	(2)		(2)
Income tax on net current period change							51		51		51
Reclassifications into income					50	(447)		26	(371)		(371)
Total comprehensive income (loss), net of tax				2,836	(43)	(242)	(67)	30	(322)		2,514
Dividend paid				(460)							(460)
Purchase of treasury stock	(4,102)									(96)	(96)
Re-issuance of treasury stock	4,943		(28)							113	85
Share-based compensation plans			54								54
Balance as of December 31, 2004	1,281,527	263	97	19,346	(3,407)	174	(429)	55	(3,607)	(1,239)	14,860
Conversion of priority shares into common stock	25										
Net income				2,868							2,868
Net current period change					1,137	43	(181)	(96)	903		903
Income tax on net current period change					49		65	32	146		146
Reclassifications into income					335	(227)		(20)	88		88
Total comprehensive income (loss), net of tax				2,868	1,521	(184)	(116)	(84)	1,137		4,005
Dividend paid				(504)							(504)
Purchase of treasury stock	(83,823)									(1,836)	(1,836)
Re-issuance of treasury stock	3,629		(85)							156	71
Share-based compensation plans			70								70
Balance as of December 31, 2005	1,201,358	263	82	21,710	(1,886)	(10)	(545)	(29)	(2,470)	(2,919)	16,666

When the amount recognised in equity in relation to cash flow hedges could be identified, it represented on average 0.8% of the total equity of the companies concerned.

Approximately half of the companies in our sample did not disclose detailed information about the amount recycled during the year from the cash flow hedge reserve in equity to profit or loss, or about the impact of gains and losses from cash flow hedges on the initial cost of an acquired asset/liability (basis adjustment). NOKIA stated that it was 'impracticable' to disclose this information given the number of transactions involved.

UNILEVER presented a table of the amounts recognised in equity and the amounts transferred to the income statement and to the relevant assets as a basis adjustment in respect of cash flow hedges:

UNILEVER Annual Report and Accounts 2005, p125

Cash flow hedges – movements during the year	€ million 2005
1 January	**(19)**
Additions	**9**
Transfers to income statement	**1**
Transfers to inventories/non-current assets	**4**
31 December	**(5)**

FIAT specified the income statement lines affected by this recycling:

FIAT Annual Report 2005, p116

In 2005 the Group transferred to income gains of 44 million euros net of tax effect previously recognised directly in equity (gains of 12 million euros in 2004) presented in the following line items:

(in millions of euros)	2005	2004
Exchange rate risk		
Increase in Net revenues	**49**	33
Decrease in Cost of sales	**8**	(4)
Interest rate risk		
Financial income (expenses)	**(15)**	(14)
Taxes income (expenses)	**2**	(3)
Total recognised in the income statement	**44**	12

The ineffectiveness of cash flow hedges was not material for the years 2005 and 2004.

Very few companies gave information about the periods in which the cash flows in respect of cash flow hedges were expected to occur.

Corporate financial instruments *continued*

REED ELSEVIER presented a recycling schedule of amounts accumulated in equity in respect of cash flow hedges:

REED ELSEVIER Annual Report and Financial Statements 2005, p89

The deferred gains and losses on cash flow hedges at 31 December 2005 are currently expected to be recognised in the income statement in future years as follows:

	Transition loss £m	Interest rate hedges £m	Foreign exchange hedges £m	Total hedge reserve £m
2006	(3)	–	12	9
2007	(2)	1	2	1
2008	–	–	(2)	(2)
2009	–	(1)	–	(1)
Gains/(losses) deferred in hedge reserve at end of year	(5)	–	12	7

Few companies provided information about ineffectiveness recognised in respect of cash flow hedge relationships and those that did so for the most part stated merely that the impact was not material.

Employee benefits

The most obvious observation that arises from a review of the way in which companies in our sample implemented IAS 19 *Employee Benefits* is the wide range of detail given in the disclosures. Naturally, post-employment benefits will be more significant to some companies than others. However, it was evident that some companies did not disclose every element required by the standard. In contrast, other companies supplemented their disclosures with additional voluntary information. It is to be hoped that market pressures and regulatory involvement will encourage evolution towards the highest common factor, rather than the lowest common denominator.

Post-employment benefits

Apart from share-based payments, the most challenging and contentious area of accounting for employee benefits is that of pensions and other post-retirement benefits. In fact, accounting for the costs of such benefits in the financial statements of employer companies presents one of the most difficult challenges in the whole field of financial reporting. The amounts involved are large, the timescale is long, and the estimation process is complex and involves many areas of uncertainty which have to be made the subject of assumptions. In addition, the actuarial mechanisms used for allocating the costs to years of employment are complicated and their selection open to debate. Furthermore, the complexities are compounded by the wide variety of arrangements found in different jurisdictions.

In the light of the subjectivity of the estimations required in order to account for post-employment benefits, two issues are of particular importance to users of financial statements: adequacy of disclosure and consistency across companies.

The most common post-employment benefit was pensions, but others were evident including post-retirement medical care, reduced price goods and services, and lump sums on retirement. The remainder of this section deals only with defined benefit post-employment plans.

Disclosures

Reflecting the complexity and sensitivity of the subject, IAS 19 requires extensive and detailed disclosure in relation to defined benefit plans.

Actuarial assumptions

IAS 19 requires the disclosure of actuarial assumptions as follows:

‘An entity shall disclose the following information about defined benefit plans:

...the principal actuarial assumptions used as at the balance sheet date, including, when applicable:

(i) the discount rates;

(ii) the expected rates of return on any plan assets for the periods presented in the financial statements;

(iii) the expected rates of return for the periods presented in the financial statements on any reimbursement right recognised as an asset in accordance with paragraph 104A;

(iv) the expected rates of salary increases (and of changes in an index or other variable specified in the formal or constructive terms of a plan as the basis for future benefit increases);

Employee benefits *continued*

(v) medical cost trend rates; and

(vi) any other material actuarial assumptions used.'

Generally the companies in the sample were better in providing the disclosures specifically required by the standard (shown as (i) – (v) above) than they were in providing any further relevant assumptions as required by (vi) above. In particular, it is likely that the assumed rate of mortality will be material to many schemes. Somewhat disappointingly, less than a quarter of the companies provided mortality assumptions. This is particularly noteworthy given how sensitive the valuation of the liability is to small changes in this assumption.

Some companies presenting information about mortality made reference to published mortality tables. Others included quantitative disclosures. TESCO provided both as illustrated in the extract below:

TESCO Annual Report and Financial Statements 2006, p82

UK mortality assumptions

Following analysis of the mortality trends under the Tesco PLC Pension Scheme in the UK, which was carried out as part of the formal valuation of the Scheme as at 31 March 2005, it was decided to alter the mortality assumptions used in the formal valuation. The updated mortality tables as at 31 March 2005 were PMA92COO for male members and PFA92COO for female members. This change has been carried through into the calculation of the pension liabilities in the Balance Sheet as at 25 February 2006 for the main UK fund.

The following table illustrates the expectation of life of an average member retiring at age 65 at the Balance Sheet date and a member reaching age 65 at the same date +25 years.

		At 25 Feb 2006 in years	At 26 Feb 2005 in years
Retiring at Reporting date at age 65:	Male	17.5	16.4
	Female	21.8	20.3
Retiring at Reporting date +25 years at age 65:	Male	18.4	18.2
	Female	23.0	21.1

Disclosure of additional information

As noted above, notwithstanding the extensive disclosures required by the standard, a number of companies made additional disclosures.

Notably, 15% of the companies disclosed the expected rate of return on scheme assets by class of asset (eg equities, bonds, property etc). The IASB considered mandating this, but in the face of resistance from commentators ultimately decided against it. It is interesting to see that some companies considered this analysis to be important and gave it voluntarily. One company that did this was CADBURY SCHWEPPES as shown in the following extract:

CADBURY SCHWEPPES Report and Accounts 2005, p118

The market value of the assets and liabilities of the defined benefit schemes and post-retirement medical benefit schemes as at 1 January 2006 are as follows:

	UK Schemes Expected Rate of Return %	Overseas Schemes Expected Rate of Return %	UK Pension Schemes Market Value £m	Overseas Pension Schemes Market Value £m	Post-Retirement Medical benefits Market Value £m	Total All Schemes £m
Equities	7.7	7.3–8.5	1,107	345	2	1,454
Bonds	4.4	4.8–5.5	449	124	1	574
Property	6.3	6.0–6.6	148	31	–	179
Other	4.2	3.0–4.1	58	32	–	90
	6.7	6.95	1,762	532	3	2,297
Present value of benefit obligations			(1,930)	(695)	(41)	(2,666)
Recognised in the Balance Sheet			**(168)**	**(163)**	**(38)**	**(369)**

A second example of voluntary disclosure was the inclusion of a schedule of expected contributions (or benefit payments) for several years in the future thereby supplementing the standard's requirement to quantify the contributions to a scheme in the next year. 20% of the companies in our sample adopted this approach, one of which is ROYAL DUTCH SHELL, as shown in the following extract:

ROYAL DUTCH SHELL Form 20-F 2005, p133

Employer contributions to defined benefit pension plans during 2006 are estimated to be $1.4 billion. The following benefit payments, which reflect expected future service, as appropriate, are expected to be paid:

$ million

		Other benefits		
Future benefit payments	Pension benefits	USA	Other	Total
2006	2,514	143	20	163
2007	2,543	157	22	179
2008	2,622	168	23	191
2009	2,681	178	24	202
2010	2,747	186	25	211
2011–2015	14,631	992	133	1,125

A further observation relates to innovative ways of presenting data. IAS 19 (like IFRS generally) is not prescriptive regarding the manner in which information should be displayed. The sample of companies surveyed included one using graphical techniques to present a sensitivity analysis of post-retirement health care.

Consistency

The ability to compare the financial statements of different companies in order to assess their relative performance and financial position depends on the extent to which like transactions and arrangements are measured and displayed in a consistent manner. IAS 19 raises particular questions in this area. Consistency across companies as regards post-employment benefits can be considered in two broad areas: consistency of accounting treatment and consistency of actuarial assumptions.

Employee benefits *continued*

Consistency of accounting treatment – actuarial gains and losses

IAS 19 offers various choices in how to deal with actuarial variances:

- In the income statement – with a spectrum of options available ranging from the full smoothing techniques of the 10% corridor and amortisation over service lives, through any faster method of recognition to, ultimately, full recognition in income.
- In equity – the recently introduced option of full recognition of actuarial variances outside profit and loss.

Given this range of possibilities, there will obviously not be consistency of treatment across companies. This is compounded by first-time adoption issues. Companies previously applying IAS may have been using the 'corridor' approach since 1999. First-time adopters had the choice of full recognition of surpluses/deficits (other than unvested past service costs) at their date of transition or full retrospective application of the current IAS 19 – ie to the beginning of the plan, not just back to 1999. Few would have the data for full retrospective application. In any event, there will be a lack of comparability between ongoing IFRS reporters using the corridor and first-time adopters.

The range of options available was reflected in our sample, as shown in the following key highlights:

- Three companies adopted a policy of full recognition in income
- No first-time adopter applied the corridor retrospectively
- 40% of companies adopted the latest option of full recognition outside income
- The remaining 55% of companies adopted the 'corridor' approach, applying a threshold of 10% and therefore the maximum smoothing permitted by the standard.

Broadly speaking, policies were adopted at the extremes of the available range – full recognition or maximum smoothing, with little in between.

When introducing the option of recognising actuarial variances in equity, the IASB explained that the main reason it did so was for UK companies. The UK had recently made the approach mandatory and Sir David Tweedie observed that 'The amendment issued today allows entities to choose a simpler, more transparent method of accounting than is commonly adopted at present. I hope that many entities will take the opportunity of improving their financial reporting in this way.' The history of the introduction of this option was reflected in practice. Of the UK companies in our sample, all but one adopted a policy of full recognition outside profit and loss. This figure falls to 30% for non-UK companies.

Consistency of accounting treatment – income statement classification

IAS 19 is deliberately non-prescriptive about where in the income statement the various components of the defined benefit cost should be included. As a result, practice is mixed. For example, just over a quarter of companies included the IAS 19 financial items (interest cost and expected return on assets) with other financial items in the income statement. Others included all the elements of the IAS 19 charge in operating expenses or cost of sales. For some it was not apparent what approach had been taken.

Actuarial assumptions

Actuarial assumptions are clearly a critical area for the users of financial statements, as small changes in assumptions can have a significant impact on the accounts.

Given the standard's permissive approach to aggregation of disclosures (by type of plan and/or across jurisdictions), it is quite hard to determine the level of consistency from published financial statements. Furthermore, no two plans are the same and accordingly it is not the case that there should be one 'right' set of assumptions.

Notwithstanding the above, some of the financial statements in our sample did provide jurisdictionally specific disclosures of assumed discount rates – a particularly important assumption to which the quantum of the liability is highly sensitive. Encouragingly, this revealed a general consensus regarding the appropriate discount rates. Analysing the discount rate used by those companies where the data could be determined revealed the following:

Country	Number of disclosures	Discount rate%		Mean	Standard deviation
		High	Low		
France	16	4.70	3.80	4.23	0.24
Germany	12	5.00	3.80	4.23	0.19
Eurozone[1]	58	5.75	3.13	4.23	0.30
UK	22	5.40	4.70	4.85	0.13
US	21	6.75	5.00	5.63	0.23

[1] Includes France and Germany

Whilst the high/low figures above indicate quite a significant range of rates, the standard deviations suggest a general trend of close grouping around the mean – generally less than one-third of a percentage point. In future periods, it may well be that those companies selecting outlying discounts will critically re-challenge the appropriateness of the assumption in the particular context of their scheme.

Impairment of assets

This section is an analysis of matters related to IAS 36 *Impairment of Assets* from our sample of 65 IFRS financial statements, with a particular emphasis on impairment of goodwill and intangible assets with indefinite useful lives.

All but one company in our sample carried goodwill in their balance sheets as at 31 December 2005, and roughly half reported a goodwill impairment loss in 2005, while 70% of the companies reported impairment of tangible assets and/or intangible assets with finite useful lives. Although impairment charges primarily depend on the circumstances of the particular company, the frequency of impairments among companies in our sample also suggests that the requirements of IAS 36 put more emphasis on the 'routine' and formalised nature of the process of impairment testing, leading to relatively frequent impairment charges.

Detailed disclosures for each cash-generating unit or group of cash-generating units are required in accordance with paragraph 134 of IAS 36, where the carrying amount of goodwill or intangible assets with indefinite useful lives allocated to a cash-generating unit or group of cash-generating units is significant in comparison with the company's total carrying amount of goodwill or intangible assets with indefinite useful lives. The disclosures required include the amount of goodwill or intangible assets allocated to the cash-generating unit (group of units) and the basis on which the recoverable amount was determined, with information on reasonably possible changes in key assumptions, if such changes could result in an impairment loss.

Cash-generating units

Determination of cash-generating units

Paragraph 6 of IAS 36 defines a cash-generating unit as 'the smallest identifiable group of assets that generate cash inflows which are largely independent of the cash inflows from other assets or groups of assets'. Paragraph 80 of IAS 36 prescribes how goodwill shall be allocated to cash-generating units. More than a quarter of companies in our sample adopted a fairly standard approach when it came to describing how cash-generating units were determined and how goodwill was allocated to such units, doing no more than summarising the key requirements of IAS 36 and providing no specific details regarding their company.

Companies that defined their cash-generating units as the business segments determined in accordance with IAS 14 *Segment Reporting* included for example SANOFI-AVENTIS, ASTRAZENECA, ROCHE and PEARSON.

Many companies such as BP, NOVARTIS, WPP GROUP, RWE, EADS and INBEV indicated that their cash-generating units were determined at a lower level than their business segments.

BP Annual Report and Accounts 2005, p57

13 Impairment of goodwill

$ million

	2005	2004	2003
Exploration and Production	4,371	4,371	4,371
Refining and Marketing	5,955	6,418	6,151
Gas, Power and Renewables	45	43	49
Other businesses and corporate	–	25	21
Goodwill as at 31 December	10,371	10,857	10,592

Goodwill acquired through business combinations has been allocated first to segments and then down to the next level of cash-generating unit that is expected to benefit from the synergies of the acquisition. For Exploration and Production, goodwill has been allocated to each geographic region, that is UK, Rest of Europe, US and Rest of World, and for Refining and Marketing, goodwill has been allocated to strategic performance units (SPUs), namely Refining, Retail, Lubricants, Aromatics and Acetyls and Business Marketing.

Few companies gave any indication of their number of cash-generating units but based on those who did, it was apparent that the number of cash-generating units tested for goodwill impairment varied considerably across the sample analysed. NESTLÉ stated that 'goodwill impairment reviews have been conducted for more than 200 goodwill items allocated to some 50 cash-generating units' whereas ASTRAZENECA noted that 'for the purposes of impairment testing of goodwill, the Group is regarded as a single cash generating unit.'

Allocation of goodwill to cash-generating units

Few companies disclosed the information required by paragraph 134 of IAS 36 as summarised above. Where the amount of goodwill or the amount of indefinite-lived intangible assets was material, and no such disclosure was made, it was not clear from the financial statements whether or not a significant proportion of the goodwill or indefinite-lived intangible assets had been allocated to a cash-generating unit or group of cash-generating units. Clearly, the smaller the number of cash-generating units or groups of units to which goodwill or indefinite-lived intangible assets are allocated the more likely it is that the disclosures required by paragraph 134 of IAS 36 are required.

While many companies provided an analysis of goodwill by company or at the segment level, this did not always correspond to the cash-generating unit level as defined by the company.

In other instances where companies provided an analysis of goodwill but did not state how they determine their cash-generating units, it was generally not clear whether the breakdown was provided at the cash-generating unit level or at a higher aggregated level.

Impairment of assets *continued*

The tabular format was favoured by most companies to show their allocation of goodwill and intangible assets with indefinite useful lives to cash-generating units:

INBEV, Annual Report 2005, p91 and p93

The carrying amount of goodwill was allocated to the different business unit levels as follows:

Business unit - Million euro	31 December 2005
Brazil	4 751
Germany	1 046
Russia/Ukraine	944
Canada	926
South Korea	848
UK/Ireland	689
Hispanic Latin America	536
New market development	393
USA	290
France/Italy/Spain	270
China	241
Bulgaria/Romania/Montenegro/Serbia	119
Belgium/Luxemburg	54
Other	1
	11 108

The carrying amount of intangible assets with indefinite useful lives was allocated to the different countries as follows:

Country - Million euro	31 December 2005
UK	97
USA	50
Brazil	45
Russia	24
Germany	15
	231

Only a limited number of companies explained the allocation other than in a tabular format, NESTLÉ being one of these.

NESTLÉ Financial Statements 2005, p38

Detailed results of the impairment tests are presented below for the three main goodwill items, representing more than 65% of the net book value at 31 December 2005. For the purpose of the tests, they have been allocated to the following CGUs: PetCare, Hand Held Foods Group USA and Ice Cream USA.

PetCare
Goodwill related to the 2001 acquisition of Ralston Purina has been allocated for the impairment test to the CGU of the product category PetCare on a worldwide basis. The carrying amounts of all goodwill items allocated to this CGU are expressed in various currencies for an equivalent of CHF 11 810 million as at 31 December 2005.

Recoverable amount of goodwill and intangible assets with indefinite useful lives

The recoverable amount of an asset or cash-generating unit is 'the higher of its fair value less costs to sell or its value in use' [paragraph 18 of IAS 36].

While many companies stated this general measurement principle in their accounting policies, they did not always specifically state which of the two bases ('fair value less costs to sell' or 'value in use') they used in their impairment tests and the descriptions given of the estimation of future cash flows. This explains the large number of indeterminates shown in the table below.

Method used to measure recoverable amount	Number of companies
Value in use	30
Fair value less costs to sell	3
Combination of both	14
Indeterminate	17

For most companies, therefore, the recoverable amount of goodwill and intangible assets with indefinite useful lives was based on 'value in use'.

Companies that mentioned that the basis for the recoverable amount depended on the item tested included ANGLO AMERICAN, TELECOM ITALIA, ROCHE, NOVARTIS, PEARSON and CARLSBERG. These companies had goodwill balances related to listed subsidiaries and determined the recoverable amount of their interests in the subsidiaries based on the market values of their interests.

Among the companies that disclosed an impairment testing process that involved both bases were FRANCE TELECOM and LAFARGE:

FRANCE TELECOM, Financial Report 2005, p143

France Telecom has calculated the fair value less costs to sell, and value in use of all of the above CGUs:

- Fair values were estimated: (i) based on quoted market prices, or (ii) in the absence of an active market for the CGUs, on the basis of the best information available to reflect the amount, corresponding to the fair value less costs to sell, that the entity would receive for the CGUs. Fair value calculated in the absence of an active market on November 30, 2005 was estimated based on: (i) 2005 and 2006 revenue and EBITDA multiples for comparable companies adjusted for a control premium; (ii) revenue and EBITDA multiples for comparable transactions applied in line with 2005; and (iii) the discounted present value of future cash flows over a five-year period, plus a five-year EBITDA multiple.
- Value in use corresponds to the present value of estimated future net cash flows based on five-year budgets and business plans. Cash flow projections beyond the five-year timeframe are extrapolated by applying a flat growth rate to perpetuity (or declining growth rate over two to three years), not exceeding the average expected long-term growth rate for the sector.

The recoverable amount is then calculated at the level of the CGU groups defined above.

Impairment of assets *continued*

LAFARGE, Annual Report on Form 20-F 2005, pF-12

In its goodwill impairment test, the Group uses a combination of a market approach (fair value) and an income approach (value in use). In the market approach, we compare the carrying value of our CGUs with multiples of their current operating income before depreciation and amortization. For CGUs presenting an impairment risk according to the market approach we then use the value in use approach. In the value in use approach, we estimate the discounted value of the sum of the expected future cash flows. If the carrying value of the CGU exceeds the higher of the fair value or the value in use of the related assets and liabilities, the Group records an impairment of goodwill (in "other operating expenses").

Disclosures related to 'fair value less costs to sell' were made by DEUTSCHE TELEKOM and INBEV amongst others. The valuation methods most often cited were quoted market price, multiples, recent transactions or valuation models using discounted cash flows:

DEUTSCHE TELEKOM, Financial Year Report 2005 , p140

Deutsche Telekom performs its annual impairment test as of September 30. At the time of publication of the interim financial statements for the third quarter 2005, Deutsche Telekom had not yet completed the impairment test for its mobile communications operations in the United Kingdom (T-Mobile UK). At the time, information from various sources was still being evaluated, including the offer announced by Telefónica on October 31, 2005, to acquire the UK group O_2 at a price of 200 pence per share (approximately GBP 17.7 billion). When determining the fair value less costs to sell, the purchase price paid in comparable transactions must generally be given preference over internal DCF calculations. We derived the fair value of the cash-generating unit T-Mobile UK from the Telefónica offer in accordance with a valuation model based on multipliers. These calculations resulted in an impairment expense equal to EUR 1.9 billion as of December 31, 2005.

INBEV Annual Report 2005, p77-p78

Impairment testing of intangible assets with an indefinite useful life is primarily based on a fair value approach applying multiples that reflect current market transactions to indicators that drive the profitability of the asset or the royalty stream that could be obtained from licensing the intangible asset to another party in an arm's length transaction.
For goodwill the recoverable amount of the cash generating units to which the goodwill belongs is based on a fair value approach. More specifically, a discounted free cash flow approach, based on current acquisition valuation models, is used. These calculations are corroborated by valuation multiples, quoted share prices for publicly traded subsidiaries or other available fair value indicators. As regards the level of goodwill impairment testing, InBev's overall approach is to test goodwill for impairment at the business unit level (i.e. one level below the segments).

Carrying amounts of and reasons for indefinite-life intangible assets

Paragraph 122(a) of IAS 38 *Intangible assets* requires that the carrying amount of intangible assets with indefinite useful lives and the reasons supporting the assessment of indefinite useful life should be disclosed.

Many accounting policies for intangible assets that were reviewed included general references to intangibles with indefinite useful lives when discussing amortisation periods and impairment tests. Some companies stated explicitly that they did not currently own any intangibles with indefinite useful lives apart from goodwill; amongst these were RIO TINTO, TESCO, SANOFI-AVENTIS and LAFARGE.

23 companies positively confirmed that, in addition to goodwill, they also carried other intangible assets with indefinite useful lives on their books. These included DEUTSCHE TELEKOM, AHOLD, INBEV, LVMH and CADBURY SCHWEPPES.

Among the reasons given by companies in the sample supporting the assessment of an indefinite useful life were the history and longevity of brands, the ownership of rights that can be renewed at little or no cost, the unlimited period of time for which positive cash flows are expected to be generated, and the level of advertising and marketing support that is provided to safeguard the value of the intangibles.

One of the more extensive disclosures was given by CADBURY SCHWEPPES:

CADBURY SCHWEPPES, Report and Accounts 2005, p100

No amortisation is charged on over 99% of brand intangibles, as the Group believes that the value of these brands is maintained indefinitely. The factors that result in the durability of brands capitalised is that there are no material legal, regulatory, contractual, competitive, economic or other factors that limit the useful life of these intangibles. Furthermore:

- The Group is a brands business and expects to acquire, hold and support brands for an indefinite period. The Group supports these brands through spending on consumer marketing across the business and through significant investment in promotional support. The brands capitalised are expected to be in longstanding and profitable market sectors.
- The likelihood that market based factors could truncate a brand's life is relatively remote because of the size, diversification and market share of the brands in question.
- The Group owns the trademark for all brands valued on the balance sheet and renews these for nominal cost at regular intervals. The Group has never experienced problems with such renewals.

Where a brand's life is not deemed to be indefinite it is written off over its expected useful life on a straight-line basis.

CADBURY SCHWEPPES, Report and Accounts 2005, p111

Significant intangible assets details

	Description	Carrying amount £m	Remaining amortisation period
Brand intangibles			
Dr Pepper/Seven Up	Carbonated soft drink	1,047	Indefinite life
Snapple	Non-carbonated soft drink	431	Indefinite life
Hawaiian Punch	Non-carbonated soft drink	120	Indefinite life
Halls	Sugar product	357	Indefinite life
Trident	Gum	250	Indefinite life
Dentyne	Gum	141	Indefinite life

In some instances intangible assets with indefinite useful lives were mentioned in the accounting policies but no further information was provided elsewhere in the report. This implies that the companies concerned overlooked the requirements of paragraph 122(a) of IAS 38.

Impairment of assets *continued*

Sensitivity analysis

Where a significant proportion of a company's goodwill or intangible assets with indefinite useful lives has been allocated to a cash-generating unit or group of units, and a reasonably possible change in a key assumption on which its recoverable amount is based would cause its carrying amount to exceed its recoverable amount, paragraph 134(f) of IAS 36 *Impairment of Assets* requires certain information to be disclosed (such as the amount by which the recoverable amount of the unit or group of units exceeds its carrying amount).

While most accounting policies referred in some manner to the valuation of long-term assets, including goodwill or impairment testing, as an area heavily influenced by the use of estimates and assumptions, our analysis showed that the ways in which companies commented about reasonably possible changes in the key assumptions used in their impairment tests varied widely.

In just over half of the financial statements there was no specific reference to, or disclosure about, such reasonably possible changes or sensitivities related to impairment testing assumptions.

20% of the financial statements in our sample included an explicit statement that reasonably possible changes were not expected to cause impairment losses.

An example of this type of disclosure was that made by ROCHE:

ROCHE Finance Report 2005, p72

> Management believes that any reasonably possible change in any of the key assumptions would not cause the carrying value of goodwill to exceed the recoverable amount.

Other companies mentioned that the recoverable amount was significantly greater than the carrying value or showed this excess figure, thereby implying that no reasonably possible change would lead to an impairment charge.

NESTLÉ was one of the small number of companies in our sample that disclosed information about the impact of variations in the key assumptions on their impairment tests:

NESTLÉ, Financial Statements 2005, p39

> Main assumptions, based on past experiences and current initiatives, were the following:
> – Sales: average growth of 8.5% over the first 10-year period;
> – EBITA margin evolution: steadily improving margin over the period, in a range of 50–90 basis points per year, which is consistent with strong sales growth and enhanced cost management and efficiency.
>
> The key sensitivity for the impairment test is the growth in sales and the EBITA evolution. Limiting growth to only 6% until 2014 and 0% thereafter would not result in the carrying amount exceeding the recoverable amount. Reaching 80% of the expectations in terms of EBITA evolution would not result in the carrying amount exceeding the recoverable amount.

The key assumptions and their variability most frequently commented on were discount and growth rates or changes in forecast cash flows.

Of those companies that included quantitative information about reasonably possible changes, few also stated by how much a key assumption would have to change in order for the recoverable amount to equal the carrying amount, as prescribed by paragraph 134(f)(ii) of IAS 38. RIO TINTO was one of these companies:

RIO TINTO 2005 Annual Report and Financial Statements, p111

Impact of reasonably possible changes in key assumptions

Australian Iron Ore and Kennecott Energy

It does not appear that any reasonably possible changes in the key assumptions on which Australian Iron Ore or Kennecott Energy's recoverable amounts are based would cause their respective values to fall short of their carrying amounts at 31 December 2005.

Argyle

Argyle's recoverable amount exceeds its carrying value amount by approximately US$100 million. If any of the following changes were assumed, Argyle's recoverable amount would equal its carrying amount:

- An increase of three percentage points in the discount rate;
- A strengthening of the Australian dollar exchange rate to US$0.76 from US$0.73;
- The use of a diamond price that was five per cent lower than current market prices in real terms throughout the life of the operation rather than the current assumption; and
- An increase of 19 per cent in capital costs or ten per cent in operating costs related to the underground development and open pit extension, from the current assumptions.

Other

Under IAS 36, goodwill is no longer amortised but reviewed annually for impairment. The Groups' business relates to the mining and processing of finite resources and it is therefore likely that impairments of certain elements of the goodwill may occur at some stage in the future as resources are depleted.

ROYAL DUTCH SHELL, on the other hand, commented in the 'Key Accounting Estimates and Assumptions' section of its annual report on the impracticability of determining the likelihood and magnitude of impairments under different sets of assumptions:

ROYAL DUTCH SHELL Form 20-F 2005, p114

The Shell Group has a portfolio of assets across a number of business lines and geographic regions. The factors that influence estimated future cash flows from assets also vary depending on the nature of the business activity in which those assets are used and geographical market conditions impacting the businesses in which assets are used. This wide business and geographic spread is such that it is not practicable to determine the likelihood or magnitude of impairments under different sets of assumptions. The assumption on future oil prices tends to be stable because the Group does not consider short-term increases or decreases in prices as being indicative of long-term levels. At the end of 2005 the estimated oil and gas prices used for impairment testing were lower than prices prevailing in the market at that time.

Income taxes

The aspects of accounting for income taxes that we considered in our review of the 65 financial statements in our sample were:

- In how much detail did the companies explain their accounting policy for income taxes?
- How did companies disclose the impacts of IAS 12 *Income Taxes* on their transition adjustments to IFRS?
- How much disclosure did companies make in terms of explaining the major components of income tax expense?
- Did companies provide a detailed, understandable tax rate reconciliation?
- Did companies disclose in detail the amount of recognised deferred tax assets and liabilities for each type of temporary difference, unused tax losses and unused tax credits, including the amounts recognised in the income statement for all periods presented in the financial statements?
- How did companies disclose the amount (and, if applicable, expiry date) of deductible temporary differences, unused tax losses and used tax credits for which no deferred tax asset was recognised?
- How did companies disclose the deferred tax amounts arising from temporary differences associated with subsidiaries, associates and joint ventures that had not been recognised?

Because tax laws vary between jurisdictions, and can even vary at the company level in certain jurisdictions, this can have an impact on the recognition, measurement and presentation of income taxes in financial statements and the level of detail of disclosures relating to income taxes. Accordingly, the absence of certain information or the disclosure of less information than that given by other companies does not necessarily indicate poor compliance with the requirements of IAS 12. However, this can make a comparison between companies more difficult for income taxes than for other items in financial statements.

Although IAS 12 covers both current tax and deferred tax, most of the requirements in the standard – and most disclosures relating to income taxes in financial statements – deal with deferred taxation.

Accounting policies

Most companies adopted a fairly similar approach when it came to describing their accounting policies for income taxes, doing no more than summarising the key requirements of IAS 12. This included a brief description of circumstances when deferred tax assets and liabilities were recognised in accordance with the requirements of IAS 12. Approximately 40% of the companies in the sample made reference to recognising deferred tax in equity when it related to items charged or credited directly to equity. More than half of the companies included a description of the 'initial recognition exemption' in IAS 12 as part of their accounting policy, explaining that a deferred tax liability is not recognised when it arises from the initial recognition of goodwill or assets or liabilities that are not part of a business combination.

One in four companies in our sample disclosed information additional to that required by IAS 12, usually in order to highlight particular income tax treatments or other tax-related matters that were specific to their circumstances. Examples of these included the following:

- the use of forecasts to assess the recovery of deferred tax assets
- when a deferred tax asset or liability is recognised for share-based payments
- the restatements of finance leases resulting in the recognition of deferred taxes
- tax contingencies
- the recognition of deferred tax for brands
- the operation of tax consolidation agreements for the company
- goodwill and deferred tax implications for the acquisition of a business, and
- a description of other types of taxes the company is subject to, for example: capital gains tax, property taxes, withholding taxes, taxes on dividends.

Adoption of IAS 12

The reconciliations from previous GAAP to IFRS required by IFRS 1, *First-time Adoption of International Financial Reporting Standards* provided some insights into the more common sources of temporary differences, although the level of detail provided varied between companies and the information presented on deferred tax adjustments was generally more limited when compared to the level of detail provided for other IFRS adjustments.

A small minority did not disclose the specific tax impact relating to particular adjustments arising from other accounting standards and only provided either:

- IFRS adoption adjustments net of tax, or
- the adjustment to the deferred tax asset or liability as a total figure, without additional details to explain the adjustment in the reconciliation table.

Some of the more common deferred tax adjustments were related to provisions for pensions, intangible assets, revaluation of property, plant and equipment and the recognition of financial instruments.

Income taxes *continued*

A reconciliation showing the impact of adoption of IAS 12 was presented by CRH as follows:

CRH Annual Report 2005, p108-109

Group Income Statement
for the year ended 31st December 2004

All figures in € millions	Previous Irish GAAP	Adjustments under IFRS: Share-based payments (i)	Business combinations (ii)	Intangible assets (iii)	Income tax (iv)	Pensions (v)	Joint ventures (vi)	Associates (vii)	Discounting (viii)	Derivatives (ix)	Dividends/ Min. interest (x)	Restated under IFRS
Turnover incl. share of joint ventures	**12,819.7**											
Less: share of joint ventures	**539.6**											
Group turnover	**12,280.1**						474.4					**12,754.5**
Cost of sales	**8,412.2**		3.3				301.9					**8,717.4**
Gross profit	**3,867.9**		(3.3)				172.5					**4,037.1**
Operating costs excluding goodwill amortisation	**2,710.0**	9.7	(10.9)	4.1		0.1	110.1		(9.4)	3.2		**2,816.9**
Group operating profit	**1,157.9**	(9.7)	7.6	(4.1)		(0.1)	62.4		9.4	(3.2)		**1,220.2**
Share of JV's operating profit	**67.4**						(67.4)					**-**
Share of associates' operating profit	**21.7**							(21.7)				**-**
Operating profit excluding goodwill amortisation	**1,247.0**	(9.7)	7.6	(4.1)		(0.1)	(5.0)	(21.7)	9.4	(3.2)		**1,220.2**
Goodwill amortisation	**101.4**		(93.1)				(7.4)	(0.9)				**-**
Profit on disposal of fixed assets	**11.3**						(0.2)	(0.3)				**10.8**
Profit on ordinary activities before interest	**1,156.9**	(9.7)	100.7	(4.1)		(0.1)	2.2	(21.1)	9.4	(3.2)		**1,231.0**
Group interest payable (net)	**126.0**					(8.5)	11.7		11.3	3.8	2.1	**146.4**
Share of JV's and associates' interest	**13.9**						(12.8)	(1.1)				**-**
Share of associates' profit after tax	**-**						4.5	14.9				**19.4**
Profit on ordinary activities before taxation	**1,017.0**	(9.7)	100.7	(4.1)		8.4	7.8	(5.1)	(1.9)	(7.0)	(2.1)	**1,104.0**
Taxation on profit on ordinary activities	**247.1**	(9.0)	1.9		(7.0)	2.0	3.0	(6.0)		0.2		**232.2**
Profit on ordinary activities after taxation	**769.9**	(0.7)	98.8	(4.1)	7.0	6.4	4.8	0.9	(1.9)	(7.2)	(2.1)	**871.8**
Profit attributable to equity minority interests	**7.8**										(7.8)	**-**
Preference dividends	**0.1**										(0.1)	**-**
Profit for the year attributable to ordinary shareholders	**762.0**	(0.7)	98.8	(4.1)	7.0	6.4	4.8	0.9	(1.9)	(7.2)	5.8	**871.8**
Dividends paid	**51.0**										(51.0)	**-**
Dividends proposed	**124.7**										(124.7)	**-**
Profit retained for the financial year	**586.3**	(0.7)	98.8	(4.1)	7.0	6.4	4.8	0.9	(1.9)	(7.2)	181.5	**871.8**

Group Balance Sheet

as at 31st December 2004

All figures in € millions	Previous Irish GAAP	Adjustments under IFRS: Share-based payments (i)	Business combinations (ii)	Income tax (iii)	Pensions (iv)	Joint ventures (v)	Discounting (vi)	Derivatives (vii)	Dividends/ Min. interest (viii)	Reclass-ifications (ix)	Restated under IFRS
ASSETS											
Non-current assets											
Property, plant and equipment	**5,319.9**			19.4		491.3					**5,830.6**
Intangible assets - goodwill	**1,443.5**		78.0	7.4	0.6	227.4					**1,756.9**
Intangible assets - other	**-**		17.2								**17.2**
Investments in joint ventures:											
- share of gross assets	**993.1**					(993.1)					**-**
- share of gross liabilities	**(535.1)**					535.1					**-**
- loans to joint ventures	**83.5**					(83.5)					**-**
Investments in associates	**149.2**		0.7			28.9					**178.8**
Derivative financial instruments	**-**							173.2			**173.2**
Other financial assets	**11.7**					101.5					**113.2**
Deferred income tax assets	**-**	18.5		207.4	101.2	7.1		1.1			**335.3**
Total non-current assets	**7,465.8**	18.5	95.9	234.2	101.8	314.7		174.3			**8,405.2**
Current assets											
Inventories	**1,249.6**		1.3			58.0					**1,308.9**
Trade and other receivables	**1,829.8**					132.9	10.4				**1,973.1**
Derivative financial instruments	**-**							1.1			**1.1**
Liquid investments	**-**									311.7	**311.7**
Cash and cash equivalents	**1,322.4**					61.3				(311.7)	**1,072.0**
Total current assets	**4,401.8**		1.3			252.2	10.4	1.1		-	**4,666.8**
Total assets	**11,867.6**	18.5	97.2	234.2	101.8	566.9	10.4	175.4		-	**13,072.0**
EQUITY											
Capital and reserves attributable to the Company's equity holders											
Equity share capital	**181.0**										**181.0**
Preference share capital	**1.2**										**1.2**
Share premium account	**2,149.3**										**2,149.3**
Other reserves	**9.9**	13.6									**23.5**
Foreign currency translation reserve	**-**		(3.6)	17.9	2.5	(0.4)	(1.3)	5.1		(200.1)	**(179.9)**
Retained income	**2,876.4**	4.9	103.0	(358.9)	(213.2)	(3.3)	47.5	(11.1)	124.7	200.1	**2,770.1**
	5,217.8	18.5	99.4	(341.0)	(210.7)	(3.7)	46.2	(6.0)	124.7	-	**4,945.2**
Minority interest	**82.6**		1.7	(0.7)		4.8			(54.2)		**34.2**
Total equity	**5,300.4**	18.5	101.1	(341.7)	(210.7)	1.1	46.2	(6.0)	70.5	-	**4,979.4**
LIABILITIES											
Non-current liabilities											
Interest-bearing loans and borrowings	**3,351.1**					274.3		122.8	54.2		**3,802.4**
Derivative financial instruments	**-**							51.9			**51.9**
Deferred income tax liabilities	**528.3**			371.4		86.8		0.9			**987.4**
Trade and other payables	**103.4**		(5.0)			29.7	(6.1)				**122.0**
Retirement benefit obligations	**-**				347.2	2.5					**349.7**
Provisions for liabilities and charges	**325.7**		0.3		(10.2)		(133.5)				**182.3**
Capital grants	**11.0**					1.4					**12.4**
Total non-current liabilities	**4,319.5**		(4.7)	371.4	337.0	394.7	(139.6)	175.6	54.2		**5,508.1**
Current liabilities											
Trade and other payables	**1,638.0**		(1.0)		(25.1)	122.5	7.7				**1,742.1**
Current income tax liabilities	**73.0**		1.8	204.5	0.6	4.6					**284.5**
Interest-bearing loans and borrowings	**412.0**					44.0		(204.6)			**251.4**
Derivative financial instruments	**-**							210.4			**210.4**
Provisions for liabilities and charges	**-**						96.1				**96.1**
Dividends proposed	**124.7**								(124.7)		**-**
Total current liabilities	**2,247.7**		0.8	204.5	(24.5)	171.1	103.8	5.8	(124.7)		**2,584.5**
Total liabilities	**6,567.2**		(3.9)	575.9	312.5	565.8	(35.8)	181.4	(70.5)		**8,092.6**
Total equity and liabilities	**11,867.6**	18.5	97.2	234.2	101.8	566.9	10.4	175.4	-		**13,072.0**
Net debt (x)	**2,440.7**	-	-	-	-	257.0	-	6.2	54.2	-	**2,758.1**

Income taxes *continued*

Most companies did not explain the change in the underlying principles in determining deferred tax in accordance with IFRS compared with previously applied national accounting standards. However, an example of such an explanation is that given by TESCO as follows:

TESCO Annual Report and Financial Statements 2006, p99

Deferred and current taxes (IAS 12)

Under UK GAAP deferred tax was recognised in respect of all timing differences that had originated but not reversed by the Balance Sheet date and which could give rise to an obligation to pay more or less taxation in the future.

Deferred tax under IAS 12 'Income Taxes' is recognised in respect of all temporary differences at the Balance Sheet date between the tax bases of assets and liabilities and their carrying value for financial reporting purposes.

The change to a Balance Sheet liability method of providing for deferred tax leads to a number of adjustments, as follows:

	29 February 2004 Net assets £m	2004/05 Income Statement £m	2004/05 Reserves £m	26 February 2005 Net assets £m
Impact of IAS 12	(79)	(13)	(2)*	(94)
Tax effect of accounting changes	232	33	78*	343
Net impact on tax balance/profit after tax	153	20	76	249
JV and Associate presentation change		32		
Total impact on tax		52		

* Includes foreign currency translation differences in respect of foreign operations

The significant components of the Balance Sheet adjustments are the recognition of deferred tax assets on the pension deficit and share-based payments, less deferred tax provisions for potential future gains arising from rolled-over gains and for the potential future tax liabilities arising from fair value adjustments recorded for business combinations. Neither of these provisions were previously recognised under FRS 19.

Disclosure of major components of tax expense

Paragraph 79 of IAS 12 requires the major components of tax expense to be disclosed separately. The standard provides examples of the type of components expected to be disclosed. Our review indicated that the level of detail provided by companies varies. In particular:

- Approximately half of the companies surveyed separated the tax expense into different jurisdictions, but those that did so generally divided the expense into just two categories: country of parent company and foreign countries.
- 11 companies in the sample disclosed only the total amount for current tax and deferred tax and did not present an analysis of the major components of each of these two categories. In a number of these cases, it was possible to derive some further information about the elements of the deferred tax charge from other supporting notes, such as the note setting out the movement in the deferred tax liability.

An income tax note illustrating the requirements of paragraph 79 of IAS 12 has been extracted below from the LAFARGE Annual Report:

LAFARGE Annual Report on Form 20-F, pF-38

The income tax expense for the year is detailed as follows:

(MILLION EUROS)	YEARS ENDED DECEMBER 31, 2005	2004
CURRENT INCOME TAX	**630**	**439**
French companies	35	42
Foreign companies	595	397
DEFERRED INCOME TAX	**(206)**	**(172)**
French companies	(171)	(110)
Foreign companies	(35)	(62)
INCOME TAX	**424**	**267**

The components of the income tax expense are as follows:

(MILLION EUROS)	YEARS ENDED DECEMBER 31, 2005	2004
CURRENT INCOME TAX	**630**	**439**
Corporate income tax for the period	575	390
Adjustment recognized in the period for current tax of prior periods	20	(19)
Withholding tax on dividends	25	18
Other	10	50
DEFERRED INCOME TAX	**(206)**	**(172)**
Deferred taxes on origination or reversal of temporary differences	(185)	(72)
Effect of changes in tax rates	-	(40)
Prior period unrecognized assets used in the period	(1)	5
Reassessment of deferred tax assets	(30)	(51)
Other	10	(14)
INCOME TAX	**424**	**267**

Income taxes *continued*

Tax reconciliation disclosure

Paragraph 81(c) of IAS 12 requires a company to disclose the relationship between tax expense and accounting profit by way of either a reconciliation between tax expense and the product of accounting profit multiplied by the applicable tax rates, or a reconciliation between the average effective tax rate and the applicable tax rate.

In essence, the reconciliation analyses the reason for the difference between the 'expected' or 'theoretical' tax charge and the actual tax charge, thereby enabling users of financial statements to understand the factors that have affected the tax charge, whether the relationship between the tax expense and accounting profit is unusual, and the significant factors that could affect that relationship in the future. Depending on the level of detail of the information disclosed, the reconciliation table can be particularly useful in helping to explain how the tax expense has been determined.

Choice of reconciliation

The types of reconciliation used by the companies within the sample may be summarised as follows:

	Reconciliation of tax expense	Reconciliation of tax rate	Reconciliation using both methods
Number of companies	38	20	7

Applicable tax rate used in the tax reconciliation

The standard requires the exercise of judgment in determining the applicable tax rate. It requires a company to use a rate that provides the most meaningful information to the users of its financial statements. The choice of the applicable tax rate is important, because it has a direct impact on the items disclosed in the reconciliation table and therefore the degree of its usefulness.

The following table summarises the bases for the applicable tax rate used by the companies in the sample:

	Number of entities
Country tax rate of parent company – either statutory rate or combined rate (eg statutory plus other taxes, such as surtax)	47
Average tax rate of companies comprising the group	12
Respective tax rates of companies comprising the group	3
Did not disclose the basis on which the applicable tax rate is computed	3

Among 35 companies where changes in the applicable tax rates were noted as compared to the previous accounting period, seven explained the reason for changes as required by paragraph 81(d) of IAS 12.

Level of detail in the tax reconciliation

As noted above, given the variety of possible disclosure formats and level of detail, the usefulness of the tax reconciliation can vary significantly:

- Approximately 70% of companies within the sample gave a relatively brief description of the nature of reconciling items, such as income not subject to tax and expenses not deductible for tax, without further elaboration. In certain cases, only a narrative description without corresponding quantitative effects was presented.

- The table below summarises the number of reconciling line items provided:

Number of companies	Number of reconciling items
Fewer than 5	19
Between 5 and 10	44
Greater than 10	2

- Use of the balancing item 'other' was widespread. However, the amount was generally immaterial and did not appear to be used as a means of avoiding further disclosure. The table below shows the extent of the residual reconciling items that were included in an item described as 'other':

	Number of companies
No 'other' used	13
Balance included in 'other' less than 5% of profit before tax	49
Balance included in 'other' greater than 5% but less than 10% of profit before tax	3

A detailed tax reconciliation was provided by VIVENDI UNIVERSAL:

VIVENDI UNIVERSAL 2005 Annual Report, p202

(In millions of euros, except %)	Note	Year Ended December 31, 2005	2004
Earnings, attributable to equity holders of the parent		3,154	3,767
Add back:			
Provision for income taxes		204	292
Earnings from discontinued operations		(92)	(777)
Minority interests		1,112	1,056
Earnings from continuing operations before provision for income taxes		**4,378**	**4,338**
French statutory tax rate (a)		**33.3%**	**33.3%**
Theoretical provision for income taxes based on French statutory tax rate		**(1,459)**	**(1,446)**
Reconciliation of the theoretical and effective provision for income taxes:			
Permanent differences			
Income from equity affiliates (b)		114	74
Long term capital gains and losses taxed at reduced rate		-	81
Untaxable consolidation capital gains		104	222
Other differences from tax rates		(75)	(79)
Other permanent differences		(154)	(117)
Restatements in respect of the provision for income taxes of previous years			
Reversal of tax liabilities relating to tax years no longer open to audit		300	-
Other		49	-
Tax losses			
Current tax savings related to the Consolidated Global Profit Tax System	6.1.1	507	464
Change in the deferred tax asset related to the Consolidated Global Profit Tax System	6.1.1	88	492
Other changes from deferred tax assets		123	-
Use of unrecognized ordinary losses (France and US)		215	209
Unrecognized tax losses		(16)	(192)
Effective provision for income taxes		**(204)**	**(292)**
Effective tax rate		**4.7%**	**6.7%**

Income taxes *continued*

Recognised temporary differences, tax losses and tax credits

Paragraph 81(g) of IAS 12 requires an analysis of each type of temporary difference, unused tax losses and unused tax credits recognised by the company in the balance sheet and income statement. Most of the companies in the sample chose a combination of line item description in a table and some additional narrative where appropriate.

Where the table format was adopted, the following categories were frequently reported in the analysis:

- intangible assets and/or goodwill
- provision for pensions or employee benefits
- financial instruments
- inventories
- property, plant and equipment
- tax losses
- tax credits, and
- general provisions.

Some of the less common categories appearing in deferred tax asset and liability reconciliations included:

- employee share options
- capitalisation of development costs
- restructuring provisions, and
- reserves for contingencies.

Although not specifically required to do so by IAS 12, approximately half of the companies in the sample provided a reconciliation of the movement between the opening and closing balances of deferred tax assets and liabilities. This approach provides a convenient way of dealing with other disclosure requirements of the standard, such as the amounts that were recognised either in the income statement or in equity.

Most of the companies that provided an analysis of the movements in deferred tax assets and deferred tax liabilities did so by linking them to the total amounts contained in the balance sheet. Other companies went further by using the reconciliation table to meet the requirements of paragraph 81(g) of IAS 12 referred to above and analysing the movement in the different types of temporary differences comprising the total. Such a reconciliation was presented by FIAT:

FIAT Consolidated Financial Statements 2005, p100

02 Fiat Group

Deferred tax assets, net of Deferred tax liabilities, can be analysed as follows:

(in millions of euros)	At December 31, 2004	Recognised in income statement	Charged to equity	Changes in the scope of consolidation	Translation differences and other changes	At December 31, 2005
Deferred tax assets arising from:						
Taxed provisions	1,057	261	–	13	65	**1,396**
Inventories	132	72	–	10	9	**223**
Taxed allowances for doubtful accounts	149	(7)	–	(2)	2	**142**
Employee benefits	630	(19)	–	(21)	85	**675**
Write-downs of financial assets	1,660	(566)	–	(20)	(1)	**1,073**
Measurement of derivative financial instruments	14	4	14	–	(10)	**22**
Other	998	(25)	–	–	126	**1,099**
Total Deferred tax assets	4,640	(280)	14	(20)	276	**4,630**
Deferred tax liabilities arising from:						
Accelerated depreciation	(405)	(34)	–	(32)	(62)	**(533)**
Deferred tax on gains	(171)	91	–	–	(3)	**(83)**
Capital investment grants	(24)	(3)	–	–	–	**(27)**
Employee benefits	(9)	(4)	–	(11)	–	**(24)**
Capitalisation of development costs	(692)	(84)	–	–	(46)	**(822)**
Other	(872)	(159)	9	78	(67)	**(1,011)**
Total Deferred tax liabilities	(2,173)	(193)	9	35	(178)	**(2,500)**
Theoretical tax benefit arising from tax loss carryforwards	4,591	469	–	(182)	133	**5,011**
Adjustments for assets whose recoverability is not probable	(5,178)	(421)	–	244	(87)	**(5,442)**
Total Deferred tax assets, net of Deferred tax liabilities	**1,880**	**(425)**	**23**	**77**	**144**	**1,699**

Some companies elected to provide further analysis of recognised deferred tax assets and liabilities. BOUYGUES provided a breakdown by business segment as follows:

BOUYGUES 2005 Consolidated Financial Statements, p185

8.3. Deferred tax assets and liabilities by business segment

Type of deferred taxation by business segment	Net deferred tax asset / liability at 31/12/04	Changes in scope of consolidation	Translation adjustment	Movements during 2005		Other items
				Gain	Expense	
A - Tax losses available for carry-forward						
Bouygues Construction	3					
Bouygues Immobilier						
Colas	3			4		
Media				12		
Telecoms	332				(168)	
Bouygues SA and other activities						
Sub-total	**338**	**0**	**0**	**16**	**(168)**	**0**
B - Temporary differences[1]						
Bouygues Construction	33			13	(1)	12
Bouygues Immobilier	16			5		
Colas	(23)	(3)	(4)	16	(7)	17
Media	(10)			11	(1)	(3)
Telecoms	94			4	(57)	(3)
Bouygues SA and other activities	(40)			3	(1)	29
Sub-total	**70**	**(3)**	**(4)**	**52**	**(67)**	**52**
Total	**408[2]**	**(3)**	**(4)**	**68**	**(235)**	**52**

(1) main sources of deferred taxation:	2005	2004
- deferred tax assets on employee benefits	87	64
- deferred tax on temporarily non-deductible provisions	54	19
- restricted provisions booked solely for tax purposes	(57)	(18)
- other	16	5
	100	70

(2) net deferred tax asset

Income taxes *continued*

Treatment of tax losses carried forward

Paragraph 34 of IAS 12 requires a company to recognise a deferred tax asset for the carryforward of unused tax losses to the extent that it is probable that future taxable profit will be available against which the unused tax losses can be utilised. In specific circumstances (such as current or previous year losses in the tax jurisdiction in which the deferred tax asset arises) the amount of the deferred tax asset recognised and the nature of the evidence supporting the recognition are also required to be disclosed. Disclosure is also required under paragraph 81(e) of the amount (and expiry date, if any) of deductible unused tax losses for which no deferred tax asset is recognised in the balance sheet.

57 companies in the sample separately disclosed in the deferred tax note that a deferred tax asset is recognised for tax losses carried forward. Among these, 14 companies disclosed the nature of the evidence supporting the recognition and included factors such as:

- budgets and forecasts
- restructuring measures implemented
- updated strategic plans and related tax plans.

Three of the 57 companies that separately disclosed recognised tax losses in the current year in the reconciliation table did not include details of any unrecognised tax losses in the prior period (IAS 12 requires disclosure of the amount of the benefit from a previously unrecognised tax loss), and 45 companies in the sample disclosed the existence of unrecognised tax losses carried forward.

However, the level of detail varied and can be summarised is follows:

Unrecognised deferred tax assets arising from tax losses

	Number of companies
Both amount and expiry date of tax losses disclosed	17
No information on the expiry date of the tax losses	13
Amount and expiry date combined with the disclosure of other unrecognised deferred tax assets (ie not possible to isolate those relating to tax losses)	15

Investments in subsidiaries, associates and interests in joint ventures

Paragraph 81(f) of IAS 12 requires disclosure of the aggregate amount of temporary differences associated with investments in subsidiaries, branches and associates and interests in joint ventures for which deferred tax liabilities have not been recognised. Our review of the 65 companies produced the following results:

	Number of companies
Unrecognised temporary differences quantified	19
Unrecognised temporary differences not quantified	6
Statement that the temporary differences were recognised but not quantified in the note	3
Statement that deferred tax was not recognised as the amount was immaterial	5
Disclosure not addressed in the notes to the financial statements	32

From the results above, it can be observed that only 30% of companies quantified the unrecognised temporary differences. An example of the quantification of the temporary differences not recognised has been extracted from the BAYER Annual Report:

BAYER 2005 Annual Report, p128

Deferred taxes have not been recognized for temporary differences of €4,283 million (2004: €3,662 million) relating to earnings of foreign subsidiaries, either because these profits are not subject to taxation or because they are to be reinvested for an indefinite period. If deferred taxes were recognized for these temporary differences, the liability would be based on the respective withholding tax rates only, taking into account the German tax rate of 5 percent on corporate dividends where applicable. The amount of these unrecognized deferred tax liabilities could not be derived with reasonable effort.

Share-based payment

Accounting for share-based payment awards under IFRS 2 *Share-based Payment* has proven to be far from straightforward. The standard itself is silent on certain areas and the topic has resulted in no fewer than one IFRIC interpretation, and two draft IFRIC interpretations, three IFRIC rejection notices and an exposure draft that would amend the standard. All this, even though IFRS 2 has only been applicable for accounting periods beginning on or after 1 January 2005.

As with accounting for post-employment benefits, the application of IFRS 2 involves significant estimation and many areas of uncertainty need to be addressed. The steps required in analysing a share-based payment transaction for IFRS accounting purposes can be summarised broadly as follows:

1. determination of whether the plan falls under the scope of IFRS 2
2. determination of whether the fair value of the share-based payment is to be determined with reference to the fair value of the goods and services received or the fair value of the equity instruments granted
3. determination of whether an award is cash or equity settled
4. choice of an appropriate valuation model
5. decision as to the appropriate inputs for the valuation model chosen
6. estimation of the number of equity settled awards which will vest. This requires assumptions regarding 'leavers' and also regarding the probability that non-market performance conditions will be met.

Interestingly, IFRS 2 does not require any specific disclosures relating to how the decisions in Steps 1 to 4 and 6, above were arrived at, even though these are crucial to the accounting which follows.

However, paragraph 46 of IFRS 2 states: 'An entity shall disclose information that enables users of the financial statements to understand how the fair value of the goods or services received, or the fair value of the equity instruments granted, was determined.' Among the specific information that is required to be disclosed in compliance with paragraph 46 is the valuation model, the inputs to the model, how expected volatility was determined, and how other features of the award, such as market conditions on incorporated into the measurement of fair value.

Aspects of share-based payments that we considered in reviewing our sample of 65 financial statements were:

- What types of valuation model were used to value share-based payments?
- What types of vesting conditions were applied?
- What information was provided about valuation input factors, especially volatility?

Our research suggests that in some instances the information provided by companies was probably not at the level expected by the IASB.

Within our sample, five companies had not made any share-based awards (or at least did not provide any IFRS 2 related information). Therefore, more than 90% of companies reviewed had awarded some form of share-based remuneration to their employees. Most of these companies entered into different types of grants, depending on to whom the award was granted.

Disclosures regarding the type of valuation model used to value share-based payments

Paragraph 47 of IFRS 2 requires disclosure of the valuation models used to value share options and grants of other equity instruments. We extracted this information from the financial statements and also identified which models were used to value equity-settled plans as opposed to cash-settled plans.

The following is a summary of the information gathered:

Model	Equity-settled		Cash-settled		Settlement not disclosed	
	Number		Number		Number	
Black-Scholes-Merton	28	43%	4	21%	4	50%
Binomial	14	22%	3	16%	3	38%
Trinomial	2	3%	–	–	–	–
Monte Carlo	7	11%	5	26%	–	–
Market Value of underlying shares	8	12%	1	5%	–	–
Model not stated	6	9%	6	32%	1	12%
TOTAL	**65**	**100%**	**19**	**100%**	**8**	**100%**

Equity-settled plans

Some of the 59 companies in our sample that disclosed having granted equity-settled share-based payments granted more than one type of plan, leading to a total of 65 disclosures of equity-settled share-based payment plans in the financial statements surveyed.

It can be seen from this analysis that the Black-Scholes-Merton method is by far the most popular when valuing equity-settled plans, which is perhaps to be expected given that a high proportion of companies in our sample are SEC registrants. The Black-Scholes-Merton model is widely used for US GAAP purposes and is less demanding to use than the binomial or other models.

Appendix B5 to IFRS 2 discusses the factors that are relevant to the choice of pricing model. In particular, it states that:

'The entity shall consider factors that knowledgeable, willing market participants would consider in selecting the option pricing model to apply. For example, many employee options have long lives, are usually exercisable during the period between vesting date and the end of the options' life, and are often exercised early. These factors should be considered when estimating the grant date fair value of the options. For many companies, this might preclude the use of the Black-Scholes-Merton formula, which does not allow for the possibility of exercise before the end of the option's life and may not adequately reflect the effects of expected early exercise. It also does not allow for the possibility that expected volatility and other model inputs might vary over the option's life. However, for share options with relatively short contractual lives, or that must be exercised within a short period of time after vesting date, the factors identified above may not apply. In these instances, the Black-Scholes-Merton formula may produce a value that is substantially the same as a more flexible option pricing model.'

Share-based payment *continued*

In general, the financial statements reviewed did not offer an explanation as to why it was thought that use of the Black-Scholes-Merton model was appropriate in the 28 instances where it was the chosen model. It is not clear whether it can be inferred from this that the effect of using a different pricing model, for example a binomial model, would have been immaterial.

Of the companies that used the Black-Scholes-Merton model, five specified that they used this model specifically for valuing options. These companies used other models for grants of other types of instruments. For example, ANGLO AMERICAN specified that the Black-Scholes-Merton model was used to value awards which incorporated non-market performance conditions whereas a Monte Carlo model was used if the award did not include performance conditions:

ANGLO AMERICAN Annual Report 2005, p53

> The Group makes equity-settled share-based payments to certain employees, which are measured at fair value at the date of grant. For those share schemes which do not include non-market vesting conditions, the fair value is determined using the Monte Carlo method at the grant date and expensed on a straight line basis over the vesting period, based on the Group's estimate of shares that will eventually vest. The fair value of share options issued with non-market vesting conditions has been calculated using the Black Scholes model. For all other share awards, the fair value is determined by reference to the market value of the share at the date of grant. For all share schemes with non-market related vesting conditions, the likelihood of vesting has been taken into account when determining the relevant charge. Vesting assumptions are reviewed during each reporting period to ensure they reflect current expectations.

Three companies used the Monte Carlo method to value awards of restricted shares. One plan incorporating market conditions was valued using the Monte Carlo method whereas one entity stated that this method was used if there were no performance conditions. It was not clear if this meant there were market conditions present in the plan.

The market value of the underlying shares, adjusted in some instances for dividends, was the method used in seven instances for valuing grants of restricted shares. One entity used this method for valuing 'other awards'.

Six companies which gave disclosures regarding equity-settled plans did not specify which valuation model was used, notwithstanding the IFRS 2 requirement to do so.

Cash-settled plans

As can be seen from the table above, there were far fewer instances of grants of cash-settled awards than equity-settled awards. It remains to be seen whether the income statement volatility caused by the IFRS 2 requirement to re-measure cash-settled awards at fair value at each reporting date until settlement will discourage companies from using cash-settled plans.

Interestingly, the use of the Black-Scholes-Merton model was not as prevalent for cash-settled as for equity-settled plans (20% of cash-settled, 40% of equity-settled), whereas the Monte Carlo method was used to value a quarter of the cash-settled plans, as opposed to 10% of the equity-settled plans. One third of the companies that disclosed the existence of cash-settled plans did not state which valuation model was used.

It was not immediately apparent whether this was due to the existence of particular features in the cash-settled plans which required use of a more sophisticated model.

Other observations

In eight cases share-based payments were disclosed without specifying whether they were equity-settled or cash-settled.

When companies used more than one model, there was no disclosure of the reasons for using different models or, more generally, any explanation of why a particular model was used.

Overall there appears to have been some degree of correlation between the pricing model used and the type of share-based payment (equity-settled or cash-settled) concerned and also the types of vesting conditions involved. However in some cases the Black-Scholes-Merton model was used despite the existence of factors that, according to Appendix B5 of IFRS 2, might make the use of the model inappropriate.

We also observed a high rate of non-disclosure of the type of valuation model used for a specified type of plan, (10% of the equity-settled plans and one third of the cash-settled plans) and also that 10% of the disclosures did not clarify whether the plan was equity or cash-settled.

There was no correlation between a particular type of model and the industry in which a company operates. The determining factor seemed to be the type of award combined with the existence or absence of performance or market conditions.

Disclosures regarding the types of vesting conditions applied

Paragraph 45 of IFRS 2 requires disclosure of 'the general terms and conditions of each arrangement, such as vesting requirements'.

Some companies provided much more detailed disclosures than others. Also, some companies granted a wide variety of types of plans and did not always give extensive details of each particular plan.

Companies generally stated clearly whether a plan incorporates a required service period and the length of that period:

CARLSBERG Annual Report 2005, p71

> The share options vest over a period of three years from the time of grant. The options may be exercised no earlier than three years and no later than eight years after they are granted. Where an employee leaves the company, a proportion of the options may be exercised within a deadline of between one and three months. Special terms and conditions apply in the case of retirement, illness, death and changes in Carlsberg A/S' capital situation.

Details of specific performance targets were not always given. NOKIA, however, gave the following information regarding non-market performance conditions:

Share-based payment *continued*

NOKIA 2005 Annual Accounts IFRS, p49-50

Performance shares

The Group has granted performance shares under the 2004 and 2005 performance share plans, which have been approved by the Board of Directors. A valid authorization from the Annual General Meeting is required, when the plans are settled using the Company's newly issued shares or disposal of existing treasury shares. The Group may also settle the plans using shares purchased on the open market or in lieu of shares cash settlement. The Group introduced performance shares in 2004 as the main element to broad-based equity compensation program, to further emphasize the performance element in employees' long-term incentives. The performance shares represent a commitment by the Company to deliver Nokia shares to employees at a future point in time, subject to the company's fulfillment of pre-defined performance criteria. No performance shares will vest unless the Company's performance reaches at least one of the threshold levels measured by two independent, pre-defined performance criteria. For performance between the threshold and maximum performance levels the settlement follows a linear scale. Performance exceeding the maximum criteria does not increase the number of shares vesting. The maximum number of performance shares (Maximum Number) equals four times the number originally granted (Threshold Number). The criteria are calculated based on the Group's Average Annual Net Sales Growth and Earnings per Share ("EPS") Growth (basic) for the four year performance period of the plan. For the 2004 plan the performance period consists of the fiscal years 2004 through 2007 and for the 2005 plan the years 2005 through 2008.

For both the 2004 and 2005 plans, if either of the required performance levels are achieved, the first settlement will take place after two years' interim measurement period and is limited to a maximum vesting equal to the Threshold Number. The second and final settlement, if any, will be after the close of the four year performance period. Any settlement made after the Interim Measurement Period, will be deducted from the final settlement after the full Performance Period.

A number of entities linked vesting to market conditions. ASTRAZENECA gave the following information about its performance share plan:

ASTRAZENECA Annual Report and Form 20-F Information 2005, p112

The AstraZeneca Performance Share Plan
This plan was approved by shareholders in 2005 for a period of 10 years. Generally, awards can be granted at any time, but not during a close period of the Company. The first grant of awards was made in June 2005. Thereafter, the majority of awards are likely to be granted at or around the same time as options are granted under the AstraZeneca Share Option Plan. Awards granted under the plan vest after three years depending on the performance of the Company compared to that of a selected peer group of other pharmaceutical companies. The Remuneration Committee has responsibility for agreeing any awards under the plan and for setting the policy for the way in which the plan should be operated, including agreeing performance targets and which employees should be invited to participate. A fuller description of this plan can be found on page 73 in the Directors' Remuneration Report.

Paragraph 47(a)(iii) of IFRS 2 requires an entity to disclose 'whether and how any other features of the option grant were incorporated into the measurement of fair value, such as a market condition'.

However, few companies explained how market conditions were incorporated into the fair value measurement. BP was one that did give such an explanation:

BP Annual Report and Accounts 2005, p99

Shares granted in 2005	MTPP – TSR	MTPP – FCF	EDIP – TSR	EDIP – LTL	RSP
Number of equity instruments granted (million)	9.3	8.4	3.7	0.5	0.3
Weighted average fair value	$5.72	$11.04	$3.87	$10.13	$11.04
Fair value measurement basis	Monte Carlo	Market value	Monte Carlo	Market value	Market value

The group used a Monte Carlo simulation to fair value the TSR element of the 2005 MTPP and EDIP plans. In accordance with the rules of the plans the model simulates BP's TSR and compares it against our principal strategic competitors over the three-year period of the plans. The model takes into account the historic dividends, share price volatilities and covariances of BP and each comparator company to produce a predicted distribution of relative share performance. This is applied to the reward criteria to give an expected value of the TSR element.

This disclosure clearly explains how the 'TSR' (Total Shareholders' Return) market feature was incorporated into the fair value measurement.

It appears from our review that while companies generally disclosed whether vesting was subject to a service period, performance and/or market condition, specific details regarding those vesting conditions were not always given despite the requirement to do so in paragraph 7 of IFRS 2.

Disclosures of valuation input factors

IFRS 2 requires disclosure of the inputs to the model used for the purposes of fair valuing share-based awards, including:

- exercise price of the option
- life of the option
- current price of the underlying shares
- expected volatility of the share price
- dividends expected on the shares (if appropriate), and
- risk-free interest rate for the life of the option.

Nine companies did not provide any disclosure regarding inputs to the valuation models used, although one of the companies explained that no grants of share-based awards had occurred in the year. BP provided the following table on the input factors used:

Share-based payment *continued*

BP Annual Report and Accounts 2005, p99

FAIR VALUES AND ASSOCIATED DETAILS FOR OPTIONS AND SHARES GRANTED

Options granted in 2005	BPSOP	ShareSave 3 year	ShareSave 5 year
Option pricing model used	Binomial	Binomial	Binomial
Weighted average fair value	$2.34	$2.76	$2.94
Weighted average share price	$10.85	$10.49	$10.49
Weighted average exercise price	$10.63	$7.96	$7.96
Expected volatility	18%	18%	18%
Option life	10 years	3.5 years	5.5 years
Expected dividends	2.72%	3.00%	3.00%
Risk free interest rate	4.25%	4.00%	4.25%
Expected exercise behaviour	5% years 4-9 70% year 10	100% year 4	100% year 6

Options granted in 2004	EDIP Options	BPSOP	ShareSave 3 year	ShareSave 5 year
Option pricing model used	Binomial	Binomial	Binomial	Binomial
Weighted average fair value	$1.34	$1.55	$1.94	$2.13
Weighted average share price	$8.09	$8.12	$8.75	$8.75
Weighted average exercise price	$8.09	$8.09	$7.00	$7.00
Expected volatility	22%	22%	22%	22%
Option life	7 years	10 years	3.5 years	5.5 years
Expected dividends	3.75%	3.75%	3.75%	3.75%
Risk free interest rate	3.50%	4.00%	3.00%	3.75%
Expected exercise behaviour	5% years 2-6 75% year 7	5% years 4-9 70% year 10	100% year 4	100% year 6

Expected volatility is a measure of the amount by which the company's share price is expected to fluctuate each year during the expected life of the option. Much of the value of a share option is derived from its potential for appreciation resulting from that volatility. The greater the volatility of the underlying share, the more valuable the option because of the greater possibility of significant changes in share price.

The expected volatility is one of the most subjective valuation inputs and paragraph 47(a)(ii) of IFRS 2 requires disclosure of how expected volatility was determined and the extent to which expected volatility was based on historical volatility.

CRH gave a detailed analysis of how expected volatility was determined, explaining that volatility was based on historical volatility and disclosing the intervals for price observations:

CRH Annual Report 2005, p76

The fair values of options granted under the 2000 share option scheme were determined using the following assumptions:

	2005		2004		2003	
	3-year	**5-year**	3-year	5-year	3-year	5-year
Weighted average exercise price (amounts in €)	**20.84**	**n/a**	16.72	16.72	13.20	13.20
Risk-free interest rate (%)	**3.03**	**n/a**	3.30	3.66	3.42	3.83
Expected dividend payments over the expected life (€ cent)	**260.74**	**n/a**	222.50	365.20	189.46	310.98
Expected volatility (%)	**23.3**	**n/a**	27.4	28.2	31.9	28.0
Expected life in years	**5**	**n/a**	5	7	5	7

The expected volatility was determined using an historical sample of 61 month-end CRH share prices in respect of the three-year share options and 85 month-end share prices in respect of the five-year share options. Share options are granted at market value at the date of grant. The expected lives of the options are based on historical data and are therefore not necessarily indicative of exercise patterns that may materialise.

Paragraph B25 of Appendix B to IFRS 2 identifies various factors that should be considered in estimating expected volatility. AHOLD and EADS illustrate two of these factors, namely the appropriateness of disregarding a period of extraordinary volatility from the historical volatility used to estimate expected volatility, and the relevance in estimating expected volatility of the implied volatility from traded options on the entity's shares.

AHOLD disclosed that expected volatility was based on historical volatilities excluding a specific period of extraordinarily high volatility.

AHOLD Annual Report 2005, p121

Valuation model and input variables

The weighted average fair value of the share options granted in 2005 and 2004 amounts to EUR 2.30 and EUR 2.12 respectively. These fair values were calculated using the Black-Scholes-Merton formula and the following assumptions:

WEIGHTED AVERAGE ASSUMPTIONS	2005	2004
Expected life of the option (years):		
Five-year options	4.0	4.0
Eight-year options	5.5	–
Ten-year options	6.0	6.0
Interest rate	3.0%	3.5%
Volatility	43.0%	45.0%
Assumed annual forfeitures	5.0%	5.0%
Assumed dividend yield	2.0%	2.0%

The effects of expected early exercise have been incorporated in the calculation by using an expected life of the share option that is shorter than the contractual life. Expected volatility has been determined based on historical volatilities, whereby the extraordinarily volatile month after February 24, 2003 has been excluded.

EADS used historical volatility, but only after checking that differences compared to implied volatility from traded options on the company's shares were immaterial:

EADS Financial Statements and Corporate Governance 2005 , p98

EADS uses the historical volatilities of its share price as an indicator to estimate the volatility of its stock options granted. To test whether those historical volatilities sufficiently approximate expected future volatilities, they are compared to the implied volatilities of EADS options, which are traded at the market as of grant date. Such options typically have a shorter life of up to two years. In case of only minor differences between the historical volatilities and the implied volatilities, EADS uses historical volatilities as input parameters to the Black Scholes Option Pricing Model (please refer to Note 2 "Summary of significant accounting policies"). For valuation purposes performance criteria are considered to be met.

The estimated option life of 5.5 years is based on historical experience and incorporates the effect of expected early exercises.

Some other companies disclosed what the expected volatility was, but did not elaborate on whether it was based on historical volatility or otherwise, notwithstanding the requirement in paragraph 47(a)(ii) of IFRS 2.

25 companies stated that volatility was based on historical volatility, while a significant number of companies referred to implied volatility.

The range of volatilities disclosed was very large, with the lowest volatility being 15% for a pharmaceuticals company and the highest being 60% for a company in the industrial products sector.

Part 3 Analysis by Industry

Automotive manufacturers

The sample chosen from the automotive manufacturing sector consisted of the following companies: BMW, FIAT, PSA PEUGEOT CITROËN, RENAULT and VOLKSWAGEN.

The German company DAIMLERCHRYSLER presented its consolidated financial statements in accordance with US GAAP. It was granted an exemption from the requirement to the IFRS until 2007 and was therefore not included in the sample.

FIAT, PSA PEUGEOT CITROËN and RENAULT were IFRS first-time adopters in 2005.

For the automotive manufacturing industry we considered the following issues:

- What revenue recognition policies are applied in the industry, not only from the sale of vehicles but also from vehicle financing arrangements?
- What policies are applied by companies in the industry or the capitalisation of development costs?
- How did companies explain their approach to the recognition and measurement of asset impairment?
- How comparable were the segments that were reported?

Revenue recognition

For all the companies in our sample, revenue is mainly generated from the sale of automotive products and from various vehicle financing arrangements.

Recognition of revenue from sale of goods

Revenue from the sale of vehicles is recognised when all risks and rewards from ownership of the goods are transferred to the customer. FIAT, PSA PEUGEOT CITROËN and RENAULT stated that this is the date when vehicles are 'made available' to non-group dealers, or upon delivery to end-users in the case of direct sales.

BMW and FIAT indicated that revenues are stated net of discounts, allowances, settlement discount and rebates. RENAULT explained its accounting policy in respect of sales incentive programmes as follows: 'When based on the volume or price of the products sold, the cost of these programs is deducted from revenues when the corresponding sales are recorded. Otherwise, the cost is included in selling, general and administrative expenses. If programs are approved after the sales, a provision is established when the decision is made.'

BMW and RENAULT disclosed that if the sale of products includes a determinable amount for subsequent services, the related revenues from the subsequent services are deferred and recognised as income over the period of the contracts.

Recognition of revenue from the sale of goods with a repurchase commitment (buy-back guarantees)

One of the special aspects of the sale of vehicles relates to buy-back guarantees given by the manufacturer. All of the automotive companies stated that, when goods are subject to a buy-back guarantee, revenue is not recognised on delivery but only after the expiry of the buy-back period (at which point the risks and rewards of ownerships are regarded as transferring to the customer).

However, the accounting treatment is not uniform throughout the companies. BMW and VOLKSWAGEN included the vehicles subject to a buy-back guarantee in inventories. By contrast, PSA PEUGEOT CITROËN recognised these vehicles in property, plant and equipment. In between, FIAT and RENAULT accounted for them as inventories for short-term contracts of less than one year and as property, plant and equipment for long-term contracts exceeding one year. The decision whether to classify these transactions as inventories or as property, plant and equipment directly affects reported working capital.

FIAT and PSA PEUGEOT CITROËN reported that vehicles recognised in property, plant and equipment are depreciated using the straight-line method, on the basis of the vehicle's cost less its estimated residual value, corresponding to the estimated resale price on the used vehicle market at the end of the buy-back period.

FIAT, PSA PEUGEOT CITROËN and RENAULT stated that they account for these buy-back commitments as operating leases in the capacity of lessor when it is probable that the vehicle will be bought back. Therefore they regarded the difference between the initial sales price and the buy-back price as rental income, spreading it on a straight-line basis over the period the vehicle is at the customer's disposal.

Any additional gain made on the resale of the vehicle on the used car market (after it is bought back from the customer) is recognised in the period in which the vehicle is sold. PSA PEUGEOT CITROËN and RENAULT disclosed the following regarding the gain made and specified the treatment when a loss is expected:

PSA PEUGEOT CITROËN 2005 Reference Document, p143

> The difference between the sale price and the buyback price is recognized as rental revenue on a straight-line basis over the duration of the buyback commitment. The vehicle is initially recognized at production cost in property, plant and equipment. Depreciation expense is calculated by the straight-line method, on the basis of the vehicle's cost less its estimated residual value, corresponding to the anticipated resale price on the used vehicle market. Any additional gain made on the final sale of the vehicle is recognized in the period when the vehicle is sold on the used car market. If the total difference is a loss, an allowance is booked when the buyback contract is signed.

Automotive manufacturers *continued*

RENAULT 2005 Registration Document, p178

> In such cases, the transactions are recorded as operating leases and included in sales of services. The difference between the price paid by the customer and the buy-back price is treated as rental income, and spread over the period the vehicle is at the customer's disposal. The production cost for the new vehicle concerned is recorded in inventories for contracts of less than one year, or included in property, plant and equipment under vehicles leased to customers when the contracts exceed one year. The sale of the vehicle as second-hand at the end of the lease gives rise to recognition of sales revenue and the related margin. As soon as a loss is expected on the resale, a provision (if the vehicle is in inventories) or additional depreciation (if the vehicle is included in property, plant and equipment) is recognized to cover the loss.

Revenue from vehicle financing arrangements

All the companies disclosed revenues from vehicle financing arrangements. PSA PEUGEOT CITROËN stated that sales financing activities consist of arranging vehicle financing for commercial networks and end customers. The financing is provided by means of conventional loans, finance leases, buy-back contracts and long-term leasing. RENAULT and PSA PEUGEOT CITROËN stated that revenue from the financial products is recognised and measured by using the effective interest rate method, so as to generate a stable rate of return over the life of the loan. PSA PEUGEOT CITROËN did so by applying the 'yield-to-maturity method'.

Presentation

Regarding the presentation of revenue, most of the companies provided a breakdown of income from the sale of goods, leased vehicles and interest income respectively. BMW was the only company that separately disclosed the revenue realised from the sale of vehicles that were subject to a lease.
For segment reporting purposes, all companies presented revenue by divisions and markets.

Development costs

Costs are incurred by automotive companies to develop vehicles and mechanical parts such as engines. IAS 38 *Intangible Assets* lays down the conditions that must be met in order to recognise development costs as an intangible asset.

Recognition

All companies disclosed an accounting policy in relation to research and development costs. As well as the general recognition criteria for an intangible asset, three out of the five companies in our sample referred to some of the additional recognition criteria for internally generated intangible assets set out in paragraph 57 of IAS 38, in particular the technical feasibility of and the intention to complete and use the intangible asset. All companies stated that research and development costs which are not capitalised are recognised as an expense when incurred.

Measurement

Once a development project meets the criteria for the recognition of an intangible asset, it should be measured at cost in accordance with paragraphs 24 and 65 to 67 of IAS 38. With regard to the types of costs capitalised, the companies disclosed the following:

- PSA PEUGEOT CITROËN stated that the capitalised amount includes payroll costs of personnel directly assigned to the project, the cost of prototypes and the cost of external services related to the project, though clarifying that these costs do not include any overhead or indirect expense, such as rent, building depreciation and information systems utilisation costs.
- VOLKSWAGEN, on the other hand, indicated that as well as direct costs attributable to the development process, capitalised costs include appropriate portions of development-related overheads (but no borrowing costs).
- BMW stated that a share of the overheads is included in the cost capitalised.

Paragraph 8 of IAS 38 defines development as 'the application of research findings or other knowledge to a plan or design for the production of new or substantially improved materials, devices, products, processes, systems or services before the start of commercial production or use'. Therefore, all companies stated that they capitalised costs until the beginning of the production of the vehicles or mechanical parts concerned.

Measurement after recognition

All the companies chose the cost model rather than the alternative revaluation model.

The companies all stated that they begin amortising the capitalised costs on the date production commences on a systematic basis, principally using the straight-line method, over the estimated useful life of the asset. As shown below, the useful life determined by the companies ranged from three to more than ten years, depending on the asset concerned:

Company	Product category	Useful life
BMW	Development expenditure was not categorised	7 years
FIAT	• cars	4-5 years
	• trucks and buses	8 years
	• agricultural and construction equipment	6 years
	• engines	8-10 years
	• components	3-5 years
PSA PEUGEOT CITROËN	• vehicles	up to 7 years
	• mechanical parts	more than 10 years
RENAULT	Development expenditure was not categorised	no more than 7 years
VOLKSWAGEN	Development expenditure was not categorised	between 5 and 10 years

Automotive manufacturers *continued*

Presentation

All the companies reported their total development expenditure, disclosing the amounts capitalised and the amounts expensed separately as shown below in PSA PEUGEOT CITROËN's financial statements:

PSA PEUGEOT CITROËN 2005 Reference Document, p155

↗ 7.1. IMPACT OF CAPITALIZATION ON THE STATEMENT OF INCOME

(in millions of euros)	2005	2004
Total expenditure	(2,151)	(2,183)
Capitalized development expenditure (note 13.1)	856	885
Non-capitalized expenditure	**(1,295)**	**(1,298)**
Amortization of capitalized development expenditure (note 13.1)	(594)	(504)
Total	**(1,889)**	**(1,802)**

↗ 7.2. IMPACT OF CAPITALIZATION ON THE STATEMENT OF CASH FLOWS

(in millions of euros)	2005	2004
Impact on profit	262	381
Impact on amortization	(594)	(504)
Impact on working capital provided by operations	**856**	**885**
Impact on net cash used in investing activities	**(856)**	**(885)**
Total	**0**	**0**

BMW, FIAT, RENAULT and PSA PEUGEOT CITROËN presented the amortisation of capitalised development costs together with research and development expenses as a line item in their income statements. VOLKSWAGEN stated that 'amortisation recognised during the year is allocated to the relevant functions in the income statement'.

FIAT is the only company that divided the capitalised costs into internal and external costs as illustrated below:

FIAT Consolidated Financial Statements 2005, p102

13. Intangible assets

In 2005 changes in the gross carrying amount of Intangible assets were as follows:

(in millions of euros)	At December 31, 2004	Additions	Divestitures	Changes in the scope of consolidation	Translation differences and other changes	At December 31, 2005
Goodwill	2,809	–	–	53	297	**3,159**
Trademarks and other intangible assets with indefinite useful lives	260	1	(4)	2	24	**283**
Development costs externally acquired	1,571	240	(7)	(7)	25	**1,822**
Development costs internally generated	1,740	416	(2)	–	78	**2,232**
Total Development costs	3,311	656	(9)	(7)	103	**4,054**
Patents, concessions and licenses externally acquired	976	96	(114)	(59)	100	**999**
Total Patents, concessions and licenses	976	96	(114)	(59)	100	**999**
Other intangible assets externally acquired	520	32	(9)	30	23	**596**
Total Other intangible assets	520	32	(9)	30	23	**596**
Advances and intangible assets in progress externally acquired	119	51	–	–	(70)	**100**
Total Advances and intangible assets in progress	119	51	–	–	(70)	**100**
Total gross carrying amount of Intangible assets	7,995	836	(136)	19	477	**9,191**

VOLKSWAGEN differentiated between capitalised costs for products under development and capitalised development costs for products currently in use, as follows:

VOLKSWAGEN Annual Report 2005, p143

CHANGES IN INTANGIBLE ASSETS BETWEEN JANUARY 1 AND DECEMBER 31, 2005

€ million	Concessions, industrial and similar rights, and licenses, in such rights and assets	Goodwill	Capitalized costs for products under development	Capitalized development costs for products currently in use	Other intangible assets	Total
Historical cost						
Balance at Jan. 1, 2005	**51**	**225**	**1,642**	**8,533**	**1,113**	**11,564**
Foreign exchange differences	4	8	29	144	20	205
Changes in consolidated Group	–	–	–	–	4	4
Additions	8	5	1,071	361	186	1,631
Transfers	3	–	–1,024	1,016	24	19
Disposals	3	–	3	514	64	584
Balance at Dec. 31, 2005	**63**	**238**	**1,715**	**9,540**	**1,283**	**12,839**
Amortization and impairment						
Balance at Jan. 1, 2005	**44**	**–**	**81**	**3,337**	**612**	**4,074**
Foreign exchange differences	4	–	–	60	15	79
Changes in consolidated Group	–	–	–	–	0	0
Additions to cumulative amortization	7	–	–	1,316	165	1,488
Additions to cumulative impairment losses	1	–	5	117	0	123
Transfers	1	–	–	–	1	2
Disposals	3	–	–	511	81	595
Reversal of impairment losses	–	–	–	–	–	–
Balance at Dec. 31, 2005	**54**	**–**	**86**	**4,319**	**712**	**5,171**
Carrying amount at Dec. 31, 2005	**9**	**238**	**1,629**	**5,221**	**571**	**7,668**

Automotive manufacturers *continued*

BMW and VOLKSWAGEN explained the capitalisation ratio in their management report. The capitalisation ratio is defined as the proportion of capitalised development costs to total research and development costs within a period. The capitalisation ratio of the five companies is set out in the table below.

Company	Total R & D cost		Capitalised development cost		Non-capitalised R & D cost		Capitalisation ratio	
	2005	2004	2005	2004	2005	2004	2005	2004
	billion		billion		billion		billion	
BMW	3.115	2.818	1.396	1.121	1.719	1.697	44.82%	39.78%
FIAT	1.558	1.791	0.656	0.753	0.902	1.038	42.11%	42.04%
PSA PEUGEOT CITROËN	2.151	2.183	0.856	0.885	1.295	1.298	39.80%	40.54%
RENAULT	2.264	1.961	0.833	0.749	1.431	1.212	36.79%	38.19%
VOLKSWAGEN	4.075	4.164	1.432	1.501	2.643	2.663	35.14%	36.05%

Impairment of assets

All companies disclosed an accounting policy with regard to impairment of assets, stating that an impairment test is performed annually or more frequently if events or changes in circumstances indicate that the asset might be impaired. However, the practical application of impairment testing varied from one company to another.

Impairment of goodwill

FIAT and PSA PEUGEOT CITROËN gave the following information about cash-generating units and the goodwill allocated to them. Only in the case of PSA PEUGEOT CITROËN was a goodwill impairment loss recognised in the current period.

- PSA PEUGEOT CITROËN stated that 'impairment losses [are] recognised on the cash-generating units (CGUs) represented by Faurecia's Vehicle Interior Systems and Modules businesses… The impairment resulted from the decline in the businesses' operating margin observed in 2005, due mainly to increased raw materials costs – primarily for plastics – and the difficulty experienced by automotive equipment manufacturers in passing on the higher costs to customers. The recognised loss takes into account the margin improvement plans decided and implemented by Faurecia within these businesses. Of the total impairment loss, 138 million was deducted from the goodwill related to the Sommer Allibert automotive equipment businesses and 42 million from the businesses' property, plant and equipment'. Goodwill, as of 31 December 2005, amounted to 1,752 million.
- FIAT reported that the vast majority of goodwill, representing 91% of the total, was allocated to the agricultural equipment, construction equipment and financial services cash-generating units in CNH, and the Systems, Pico and Service cash-generating units in Comau. Goodwill, as of 31 December 2005 amounted to 2,418 million.
- BMW stated that goodwill of 33 million was recognised in conjunction with the first-time consolidation of Entory and its subsidiaries, noting that it does not present this item separately on the balance sheet as the amount is not significant in relation to either the balance sheet total or intangible assets. In addition, BMW reported a reversal of impairment losses amounting to 53 million recognised on intangible assets.

- VOLKSWAGEN stated that 'sensitivity analyses here show that it would be unnecessary to recognise impairment losses on goodwill and indefinite-lived intangible assets, including in the case of realistic variations in key assumptions'. Goodwill, as of 31 December 2005, amounted to 238 million.

- RENAULT stated that most of its goodwill is in Europe. Goodwill, as of 31 December 2005, amounted to 247 million.

PSA PEUGEOT CITROËN presented a breakdown of its goodwill as follows:

PSA PEUGEOT CITROËN 2005 Reference Document, p162

↗ 13.2. BREAKDOWN OF GOODWILL

(in millions of euros)	Dec. 31, 2005	Dec. 31, 2004	January 1, 2004
Faurecia	187	187	187
Faurecia businesses			
- Automotive Seating	793	792	790
- Vehicle Interior Systems and Modules	364	503	489
- Front-End	96	96	96
- Exhaust Systems	162	155	157
Dongfeng Peugeot Citroën Automobile	63	53	12
Peugeot Automotiv Pazarlama AS (Popas)	12	12	12
Crédipar	75	75	75
Total	**1,752**	**1,873**	**1,818**

FIAT and PSA PEUGEOT CITROËN disclosed the assumptions they used to determine the recoverable amount, in particular the 'value in use' of the cash-generating units (CGUs) concerned.

- FIAT stated that the principal assumptions made in determining the 'value in the use' of CGUs are the discount rate and the growth rate. FIAT used pre-tax discount rates between 5.5% and 16%. The growth rates were 'based upon the forecasts of the separate industrial sector to which each cash-generating unit belongs. The forecasts of operating cash flows are those included in the latest budgets and plans prepared by the Group for the next three years, extrapolated for later years on the basis of a medium- to long-term growth rate from 0% to 2% depending on the various sectors'. For the goodwill of its agricultural and industrial equipment sector (CNH), which represents approximately 83% of the total goodwill, FIAT reported that the recoverable amount 'has been determined on the basis of the value in use of the cash-generating unit to which it has been allocated, using the cash flows forecast by sector management for the next seven years, [which assume] an annual growth rate of 2% and a pre-tax discount rate varying between 10% and 16% depending on the cash-generating unit'.

- PSA PEUGEOT CITROËN reported that its calculation of value in use was based on the estimated future cash flows in management's latest projections for each cash-generating unit (2006-2009 medium-term plan). It said that 'The calculation was performed by extrapolating to perpetuity projected cash flows for the last year of the medium-term plan (2009) using a growth rate of 1.5% based on estimated trends developed by analysts for the automobile market. …An independent expert was consulted to determine the weighted average cost of capital to be used to discount future cash flows. The market parameters used by the expert for the calculation were based on a sample of 12 companies from the automotive equipment sector (six European companies and six US-based companies). Using these parameters and a risk premium of 5%, the average cost of capital used to discount future cash flows was set at 7.9%'.

Automotive manufacturers *continued*

PSA PEUGEOT CITROËN also disclosed the sensitivity of the impairment test to changes in the assumptions used to determine the value in use of the Vehicle Interior Systems and Modules business.

Impairment of intangible assets and property, plant and equipment

Information provided by the companies about the level of asset aggregation at which impairment testing of intangible assets and property, plant and equipment is carried out varied considerably. The companies pointed out the following:

- FIAT stated that, in the first instance, the tests are based on individual assets and only where it is not possible to estimate the recoverable amount of an individual asset, does the company estimate the recoverable amount of the cash-generating unit to which the asset belongs.
- BMW stated that impairment tests are regularly performed at the level of cash-generating units.
- PSA PEUGEOT CITROËN indicated that impairment testing is based on cash-generating units. The automobile division comprises a number of cash-generating units, each corresponding to a vehicle model. The assets included in a vehicle CGU consist of tooling and other specific plant and equipment used to manufacture the model together with capitalised model development costs. In the automotive equipment division, each CGU corresponds to a programme and comprises all customer contract-related intangible assets and property, plant and equipment. In addition, there are two more CGUs, one comprising the Banque PSA Finance group and the other comprising Gefco group.
- RENAULT explained that it assesses the recoverable amount of assets at the level of each division. 'For the Automobile division the return on assets is measured taking all European countries together, since the industrial plant and product range throughout Europe form one coherent unit. The return on assets outside Europe is measured for each 'coherent' sub-unit that produces independent cash flows.'

Disclosure and presentation

Impairment losses recognised in profit or loss during the period were included by BMW and RENAULT in cost of sales, whereas FIAT and PSA PEUGEOT CITROËN included impairment losses in other expenses.

In the reconciliation of the carrying amount of intangible assets at the beginning and the end of the period, BMW presented impairment losses together with amortisation and depreciation expense in one amount but pointed out the amount recognised as an impairment loss in a footnote. FIAT, PSA PEUGEOT CITROËN and VOLKSWAGEN subdivided impairment losses and depreciation/amortisation in the reconciliation of the carrying amounts.

Segment reporting

Identifying reportable segments

All companies presented segment information using business segments as their primary reporting format, and geographical segments as their secondary reporting format.

All companies apart from RENAULT presented their segment information as part of the notes. RENAULT presented its segment information as a primary statement along with its balance sheet, income statement, changes in shareholders' equity and statement of cash flows.

As the following table shows, FIAT presented a significantly greater number of business segments than the other companies in our sample:

Overview of business segments presented

Company	Number of segments	Segments
BMW	3	• Automobiles • Motorcycles • Financial Services
FIAT	11	• FIAT Auto • Maserati • Ferrari • FIAT Powertrain Technologies (FPT) • Agricultural and Industrial Equipment (CNH) • Iveco • Magneti Marelli • Production System (Comau) • Metallurgical Products (Teksid) • Business Solutions • Publishing and Communications (Itedi)
PSA PEUGEOT CITROËN	4	• Automobile • Automotive Equipment • Transportation and Logistics • Finance
RENAULT	2	• Automobile • Sales Financing
VOLKSWAGEN	2	• Automotive • Financial Services

Automotive manufacturers *continued*

As the table below shows, there is some similarity in the geographical segmentation of the five companies. In particular, the home country is a separate geographical segment in all cases except PSA PEUGEOT CITROËN which, unlike the other companies, has a 'Western Europe' as well as a 'Rest of Europe' or similar segment.

Overview of geographical segments presented

Company	Number of segments	Home country (registered office)	Other European countries	The Americas	Rest of the world
BMW	4	Germany	• Rest of Europe	• The Americas	• Africa/Asia/ Oceania
FIAT	5	Italy	• Rest of Europe	• North America • Mercosur	• Other areas
PSA PEUGEOT CITROËN	4	Not applicable	• Western Europe • Other European countries	• Latin America	• Rest of the world
RENAULT	3	France	• Other European countries (apart from Russia and Turkey)	Not applicable	• Other countries
VOLKSWAGEN	6	Germany	• Rest of Europe	• North America • South America	• Africa, • Asia/Oceania

Media

This section is based on an analysis of the IFRS financial statements of the television and radio broadcasting companies MEDIASET, M6, PROSIEBENSAT, TF1 and VIVENDI UNIVERSAL, and the publishing companies LAGARDÈRE, PEARSON and REED ELSEVIER.

ITV, EMAP and BSKYB could not be included in the sample due to later reporting dates: 31 March for ITV and EMAP, and 30 June for BSKYB.

For the media sector, we considered the following issues:

- Revenue recognition with a focus on the following issues: where multiple-element arrangements were reported, how much explanation was given of the approach applied in recognising revenue? Was revenue from distribution commissions presented gross, or net? How were barter transactions accounted for? Did companies report their revenue net of expected returns and if so, were those amounts disclosed? How were subscriber acquisition costs disclosed?
- How were assets specific to the media industry classified in the balance sheet and amortised?
- Given the significance of off-balance sheet commitments in the broadcasting industry, how much disclosure was made of such commitments?

Revenue recognition

Basis for revenue recognition

Industry revenue recognition practice was generally consistent and all companies gave a detailed description of the variety of sources of revenue and their related accounting treatment. The principal types of revenue were recognised as follows:

- Revenue from the sale of broadcasting rights: at the beginning of the licence period or when the material has been technically approved (M6, PROSIEBENSAT, VIVENDI UNIVERSAL, TF1). For example, PROSIEBENSAT stated the following: 'revenues from the sale of programming assets and ancillary programming rights are considered realised when the licence term for the purchaser of the programming has begun and broadcast-ready materials have been delivered to the purchaser'.
- Sales of advertising space: when the spot is broadcast or the advertisement is published (all).
- Revenue derived from subscriptions (press, cable or satellite channels): 'on periodic dispatch of subscribed products or rateably over the period of the subscription where performance is not measurable by dispatch' (REED ELSEVIER) or systematically on a straight-line basis over the life of the subscription (PEARSON, M6, TF1 and VIVENDI UNIVERSAL).

MEDIASET also gave details for the 'pay-per-view' activity and indicated that 'the amounts from distributors of prepaid cards and scratch cards to watch events in 'pay-per-view' mode are recognised on a straight-line basis over the remaining duration of cards sold. Similarly, direct costs are divided along the same period.'

Media *continued*

Multiple-element arrangements

This issue is mainly addressed in the financial statements of companies that are principally involved in the publishing industry.

- PEARSON described the treatment of revenue recognition of multiple-element contracts as follows: 'Where a contractual arrangement consists of two or more separate elements that can be provided to customers either on a stand-alone basis or as an optional extra, such as the provision of supplementary materials with textbooks, revenue is recognised for each element as if it were an individual contractual arrangement.'

- REED ELSEVIER, without describing the precise nature of the transactions, gave a brief description of the accounting treatment applied by the company: 'Where sales consist of two or more independent components, revenue is recognised on each component, as it is completed by performance, based on attribution of relative value.'

Presentation of revenue, gross or net from distribution commissions

Where companies involved in the sector enter into transactions where they either act as an agent or sell their products (eg sales of books, DVDs, newspapers) to third parties who act as an agent or a distributor for the companies concerned, they have to assess whether they should recognise revenue gross or net of the amounts payable to the third party concerned.

- LAGARDÈRE indicated that for the sales of books and newspapers, revenue is recorded net of distribution commissions and that revenue from sales advertising airtime and national magazine distribution consists solely of the fees received for these services.

- PEARSON, which also acted as an agent in some cases, specified that 'only commissions and fees receivable for services rendered are recognised as revenue.'

- PROSIEBENSAT referred to revenue 'net of agency commission', and TF1 stated that 'revenue from sales of merchandise and products by the group's publishing and distribution activities is reported net of …paybacks made in connection with some distribution contracts.'

It should be noted that no explanation was given by the companies as to how they determine whether they are acting as agent or as principal in the transactions.

Barter transactions

Barter transactions consist of the provision of advertising services in exchange for the supply of other advertising services, or the provision of advertising services in exchange for goods.

- MEDIASET described its accounting treatment for barter transactions as follows: 'revenues for the sale of advertising in exchange for goods (and correspondingly the cost of the goods) are adjusted to keep into account the estimated recoverable value of the goods.'

- PROSIEBENSAT set out its policy for the recognition and measurement of barter transactions as follows:

PROSIEBENSAT Annual Report 2005, p76

> Revenues from barter transactions are considered realized when goods or services that are not of the same kind are exchanged, and the amount of the proceeds and costs, as well as the economic benefit, can be clearly measured. Revenues are recognized at the market value of the bartered item or service, and may be adjusted with an additional cash payment. Barter transactions at the ProSiebenSat.1 Group are solely trade-off transactions relating to the sale of advertising time.

- TF1 also mentioned the accounting treatment of barter transactions involving sales of advertising space: 'revenue from exchanges of goods and services is recognised if the goods or services exchanged are dissimilar in nature, and the revenue from the exchange has economic substance and can be measured reliably.' The revenue is then measured 'at the fair value of the goods or services received, after adjusting for cash flows associated with the exchange.'
- LAGARDÈRE stated simply that 'purchases and sales corresponding to barter transactions of similar services are eliminated'.

None of the companies gave any indication of the criteria they apply to determine whether the elements of the barter transactions are 'dissimilar'.

Expected returns of products

All the publishing companies in our sample stated that revenue derived from the sale of goods (eg books, DVDs, CDs) is determined net of expected returns. PEARSON indicated that 'anticipated returns are estimated based primarily on historical return rates' and VIVENDI UNIVERSAL specified that its estimate was based on 'past sales statistics and takes account of the economic environment and product sales forecasts'.

Subscriber acquisition costs

TF1 described its accounting treatment of acquisition costs for subscriptions to the TPS satellite TV service: 'free subscription months granted to customers when they subscribe to offers are deducted from turnover for the months in question. Other subscription acquisition costs are recognised as an operating expense as incurred.'

On this issue, VIVENDI UNIVERSAL indicated that 'subscriber management and acquisition costs, as well as television distribution costs, are included in cost of revenues.'

Subscriber acquisition costs do not appear to be treated by publishing companies any differently from other costs as none of them mentioned such costs in their accounting policies note.

Media *continued*

Intangible assets

Television and radio broadcasting

Balance sheet presentation

Analysis of their balance sheet presentations indicated that the majority of companies in the industry grouped broadcasting rights and similar assets either under generic captions in the balance sheet, such as intangible assets or inventories, or under dedicated line items. As shown in the following table, most of the companies chose to highlight the nature of those assets that are material in the industry by making them the subject of specific lines in their balance sheet.

	Intangible assets	Inventories	Specific line item
TF1		X	X
VIVENDI UNIVERSAL			X
PROSIEBENSAT			X
LAGARDÈRE	X		
MEDIASET			X
M6		X	X

- PROSIEBENSAT presented a specific line item on the face of the balance sheet within non-current assets called 'Programming assets'. This included 'feature films, series and commissioned productions, as well as advance payments'.
- VIVENDI UNIVERSAL called this line 'Content assets', classified as current and non-current in accordance with to IAS 1 *Presentation of Financial Statements*. The item was described in its accounting policy note as including, for television broadcasting, 'film, television or sport broadcasting rights', 'theatrical film and television rights produced or acquired to be sold' and 'film and television rights catalogs'.
- MEDIASET chose the description 'Television Rights'.
- M6 and TF1 adopted a slightly different approach by including a specific line item within the category 'Intangible assets' for the non-current element of media assets, and another specific line item within the category 'Inventories' for the current element of these assets. In its accounting policies, TF1 defined the elements that were included in the line item 'Audiovisual rights' in intangible assets as 'shares in films and audiovisual programs produced or co-produced…, distribution and trading rights…, and music rights', and presented all broadcasting rights in inventories in the specific line item 'Programmes and broadcasting rights'.

M6 presented its media assets in several categories on the balance sheet, described as follows:

- 'Audiovisual rights' were presented as a specific line item within intangible assets including 'film and television broadcasting rights acquired with a view to resale (distribution and trading), produced or co-produced'.
- 'Other intangible assets' included 'Co-productions of films, dramas, theaters'.
- 'Programmes and broadcasting rights' were classified as inventories.

Amortisation method

No matter how the carrying value of these assets was classified and presented in the balance sheet, a broadly similar approach was adopted by the companies to the amortisation of the assets.

Thus, broadcasting rights, whether classified as inventories or in specific balance sheet line items, were generally amortised based on the broadcasting schedule, weighted towards the first transmission.

For example, TF1 gave the following amortisation pattern in the notes:

TF1 Annual Report 2005, p101

TF1 SA programmes (which account for most of the Group's programme inventory) are deemed to have been consumed as transmitted. If they are acquired for a single transmission, they are regarded as having been consumed in full at the time of transmission. If they are acquired for two or more transmissions, consumption is calculated as follows, according to the type of programme:

	PROGRAMME TYPE		
	DRAMAS WITH A RUNNING TIME OF AT LEAST 52 MINUTES	FILMS, TV MOVIES, SERIALS AND CARTOONS	OTHER PROGRAMMES AND BROADCASTING RIGHTS
1st transmission	80%	50%	100%
2nd transmission	20%	50%	–

"Other programmes and broadcasting rights" in the table above refers to children's programmes other than cartoons, entertainment shows, plays, factual and documentary programmes, news, sport, and dramas with a running time of less than 52 minutes.

A provision for impairment is recorded once it becomes probable that a given programme will not be transmitted.

All companies in our sample amortised co-productions or parts of co-productions on the basis of estimated future revenue.

Media *continued*

MEDIASET gave a detailed description of the various amortisation methods applied to different media assets:

MEDIASET Annual Report 2005, p72

Assets with defined useful life are amortised on a straight-line basis starting from the moment when the asset is available for use for the period of their expected use; the possibility to recover their value is assessed according to the criteria envisaged by IAS 36, described in the next section *impairment of assets*.

This principle is also used for multi-annual licences regarding ***television rights*** , which are generally amortised on a straight-line basis unless a different principle can be determined that can reasonably and reliably reflect the correlation between costs, audience and advertising revenues.

In particular, for the library of television rights available for broadcasting on multiple networks, the straight-line amortisation method was generally adopted, calculated over the period of the relevant contract and, in any event, over a period not exceeding 120 months, a method which reflects greater opportunities to exploit television rights, also in the light of the difficulty in identifying objective components for making a correlation between advertising revenues and the amortisation of rights. Regardless of the amortisation already recognised, if all showings made available under rights contracts have been used up, the residual value is fully expensed.

Sports, news and entertainment programmes rights are amortised almost entirely (90%) in the year the rights run, with the remainder being expensed the following year; rights to long-series dramas are amortised in the first year starting from their availability (70%) and in the following twelve months (30%).

For the library of television rights available for broadcasting on a single network, a generally decreasing amortisation model is used, connected with the number of showings available by contract and their actual broadcasting.

Sports rights acquired for *Pay Per View* use on digital terrestrial technology are amortised at 100% when the event is broadcasted.

Costs regarding the **right to use television frequencies** for setting up the digital terrestrial network acquired by third parties under existing laws, are amortised on a straight-line basis, with respect to the expected duration of use starting from the moment when the service is started. Starting from the current year, the end of the amortisation period, previously established as December 31st, 2006 (the same date as the end of the transitory period envisaged for digital experimentation) has been determined anew to December 31st, 2018 to keep into account the period of validity of the individual licence for network operator, equal to 12 years, starting from the release which is conventionally envisaged at December 31st, 2006.

Publishing

In this industry, there were differences in the way specific assets were classified and we noted that PEARSON and REED ELSEVIER classified 'pre-publication costs' differently. However, the amortisation methods applied were broadly similar.

Thus, REED ELSEVIER classified these elements in inventories and described their accounting treatment in the notes as follows: 'costs incurred in the origination of content prior to publication are expensed systematically reflecting the expected sales profile over the estimated economic lives of the related products, generally up to five years'.

PEARSON classified its pre-publication costs as intangible assets, and amortised them 'over estimated economic lives of five years or less, being an estimate of expected operating life cycle of the title, with a higher proportion of the amortisation taken in the earlier years.'

PEARSON also gave information about the accounting treatment applied to advances to authors and to newspaper development costs:

PEARSON Annual Report 2005, p47

h. Royalty advances
Advances of royalties to authors are included within trade and other receivables when the advance is paid less any provision required to bring the amount down to its net realisable value. The royalty advance is expensed at the contracted or effective royalty rate as the related revenues are earned. Royalty advances which will be consumed within one year are held in current assets. This represents the operating cycle of consumer publishing titles. Royalty advances which will be consumed after one year are held in non-current assets.

i. Newspaper development costs
Investment in the development of newspaper titles consists of measures to increase the volume and geographical spread of circulation. The measures include additional and enhanced editorial content, extended distribution and remote printing. These extra costs arising are expensed as incurred as they do not meet the criteria under IAS 38 to be capitalised as intangible assets.

Off-balance sheet commitments

Amounts related to contracts to acquire long-term distribution rights for films or sporting events were included in off-balance sheet commitments. VIVENDI UNIVERSAL explained its accounting policy as follows:

VIVENDI UNIVERSAL Annual Report 2005, p183

When signing contracts for the acquisition of film, television or sport broadcasting rights, the rights acquired are recorded as off balance sheet commitments. They are recorded in the statement of financial position, classified as content assets, as follows:

- film and television broadcasting rights are recognized at their acquisition cost, when the screening certificate has been obtained and the programming is available for exhibition. They are expensed over their broadcasting period,
- sport broadcasting rights are recognized at their acquisition cost, on the opening of the broadcasting period of the related sport season or upon the first payment, and are expensed as they are broadcast,
- expensing of film, television or sport broadcasting rights is included in cost of revenues.

Media *continued*

The company also gave details of these off-balance sheet commitments and described the specific elements in the notes:

VIVENDI UNIVERSAL Annual Report 2005, p211–212

Canal + Group obtained exclusive rights to broadcast the French Professional Soccer League for the seasons 2005 – 2006, 2006 – 2007 and 2007 – 2008. The rights acquired amounted to €1,800 million, i.e. €600 million for each season. They have been recognized as follows:

- at the acquisition of the rights in December 2004, they were recorded as off balance sheet commitments for €1,800 million,
- upon the opening of each League 1 season (July 2005, July 2006 and July 2007, respectively), the rights corresponding to the related opened season are recognized in the statement of financial position, as current content assets (less than 12 months), against current accounts payable owed to the French Professional Soccer League. Therefore, in Vivendi Universal's financial statements as at July 2005, a €600 million content asset was recorded against accounts payable for the same amount (to which the related VAT was added). At that date, the rights recorded as off balance sheet commitments amounted to €1,200 million and related to the 2006 – 2007 and 2007 – 2008 seasons,
- the asset is then amortized in cost of revenues, over the broadcasting period, on a pro rata to the games broadcast. As at December 31, 2005, after broadcasting 19 days of League 1, the portion of the rights related to the 2005 – 2006 season amortized amounted to €300 million and the net amount of these rights in content assets was therefore €300 million,
- accounts payable is amortized in line with payments to the French Professional Soccer League. As at December 31, 2005, in accordance with the payment schedule, payments relating to the rights to the 2005 – 2006 season amounted to €273 million and the accounts payable balance (including the VAT) was therefore €391 million.

VIVENDI UNIVERSAL Annual Report 2005, p213

Off balance sheet commitments given/received

(in millions of euros)	Total as at December 31, 2005	Payments due in 2006	2007	2008	2009	2010	After 2010	Total as at December 31, 2004
Film and television rights (a)	2,320	795	337	237	156	138	657	2,081
Sport rights	1,377 (b)	309	690	362	13	2	1	1,973
Creative talent and employment agreements (c)	930	418	247	136	53	50	26	830
Total given	**4,627**	**1,522**	**1,274**	**735**	**222**	**190**	**684**	**4,884**
Film and television rights (a)	(111)	(82)	(22)	(6)	-	-	(1)	(79)
Sport rights	(48)	(19)	(19)	(10)	-	-	-	-
Creative talent and employment agreements (c)	Not Quantifiable							
Total received	**(159)**	**(101)**	**(41)**	**(16)**	**-**	**-**	**(1)**	**(79)**

The amount presented above for off balance sheet commitments given is the minimum amount guaranteed to third parties.

(a) Including primarily contracts valid over several years relating to the broadcast of future film and TV productions (mainly exclusivity contracts with major US studios and pre-purchases in the French movie industry), StudioCanal film coproduction commitments (given and received) and broadcasting rights of CanalSat and Cyfra+ multichannel digital TV packages. They are recorded as content assets when the broadcast is available for initial release.

(b) Including €1,200 million in respect of residual rights to broadcast the French Professional Soccer League won by Canal+ Group in December 2004 for the seasons 2006 – 2008. These rights will be recognized in the statement of financial position on the opening of the related sport season or at first payment.

(c) UMG routinely commits to artists and other parties to pay agreed amounts upon delivery of content or other product («Creative talent and employment agreements»). Where the artist or other party has not yet delivered, UMG discloses its obligation as an off balance sheet commitment. While the artist or other party is also obligated to deliver content or other product to UMG (these arrangements are generally exclusive), UMG does not report these obligations (or the possible effect of the other party's failure to deliver) as an offset to its off balance sheet commitments.

TF1 explained its off-balance sheet commitments as follows:

TF1 Annual Report 2005, p117

> Off balance sheet commitments are stated at the amount of the outflow or inflow of resources specified in the contract. In the case of renewable contracts, the commitment is measured on the basis of the period until the next renewal date.
>
> A commitment is reciprocal if the future commitment given by the TF1 Group is inseparable from the commitment given by the other party to the contract. In such cases, the commitment given and the commitment received are measured on the basis of the net cash outflow for the TF1 Group.

Mining

The analysis in this section is based on the annual financial statements of ANGLO AMERICAN, ANGLOGOLD ASHANTI, RIO TINTO and XSTRATA as well as the Interim Financial Report 2006 of BHP BILLITON.

For the mining industry, we considered the following issues:

- How was revenue recognised, and what differences existed between industry participants?
- How were the costs incurred by mining companies to remove waste material or overburden (stripping costs) in order to allow access to mine the ore accounted for?
- On what basis were restoration, rehabilitation and environmental costs determined and how were they disclosed?
- On what basis have mining companies determined their functional currencies?
- How did the industry address commodity price risk?

Revenue recognition

All the companies indicated that revenue on the sale of goods is recognised when the significant risks and rewards of ownership of the sale of the goods/products are transferred to the customer. They also generally disclosed further criteria which have to be met before revenue is recognised, for example:

BHP BILLITON Interim Financial Report 2006, p35

> Revenue from the sale of goods and disposal of other assets is recognised when persuasive evidence, usually in the form of an executed sales agreement, of an arrangement exists indicating there has been a transfer of risks and rewards to the customer, no further work or processing is required by the BHP Billiton Group, the quantity and quality of the goods has been determined with reasonable accuracy, the price is fixed or determinable, and collectibility is reasonably assured. This is generally when title passes.
>
> In the majority of sales for most commodities, sales agreements specify that title passes on the bill of lading date which is the date the commodity is delivered to the shipping agent. Revenue is recognised on the bill of lading date. For certain sales (principally coal sales to adjoining power stations and diamond sales), title passes and revenue is recognised when the goods have been delivered.

RIO TINTO 2005 Annual Report and Financial Statements, p100-101

A large proportion of Group production is sold under medium to long term contracts, but turnover is only recognised on individual sales when persuasive evidence exists indicating that all of the following criteria are met:

- the significant risks and rewards of ownership of the product have been transferred to the buyer;
- neither continuing managerial involvement to the degree usually associated with ownership nor effective control over the goods sold has been retained;
- the amount of revenue can be measured reliably;
- it is probable that the economic benefits associated with the sale will flow to the Group; and
- the costs incurred or to be incurred in respect of the sale can be measured reliably.

These conditions are generally satisfied when title passes to the customer. In most instances turnover is recognised when the product is delivered to the destination specified by the customer, which is typically the vessel on which it will be shipped, the destination port or the customer's premises.

In the case of both ANGLOGOLD ASHANTI and XSTRATA, additional criteria included the probability that economic benefits will flow to the company and the revenue can be reliably measured.

With the exception of ANGLOGOLD ASHANTI, which did not specifically mention when the criteria for revenue recognition are met, all companies indicated that their revenue recognition criteria are generally met when title has passed to the customer and the goods are delivered to an agreed location.

Both BHP BILLITON and RIO TINTO indicated that in certain instances the sale price of certain products is determined on a provisional basis with adjustments to the sales price occurring over a certain period:

BHP BILLITON 2006 Interim Financial Report, p35

In the case of certain exchange traded commodities, the sales price is determined on a provisional basis at the date of sale; adjustments to the sales price occur based on movements in quoted market prices up to the date of final pricing. Revenue on provisionally priced sales is recognised based on the estimated fair value of the total consideration receivable. Fair value of the final sales price adjustment is estimated based on the lower of current and forward market prices.

Mining *continued*

RIO TINTO 2005 Annual Report and Financial Statements, p101

> Certain products are 'provisionally priced', ie the selling price is subject to final adjustment at the end of a period normally ranging from 30 to 180 days after delivery to the customer, based on the market price at the relevant quotation point stipulated in the contract. Turnover is initially recognised when the conditions set out above have been met, using market prices at that date. At each reporting date the provisionally priced metal is marked to market based on the forward selling price for the quotational period stipulated in the contract until the quotational period expires. For this purpose, the selling price can be measured reliably for those products, such as copper, for which there exists an active and freely traded commodity market such as the London Metals Exchange and the value of product sold by the Group is directly linked to the form in which it is traded on that market.
>
> From 1 January 2005, under IAS 39, the marking to market of provisionally priced contracts is recorded as an adjustment to net operating costs. Prior to 1 January 2005, the marking to market was recorded as an adjustment to turnover.

Accounting for production stage stripping costs (overburden and other waste removal)

Costs are incurred by mining companies to remove waste material or overburden (stripping costs) in order to mine the ore. Accounting for stripping costs incurred during production is difficult because these costs can benefit both future periods (that is, the nature of the cost is the same or similar to stripping costs incurred in the development phase) and current period production. Because of these difficulties, and due to the lack of specific authoritative guidance, practice is varied. Deferral of production stage stripping costs was permitted under US GAAP until March 2005 when US EITF Issue 04-06 *Accounting for Stripping Costs Incurred During Production in the Mining Industry* was released. This prohibits the treatment of production stage stripping costs as a non-current asset, and requires these costs to be accounted for as variable production costs and included in the cost of inventory.

All the companies disclosed an accounting policy in relation to stripping costs incurred during the production stage of their operations. Only RIO TINTO and XSTRATA disclosed that they capitalise stripping costs incurred in the development of a mine before production commences. However, this is common practice in the mining industry.

All the companies deferred stripping costs incurred during the production stage of their operations using a stripping ratio. A stripping ratio is the number of tonnes of waste material expected to be removed during the life of a mine per tonne of ore mined.

RIO TINTO mentioned that if it expensed 'production stage stripping costs as incurred, there would be greater volatility in the year to year results from operations, and excess stripping costs would be expensed at an earlier stage of a mine's operation.'

The companies explained their approaches for accounting for production stage stripping costs as follows:

RIO TINTO 2005 Annual Report and Financial Statements, p102

(h) Deferred stripping
As noted above, stripping (ie overburden and other waste removal) costs incurred in the development of a mine before production commences are capitalised as part of the cost of constructing the mine and subsequently amortised over the life of the operation.

The Group defers stripping costs incurred subsequently, during the production stage of its operations, for those operations where this is the most appropriate basis for matching the costs against the related economic benefits. This is generally the case where there are fluctuations in stripping costs over the life of the mine, and the effect is material. Deferred stripping costs are presented within 'Mining properties and leases'. The amount of stripping costs deferred is based on the ratio ('Ratio') obtained by dividing the tonnage of waste mined either by the quantity of ore mined or by the quantity of minerals contained in the ore. Stripping costs incurred in the period are deferred to the extent that the current period Ratio exceeds the life of mine Ratio. Such deferred costs are then charged against reported profits to the extent that, in subsequent periods, the current period Ratio falls short of the life of mine Ratio. The life of mine Ratio is based on proved and probable reserves of the operation.

- RIO TINTO also disclosed that its shares of deferred stripping costs of equity accounted operations are included in the net assets of jointly controlled entities and associates.
- BHP BILLITON stated: 'Deferral of costs to the Balance Sheet is made, where appropriate, when actual stripping ratios vary from average stripping ratios. Deferral of costs to the Balance Sheet is not made when the waste to ore ratio is expected to be consistent throughout the life of the mine. Costs which have previously been deferred to the Balance Sheet (deferred overburden removal costs) are included in the Income Statement on a unit of production basis utilising average stripping ratios.'
- ANGLO AMERICAN indicated that stripping costs are deferred when they give access to future economic benefits and charged to operating costs using the expected average stripping ratio over the average life of the area being mined.
- ANGLOGOLD ASHANTI made the following disclosure:

ANGLOGOLD ASHANTI 2005 Annual Report, p139

Stripping costs incurred in open-pit operations during the production phase to remove additional waste are charged to operating costs on the basis of the average life of mine stripping ratio and the average life of mine costs per tonne. The average stripping ratio is calculated as the number of tonnes of waste material expected to be removed during the life of mine per tonne of ore mined. The average life of mine cost per tonne is calculated as the total expected costs to be incurred to mine the orebody, divided by the number of tonnes expected to be mined. The average life of mine stripping ratio and the average life of mine cost per tonne are recalculated annually in the light of additional knowledge and changes in estimates.

The cost of the "excess stripping" is capitalised as mine development costs when the actual mining costs exceed the sum of the adjusted tonnes mined, being the actual ore tonnes plus the product of the actual ore tonnes multiplied by the average life of mine stripping ratio multiplied by the life of mine cost per tonne. When the actual mining costs are below the sum of the adjusted tonnes mined, being the actual ore tonnes plus the product of the actual ore tonne multiplied by the average life of mine stripping ratio, multiplied by the life of mine cost per tonnes, previously capitalised costs are expensed to increase the cost up to the average.

The cost of stripping in any period will be reflective of the average stripping rates for the orebody as a whole. Changes in the life of mine stripping ratio are accounted for prospectively as a change in estimate.

Mining *continued*

- XSTRATA indicated that stripping costs are deferred 'where the actual stripping ratios vary from the mine's strip ratio. The costs charged to the income statement are based on application of the mine strip ratio to the quantity of ore mined in the period. Where the ore is expected to be evenly distributed, waste removal is expensed as incurred'.

All companies accounted for changes in estimates of stripping ratios prospectively as a change in estimate.

RIO TINTO also disclosed details of movements in deferred stripping costs balance as follows:

RIO TINTO 2005 Annual Report and Financial Statements, p114

Notes to the 2005 financial statements continued

NOTES TO THE 2005 FINANCIAL STATEMENTS

14 PROPERTY, PLANT AND EQUIPMENT CONTINUED Year ended 31 December 2004	Mining properties and leases	Land and buildings	Plant and equipment	Capital works in progress	Total US$m
Cost					
At 1 January 2004	6,610	3,554	16,272	1,883	**28,319**
Adjustment on currency translation	242	96	722	49	**1,109**
Capitalisation of additional closure costs and other provisions (Note 28)	268	–	–	–	**268**
Interest capitalised (a)	4	–	24	7	**35**
Other additions	225	60	526	1,662	**2,473**
Disposals	(16)	(15)	(196)	(2)	**(229)**
Subsidiaries sold	(190)	(13)	(303)	(10)	**(516)**
Transfers and other movements (b)	142	127	1,560	(1,829)	**–**
At 31 December 2004	7,285	3,809	18,605	1,760	**31,459**
Accumulated depreciation (including impairment)					
At 1 January 2004	(1,780)	(1,556)	(9,483)	(134)	**(12,953)**
Adjustment on currency translation	(74)	(45)	(406)	–	**(525)**
Depreciation for the year	(294)	(126)	(732)	–	**(1,152)**
Impairment charges	(25)	(25)	(400)	–	**(450)**
Disposals	12	9	151	1	**173**
Subsidiaries sold	47	–	135	–	**182**
Transfers and other movements (b)	24	(18)	(16)	(3)	**(13)**
At 31 December 2004	(2,090)	(1,761)	(10,751)	(136)	**(14,738)**
Net balance sheet amount at 31 December 2004	5,195	2,048	7,854	1,624	**16,721**
Fixed assets held under finance leases (c)	–	16	128	–	**144**
Other fixed assets pledged as security (d)	2	10	348	3	**363**

(a) Interest is capitalised at a rate based on the Group's cost of borrowing or at the rate on project specific debt where applicable. Tax credits related to the amount capitalised are deferred and released to the income statement as a reduction in the tax charge, in accordance with the depreciation charged on the related assets.
(b) 'Transfers and other movements' includes reclassifications between categories.
(c) The finance leases under which these assets are held are disclosed in Note 24.
(d) Excludes assets held under finance leases.
(e) At 31 December 2005 the net balance sheet amount for land and buildings includes freehold US$1,889 million; long leasehold US$128 million; and short leasehold US$2 million.
(f) Accumulated depreciation on 'Capital works in progress' at 1 January 2004 relates to an impairment charge made in 2002.
(g) At 31 December 2005, net tangible assets per share amounted to US$10.12 (2004: US$7.69).

	2005 Subsidiaries US$m	2005 Share of equity accounted operations US$m	**2005 Total US$m**	2004 Subsidiaries US$m	2004 Share of equity accounted operations US$m	2004 Total US$m
Deferred stripping carrying values						
At 1 January	637	145	**782**	500	131	631
Adjustment on currency translation	(7)	–	**(7)**	11	–	11
Net deferral of stripping costs during year	92	1	**93**	131	14	145
Other	(23)	–	**(23)**	(5)	–	(5)
At 31 December	699	146	**845**	637	145	782

(h) Subsidiary deferred stripping costs are included in 'Mining properties and leases'. Rio Tinto's shares of deferred stripping costs of equity accounted operations are included in the net assets of jointly controlled entities and associates disclosed in Note 15.
(i) Details of stripping ratios used in accounting for the above balances are set out on page 38.

2005

Restoration, rehabilitation and environmental costs

Mine operators are usually required by the terms of their licences or by law to incur expenditure at the end of a mine's working life to remove facilities and restore the production area to an acceptable condition. Such obligations may also result from a company's own stated policies and practices. The costs are variously described as removal and restoration costs, closure costs, environmental clean-up costs, dismantling costs, rehabilitation and decommissioning costs.

All the companies in our sample disclosed an accounting policy for the treatment of such costs, being the recognition of a provision based on the net present value of estimated future costs with a corresponding increase in capitalised cost attributable to the mine. They indicated that the provision for the estimated/expected costs is recognised when the related environmental disturbance occurs, which represents the point in time at which the obligation arises.

RIO TINTO indicated that 'the ultimate cost of environmental disturbance is uncertain and cost estimates can vary in response to many factors including changes to the relevant legal requirements, the emergence of new restoration techniques or experience at other mine sites. The expected timing of expenditure can also change, for example in response to changes in ore reserves or production rates. As a result there could be significant adjustments to the provision for close-down and restoration and environmental clean-up, which would affect future financial results'.

RIO TINTO disclosed the interest rate used to discount the estimated costs to their net present value: 'approximately 5.5 per cent per annum, being an estimate of the risk-free pre-tax cost of borrowing'. All the companies included the amortisation (unwinding) of the discount on provisions in finance costs in the income statement.

BHP BILLITON and XSTRATA indicated that such costs were only capitalised where they gave rise to a future benefit. The following table summarises the period over which the companies amortised the capitalised asset:

	BHP BILLITON	RIO TINTO	ANGLO AMERICAN	ANGLOGOLD ASHANTI	XSTRATA
AMORTISATION PERIOD	The life of the operation	The life of the assets to which the costs relate	The life of the project	The lesser of the useful life of the mine plant facilities or units-of-production method based on proved and probable mineral reserves	The future production from the mine to which the costs relate

Mining *continued*

In its accounting policy on 'provision for restoration and rehabilitation', BHP BILLITON specifically identified that such provisions 'do not include any amounts related to remediation costs associated with unforeseen circumstances. Such costs are recognised when environmental contamination as a result of oil and chemical spills, seepage or other unforeseen events gives rise to a loss which is probable and reliably estimable'. In addition, BHP BILLITON indicated that 'the cost of other activities to prevent and control pollution, and to rehabilitate the environment are charged to income as incurred'.

RIO TINTO also mentioned that clean-up costs resulting from environmental damage are not 'a necessary consequence of mining, including remediation, compensation and penalties. These costs are charged to the income statement. Provisions are recognised at or near the time the damage, remediation process and estimated remediation costs become known.'

All the companies examined (other than BHP BILLITON in respect of which an interim financial report only was available) included a reconciliation of the movement in provisions for these costs as part of the notes to the financial statements.

ANGLOGOLD ASHANTI disclosed the movement in its environmental rehabilitation provisions as follows:

ANGLOGOLD ASHANTI 2005 Annual Report, p176

2004	2005	Figures in million	2005	2004
SA Rands			US Dollars	
		32 Environmental rehabilitation and other provisions		
		Environmental rehabilitation obligations		
		Provision for decommissioning		
326	**566**	Balance at beginning of year	**100**	49
148	**–**	Acquisition of subsidiaries (note 37)	**–**	22
84	**282**	Change in estimates [1]	**44**	13
51	**21**	Unwinding of decommissioning obligation (note 8)	**3**	8
(43)	**39**	Translation	**(4)**	8
566	**908**	Balance at end of year	**143**	100
		Provision for restoration		
562	**658**	Balance at beginning of year	**117**	84
202	**–**	Acquisition of subsidiaries (note 37)	**–**	29
(10)	**–**	Disposal of subsidiaries (note 37)	**–**	(1)
116	**149**	Charge to income statement	**23**	18
(39)	**408**	Change in estimates [1]	**64**	(6)
–	**40**	Unwinding of restoration obligation (note 8)	**6**	–
(90)	**(65)**	Utilised during the year	**(10)**	(14)
(83)	**45**	Translation	**(6)**	7
658	**1,235**	Balance at end of year	**194**	117

[1] The change in estimates relates to changes in laws and regulations governing the protection of the environment and factors relative to rehabilitation estimates and a change in the quantities of material in reserves and a corresponding change in the life of mine plan. These provisions are anticipated to unwind beyond the end of the life of mine.

ANGLO AMERICAN, ANGLOGOLD ASHANTI and XSTRATA also disclosed details of environmental rehabilitation trusts in relation to their respective South African operations. These trusts receive contributions to fund the estimated cost of rehabilitation during, and at the end of, the life of the relevant mine.

Currencies

IAS 21 *The Effects of Changes in Foreign Exchange Rates* is based on the twin notions of functional currency and presentation currency. Functional currency is the currency of the primary economic environment in which the company operates and is the currency in which the company 'measures' the items in its financial statements. Presentation currency is the currency in which the company 'presents' its financial statements, which can be any currency. Where the presentation currency differs from the functional currency, a company is required to translate its results and financial position into the presentation currency and any translation difference is recognised directly in equity.

It is common for the presentation currency of international mining companies to be the US dollar, and all the companies in our sample presented their financial statements in US dollars. In addition to US dollars, ANGLOGOLD ASHANTI presented their financial statements in South African rands, indicating that the two currencies were used for the benefit of international and local investors respectively. RIO TINTO mentioned that, given the dominant role of the US currency in the company's affairs, and that the US dollar most reliably reflected the company's global business performance, the US dollar was the currency in which financial results were presented internally and externally.

One of the factors specified in IAS 21 that an entity considers when determining its functional currency is the currency that mainly influences sales prices for the company's goods. For the most part, the commodities produced by international mining companies are priced in US dollars and as such, the US dollar could be considered to be the currency that influences sales prices. However, this factor is only one of a number of factors contained in IAS 21 which are to be considered by entities in determining their functional currency. In the 'Financial Review' section of its annual report, RIO TINTO explained the influence of currencies as follows:

RIO TINTO 2005 Annual Report and Financial Statements, p34

Exchange rates, reporting currencies and currency exposure
Rio Tinto's shareholder's equity, earnings and cash flows are influenced by a wide variety of currencies due to the geographic diversity of the Group's sales and the countries in which it operates. The US dollar, however, is the currency in which the great majority of the Group's sales are denominated. Operating costs are influenced by the currencies of those countries where the Group's mines and processing plants are located and also by those currencies in which the costs of imported equipment and services are determined. The Australian and Canadian dollars are the most important currencies influencing costs, apart from the US dollar.

Mining *continued*

In relation to functional currency, the following is a summary of the treatment adopted in the financial statements of the companies examined:

	BHP BILLITON	RIO TINTO	ANGLO AMERICAN	ANGLOGOLD ASHANTI	XSTRATA
FUNCTIONAL CURRENCY	'The BHP Billiton Group's reporting and dominant functional currency is US dollars, as this is the principal currency in which BHP Billiton Group companies operate'	'The functional currency for each entity in the Group, and for jointly controlled entities and associates, is determined as the currency of the primary economic environment in which it operates. For most entities, this is the local currency of the country in which it operates.'	'Anglo American retains a significant proportion of its assets within subsidiaries, joint ventures and associates located in countries, principally South Africa, where the local currency is treated as the functional currency.'	'The functional currency of a significant portion of the Group's operations is the South African rand. Other main subsidiaries have functional currencies of US dollars and Australian dollars.'	'The functional currency of each entity is determined after consideration of the primary economic environment of the entity.'

The following extract describes an accounting policy on foreign currencies where the functional currency of the majority of operations is the US dollar is as follows:

BHP BILLITON 2006 Interim Financial Report, p34

17 Accounting Policies continued

Foreign currencies
The BHP Billiton Group's reporting currency and the functional currency of the majority of its operations is US dollars, as this is the principal currency of the economic environments in which they operate.

Transactions denominated in foreign currencies (currencies other than the functional currency of an operation) are recorded using the exchange rate ruling at the date of the underlying transaction. Monetary assets and liabilities denominated in foreign currencies are translated using the rate of exchange ruling at year end and the gains or losses on retranslation are included in the Income Statement, with the exception of foreign exchange gains or losses on foreign currency provisions for site restoration and rehabilitation which are capitalised in property, plant and equipment, and foreign exchange gains and losses on foreign currency borrowings designated as a hedge of the net assets of foreign operations.

The Income Statement of subsidiaries and joint ventures which have functional currencies other than US dollars are translated to US dollars at the date of the transaction. Assets and liabilities are translated at exchange rates prevailing at year end. Exchange variations resulting from the retranslation at closing rate of the net investment in such subsidiaries and joint ventures, together with differences between their Income Statement translated at actual and closing rates, are recorded as a movement in the exchange fluctuation account. Exchange differences arising on long-term foreign currency borrowings used to finance such investments, together with any related income tax effects, are also recorded as a movement in the exchange fluctuation account. The balance of the exchange fluctuation account relating to a foreign operation that is disposed of, or partially disposed of, is recognised in the Income Statement in the year of disposal.

The following extract describes an accounting policy on foreign currency where the functional currency is not the US dollar and depends on the economic environment of each individual subsidiary:

XSTRATA, 2005 Financial Statements, p19

Foreign currencies
Financial statements of subsidiaries, joint ventures and associates, are maintained in their functional currencies and converted to US dollars for consolidation of the Group results. The functional currency of each entity is determined after consideration of the primary economic environment of the entity. Transactions in foreign currencies are translated at the exchange rates ruling at the date of transaction. Monetary assets and liabilities denominated in foreign currencies are retranslated at year end exchange rates. All differences that arise are recorded in the income statement except when hedge accounting is applied. Non-monetary assets measured at historical cost in a foreign currency are translated using the exchange rates at the date of the initial transactions. Where non-monetary assets are measured at fair value in a foreign currency, they are translated at the exchange rates when the fair value was determined. Where the exchange differences relates to an item which has been recorded in equity, the related exchange difference is also recorded in equity.

Commodity hedging

Mining companies incur risks associated with fluctuations in metal and other commodity prices which are mostly determined by international markets. Fluctuations in commodity prices have the potential to affect materially a company's current and future earnings. Many mining companies use derivative instruments such as forward contracts and options to hedge this commodity risk.

All the companies in our sample addressed the issue of commodity price risk and hedging in their financial statements, as the extracts below indicate.

RIO TINTO mentioned its policy as follows:

RIO TINTO 2005 Annual Report and Financial Statements, p35

Commodity prices
The Group's normal policy is to sell its products at prevailing market prices. Exceptions to this rule are subject to strict limits laid down by the Rio Tinto board and to rigid internal controls. Rio Tinto's exposure to commodity prices is diversified by virtue of its broad commodity spread and the Group does not generally believe commodity price hedging would provide long term benefit to shareholders. The forward contracts to sell 509 million pounds of copper at a fixed rand price per pound were entered into as a condition of the refinancing of Palabora in 2005.

Metals such as copper and aluminium are generally sold under contract, often long term, at prices determined by reference to prevailing market prices on terminal markets, such as the London Metal Exchange and COMEX in New York, usually at the time of delivery. Prices fluctuate widely in response to changing levels of supply and demand but, in the long run, prices are related to the marginal cost of supply. Gold is also priced in an active market in which prices respond to daily changes in quantities offered and sought. Newly mined gold is only one source of supply; investment and disinvestment can be important elements of supply and demand. Contract prices for many other natural resource products are generally agreed annually or for longer periods with customers, although volume commitments vary by product.

In the 'Financial Review' section of its annual report, ANGLO AMERICAN indicated that, 'other than its subsidiary ANGLOGOLD ASHANTI, it does not normally hedge the price risk of metal and other commodities and is predominantly a price-taker in the markets that it deals in. Some hedging may be undertaken for strategic reasons and derivatives could be used to optimise the value of its production of these commodities.'

Mining *continued*

Disclosures in its financial statements indicated that ANGLO AMERICAN:

- uses forward, spot, deferred and option contracts to hedge the price risk of certain commodities that it produces, primarily gold
- may choose not to designate certain derivatives as hedges, for example certain forward contracts that economically hedge forecast commodity transactions and relatively low-value or short-term derivative contracts where the potential mark-to-market exposure on the company's earnings is not considered material. Where derivatives have not been designated as hedges, fair value changes are recognised in the income statement in accordance with the company's policy and are classified as financing or operating-depending on the nature of the associated hedge risk
- classifies as normal purchase and normal sale contracts those commodity-based contracts that meet the requirements of IAS 39, when they are settled through physical delivery of the company's production or are used within the production process.

ANGLOGOLD ASHANTI disclosed that it uses forward-sales contracts and call and put options to protect against downward fluctuations in the gold price. It disclosed that some of these instruments are designated and accounted for as cash flow hedges, while 'a significant number of its hedge contracts are not fair valued as they are designated as Normal Purchase/Normal Sales contracts'. It noted that 'were it to fail to deliver gold into these contracts in accordance with their terms, then it would need to account for the fair value of all of its hedge contracts in the financial statements'.

XSTRATA indicated the following regarding its commodity price risk:

XSTRATA Financial Statements 2005, p112

Commodity price risk
The Group is exposed to fluctuations in commodity prices, with the commodity mix spread fairly evenly between those which are priced by reference to prevailing market prices on terminal markets and those that are set on a contract basis with customers, generally on an annual basis. Due to the volatile nature of commodity prices and the historical relationship between prices and the currencies of most of the countries where the Group operates, hedging may be entered into only in limited circumstances and subject to strict limits laid down by the Board. Where exposure to commodity price movements results from processing contracts for which the Group has no underlying production, market risk from fluctuations on the commodity price will from time to time be hedged by LME futures or the OTC swap market.

In its 2006 interim financial report BHP BILLITON disclosed that its commodity-based transactions executed through derivative contracts do not qualify for hedge accounting.

Oil and gas

Although during 2005 the IASB continued its research project into accounting by the extractive industries, building on the Issues Paper released in 2000 by the former International Accounting Standards Committee, an industry specific standard is still some years away. Many companies in the oil and gas sector early-adopted IFRS 6 *Exploration for and Evaluation of Mineral Resource*s. This was published in late 2004 as an interim measure to enable companies to carry forward exploration costs that would otherwise not meet the criteria for capitalisation in IAS 16 *Property, Plant and Equipment* or IAS 38 *Intangible Assets* and would therefore need to be recognised in profit or loss. However, so far as the oil and gas industry is concerned, the main effect of IFRS 6 appears to have been to cause many companies reporting under IFRS in 2005 to discontinue full cost accounting and to change to a successful efforts-based capitalisation policy.

For this comparison we selected five major international oil and gas companies' IFRS financial statements: BP, ENI, REPSOL, ROYAL DUTCH SHELL and TOTAL. Other major international oil and gas companies which report under IFRS, such as GAZPROM, were not included in this survey because their 2005 financial statements were not available at the time of writing.

The specific oil and gas industry issues that we reviewed were:

- How were the acquisition costs of licences, concessions and permits reported?
- How similar were the disclosures regarding exploration, development and production activities?
- How was the accounting treatment of restoration and decommissioning costs disclosed?
- What disclosures were made regarding the companies' interests in joint ventures?
- In respect of emission rights, did companies account for them on a similar basis and what level of disclosure was made?
- How did the industry report the commodity trading it was involved in?

Oil and gas *continued*

Exploration and production costs

In general, the capitalisation of exploration and evaluation expenditures falls within IFRS 6, whilst capital expenditure related to development and production falls within IAS 16.

Costs of licences/concessions/permits

The costs of acquisitions of licences/concessions/permits are classified as intangible assets. The methods of amortising mining licences vary from one company to another. They mainly use either the:

- straight-line method based on the duration of the licence, or
- straight-line method based on the duration of the exploration work programme.

BP indicated that the costs of acquiring exploration licences are recognised as intangible assets and amortised on a straight-line basis over the estimated period of exploration and, in the event that no future activity is planned, the remaining balance of licence acquisition costs is written off. Should a discovery be made, the amortisation would be suspended and the remaining costs aggregated with exploration expenditure on a field-by-field basis as properties awaiting approval for development. When development is approved, the relevant expenditure is transferred to tangible assets.

TOTAL applied the following treatment:

TOTAL Registration Document 2005, p171

> Exploration leasehold rights acquisition costs are capitalized as intangible assets when acquired. Depreciation is recorded, property by property, on the basis of the results of the exploratory activity and management evaluation.
>
> In the event of a discovery, the unproved leasehold rights are transferred to proved leasehold rights at their net book value as soon as proved reserves are booked.

ENI indicated that the costs of the acquisition and extension of exploration permits are recognised as intangible assets and amortised on a straight-line basis over the period of the contract. In the event that the exploration programme on a given permit is terminated, the residual carrying amount of the permit is fully depreciated.

In addition, ENI specified that the procurement costs of hydrocarbon reserves are classified as tangible or intangible assets according to the nature of the underlying asset and are amortised using the unit-of-production method based on the developed and undeveloped proved reserves.

Exploration costs

Exploration costs include geological study costs, costs of processing geophysical seismic data and drilling costs prior to the discovery of oil and gas reserves. Accounting methods for these expenses were not homogeneous among the companies examined.

ENI capitalised all exploration costs and then immediately and fully amortised them. ENI's accounting policy regarding these costs is described as follows:

ENI Annual Report 2005, p130

> EXPLORATION
> Costs associated with exploratory activities for oil and gas producing properties incurred both before and after the acquisition of mineral rights (such as acquisition of seismic data from third parties, test wells and geophysical surveys) are capitalized, to reflect their nature of investment, and amortized in full when incurred.

BP, REPSOL, ROYAL DUTCH SHELL and TOTAL directly expensed all their exploration costs, except for costs directly associated with an exploration well:

- these are maintained as an asset whilst awaiting drilling results
- dry-hole drilling costs (ie wells giving rise to no discovery) are expensed
- costs of successful exploratory wells (ie wells which find oil and gas reserves) are transferred to tangible assets.

Although BP, ROYAL DUTCH SHELL and TOTAL adopted similar overall accounting policies for exploration drilling costs, the level of information disclosed relating to the treatment of drilling costs varied.

BP carries 'suspended wells' as assets when there is a discovery requiring additional appraisal that is likely to be capable of commercial development, as described below:

'If hydrocarbons are found and, subject to further appraisal activity, which may include the drilling of further wells (exploration or exploratory-type stratigraphic test wells), are likely to be capable of commercial development, the costs continue to be carried as an asset. All such carried costs are subject to technical, commercial and management review at least once a year to confirm the continued intent to develop or otherwise extract value from the discovery. When this is no longer the case, the costs are written off.'

ROYAL DUTCH SHELL reported that:

'Exploration wells that are more than 12 months old are expensed unless (a) proved reserves are booked, or (b) (i) they have found commercially producible quantities of reserves and (ii) they are subject to further exploration or appraisal activity in that either drilling of additional exploratory wells is under way or firmly planned for the near future, or other activities are being undertaken to sufficiently progress the assessing of reserves and the economic and operating viability of the project.'

Oil and gas *continued*

TOTAL explained that it accounted for exploratory wells as follows:

TOTAL Registration Document 2005, p171

- costs of exploratory wells are temporarily capitalized until a determination is made as to whether the well has found proved reserves if both of the following conditions are met:
  - the well has found a sufficient quantity of reserves to justify its completion as a producing well, if appropriate, assuming that the required capital expenditures are made.
  - the Group is making sufficient progress assessing the reserves and the economic and operating viability of the project. This progress is evaluated on the basis of indicators such as whether additional exploratory works are under way or firmly planned (wells, seismic or significant studies), whether costs are being incurred for development studies and whether the Group is waiting for governmental or other third-party authorization of a proposed project, or availability of capacity on an existing transport or processing facility.

In general, the accounting treatments adopted in the accounting policies prior to the application of IFRS were carried forward to the companies' first IFRS financial statements, as envisaged by IFRS 6 since all the companies we reviewed had previously applied a successful-efforts based capitalisation policies.

Development costs

All companies capitalised expenditure in respect of the drilling of development and production wells, the construction of infrastructure facilities, decommissioning and restoration obligations.

Furthermore, all companies capitalised borrowing costs on qualifying assets during the period of construction.

All companies depreciated oil and gas properties using the unit-of-production method, based generally on the proved developed reserves (as distinct from proved developed and undeveloped reserves) as per the following example from TOTAL:

TOTAL Registration Document 2005, p172

(ii) Oil and Gas producing assets

Development costs incurred for the drilling of development wells and in the construction of production facilities are capitalized, together with interest costs incurred during the period of construction and estimated discounted costs of asset retirement obligations. The depletion rate is equal to the ratio of oil and gas production for the period to proved developed reserves (unit-of-production method).

With respect to production sharing contracts, this computation is based on the portion of production and reserves assigned to the Group taking into account estimations based on the contractual clauses regarding the reimbursement of exploration and development costs (cost oil) as well as the sharing of hydrocarbon rights (profit oil).

Transportation assets are depreciated using the unit-of-production method based on throughput or by using the straight-line method whichever best reflects the economic life of the asset.

BP's accounting policy was as follows:

BP Annual Report and Accounts 2005, p32

Oil and natural gas properties are depreciated using a unit-of-production method. The cost of producing wells is amortized over proved developed reserves. Licence acquisition, decommissioning and field development costs are amortized over total proved reserves. The unit-of-production rate for the amortization of field development costs takes into account expenditures incurred to date, together with sanctioned future development expenditure.

Oil and gas *continued*

The treatment of costs of drilling dry development wells varied. For example, ENI indicates that 'costs related to unsuccessful development wells or damaged wells are expensed immediately as loss on disposal'.

By contrast, BP indicated that these costs are capitalised: 'Expenditure on the construction, installation or completion of infrastructure facilities such as platforms, pipelines and the drilling of development wells, including unsuccessful development or delineation wells, is capitalised within property, plant and equipment.'

All the companies capitalised expenditure on major maintenance refits or repairs such as refinery turnarounds, and amortised the expenditure concerned over the period to the next planned major inspection.

Decommissioning and restoration costs

All the companies reviewed dealt with the treatment of facilities decommissioning and site restoration in their accounting policies.

However, the companies described the basis of their decommissioning and site restoration provisions in different ways, as the following extracts from their annual reports show.

BP Annual Report and Accounts 2005, p35

DECOMMISSIONING

Liabilities for decommissioning costs are recognized when the group has an obligation to dismantle and remove a facility or an item of plant and to restore the site on which it is located, and when a reasonable estimate of that liability can be made. Where an obligation exists for a new facility, such as oil and natural gas production or transportation facilities, this will be on construction or installation. An obligation for decommissioning may also crystallize during the period of operation of a facility through a change in legislation or through a decision to terminate operations. The amount recognized is the present value of the estimated future expenditure determined in accordance with local conditions and requirements.

A corresponding item of property, plant and equipment of an amount equivalent to the provision is also created. This is subsequently depreciated as part of the capital costs of the facility or item of plant.

Any change in the present value of the estimated expenditure is reflected as an adjustment to the provision and the corresponding property, plant and equipment.

ROYAL DUTCH SHELL 2005 Form 20-F, p112

Estimated decommissioning and restoration costs, which are primarily in respect of oil and gas production facilities, are based on current requirements, technology and price levels and are stated at fair value, and the associated asset retirement costs are capitalised as part of the carrying amount of the related property, plant and equipment. The liability is recognised once an obligation (whether legal or constructive) crystallises in the period when a reasonable estimate of the fair value can be made; a corresponding amount is recognised in property, plant and equipment. The fair value is calculated using amounts discounted over the useful economic life of the assets. The effects of changes resulting from revisions to the timing or the amount of the original estimate of the provision are reflected on a prospective basis.

TOTAL Registration Document 2005, p175

P. Asset retirement obligations

Asset retirement obligations, which result from a legal or constructive obligation, are recognized on the basis of a reasonable estimate of their fair value in the period in which the obligation arises.

The associated asset retirement costs are capitalized as part of the carrying amount of the long-lived assets and depreciated over the useful life of the associated long-lived asset.

An entity is required to measure changes in the liability for an asset retirement obligation due to the passage of time (accretion) by applying a discount rate that reflects the time value of money to the amount of the liability at the beginning of the period. The increase of the provision due to the passage of time is recognized as "Other financial expense".

ENI Annual Report 2005, p134-135

Asset retirement obligation

Obligations related to the removal of tangible equipment and the restoration of land or seabed once operations are terminated imply the recognition of significant obligations. Estimating the future asset removal costs is difficult and requires Management to make estimates and judgements because most of the removal obligations are many years in the future and contracts and regulations often have vague descriptions of what constitutes removal. Asset removal technologies and costs are constantly changing, as well as political, environmental, safety and public relations considerations. The criticality of these estimates is also increased by the accounting method used that requires entities to record the fair value of a liability for an asset retirement obligations in the period when it is incurred (typically at the time the asset is installed at the productions location). When the liability is initially recorded, the related fixed assets is increased by an equal corresponding amount. Over time, the liabilities are increased for the provisions due to reflect the passage of time and any change of the estimates following the modification of the future cash flows, the discounting rate or the discount rate adopted. The recognized asset retirement obligations liability amounts are based upon future retirement cost estimates and incorporate many assumptions such as expected recoverable quantities of crude oil and natural gas, time to abandonment, future inflation rates and the risk-free rate of interest adjusted for the Company's credit costs.

Oil and gas *continued*

REPSOL 2005 Annual Report, p78

v. Future field abandonment and dismantling costs (environmental, safety, etc.) are estimated, on a field-by-field basis, and are capitalised at their present value when they are initially recognised in the consolidated balance sheet, with a charge to the heading "Non-Current Provisions for Contingencies and Expenses".

BP, ENI and ROYAL DUTCH SHELL disclosed the discount rates used in 2005 to determine the carrying amount of the decommissioning obligation, as follows:

Company	Discount rates
BP	2% (real discount rate)
ENI	between 3% and 5.4%
ROYAL DUTCH SHELL	6%

Only BP gave an indication of the period over which the costs concerned are expected to be incurred. It reported that 'The majority of these costs are expected to be incurred over the next 10 years'.

Accounting for interests in joint ventures

In the oil and gas industry, joint ventures may take the form of jointly controlled entities or jointly controlled assets. For example, in BP's financial statements:

'results, assets and liabilities of a jointly controlled entity are incorporated in these financial statements using the equity method of accounting'

and

'certain of the group's activities, particularly in the Exploration and Production segment, are conducted through joint ventures where the venturers have a direct ownership interest in and jointly control the assets of the venture. The income, expenses, assets and liabilities of these jointly controlled assets are included in the consolidated financial statements in proportion to the group's interest.'

IAS 31 *Interest in Joint Ventures* permits a company to recognise its interest in jointly controlled entities using either proportionate consolidation or the equity method.

BP, ROYAL DUTCH SHELL and ENI recognised their interests in jointly controlled entities using the equity method of accounting, while TOTAL and REPSOL proportionally consolidated their jointly controlled entities.

Emission rights

In June 2005, IFRIC withdrew IFRIC Interpretation 3 *Emission Rights*. As might be expected, in the absence of a currently applicable IASB standard or interpretation, some divergence in practice has resulted, with companies developing their own accounting policies. Neither BP nor ROYAL DUTCH SHELL disclosed a specific policy on emission rights. ENI, REPSOL and TOTAL disclosed the following policies:

ENI Annual Report 2005, p132

> Costs related to the amount of emissions, determined on the basis of the average prices of the main European markets at the end of the period, are reported in relation to the amount of the carbon dioxide emissions that exceed the amount assigned

REPSOL measured its emission expense on a deemed cost basis with cost being the fair value prevailing at the time the emission rights were acquired:

REPSOL 2005 Annual Report, p80

> Emission allowances are initially recognised at fair value and are subsequently measured at cost. Emission allowances received from the government for no consideration are classified as government grants and, therefore, when they are assigned, deferred income is recognised for the same amount as that of the emission allowances recognised.
>
> As the emissions are made, the Group recognises a provision on the basis of the tonnes of CO_2 emissions, which is measured as follows: (i) the emission allowances assigned for no consideration, at the original prices; (ii) the emission allowances purchased in the market to cover emissions made in excess of the allowances assigned for no consideration, at the average purchases price, and (iii) emissions made in the period not covered at year-end, at the price prevailing at that date.
>
> The deferred income recognised for the emission allowances received for no consideration are taken to income systematically as the CO_2 emissions covered by them are made and the related provision is recognised and, therefore, these subsidised rights do not have any effect on the consolidated income statement.

TOTAL measured its emission expense primarily at cost, but with a balance sheet date market value adjustment to reflect any shortfall between the actual emissions for the year and the emissions rights held at year end:

TOTAL 2005 Registration Document, p176

> ***T. Emission rights***
>
> In the absence of a current IFRS standard or interpretation on accounting for emission rights, the following principles have been applied:
>
> - emission quotas issued free of charge are accounted for at zero book value;
> - transactions that have been made on the market are recorded at cost;
> - the liabilities resulting from potential differences between available quotas and quotas to be delivered at the end of the compliance period are accounted for as a liability, at fair market value.

Oil and gas *continued*

Commodity derivatives held for trading

BP, REPSOL, ROYAL DUTCH SHELL and TOTAL reported that they use derivatives in the management of commodity price risk.

BP's policy is as follows:

'The group maintains active trading positions in a variety of derivatives. This activity is undertaken in conjunction with risk management activities. Derivatives held for trading purposes are marked-to-market and any gain or loss recognised in the income statement.'

TOTAL explained its approach:

'Financial instruments related to commodity contracts, including all the crude oil, petroleum products, natural gas and power purchasing/selling contracts related to the trading activities, together with the commodity contract derivative instruments, are used to adjust the Group's exposure to price fluctuations in reference to global trading limits. These instruments are considered, according to the industry practice, as held for trading. Changes in fair value are recorded in the income statement.'

Under IAS 1 *Presentation of Financial Statements*, oil and gas companies present net the purchases and sales deriving from these trading activities.

ROYAL DUTCH SHELL reported:

'Gains and losses on derivative contracts and the revenue and costs associated with other contracts which are classified as held for trading purposes are reported on a net basis in the Statement of Income.'

In 2005, BP changed its accounting presentation of commodity derivatives:

BP Annual Report and Accounts 2005, p43

> The group's accounting policy has been to present oil, natural gas and power forward sales and purchases gross in the income statement. However, during 2005, a review was undertaken into the presentation of these commodity derivative transactions and related activity. These transactions have previously been presented gross in the income statement, although in certain areas of the group's activity, physical delivery can be optional and avoided by buying or selling offsetting contracts through a market mechanism. This led to the conclusion that it was more appropriate to represent transactions in these areas net rather than gross. These sale and purchase transactions are now offset and reported net in sales and other operating revenues. Other derivative contracts where physical delivery is the norm continue to be reported gross.

Both BP and ROYAL DUTCH SHELL identified derivatives contracts embedded in commodity contracts (eg gas contracts in the United Kingdom). These embedded derivatives were separated from the host contracts and accounted for at fair value in the balance sheet. Changes in fair value were recorded in the income statements and were explained by BP as follows:

BP Annual Report and Accounts 2005, p77

> Prior to the development of an active gas trading market, UK gas contracts were priced using a basket of available price indices, primarily relating to oil products. Post the development of an active UK gas market, certain contracts were entered into or renegotiated using pricing formulae not directly related to gas prices, for example, oil product and power prices. In these circumstances, pricing formulae have been determined to be derivatives, embedded within the overall contractual arrangements that are not clearly and closely related to the underlying commodity.

Pharmaceuticals

The 2005 financial statements of the following companies were reviewed in this analysis of the pharmaceutical sector: ASTRAZENECA, GLAXOSMITHKLINE, MERCK, NOVARTIS, NOVO NORDISK, ROCHE, SANOFI-AVENTIS and SCHERING.

The industry-specific issues that we addressed were:

- How did the companies explain the various elements that were included in their revenue, including rebates and allowances?
- How did companies disclose the criteria for capitalisation of development costs as intangible assets? How was in-process research and development accounted for in business combinations? How were those assets amortised and how did companies satisfy the requirements of IAS 36 *Impairment of Assets?*
- How were the various risks that this industry faces reflected in provisions?
- How did companies in this industry report their segments?

Revenue recognition

Based on the information given by these companies, the following specific elements had an impact on their revenue recognition:

- allowances/rebates in the different health programmes (such as Medicaid and Medicare in the United States)
- amounts due to health organisations
- commercial rebates and discounts granted to certain distributors
- discounts granted for cash or prompt payment
- sales returns.

ASTRAZENECA, GLAXOSMITHKLINE and NOVARTIS explained in a relatively detailed way the mechanisms of the discounts and rebates that applied in the American market.

ASTRAZENECA, GLAXOSMITHKLINE, NOVARTIS, ROCHE, SANOFI-AVENTIS and SCHERING each specified in their accounting policies that rebates and discounts granted to customers, and provisions for return of goods, were netted against revenues. NOVO NORDISK also specified that the return of goods was deducted from its revenues.

Pharmaceuticals *continued*

With regard to customer allowances, GLAXOSMITHKLINE stated that in the absence of detailed rules under IFRS to determine when certain marketing and promotional expenditures should be deducted from revenue rather than recorded as an expense, the company applied US EITF 01-09 *Accounting for Consideration Given by a Vendor to a Customer*, which requires most marketing, advertising and promotion payments made to customers to be deducted from revenue.

NOVARTIS presented in its annual report (although outside its financial statements) a summary of the reconciliation of its gross sales to its net sales, showing the revenue reduction attributable to each of the elements listed above. This is accompanied by a table showing the movements on the provisions for each element. GLAXOSMITHKLINE disclosed in its operating and financial review similar information for its sales in the US.

NOVARTIS Annual Report 2005, p116-117

GROSS TO NET SALES RECONCILIATION

	Income Statement charge			
	Charged through revenue deduction provisions 2005 USD millions	Charged directly without being recorded in revenue deduction provisions 2005 USD millions	Total 2005 USD millions	In % of gross sales
Gross sales subject to deductions			**38 844**	**100.0**
US Medicaid & Medicare and State program rebates & credits including prescriptions drug saving cards	-794		-794	-2.0
US managed health care rebates	-498		-498	-1.3
Other health care plans & programs (non-US) rebates	-84	-12	-96	-0.2
Chargebacks including hospital chargebacks	-1 673	-109	-1 782	-4.6
Direct discounts, cash discounts & other rebates	-798	-1 492	-2 290	-5.9
Sales returns & other deductions	-407	-765	-1 172	-3.0
Total gross to net sales adjustments	**-4 254**	**-2 378**	**-6 632**	**-17.0**
Net sales			**32 212**	**83.0**

PROVISIONS FOR REVENUE DEDUCTIONS

			Income statement charge			
	Provisions at January 1, 2005 USD millions	Payments USD millions	Adjustments of prior years USD millions	Current year USD millions	Whereof provisions offset against accounts receivable USD millions	Provisions at December 31, 2005 USD millions
US Medicaid, Medicare and State program rebates & credits including prescription drug savings cards	321	-618	-1	795		497
US managed health care rebates	156	-398	28	470		256
Other health care plans & programs (non US) rebates	17	-66		84		35
Chargebacks including hospital chargebacks	316[1]	-1 610	1	1 672	-379	
Direct customer discounts, cash discounts & other rebates	170[1]	-646	-2	800	-256	66
Sales returns & other deductions	396	-395	-9	416		408
Total	**1 376**	**-3 733**	**17**	**4 237**	**-635**	**1 262**

[1] At January 1, 2005, USD 350 million of chargebacks and cash discounts were deducted from accounts receivable.

Research and development

Accounting for in-house development costs

With the exception of GLAXOSMITHKLINE, the companies expensed all research and development costs prior to regulatory approval because of the significant uncertainties inherent in the nature of the product approval process.

- GLAXOSMITHKLINE usually capitalises development costs when a filing for regulatory approval has been made in a significant market and approval is considered highly probable.

- ASTRAZENECA stated that internal development expenditure is recognised as an expense when incurred, unless it meets the recognition criteria of IAS 38 *Intangible Assets.* However, the company stated that 'regulatory and other uncertainties generally mean that such criteria are not met'.
- MERCK also considered that capitalisation is not possible under IAS 38 before the marketing of the product, whether it is for its pharmaceutical products or for chemical activities. It stated on the other hand that costs incurred after regulatory approval were insignificant.
- NOVARTIS considered that regulatory and other uncertainties inherent in the development of new products precluded it from capitalising the costs of in-house development for new products and explained that all costs were fully expensed.

Research and development acquired separately

Research and development projects acquired separately take various forms: licensing agreements and rights relating to pharmaceutical products, research and development contracts and the acquisition of generic files. The companies reviewed account for acquired licences, patents, know-how and marketing rights as intangible assets.

Generally, the amortisation of such intangibles starts at the date on which the asset is available for use or at the date of product launch. Several of the companies did not disclose the useful lives or amortisation rates applied to their pharmaceutical intangibles, although ASTRAZENECA indicated that economic lives range from three to 20 years, and SANOFI-AVENTIS disclosed that the average period of amortisation for marketed products is eight years based on cash flow forecasts which, among other factors, takes account of the period of legal protection offered by the related patents.

Only GLAXOSMTHKINE among the companies in our sample considered that it had any intangible assets having an indefinite life. These were all acquired brands and GLAXOSMTHKINE explained that it applied a fair value less costs to sell methodology in order to test these brands for impairment each year.

In-process research and development acquired by way of business combinations

Other than NOVO NORDISK and ASTRAZENECA, all the companies disclosed information about the recognition and measurement of research and development acquired by means of business combinations.

IFRS 3 *Business Combinations* requires in-process research and development to be recognised as part of the purchase price allocation, and measured at fair value separately from goodwill in the same way as other intangible assets. (This contrasts with US GAAP, under which in-process research and development acquired in a business combination is not recognised.)

IAS 38 requires amortisation of these projects, and IAS 36 requires that impairment tests be undertaken if indicators of impairment exist. NOVARTIS and SANOFI-AVENTIS disclosed the following:

- NOVARTIS stated that once a research and development project acquired by means of a business combination has been successfully developed and is available for use, it is amortised over its useful life into 'cost of goods sold' along with any related impairment charge.
- SANOFI-AVENTIS explained that research and development work in process at the time of acquisition is amortised on a straight-line basis over its useful life, starting with regulatory approval for the resulting drugs. The amortisation expense is recorded under 'amortisation of intangible assets'.

Pharmaceuticals *continued*

Research and development ratios

In addition to the amount of research and development expenditure, all the companies disclosed a ratio of research and development expenditure to sales. They did not specify the impact of depreciation on the calculation of the ratio although NOVARTIS and GLAXOSMITHKLINE specified that the ratio was impacted by the impairment of research and development assets recognised in the period.

Company	R&D expenditure turnover	Ratio presentation
ASTRAZENECA	14.1 %	• Presented in the *Financial Review* of its *2005 Annual Report*, in the *Operating Profit* table • No specific comments
GLAXOSMITHKLINE	14.5 %	• Presented in the *Operating and Financial Review and Prospects* of the *Report of the Directors* of the *Annual Report 2005*, within *Operating Profit* • Commentary is provided in the same section
MERCK	15 % within the pharmaceutical area	• Presented in the *Management Report* and the *2005 Annual Report*, only for this sector and this division • Commentary is provided in the same section
NOVARTIS	15.0 %	• Presented in its *Summary of Financial Data* of the *2005 Annual Report*, then by activity sector and included in the *Operating and Financial Review* of the same report, under the chapter *Other revenues and operating expenses* • No specific comments
NOVO NORDISK	15.1 %	• Presented in the *Non-financial highlights* section of the *Annual Report 2005,* under *Management Report and Discussion* • No specific comments
ROCHE	14.8 %	• Presented among the *Key Performance Indicators* in the *2005 Business Report* and illustrated by division • Commented on in the *Business Report* and the *Finance Report 2005*
SANOFI-AVENTIS	16.1 %	• Presented in the Management report included in the 2005 Document of Reference under *Consolidated Financial statements for the year 2005* • Commented on in the *Results for the year 2005 compared to the results of year 2004*
SCHERING	18.5 %	• Presented in the *Management Report* of the *Annual Report 2005* • Commentary is provided in the same section

Impairment of assets

There was considerable variation among the companies in the sample in the extent of the information they disclosed about the processes they use to measure the recoverable amount of goodwill and, more specifically, the identification of cash-generating units and discount rates.

Information disclosed about the cash-generating units (CGUs) identified for the allocation and measurement of goodwill was as follows:

- ASTRAZENECA regarded the company as a single CGU.
- GLAXOSMITHKLINE did not supply any information.
- MERCK stated that a CGU is normally a segment but in a few cases the CGU is a company or a 'business field' within a segment.
- NOVARTIS stated that CGUs are 'at least one level below the divisional segmentation'.
- ROCHE stated that each business segment is a CGU.
- SANOFI-AVENTIS allocated its goodwill to its segments and, within each of these segments, to three geographical sub-segments. A table detailing the goodwill per business sector and geographical area was presented.
- SCHERING stated that goodwill is tested for impairment by geographical segments (the primary reporting format for SCHERING's segment reporting).

Cash flow estimates:

- Extended over ten years at ASTRAZENECA, which indicated that this reflected the patent-protected lives of the company's current products.
- Extended over five years for GLAXOSMITHKLINE in the case of brands with indefinite lives, with a terminal value calculation. The projection period for goodwill impairment testing was not disclosed.
- At MERCK these were based on the medium-term business plan and a long-term growth rate between 0% and 2%, depending on the activity concerned.
- Were projected by NOVARTIS for the next five years based on management's range of forecasts with a terminal value using sales projections in line with or lower than inflation thereafter (a range of -3% to +4% was used). NOVARTIS stated that, typically, three probability-weighted scenarios were used.
- Were projected over five years based on the most recent business plans approved by management for the diagnostic division of ROCHE.
- Were projected over 20 years at SANOFI-AVENTIS for the purpose of testing goodwill for impairment. For other intangible assets, the period used is the period of protection provided by the relevant patent.
- Were based on a three-year operating plan at SCHERING with a long-term growth rate per sector of 2% for the Europe region and 4% for the United States region.

Pharmaceuticals *continued*

- Alone among the companies in the sample, SANOFI-AVENTIS disclosed for each of its two segments the operating margins assumed in preparing its cash flow estimates (ranging from 29% to 41%) as well as its perpetual growth rate assumptions (ranging from 1.8% to 5%). The extent of disclosures may well have been influenced by the fact that the company recorded large impairment losses in 2005.

The discount rates applied to the cash flow projections used to test goodwill for impairment were as set out below. Where companies used a post-tax rather than a pre-tax rate as required by IAS 36, it is likely that – as stated by GLAXOSMITHKLINE and NOVARTIS – they used post-tax cash flow forecasts and believe that applying a post-tax discount rate to them approximates to applying a pre-tax discount rate to pre-tax cash flows.

- ASTRAZENECA applied a risk-adjusted rate of 12%.
- GLAXOSMITHKLINE applied a rate of 8%, being the company's post-tax weighted average cost of capital, adjusted where appropriate for country-specific risks.
- NOVARTIS disclosed ranges of post-tax discount rates for its Sandoz division (7% to 13%) and its Consumer Health division (6% to 11%).
- For its Diagnostics division, ROCHE used a post-tax rate of 8.4 % derived from a capital pricing model, adjusted to a pre-tax rate of 12.9 %.
- SANOFI-AVENTIS used a discount rate of 10% for its pharmaceuticals division and 11% for its vaccines division. It did not specify whether those are pre-tax or post-tax rates.
- SCHERING applied a pre-tax discount rate of 13.5 % for its Europe region and 14.25 % for its United States region.
- MERCK applied a range of post-tax discount rates, from 7.0% to 7.6%, 'based on the weighted average cost of capital applicable to the cash-generating units of the Pharmaceutical and Chemical business sectors'.

Provisions

The various categories of provisions relevant to the pharmaceutical sector presented by the companies reviewed showed in particular that risks:

- relate to infringement of intellectual property rights and to the validity of certain patents
- are dependent on the end-use of products by the customers
- include environmental, tax and other risks related to legislation around the cross-border transfer and marketing of the products.

All companies in the sample described the risks related to infringement of intellectual property rights, the validity of certain patents and product liability claims, in extensive narratives in their annual reports, usually outside the notes to financial statements. However, the disclosures usually do not include the amounts of liabilities or assets recorded in the accounts, as such disclosure may prejudice the position of the reporting company. Although, despite the requirement in IAS 37 *Provisions, Contingent Liabilities and Contingent Assets*, this was not stated by all the companies.

Litigation relating to the issues mentioned above and also to anti-trust legislation in the United States, was referred by GLAXOSMITHKLINE and SANOFI-AVENTIS, and claims relating to pricing and marketing practices in North America were mentioned by MERCK, NOVARTIS and SANOFI-AVENTIS.

GLAXOSMITHKLINE and NOVARTIS mentioned their provisions for self-insurance, which NOVARTIS disclosed separately.

All companies in the sample disclosed environmental provisions separately with the exception of GLAXOSMITHKLINE and MERCK which included such provisions in 'other' categories of provisions.

Among the provisions for risks of a tax nature, ASTRAZENECA and GLAXOSMITHKLINE emphasised the significance of disputes about transfer pricing as a result of being present in several territories.

All the companies disclosed in their notes to the financial statements a table of movements in provisions, as required by IAS 37. ASTRAZENECA, GLAXOSMITHKLINE and SANOFI-AVENTIS also included additional descriptions of certain provisions in management's discussion in their annual report.

Segment information

Six of the eight companies in our sample used their business segments as their primary segment reporting format. ASTRAZENECA and SCHERING were the only companies to use geographical information as their primary reporting format. ASTRAZENECA determined that it has only one business segment, namely 'Pharmaceutical Products'.

Most companies in the sample reported no more than three business segments (corporate activities excluded).

Pharmaceuticals *continued*

Company	Primary level	Secondary level
ASTRAZENECA	**Business segment** • Pharmaceutical products	**Geographical segments** • UK • Continental Europe • The Americas • Asia/Africa/Australasia
GLAXOSMITHKLINE	**Business segments** • Pharmaceuticals (prescription pharmaceuticals and vaccines) • Consumer Healthcare (over-the-counter medicines, oral care and nutritional healthcare)	**Geographical segments** • USA • Europe • Rest of the world
MERCK	**Business segments** • Pharmaceuticals (divided into Ethicals, Generics, and Consumer Health Care) • Chemicals (divided into Liquid Crystals, Pigments, and Life Sciences & Analytics) • Corporate and Other	**Geographical segments** • Germany • France • Rest of Europe • North America • Latin America • Asia • Rest of the world
NOVARTIS	**Business segments** • Pharmaceutical Division • Sandoz Division • Consumer Health Division • Corporate	**Geographical segments** • Europe • The Americas • Asia/Africa/Australia
NOVO NORDISK	**Business segments** • Diabetes Care • Biopharmaceuticals	**Geographical segments** • Europe • North America • Japan & Oceania • International operations (grouping other countries)
ROCHE	**Business segments** • Pharmaceuticals • Diagnostics Division • Corporate	**Geographical segments** • North America • Europe, Middle East and Africa • Japan • Other
SANOFI-AVENTIS	**Business segments** • Pharmaceutical products • Human vaccines	**Geographical segments** • Europe • The United States of America • Other countries
SCHERING	**Geographical segments** • Europe • United States • Japan • Latin America/Canada • Asia/Pacific • Other activities	**Business segments** • Gynecology & Andrology • Diagnostic Imaging • Specialised Therapeutics • Oncology • Other sources

Real estate

Sharply varying customs and legislation in different real estate markets have resulted in aspects of IAS 40 *Investment Property* and IAS 17 *Leases* being interpreted and applied in a variety of ways to date.

Accounting issues that those involved with real estate must consider include the use of the fair value model for investment property, valuation methods, revenue recognition and the interaction between IAS 17 and IAS 40.

We selected for review the financial statements of some of the largest publicly listed property companies in Europe, Australia and Hong Kong. The companies we selected are listed below:

Company	Location	Financial year-end
LAND SECURITIES (Land Securities Group PLC)	United Kingdom	Mar 06[1]
BRITISH LAND (The British Land Company PLC)	United Kingdom	Mar 06[1]
HKL (Hongkong Land Holdings Limited)	Hong Kong[2]	Dec 05
RODAMCO (Rodamco Europe, NV)	The Netherlands	Dec 05
GECINA (Gecina)	France	Dec 05
UNIBAIL (Unibail Holding)	France	Dec 05
LIBERTY (Liberty International PLC)	United Kingdom	Dec 05
IVG (IVG Immobilien AG)	Germany	Dec 05
WESTFIELD (Westfield Holdings Limited)	Australia	Dec 05

[1] Because of the size of these companies they were included in our sample, although their first full IFRS financial statements were not available at the time of writing. Instead, we considered their published IFRS financial information, interim financial statements and preliminary announcements.
[2] HKL is incorporated in Bermuda and primarily listed in London.

Investment property

The fair value option

Unsurprisingly, given the sector's focus on asset values, almost all of the companies in our sample used the fair value model in IAS 40 for their investment property.

IVG was the sole exception. It used the cost model and depreciated its properties over 50 or 66.7 years. Its financial statements explained that the cost model is adopted because the company considers that 'industry standards with regard to choice of accounting policy for investment property are still evolving', although none of the other companies in our sample expressed similar sentiments. IVG also noted that adopting the cost model will still allow a change to the fair value model at some point in the future. As the cost model was used by IVG the company disclosed, in accordance with paragraph 79(e) of IAS 40, that the fair value of investment property at 31 December 2005 was some 25% greater than the carrying amount.

Real estate *continued*

Disclosure of valuation methods

The valuer

IAS 40 does not mandate the use of an independent valuer and our review found that not all of these companies used one each year. However, paragraph 75(e) does require the disclosure of whether the estimate of fair value was based on a valuation by an independent valuer who holds a relevant qualification. There were varying practices: for example, IVG referred to its fair value disclosures being 'largely based on valuations performed by reputable neutral appraisers', whilst others named the valuers used. LIBERTY, for example, listed DTZ Debenham Tie Leung, Knight Frank LLP, CB Richard Ellis, Matthews & Goodman LLP and Cushman and Wakefield California, Inc.

WESTFIELD's property investments were carried at 'the directors' determination of fair value based on annual independent valuations where appropriate'. Their financial statements explain that a full independent valuation of each shopping centre is obtained at least every three years and then updated annually.

Methodology and assumptions

Paragraph 76(d) of IAS 40 requires disclosure of the methods and significant assumptions applied when determining the fair value of investment property. In general the companies in our sample briefly described the valuation methodologies utilised. WESTFIELD was typical in using 'both the capitalisation of net income method and the discounting of future net cash flows to their present value'. Some companies also disclosed that the appraisal was carried out in accordance with certain valuation standards. For example, RODAMCO referred to the Royal Institute of Chartered Surveyors and International Valuation Standards Committee standards. UNIBAIL gave a relatively detailed explanation of how its valuation methodology differed between offices, shopping centres and convention-exhibition buildings.

Development property

The revaluation option

The policy adopted for measuring development properties varied along national lines. The UK companies applied the revaluation option in IAS 16 to their development properties. LIBERTY stated specifically that it had chosen the revaluation option because reliable estimates were available for such properties. However, to the extent that the non-UK companies disclosed development properties, all carried them at cost.

The Basis for Conclusions to IAS 40 implies that investment property under construction may not be revalued but IAS 16 does not preclude accounting for such property using the revaluation model. In the light of this, IFRIC has recently asked the IASB whether it would consider amending IAS 40 to state that investment property under construction should be accounted for under that standard.

Finance costs

With the exception of IVG, the companies adopted the allowed alternative treatment in IAS 23 *Borrowing Costs* of capitalising borrowing costs directly attributable to the construction of properties.

IVG simply stated that borrowing costs were not capitalised. It is worth noting that this policy choice (ie of not capitalising) will be removed if the exposure draft of amendments to IAS 23 (issued by the IASB in May 2006) is adopted.

Revenue recognition

Disposal of investment property

There was some variety in the way this issue was addressed.

In the appendix to IAS 18 *Revenue*, paragraph 9 'Real estate sales' states that:

'Revenue is normally recognised when legal title passes to the buyer. However, in some jurisdictions the equitable interest in a property may vest in the buyer before legal title passes and therefore the risks and rewards of ownership have been transferred at that stage. In such cases, provided that the seller has no further substantial acts to complete under the contract, it may be appropriate to recognise revenue...'

Whilst 'equitable interest' is not a defined term and its interpretation may vary, it is generally accepted that companies are required to judge when it is most appropriate to recognise a disposal. Our sample showed the following:

Company	When risks and rewards are passed to the buyer	On transfer of legal title	Not specified
LAND SECURITIES	X		
BRITISH LAND		X	
HKL			X
RODAMCO			X
GECINA			X
UNIBAIL			X
LIBERTY	X		
IVG	X		
WESTFIELD			X

Companies may determine different trigger points for recognising the disposal of investment property, but many of the companies sampled did not explicitly state what their policy was in this regard.
The three UK companies specified when a disposal was recognised – either on completion (ie transfer of legal title) or on exchange of contracts if no significant conditions remain to be fulfilled prior to completion (ie when risks and rewards had passed to the acquirer). IVG noted that revenue is recognised when all significant risks and rewards have been transferred to the buyer. None of the other companies sampled were specific. It may be that either no opportunity for passing an equitable interest to an acquirer prior to transfer of legal title exists in their jurisdictions, or any such judgments did not affect their financial statements.

IFRIC has now taken on to its agenda a project to clarify the requirements of IAS 18 for real estate sales in which contracts are signed before construction is complete. Its conclusions may affect the timing of recognition of the disposal of a property.

Real estate *continued*

Interaction between IAS 17 and IAS 40

Paragraph 50 of IAS 40 stipulates that 'In determining the fair value of investment property, an entity does not double count assets or liabilities that are recognised as separate assets or liabilities'.

We reviewed the sample to ascertain how that requirement is interpreted in respect of balances arising from:

- SIC-15 *Operating Leases – Incentives*: when an entity offers an initial rent-free period to the lessee, it will recognise an asset and amortise it over the lease term, thereby spreading the reduction in rental income over the duration of the lease; and
- IAS 17: in particular finance lease balances relating to the properties in question.

Our review showed that the requirement in IAS 40 not to double count assets or liabilities recognised separately is usually interpreted as a requirement to adjust the carrying value of an investment property from its fair value to the extent that an asset or liability arises as required by SIC-15 or IAS 17. For example, one company that took this view was BRITISH LAND which explained the treatment in its accounting policies as shown below:

BRITISH LAND Interim Statement 2005, p19

Net rental income
Rental income is recognised on an accruals basis, exclusive of service charge recoveries. Rental income from fixed and minimum guaranteed rent reviews is recognised on a straight-line basis over the shorter of the entire lease term or the period to the first break option. Where rental income is recognised ahead of the related cash flow, an adjustment is made to ensure the carrying value of the related property including the accrued rent does not exceed the external valuation.

This can lead to some significant adjustments. LAND SECURITIES disclosed in its 30 September 2005 interim accounts (as would be required by paragraph 77 of IAS 40 in full financial statements) that the appraised market value of its property portfolio at that date was £10,345m which was then adjusted to arrive at a book value of £10,140m as follows:

LAND SECURITIES 30 September Interim Accounts 2005, p33

Reconciliation of net book value to market value:			
Net book value at 30 September 2005	9,244.9	895.5	10,140.4
Plus: amount included in prepayments in respect of lease incentives	62.0	7.6	69.6
Less: head leases capitalised	(57.3)	–	(57.3)
Plus: properties treated as finance leases	191.9	–	191.9
Market value at 30 September 2005 – Group	9,441.5	903.1	10,344.6
– plus: share of joint ventures (note 12)	1,119.6	30.0	1,149.6
Market value at 30 September 2005 – Group and share of joint ventures	**10,561.1**	**933.1**	**11,494.2**

It can be seen from this example that, despite the literal requirement of paragraph 33 of IAS 40 for an entity to 'measure all of its investment property at fair value', often the net book value of a property portfolio will not be the same as the appraised market value of the portfolio.

However, no disclosures of adjustments to the fair value were made by the non-UK companies. This may reflect the fact that long leasehold interests (and perhaps even lease incentives) are a more common feature of the UK real estate market than others.

Retail

For the purpose of this research, the following retail companies were selected: AHOLD, CARREFOUR, CASINO, KINGFISHER and PPR.

DIXONS, SAINSBURY and TESCO had not published their first IFRS financial statements at the time of writing, and were therefore excluded from this analysis.

The specific retail industry issues we considered were:

- How many companies in this industry used business segments and how many used geographical segments for their primary segment reporting?
- What were the industry-specific issues relating to revenue recognition such as revenue recognition criteria, the accounting for franchise licence contracts and vendor allowances?
- When the players in the industry own shopping malls, do they classify these as investment properties or property, plant and equipment?
- On what basis was impairment considered?
- Was there consistency in the way inventory was measured and disclosed?

Segment reporting

Within our sample, AHOLD and PPR used business segments for primary segment reporting and then geographical segments as secondary information. Geographical segments were primary for CARREFOUR while KINGFISHER considered that it had one single business segment (retail sales) and gave no secondary segment disclosure.

Whether forming primary or the secondary segments, the core business activities were segmented differently by each company: CARREFOUR, for instance, reported by shop type (hypermarket, supermarket, hard discount, and 'other activities') whereas AHOLD separated its retail and wholesale activity from its food activity. PPR reported by shop brand, distinguishing its luxury goods activity from its retail activity.

The amount of information reported for segment reporting purposes was comparable. AHOLD was the only company to provide practically the same level of information for both business and geographical segments.

Revenue recognition

Revenue recognition criteria

The major element of revenue in the sector arises comes from shops and warehouses. This source of revenue was recognised when payment was made at the cash desk by the customer.

For sales through internet or franchisors, revenue is generally recognised upon delivery. Revenue linked to an extended guarantee is spread over the extended guarantee period on a straight-line basis.

Discounts or other benefits earned by customers from the use of bonus or loyalty cards were generally recorded as a reduction of the sales price at the time of the sale.

Franchise licence contracts and roles as 'agents'

Two companies in our sample highlighted specific aspects of revenue recognition:

PPR stated: 'Revenue recognition in respect of Printemps concession contracts depends on the nature of the transaction: in the case of contracts where Printemps acts as the principal, sales are recognised in Revenue; in the case of contracts where Printemps acts as an agent, only concession commission received is recorded in Revenue.'

Where AHOLD sells as an agent (sales of third-party prepaid phone cards, stamps and public transportation tickets), only the net margin is recorded in net sales.

AHOLD also disclosed that it recognises franchise fees as revenues 'when all material services relating to the contract have been substantially performed'.

Recording vendor allowances

All the companies recognised allowances received from vendors as a reduction in the cost of the product.

The most common allowances offered by vendors are:

- volume allowances, based on the quantity of products sold to customers or purchased from the vendors, and
- promotional allowances, which relate to the launch of new products or special in-store merchandising.

AHOLD gave a detailed explanation of how it accounts for vendor allowances, which included the following:

AHOLD Annual Report 2005, p100

> **Vendor allowances**
>
> Ahold receives various types of vendor allowances. These take the form of up-front payments such as lump sum payments or prepaid amounts, rebates, in the form of cash or credits, and other forms of payments. Ahold treats the allowances received from vendors as a reduction in the price paid for the product, unless there is clear evidence that it should be classified as revenue or a reimbursement of costs. Ahold recognizes vendor allowances only where there is evidence of a binding arrangement with the vendor and receipt is both probable and estimable. Any allowances relating to products that are still in ending inventories are deferred until the related product is sold.

Retail *continued*

In relation to promotional allowance payments from vendors AHOLD stated:

AHOLD Annual Report 2005, p101

> Promotional allowance payments from vendors representing promotional activities are recorded as a reduction of the cost of the related products when the advertising or other marketing activities specified in the contract are performed by the Company for the vendor. If the contract does not specify any performance criteria the allowance is deferred over the term of the contract. When the products concerned are sold, the promotional allowance is recognized as a reduction of cost of sales.

KINGFISHER disclosed that 'volume related rebates receivable from suppliers are credited to the carrying value of the stock to which they relate. Where a rebate agreement with a supplier covers more than one year, the rebates are recognised in the accounts in the period in which they are earned.'

Assets

Useful lives for tangible assets

The estimated useful lives of depreciable tangible assets were broadly similar across the companies in our sample. In particular, the useful lives of buildings were as follows:

Company	Estimated useful lives
AHOLD	30 to 40 years
CARREFOUR	40 years
CASINO	40 years
KINGFISHER	From 20 to 50 years
PPR	From 10 to 40 years [1]

[1] Includes leasehold improvements.

Investment property

IAS 40 *Investment Property* defines investment property as 'property (land or a building or part of a building or both) held (by the owner or by the lessee under a finance lease) to earn rentals or for capital appreciation or both' as opposed to 'property held for use in the production or supply of goods or services, for rental to others, or for administrative purposes' (IAS 16 *Property, Plant and Equipment*).

Both CARREFOUR and CASINO classified their shopping malls, in full ownership or co-ownership, as investment properties. These were recorded at historical cost, less depreciation in accordance with IAS 40.

CARREFOUR and AHOLD stated that they restricted their classification of investment properties to those parts of owned or finance leased shopping centres that are leased to third-party retailers.

CARREFOUR also disclosed a comparison between the historical cost carrying amount and the fair value of the properties concerned determined by 'applying a multiple that is a function of the calculated profitability of each of the shopping malls and a capitalisation rate based on the country to the annualised gross rents generated by each investment property'.

Impairment of assets

Under IFRS, asset impairment is assessed by reference to the smallest group of assets that generate their own cash flows. In the case of retail outlets, it might be thought that the smallest group that generates its own independent cash flows will be an individual outlet unless it is considered that shoppers will choose to shop at more distant outlets of the same company in preference to less distant outlets of competitors.

AHOLD stated that individual stores are considered to be separate cash generating units (CGU) for impairment testing purposes, whereas CARREFOUR and CASINO applied an impairment testing approach based on the type of commercial outlet:

- CARREFOUR considered each hypermarket to be a CGU, whereas the CGU for supermarkets and hard discount outlets cover geographical areas.
- CASINO specified that the CGU for hypermarkets and supermarkets is the individual store, whereas for the other types of stores, the CGU is a geographical network of stores.

Inventories

IAS 2 *Inventories* requires inventories to be stated at the lower of cost and net realisable value, and defines net realisable value as 'the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs necessary to make the sale.' AHOLD stated that estimated marketing, distribution and selling expenses are deducted in arriving at net realisable value.

Inventory valuation methods differed considerably from one company to another. For example, CARREFOUR valued its merchandise inventory 'at the most recent purchase price plus any additional costs' and stated that this method 'is well suited to rapid inventory turn-around, and one which does not generate a significant difference with the FIFO method'. KINGFISHER, by contrast, measured its inventory 'on a weighted average cost basis'. PPR and AHOLD measured their inventory using the 'retail method' (ie selling price less a percentage of gross margin), the first-in, first-out method, or the weighted average cost method, depending on the nature and use of the inventories concerned.

Telecommunications

This analysis of accounting policies under IFRS, specific to the telecommunications industry, is based on consolidated financial statements included in annual reports, financial reports or Form 20Fs filed by the following operators, all of which had a 31 December 2005 balance sheet date:

- BELGACOM (Belgium)
- BOUYGUES (France), with its telecommunications subsidiary Bouygues Telecom
- DEUTSCHE TELEKOM (Germany)
- FRANCE TELECOM (France)
- KPN (Netherlands)
- PORTUGAL TELECOM (Portugal)
- SWISSCOM (Switzerland)
- TELIASONERA (Sweden)
- TELECOM ITALIA (Italy)
- TELEFONICA (Spain)
- TELENOR (Norway)
- VIVENDI UNIVERSAL (France), with its telecommunications subsidiaries SFR and Maroc Telecom.

Because their balance sheet dates did not coincide with the calendar year, the UK operators BRITISH TELECOM, VODAFONE and CABLE & WIRELESS, as well as the Australian operator TELSTRA, had not issued their first IFRS financial statements at the time of writing.

The industry issues we considered were:

- What were the accounting policies and disclosures related to revenue recognition and to some of the related issues such as accounting for bundled offers, accounting for loyalty programmes?
- How did companies account for subscriber acquisition costs?
- How were equipment inventories reported?
- How were licences to operate mobile telephone networks and acquisition costs accounted for?
- What starting dates were used for amortisation and what methods were used to assess the impairment of the licences and associated network assets?
- Were network components accounted for on a consistent basis, and how were the costs of dismantling and restoring sites reported?
- How comparable was segment reporting in this industry?

Revenue recognition

The main aspects of revenue recognition policies specific to the industry relate to:

- revenues from telephone traffic
- bundled offers that may include both equipment and services
- initial up-front connection fees that are billed to subscribers, and the treatment of associated costs
- loyalty programme schemes, in particular whether they are or are not contingent upon renewed subscription
- customer discounts not connected to loyalty programmes
- arrangements in which the company's role is in substance that of an agent, such that its revenue is limited to a commission or other 'net' amount
- sales of capacity ('indefeasible rights of use').

It is relevant to note that some operators, such as DEUTSCHE TELEKOM, TELIASONERA, TELECOM ITALIA and TELENOR pointed out that determining revenue recognition, either generally or specifically, was a matter requiring management judgment.

TELIASONERA disclosed in its note on revenue recognition:

TELIASONERA Annual Report 2005, p42

> For a telecom operator, management judgment is required in a number of cases to determine if and how revenue should be recognized and to determine fair values, such as when signing agreements with third-party providers for content services (is TeliaSonera principal or agent under a certain agreement?); in complex bundling of products, services and rights to use assets into one customer offering (should TeliaSonera recognize the separate components up-front or defer?); the sales of Indefeasible Rights of Use; when signing swap contracts for infrastructure, capacity and services; and in assessing the degree of completion in service and construction contracts.

Revenues from telephone traffic

The operators reported that revenue from telephone traffic is recognised as and when the service is provided, ie at the point the call is made.

Some operators specified that this principle was applied to prepaid phone cards. SWISSCOM, BELGACOM, TELEFONICA AND TELIASONERA deferred recognition of revenue from unused units on prepaid cards.

Bundled offers

Most operators disclosed the accounting treatment applied to bundled offers and the component parts of these offers. This involves the identification of each component in the bundle, determining its individual characteristics and, if applicable, the limit to the amount of revenue allocated to the item and the timing of the recognition of the revenue.

Identifying and evaluating the components in the bundled offer

Broadly similar principles were applied by the operators in the sample when identifying the different components of the offer and determining their 'separability':

Telecommunications *continued*

- If the components of the offer are separable and identifiable, the relevant general revenue recognition criteria are applied to each component.
- If this is not the case, each offer is treated as a single transaction and recognised as such.

FRANCE TELECOM stated:

'Sales of packaged mobile and Internet offers are considered as comprising identifiable and separate components to which general revenue recognition criteria can be applied separately. Numerous service offers on the Group's main markets are made up of two components, a product (e.g. mobile handset) and a service.'

Most operators reported that the amount received, or receivable, from the customer is allocated to each separable component of the offer, based on its relative fair value.

However, DEUTSCHE TELEKOM and KPN indicated that they may also use the residual value method in allocating the arrangement consideration.

- DEUTSCHE TELEKOM indicated that it applied the US GAAP requirements in EITF 00-21, *Accounting for Revenue Arrangements with Multiple Deliverables*, under which the total consideration is, where possible, allocated among the different elements of a bundled contract based on their relative fair values. Where the fair value of the delivered elements cannot be determined reliably, but the fair value of the undelivered elements can be determined reliably, the fair value of the undelivered items is deducted from the total consideration and the net amount is allocated to the delivered items (the so-called 'residual value' method). DEUTSCHE TELEKOM stated that the residual value method is applied to allocate the arrangement consideration when the fair value of the delivered elements of a bundled contract cannot be determined reliably, but the fair value of the undelivered items can be determined reliably.
- KPN also indicated that it performs an allocation based either on relative fair value or residual value. In its note relating to IFRS adoption, KPN indicated that it chose to follow US GAAP as closely as possible in order to make use of the more detailed guidance available in US GAAP, while remaining IFRS-compliant. It also referred in this regard to the limited guidance provided under IFRS on revenue recognition criteria for specific situations and to the ongoing convergence between IFRS and US GAAP.

Regarding the value allocated to the delivered item (for example, a handset as part of a bundled offer comprising both the equipment and a service), some operators, such as FRANCE TELECOM and TELEFONICA, indicated that the amount allocated is limited to the amount that is not dependent on the delivery of other items.

FRANCE TELECOM reported that the sum allocated to the delivered equipment generally corresponds to the price paid by the end-customer for that equipment, since the balance of the amount received or receivable is contingent upon future delivery of the service.

Timing for the recognition of the revenue allocated to the delivered item

For most operators, the recognition of this revenue (mobile handsets or other equipment) was made upon delivery to the customer. However, TELIASONERA indicated that customised equipment that could only be used in connection with its services or products is not accounted for separately and revenue is deferred and recognised over the total service contract period.

The French operators stated that, in the case of sales through distributors, revenue is recognised when the sale is made to the end-customer, ie for FRANCE TELECOM the 'conclusion of the sale to the end-customer' and for VIVENDI UNIVERSAL when the line to the new customer is in service. FRANCE TELECOM specified that the recognised revenue reflected the 'group's best estimate of the retail price'. BOUYGUES stated, for its part, that it recognised the sale of handsets when they were sold to the distributors, but deferred the associated margin until the customer activated the line.

Revenue from connection fees and associated costs

Most operators disclosed how they accounted for revenues relating to the initial subscriber connection.

Some deferred and amortised connection charge revenues over the expected customer retention period. Others stated that the deferral of these connection charges was dependent on related facts and circumstances. However, a third group of operators recognised this revenue when the subscriber was connected.

It was common practice among operators to spread these connection fees over the expected customer retention period.

FRANCE TELECOM explained the reason for this approach as follows:

FRANCE TELECOM Financial Report 2005, p117

> Offers that cannot be analyzed between separately identifiable components, because the commercial effect cannot be understood without reference to the series of transactions as a whole, are treated as bundled offers. Revenues from bundled offers are recognized in full over the life of the contract. The main example is connection to the service: this does not represent a separately identifiable transaction from the subscription and communications, and connection fees are therefore recognized over the average expected life of the contractual relationship.

Most of the companies explained the circumstances in which they systematically defer revenues over the expected customer retention period:

- TELEFONICA stated that 'connection fees originated when customers connect to our network are recognised as revenues together with the corresponding revenues from handset and other equipment sales, provided there are no amounts contingent on delivery of other goods or services to the customer. Connection revenues not recognised together with revenues from equipment sales are deferred and taken to the income statement throughout the average estimated customer retention period'.
- KPN stated that initial connection fees are not a separate unit of accounting and that its accounting treatment depends on the nature of the bundled offer:
    - If the offer, including the up-front connection fees, comprises only one unit of accounting, the connection fees are amortised over the estimated customer retention period.
    - If the offer comprises multiple units of accounting, the consideration received is allocated to each unit of accounting based on relative fair values or on the residual method, and any connection fee proceeds not allocated to the delivered equipment are deferred upon connection and recognised as service revenue over the estimated customer retention period.

Telecommunications *continued*

- DEUTSCHE TELEKOM amortised connection fees over the estimated average customer retention period unless they were part of a bundled offer, in which case they are a component of the arrangement consideration to be paid by the customer (and accounted for as an element of a bundled contract).
- TELIASONERA recognised up-front fees once the customer was connected, provided they consisted only of connection fees.
- TELENOR reported that:

TELENOR 2005 Form 20-F, pF-12

Connection fees

Revenues from connection that do not represent a separate earnings process are deferred and recognized over the periods that the fees are earned which is the expected period of the customer relationship. The expected period of the customer relationship is based on past history of churn, and expected development based on recent development or experience from other Group companies.

When connection fees are charged in arrangements where discounts is provided on other elements in the transaction (including multiple element transactions) connection fee has been allocated to sale of the rebated equipment or services, limited to the amount of the discount, and therefore recognized as revenue at the same time the equipment or services is recognized as revenue.

- DEUTSCHE TELEKOM and TELENOR described how they estimated the period over which to spread their connection fees, but they appeared to differ slightly in the factors they took into account: to estimate the expected customer retention period, DEUTSCHE TELEKOM relied on historical customer revenue, while TELENOR used historical churn, recent developments or the past experience of other group companies.
- TELECOM ITALIA disclosed its estimated customer retention periods.
- SWISSCOM and BELGACOM recognised connection fees at the time the subscriber was connected. SWISSCOM justified its accounting treatment by reference to the fact that direct costs associated with these operations exceeded revenue: 'Revenue from installation and connection activities is recorded at the time of installation or connection, as the direct costs associated with these activities exceed the revenue.'
- PORTUGAL TELECOM reported connection fees as a reconciliation item in the notes to its Form 20-F explaining the differences between IFRS and US GAAP:

PORTUGAL TELECOM Form 20-F 2005, pF-95

> ***(i) Connection fees***
>
> The principal difference between SAB 101 and IFRS for revenue recognition is related with the recognition of connection fees. Under IFRS, in accordance with IAS 18, revenue recognition regarding entrance fee (certain "up front" fees) depends on the nature of the services provided. If the fee includes only the entrance as a standalone transaction, and all other services or products are paid for separately, or if there is a separate annual subscription, the fee is recognized as revenue if no significant uncertainty as to its collectability exists.
>
> Under U.S. GAAP, Staff Accounting Bulletin No. 101, Revenue Recognition in Financial Statements, (SAB 101 modified by SAB 104, or SEC Staff Accounting Bulletin Topic 13-A.1, Revenue Recognition) guidance is followed, and such entrance fee which is considered to be revenue earned from access and similar charges should be recognized over the estimated life of the customer relationship.
>
> The Company has estimated the following average lives of customers of its various businesses for which initial fees are being charged: 5 years for cable/internet access and 15 years for fixed line telephony. These estimated average customer lives are based on management's best estimates. Such estimates are subject to revision, based on changes in customer demographics, the introduction of increased competition, as well as other factors.

If most operators systematically described the accounting treatment of connection fee revenue, fewer disclosed their treatment of costs associated with the connection. Insufficient information was provided to draw any conclusions regarding the consistency of accounting treatments (level of costs and accounting method).

Among the operators that provided this information:

- DEUTSCHE TELEKOM indicated that the incremental costs associated with up-front fees are recognised over the estimated average customer retention period and TELECOM ITALIA followed a similar approach.
- KPN indicated that where connection fees were deferred as part of a bundled offer comprising a single unit of accounting, associated costs were expensed as 'incurred'.
- TELENOR reported that 'initial direct costs incurred in earning connection fees, are deferred over the same period as the revenue, limited to the amount of the deferred revenue. Costs incurred consist primarily of the first payment of distributor commission, costs for credit card checks, costs of the SIM card, the cost of the printed new customer information package, costs of installation work and expenses for order handling. In most instances, costs associated with connection fees exceed such revenues'.

Loyalty schemes

Some operators reported on the accounting treatment of their subscriber loyalty schemes, such as offers of a discount on the price of mobile handsets and/or services. The French operators (FRANCE TELECOM, VIVENDI UNIVERSAL and BOUYGUES) referred to the fact that accounting for loyalty schemes is being addressed by IFRIC.

Telecommunications *continued*

What constitutes a 'loyalty scheme'?

FRANCE TELECOM and TELEFONICA defined loyalty schemes as follows:

- FRANCE TELECOM: 'Loyalty programs consist of granting future benefits to customers (such as call credit and product discounts) in exchange for present and past use of the service (volume-based incentives).'
- TELEFONICA: 'In the wireless telephony business there are loyalty campaigns whereby customers obtain points for the telephone traffic they generate. These points can be exchanged for discounts on the purchase of handsets, traffic or other types of services, based on the number of points earned and the type of contract involved.'

Accounting treatment of loyalty scheme

Operators did not appear to apply a common accounting treatment for their loyalty schemes. Whether such schemes were given accounting recognition was not always explained. However, when the accounting treatment of such schemes was disclosed, the operators generally explained whether they:

- deferred some of the revenue from the customers concerned (on the basis that the goods or services to be provided under the scheme are sales transactions), or
- made provision for the cost of providing the goods or services under the scheme.

Some of the accounting treatments were as follows:

- FRANCE TELECOM deferred part of the revenue invoiced over the vesting period of the customer rights, based on the fair value of the obligations, whether or not the grant of the future benefits to customers was associated with a contract renewal obligation.
- VIVENDI UNIVERSAL did not accrue for loyalty coupons granted to customers for the replacement of their mobile phone, but it did accrue for loyalty coupons that could be converted into free services. The operator explained that coupons for mobile phone replacements are not accrued because the schemes did not represent a benefit greater than that offered to new customers at the contract inception date, so that the coupons did not result in an additional cost.
- TELEFONICA stated that the provision for its points-based loyalty programmes is 'based on an estimate of the value of points accumulated at year-end'.
- TELENOR disclosed the following: 'For discount schemes (loyalty programs etc), if the Group has past history to be able to make a reliable estimate the accrued discount is limited to the estimated discount that will actually be earned. The exact amount and earnings period of the discount often must be based on estimation techniques, with potentially changes recorded in the period the estimate changes or the final outcome is known.'

Discounts granted to subscribers outside loyalty schemes

Many operators indicated that revenue was stated net of discounts granted to customers but few of them disclosed their policy for recognition in the statement of operations, ie whether or not the discounts are deferred, or the facts and circumstances under which discounts are accounted for as a cost rather than a reduction in revenue.

- FRANCE TELECOM disclosed its free services as follows: 'Revenues are stated net of discounts. For certain commercial offers where customers are offered a free service over a certain period in exchange for signing up for a fixed period (time-based incentives), the total revenue generated under the contract is spread over the fixed, non-cancellable period.'
- BOUYGUES stated that 'service discounts offered to new customers on subscription to fixed-price products that are contingent upon the customer commiting to retain their subscription for a specified period are charged to income over the minimum commitment period.'
- TELENOR also spread its discounts and specified that a cost was recognised when the discounts related to free products or services delivered by a third party: 'Discounts are often provided in the form of cash, free products or services delivered by the Group or by external parties. Discounts are recorded on a systematic basis over the period the discount is earned. Cash discounts or free products are recorded as revenue reductions. Free products or services delivered by external parties are recorded as expenses.'

Gross as opposed to net revenue

Many operators indicated that they record revenue on a gross basis when they act as principal in a sale transaction. When they acted as agent or broker for the supplier, revenue is recorded on a net basis.

TELENOR, for instance, stated: 'Revenues are reported gross with a separate recording of expenses to vendors of products or services. However, when Telenor only acts as an agent or broker on behalf of suppliers of products or services, revenues are reported on a net basis.'

However, few operators discussed the criteria they applied in assessing whether they acted as principal or agent and whether the gross or net basis is applied.

Among the operators that provided such information:

- TELIASONERA adopted net-based recognition when it acted as agent or broker without assuming the risks and rewards of service ownership.
- FRANCE TELECOM disclosed the criteria it uses to determine the agent or principal status: 'Revenue-sharing arrangements (premium rate numbers, audiotel, special numbers for Internet dial-up) are recognised gross, or net of content or service provider fees when the provider is responsible for the service rendered and for setting the price to be paid by the subscribers. Revenues from the supply of content are also recognised gross, or net of the amount due to the content provider, when the latter is responsible for the service content and for setting the price to subscribers.'

Telecommunications *continued*

- The French operators BOUYGUES and VIVENDI UNIVERSAL addressed specific transactions that were recorded on a net basis:
    - BOUYGUES reported that 'services carried out on behalf of content providers in relation to SMS+ services, special numbers and i-mode are not included in income and expenses for the period. Only the margin on such services is recognised in sales.'
    - VIVENDI UNIVERSAL stated: 'Sales of services provided to customers managed by SFR and Maroc Telecom on behalf of content providers (mainly toll numbers), are accounted for net of related expenses.'

Revenue from sale of capacity ('indefeasible rights of use')

TELIASONERA and FRANCE TELECOM referred to the accounting treatment of revenue arising from sale of capacity (fibres, ducts and/or cables). Both recognise this revenue over the life of the contract. FRANCE TELECOM specified that this recognition is on a straight-line basis.

TELIASONERA also provided information on the accounting treatment it applied to swap contracts for infrastructure and capacity with other carriers: 'When entering into swap contracts for infrastructure and capacity with other carriers, evenly balanced swap deals and the non-cash part of unbalanced swap deals are not recorded as revenue or expense in the consolidated accounts, as the contracts refer to assets of similar nature and value'.

Subscriber acquisition costs

Many operators, including FRANCE TELECOM, PORTUGAL TELECOM, SWISSCOM, TELIASONERA, TELECOM ITALIA and VIVENDI UNIVERSAL, disclosed the accounting treatment of their subscriber acquisition costs.

The accounting treatment of these acquisition costs was as follows:

- FRANCE TELECOM, TELIASONERA, TELECOM ITALIA, PORTUGAL TELECOM and SWISSCOM reported that they recognised these costs in the period in which they were incurred.
- In the notes to its Form 20-F document explaining the main differences between IFRS and Portuguese accounting principles, PORTUGAL TELECOM stated that, under IFRS, customer acquisition costs could be recognised in net income when incurred or, alternatively, recognised as an intangible asset and amortised over the expected customer retention period when these costs can be allocated to each customer. The operator specified that it had opted to recognise these costs when incurred.
- VIVENDI UNIVERSAL reported that rebates on the sale of handsets to customers through distributors are recognised as a deduction from revenues and that premiums unrelated to the sale of equipment in a bundled offer or commissions paid to distributors, are recognised as selling and general expenses.
- DEUTSCHE TELEKOM indicated that the cost of acquiring customers are deferred to the extent of the amount of related deferred connection fees, and recognised over the average customer retention period.

Net realisable value of equipment inventories

Most operators indicated that inventories were stated at the lower of cost and net realisable value, but few of them disclosed how this value was determined, especially when equipment was sold as part of a bundled offer including a service subscription.

FRANCE TELECOM reported as follows: 'Inventories are stated at the lower of cost and net realizable value, taking into account expected revenues from the sale of packages comprising a mobile handset and a subscription. Cost corresponds to purchase or production cost determined by the weighted average cost method.'

TELIASONERA did not mention whether it took into account expected revenues from the subscription to determine the net realisable value of its equipment inventories. The operator stated: 'Inventories and stock in trade are valued at acquisition value, based on FIFO (first in/first out), or net selling price, whichever is lower. Write-downs for obsolescence are made separately for each individual store. Obsolescence is assessed with reference to the age and rate of turnover of the articles.'

Licences to operate mobile telephone networks

Accounting issues specific to mobile telephone networks include:

- acquisition cost of these licences
- starting date for amortisation and the amortisation method
- impairment of the licences and associated network.

Acquisition cost of licences to operate mobile telephone networks

Operators that were granted mobile licences, such as DEUTSCHE TELEKOM, FRANCE TELECOM, TELEFONICA, BELGACOM, VIVENDI UNIVERSAL AND BOUYGUES, indicated that these licences, which were purchased separately, were measured at acquisition cost and classified as intangible assets. TELEFONICA uniquely described these licences as administrative concessions.

Two of the French operators, FRANCE TELECOM and VIVENDI UNIVERSAL, indicated that the up-front fixed payment for the French UMTS mobile licence was capitalised as an intangible asset and that the variable portion of the purchase price, ie 1% of the revenues generated by the UMTS activity, was expensed as incurred. VIVENDI UNIVERSAL justified this accounting method by stating that the variable portion could not be determined reliably.

Amortisation of licences: method, period and starting date

All the operators amortised their licences, except for DEUTSCHE TELEKOM in respect of its US mobile licences, as they are regarded by the company as having an indefinite useful life.

The amortisation method is always the straight-line method and the estimated useful life is usually the licence period. DEUTSCHE TELEKOM, however, explained that the useful lives of its mobile licences are determined based on several factors, including the term of the licences granted by the respective regulatory body in each country, the availability and expected cost of renewing the licences, as well as the development of future technologies.

Not all operators appeared to use the same starting date for amortisation.

PORTUGAL TELECOM reported that amortisation begins in the month when a licence becomes available for use.

Telecommunications *continued*

All other operators referred to the associated network/service. Some indicated that amortisation begins when the network/service is ready for use (such as FRANCE TELECOM and DEUTSCHE TELEKOM) while others used their actual operational starting date (such as VIVENDI UNIVERSAL, BOUYGUES and SWISSCOM).

Licences and associated network: impairment

Few operators referred to the methods and conditions for conducting impairment tests on their mobile licences (GSM/UMTS) and associated networks. Some of the questions that arise are: were the licences tested separately for impairment, with the associated networks or at a higher level? Were the UMTS and GSM operations dealt with separately?

KPN, one of the few operators to provide such information, indicated that separate impairment tests were, conducted for GSM and UMTS operations according to geographical area until 2004. However, starting in 2005, both operations had to be regrouped since the cash flows of one could not be determined independently of the other. KPN justified the reasons for this change as follows:

'Until 2004, we performed separate impairment tests for our GSM and UMTS activities per geographical area. As from 2005, we believe that the cash flows from GSM and UMTS activities can no longer be determined largely independent from each other, while achieving reliable outcomes. The following developments are the basis for this conclusion:

- users switch between GSM and UMTS networks without noticing and without being invoiced separately;
- innovations, like EDGE, gradually decrease the technical separations between GSM and UMTS;
- in some European countries including Germany…discussions have started about extending GSM licences, which indicates that UMTS is not likely to replace GSM, but rather complementary to GSM;
- GSM and UMTS networks use common infrastructure; and
- the business is managed and monitored as one integrated operation.'

Considerably more information was provided on impairment tests performed on cash-generating units (CGUs) that included allocated goodwill (as required by IAS 36 *Impairment of Assets*).

FRANCE TELECOM reported that it has 38 main cash-generating units (which usually represent an operation in a particular country) and disclosed how the 38 CGUs are grouped for the purpose of allocating acquired goodwill and testing it for impairment.

Telecommunication networks

Two specific areas were addressed when reviewing the sample:

- the network components and associated amortisation period, and
- the costs of decommissioning and restoring sites.

Network components and amortisation period

The level of detail in the information given about the different components making up a network, and the associated amortisation period, varied greatly between operators.

Among the operators that provided detailed information were:

BELGACOM	Useful lives (years)
Technical and network equipment	
• Switches	3 to 10
• Cables and Operational support systems	4 to 20
• Transmission	4 to 10
• Equipment installed at client premises	2 to 5
• Equipment for data transfer business	3 to 5
• Mobile antennas	6

SWISSCOM	Useful lives (years)
Cable and ducts	14 to 20
Transmission equipment	4 to 12
Switching equipment	5 to 10
Customer premises equipment	4 to 10
Broadcasting equipment and other network assets	3 to 10

TELIASONERA	Depreciation rate
Mobile networks	
• Base stations	9.5-14.5%
• Other installation	10-33%
Fixed networks	
• Switching systems and transmission systems	10-33%
• Transmission media (cable)	5-12.5%
• Equipment for special networks	20-33%
• Usufruct agreements for limited duration	Agreement period or time corresponding to the underlying tangible fixed asset
• Other installations	3-33%

Telecommunications *continued*

Costs of decommissioning and restoring sites

Some operators, such as BELGACOM, SWISSCOM and TELENOR, explained the nature of their commitments in respect of network decommissioning and site restoration.

- BELGACOM reported that its provisions related mainly to expected costs for dismantling and restoring mobile antennas and buildings.
- SWISSCOM indicated that its dismantling obligation relate to transmitter stations and that its restoration commitments relate to property owned by third parties on which the stations are situated.
- TELENOR explained that its asset retirement obligations relate 'primarily to equipment and other leasehold improvements installed on leasehold network sites and in administrative and network buildings. Those leases generally contain provisions that require TELENOR to restore the sites to their original condition at the end of the lease term.'

Segment reporting: business segments

Except for TELIASONERA, all operators had business segments as primary reportable segments.

In general, a distinction was made between landline and mobile operations.

Specific segment structures included the following:

- TELEFONICA had a business line segment structure in which the segments had both a business activity and a geographical dimension and, consequently, it reported on seven business segments.
- TELENOR reported separate segments for certain geographical areas of its mobile operations due to the size of these operations.
- KPN presented three segments for its landline division: Consumer, Business, and Wholesale & Operations. The mobile division was reported as a separate segment. The operator presented the information in respect of its mobile operations based on geographical areas, but stated that these were not business segments for external reporting purposes.

The table overleaf presents a summary of business segments for all the operators in our review, with the exception of VIVENDI UNIVERSAL and BOUYGUES, for which telecommunications was just one of several business activities conducted by these companies. VIVENDI UNIVERSAL classified each of its two telecommunications operators as a separate segment while BOUYGUES disclosed a single 'telecoms' segment.

FRANCE TELECOM	TELEFONICA	BELGACOM	SWISSCOM	TELECOM ITALIA	TELIA SONERA	DEUTSCHE TELEKOM	TELENOR	PORTUGAL TELECOM	KPN
Personal Communication Services	Telefónica Móviles: wireless telephony in Spain and Latin America	Services de communications mobiles	Mobile	Mobile	Mobile Communi-cations	Mobile Communi-cations	Telenor Mobile (Norway)[2]	Domestic Mobile	Mobile[3]
Home Communication Services	Telefónica de España: wireline telephony in Spain	Services de téléphonie fixe	Fixnet	Wireline	Fixed Communi-cations	Broadband/ Fixed network	Sonofon (Denmark)[2]	Wireline Business	Fixed – segment Consumer
Enterprise Communication Services	Telefónica Latinoamérica: wireline telephony in Latin America	Services internationaux de carrier	Solutions[1]	Media	Other	Business Customers	Kyivstar (Ukraine)[2]	Brazilian Mobile	Fixed – segment Business
Directories	Cesky Telecom: integrated telecommunicat-ions provider in the Czech Republic		Other	Olivetti		Group Headquarters & Shared services	Pannon GSM (Hungary)[2]	Multimedia Business	Fixed – segment Wholesale & Operations
	Telefónica Contenidos: audio-visual media and content in Europe and Latin America			Other activities			DiGi.Com (Malaysia)[2]		Fixed-Other (incl. eliminations)
	Directories business: publication, development and sale of advertising for telephone directories throughout Europe and Latin America						GrameenPhone (Bangladesh)[2]		
	Atento: call centers in Europe, Latin America and North Africa						Other mobile operations[2]		
	Other & Intragroup eliminations						• Fixed • Broadcast • Other operations		

[1] 'Solutions comprises primarily fixed-line voice telephony services to business customers, leased lines, intranet services, management of communication infrastructures and planning, construction and operation of comprehensive communication solutions'

[2] 'Mobile communication business'

[3] 'Within our Mobile activities... we have made a further split based on geographical areas: Germany, The Netherlands and Belgium. These geographical areas are however not business segments for external reporting purposes'

Utilities

This analysis of IFRS accounting policies in the utilities sector was based on consolidated financial statements included in annual reports, financial reports or Forms 20-F filed by the following companies, all of which had a 31 December 2005 balance sheet date:

- ENDESA (Spain)
- ENEL (Italy)
- RWE (Germany)
- SUEZ (France)
- IBERDROLA (Spain)
- EDF (France)
- ESSENT (The Netherlands)
- CENTRICA (United Kingdom)
- ELECTRABEL (Belgium)

All of these companies, except RWE, were first-time adopters of IFRS.

The industry-specific issues we considered related to:

- revenue recognition
- emission rights
- financial instruments (scope of IAS 39 and hedge accounting)
- property, plant and equipment (treatment of borrowing costs, adoption of IFRIC 4 *Determining whether an Arrangement contains a Lease*, impact of first time adoption of IFRS, components approach, nuclear safety expenses decommissioning), and
- impairment of assets.

Revenue recognition

All first-time adopters reported an effect of first-time adoption on revenue, varying from -0.3% to -36.4%. Four companies reported an adjustment with an impact of more than 15%. These adjustments mainly related to sale and purchase contracts which were previously reported on a gross basis and were now reported on a net basis, resulting in a permanent reduction of the total amount of revenue reported but with no effect on net income. This issue directly relates to the application of IAS 39 *Financial Instruments: Recognition and Measurement*, since most of the contracts reported on a net basis are now accounted for as commodity derivatives.

ESSENT reported the following effect as a result of the different handling of optimisation contracts:

ESSENT Financial Statements 2005, p23

NOTE 4 COST OF OPTIMISATION CONTRACTS

In line with the adoption of IAS 32 and IAS 39, and the related classification of contracts, several major contracts, previously treated as supply contracts, are now classified as derivative financial instruments. The effect of this new classification is that purchases and sales under these contracts are no longer recognised respectively as cost of energy, raw materials and consumables and revenue. Instead, the margin on these derivative financial instruments is recognised as revenue. The reclassification relates to the cost of the optimisation contracts concerned. For 2004, the amount involved is EUR 1,457.0 million. However, the comparative figures have not been adjusted to reflect this modified definition of revenue, as the Group adopted IAS 32 and IAS 39 for the first time on 1 January 2005.

Optimisation contracts are concluded to optimise existing positions taken in the normal course of business in order to benefit from price fluctuations in the markets in which the Group operates. Such price fluctuations are the result of electricity and gas supply and demand volatility. By pursuing an active risk policy, the company can hedge the risks underlying the volatility of these markets and at the same time realise additional margin by concluding short back-to-back purchase and sale transactions, thus optimising the Group's existing positions on the various purchasing and/or selling markets in which it operates.

Utilities *continued*

SUEZ reported a similar adjustment:

SUEZ 2005 Reference Document, p188

> In addition, the application of IAS 18 changes the consolidated income statement disclosure of certain transactions. This mainly relates to transactions entered into as part of energy trading activities and income received on behalf of third parties. In the French GAAP financial statements, the contribution of operational energy trading activities aimed at optimizing production assets and fuel and energy purchase and sale portfolios, is recorded in "Revenues" and "Purchases and changes in inventories."
>
> In accordance with IAS 18 and IAS 1, when sale contracts are offset by similar purchase contracts, or if the sale contracts are entered into as part of an offset strategy, they are recognized in revenues based on the net amount. This change in presentation leads to a decrease of €1,761 million in revenues and a reduction in net operating expenses of the same amount, and does not therefore impact operating income.
>
> Revenues collected on behalf of third parties by the Environment Division, which are reported in the French GAAP financial statements under revenues and expenses, are now recognized in revenues on a net basis in the same way. This change in presentation leads to a decrease of €1,001 million in revenues; operating income is not affected.

Other revenue recognition changes arose from situations in which companies determined that they act as agents rather than principals. Some of the utility companies acted as operator only and reported the purchases and sales made on behalf of other parties on a net basis under IFRS.

Metering uncertainty

Six of the nine companies in our sample disclosed, as one of the estimation uncertainties, the quantity of energy delivered to their customers, but not yet measured or billed. This was calculated based on consumption statistics and price estimates. Two examples of these disclosures follow:

CENTRICA Annual Report and Accounts 2005, p53

Revenue recognition – unread gas and electricity meters
Revenue for energy supply activities includes an assessment of energy supplied to customers between the date of the last meter reading and the year end (unread). Unread gas and electricity is estimated using historical consumption patterns taking into account the industry reconciliation process for total gas and total electricity usage by supplier. The industry reconciliation process is required as differences arise between the estimated quantity of gas and electricity the Group deems to have supplied and billed customers, and the estimated quantity the industry system operator deems the individual suppliers, including the Group, to have supplied to customers.

The reconciliation process can result in either a higher or lower value of industry deemed supply than has been billed to customers, but in practice tends to result in a higher value of deemed supply. Management estimate the level of recovery which will be achieved either through subsequent customer billing or through the developing industry settlement process.

A similar disclosure was made by SUEZ as follows:

SUEZ 2005 Reference Document, p161-162

Revenues

Revenues generated from types of customers whose energy consumption is metered during the accounting period, particularly customers supplied with low-voltage electricity or low-pressure gas, must be estimated at the balance sheet date based on historic data, consumption statistics and estimated selling prices. Network sales have become more difficult to calculate since the deregulation of the Belgian energy market in view of the larger number of grid operators. The Group is allocated a certain volume of energy transiting through the networks by the grid managers. The final allocations are often sometimes only known several months down the line, which means that revenue figures are only an estimate. However, the Group has developed measuring and modeling tools allowing it to ensure that risks of error associated with estimating quantities sold and the resulting revenues are minimized and can be considered as not material.

Utilities *continued*

Emission rights

Accounting for emission rights was a much debated issue in 2005. Since the withdrawal of IFRIC 3 *Emission Rights* there has been no specific guidance on how to account for them, and no company in our sample applied in full any of the methods that were prescribed in IFRIC 3.

Seven of the companies in our survey applied some form of the 'net liability approach' whereby the CO2 emission rights granted free-of-charge are effectively not recognised in the balance sheet, and no provision for emissions is recognised as long as sufficient free-of-charge rights are available.

Two companies recorded the rights granted free-of-charge initially at fair value on receipt, with a corresponding item of deferred income, and subsequently regarded this value as representing cost.

In the event that the amount of a company's actual emission exceeds the CO2 emission rights it holds at the balance sheet date, a liability arises because the company will need to acquire additional emission rights in the market to cover the excess. The method of measuring this liability varied among the companies in our sample. Eight of them measured the liability on the basis of the cost of the emission rights purchased (or to be purchased) in the market and recorded acquired emission rights at cost. The other company measured the liability based on the fair (ie market) value of the corresponding emission rights until such time as the liability is discharged, and measured the emission rights acquired in the market on the same basis.

CENTRICA, one of the eight companies referred to above, set out its accounting policy as follows:

CENTRICA Annual Report and Accounts 2005, p52

Emissions trading scheme
The Group has been subject to the European Emissions Trading Scheme (EU ETS) since 1 January 2005. IFRIC 3, Emission rights was withdrawn by the IASB in June 2005, and has not yet been replaced by definitive guidance. The Group has adopted an accounting policy, which recognises CO_2 emissions liabilities when the level of emissions exceeds the level of allowances granted by the Government in the period. The liability is measured at the cost of purchased allowances up to the level of purchased allowances held, and then at market price of allowances ruling at the balance sheet date. Movements in the liability are reflected within operating profit. Forward contracts for sales and purchases of allowances are measured at fair value.

It will be seen that, by contrast with the approach in IFRIC 3, these accounting approaches all minimised the impact on the income statements: income statement exposure arises only to the extent that there is a shortfall in emission rights held that has not been covered by purchasing emission rights in the market.

One company disclosed that emission rights held for trading purposes are classified as inventories, where it applied the broker-trader exemption in IAS 2 *Inventories* to enable the rights to be measured at fair value less costs to sell.

ENDESA is one of the two companies in our sample that recognised emission rights, granted free-of-charge, at fair value on receipt, as the following extracts from its 2005 annual report explain:

ENDESA Annual Report 2005, p11 and p15

The Group recognises CO_2 emission allowances as non-amortisable intangible assets. The allowances received for no consideration under the related national assignment plans are measured at the market price prevailing when they are received, and an item of deferred income is recognised for the same amount.

Provision for CO_2 emission allowance costs

From 2005 onwards the European Group companies that make CO_2 emissions in their electricity generation activity must deliver in the first few months of the subsequent year CO_2 emission allowances equal to the volume of emissions made during the year.

The obligation to deliver emission allowances for the CO_2 emissions made during the year is recognised as a short-term provision under the heading "Non-Current Trade and Other Payables" in the consolidated balance sheet, and the related cost was recorded as Other Variable Procurements and Services in the consolidated income statement. This obligation is measured at the same amount as that at which the CO_2 emission allowances to be delivered to cover this obligation are recognised under Intangible Assets in the consolidated balance sheet (see Notes 3-d and 3-j).

If at the consolidated balance sheet date the Group does not hold all the CO_2 emission allowances required to cover the emissions made, the cost and the provision for this portion is recognised on the basis of the best estimate of the price that the Group will have to pay to acquire them. When a more appropriate estimate does not exist, the estimated acquisition price for the allowances not held by the Group is the market price at the date of the consolidated balance sheet.

Financial instruments

The main aspects of the sector-specific policies on financial instruments included:

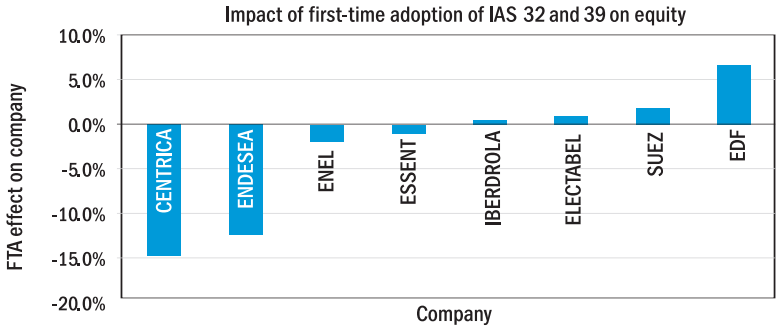
- date of adoption of IAS 32 and IAS 39 and reported impact on equity
- scope of IAS 39: 'own use' contracts and embedded derivatives
- application of hedge accounting.

Date of adoption of IAS 32 and IAS 39 and reported impact on equity

Most of the companies used the exemption from adopting IAS 32 and IAS 39 prior to January 2005 in IFRS 1, *First-time Adoption of International Financial Reporting Standards*. But two of them (ENEL and IBERDROLA) adopted these standards as from January 2004.

Utilities *continued*

The impact of the first-time adoption of IAS 32 and IAS 39 expressed as a percentage of equity varied from: - 14.9% (CENTRICA) to + 6.8% (EDF). The chart below shows this effect:



CENTRICA reported a negative impact on total equity of 14.9%, mainly due to the recognition and valuation (at fair value) of derivative financial instruments (- 9.2%) and the reclassification of a fund providing non-recourse finance (-10.9%). Units of this fund were traded on the Toronto Stock Exchange and are treated as debt in the financial statements from the date of adoption of IAS 32 and 39. The units were treated as non-equity minority interests prior to the adoption of IAS 32 and 39.

ENDESA reported a negative effect on total equity of 10.6% as a consequence of the reclassification of preferred shares from equity to liabilities. Under Spanish GAAP, the preference shares were classified as 'shares of subsidiaries held by third parties' and included in minority interests. However, under IFRS these shares are classified as a financial liability, since the holders are entitled to a dividend whenever ENDESA reports a consolidated profit and there is therefore a contractual obligation to deliver cash in respect of the shares.

SUEZ and EDF reported positive first-time adoption impacts of 1.9% and 6.8% on equity respectively as a result of the valuation of available-for-sale financial instruments and derivatives at fair value through equity.

Scope of IAS 39: 'own use' contracts and embedded derivatives

All companies included extensive descriptions of accounting policies on the classification of commodity contracts as 'own use' contracts (out of scope of IAS 39) and commodity derivatives (within the scope of IAS 39), respectively.

Nevertheless, it was difficult to assess whether the classifications were consistently applied due to a number of factors, including:

- the variety of the types of contracts that companies enter into
- the difficulty of distinguishing in practice between 'own use' and trading activities
- business intent and past practices for these types of contracts
- level of trading activity.

The impact of the recognition of commodity derivatives on the balance sheets of the utility companies in our sample varied greatly – from less than 1% of total assets and liabilities to 18% of total assets and 15% of total liabilities at 31 December 2005.

Reasons for the variations in the impact from company to company:

- differences in the nature of the business activities of the companies
- differences in the strategies pursued by companies to manage commodity price risk and in the extent of any other commodity trading activities
- the classification of 'own use' contracts.

The grossing up of balance sheet amounts was also due to the fact that the conditions for offsetting assets and liabilities under IAS 32 are very restrictive, with the result that positions that are economically closed must nevertheless be presented on a gross basis.

'Own use' contracts

One of the key considerations for utility companies is whether a contract to buy or sell a commodity falls within the scope of IAS 39. If a contract falls outside the scope of IAS 39, it is referred to as an 'own use' contract.

Most companies provided extensive explanations of how they apply the exemption for 'own use' contracts. Although these policies are quite similar, differences in practice may arise due to differences in the nature of the contracts entered into and the business model applied (including past practices of net settlement).

SUEZ reported that electricity and natural gas purchases and sale contracts were systematically analysed to determine whether they represented sales and purchases arising in the ordinary course of business, in which case they are excluded from the scope of IAS 39.

For this purpose SUEZ used a two-step methodology as follows:

SUEZ 2005 Reference Document, p169

Electricity and natural gas purchase and sale contracts, in particular, are systematically analyzed to determine whether they represent sales and purchases arising in the ordinary course of business, in which case they can be excluded from the scope of IAS 39. The first step of the analysis consists of demonstrating that the contract was entered into and continues to be held for the purpose of the receipt or delivery of a non-financial item in accordance with the Group's expected sale or usage requirements in the foreseeable future in the ordinary course of its operations. The second step is to demonstrate that:

- the Group has no practice of settling similar contracts on a net basis. In particular, forward purchases or sales with physical delivery of the underlying that are carried out with the sole purpose of balancing Group energy volumes are not considered by the Group as contracts that are settled net;
- the contract is not negotiated with the aim of taking delivery of the underlying and selling it within a short period after delivery for the purpose of generating a profit from short-term fluctuations in price;
- the contract is not equivalent to a written option. In particular, in the case of electricity sales allowing the buyer a certain degree of flexibility concerning the volumes delivered, the Group distinguishes between contracts that are equivalent to capacity sales – considered as transactions falling within the scope of ordinary operations – and those that are equivalent to written financial options, which are accounted for as derivative financial instruments.

Only contracts that fulfill all of the above conditions are considered as falling outside the scope of IAS 39. Adequate specific documentation is compiled to support this analysis.

Utilities *continued*

SUEZ also gave a clear definition of contracts that qualify as 'own use' contracts under IAS 39:

SUEZ 2005 Reference Document, p195

Commodity derivatives not qualifying as hedges

Most electricity and gas purchase and sales contracts entered into by the Group provide for physical delivery of quantities intended to be consumed or sold by the entity within a reasonable period and as part of its ordinary business; such contracts are thus excluded from the scope of IAS 39. The Group is nevertheless a party to certain contracts which qualify as derivatives under IAS 39 but did not qualify as derivatives in accordance with French GAAP. These contracts have now been recognized at fair value in the consolidated balance sheet by adjusting consolidated reserves. Subsequent changes in the fair value of these contracts will be recognized as part of income from ordinary activities. The negative pre-tax impact of this adjustment on shareholders' equity amounts to €77 million.

The contracts involved are mainly:

(i) those used to manage global exposure to certain market risks, a hedging strategy which is not recognized as such by IAS 39;

(ii) those entered into by the Group in order to improve margins by taking advantage of certain differences in market prices, notably in the case of strategies designed to manage product price risk (including in the case of purchases of fuel and sales of electricity) involving the entity's physical assets and aimed at optimizing sites' operating performance;

(iii) sales contracts analyzed by IAS 39 as written options.

EDF described how it determines which commodity contracts fall outside the scope of IAS 39 as follows:

EDF Annual Report 2005, p38

The scope of derivatives applied by the Group corresponds to the principles set out in IAS 39.

In particular, forward purchases and sales for physical delivery of energy or commodities are considered to fall outside the scope of application of IAS 39, when the contract concerned is considered to have been entered into as part of the Group's normal business activity. This is demonstrated to be the case when all the following conditions are fulfilled:

- a physical delivery takes place under all such contracts;
- the volumes purchased or sold under the contracts correspond to the Group's operating requirements;
- the contracts cannot be considered as options as defined by the standard. In the specific case of electricity sale contracts, the contract is substantially equivalent to a firm forward sale or can be considered as a capacity sale.

The Group thus considers that transactions negotiated with a view to balancing the volumes between electricity purchase and sale commitments are part of its ordinary business as an integrated electricity company, and do not therefore come under the scope of IAS 39.

CENTRICA disclosed the type of contracts that are excluded from the scope of IAS 39 as follows:

CENTRICA Annual Report and Accounts 2005, p49

The Group routinely enters into sale and purchase transactions for physical gas, power and oil. The majority of these transactions take the form of contracts that were entered into and continue to be held for the purpose of receipt or delivery of the physical position in accordance with the Group's expected sale, purchase or usage requirements, and are not within the scope of IAS 39.

Certain physical gas, power and oil purchase and sales contracts are within the scope of IAS 39 because they net settle or contain written options. Such contracts are accounted for as derivatives under IAS 39 and are recognised in the Balance Sheet at fair value. Gains and losses arising from changes in fair value on derivatives that do not qualify for hedge accounting are taken directly to the Income Statement for the year.

ELECTRABEL explained its policy regarding 'own use' criteria as follows:

Electrabel Annual Report 2005, p64

Contracts to buy or sell non-financial items that can be net settled are outside the scope of IAS 39 if they are entered into for 'group purposes', i.e. the contracts were part of normal business considerations.

The Group systematically analyses contracts to sell or buy electricity and gas, to determine whether the contracts are agreed within the « normal » business considerations and should be excluded from the scope of IAS 39. The prime purpose of this review is to demonstrate that the contract was agreed and continues to be held, for the purpose of receipt or delivery of the underlying, respecting volumes that are in accordance with the Groups sale or usage requirements, and within a reasonable timeframe in the context of its exploitation activities. Next to that the analysis will indicate that:

- the Group has no practice of settling similar contracts net. More specific the Group believes that it has no practice of net settlement for future purchase or sale agreements with delivery of the underlying and with the sole purpose to balance the energy volumes of the Group.
- the contract is not agreed in the context of financial arbitrage.
- the contracts are not similar to the sale of options. In the context of the sale of electricity where the counter-party has a choice on the volume sold, the Group makes a difference between sales contracts that are similar to the sale of capacity – which are considered to be part of the normal activities of the Group- and sales contracts which are similar to the sale of financial options, which are treated as derivatives.

Only contracts that meet all the conditions mentioned above are excluded of the scope of IAS 39. This analysis results in the constitution of specific documentation.

Utilities *continued*

Embedded derivatives

Most companies reported on the recognition of embedded derivatives. EDF gave the following disclosure:

EDF Annual Report 2005, p38

> In compliance with IAS 39, EDF analyses all its contracts, of both a financial and non-financial nature, to identify the existence of any "embedded" derivatives. Any component of a contract that affects the cash flows of that contract in the same way as a stand-alone derivative corresponds to the definition of an embedded derivative.
> If they meet the conditions set out by IAS 39, embedded derivatives are accounted for separately from the "host" contract at inception date.

SUEZ provided a more detailed explanation of the circumstances in which embedded derivatives are accounted for separately:

SUEZ Reference Document 2005, p169-170

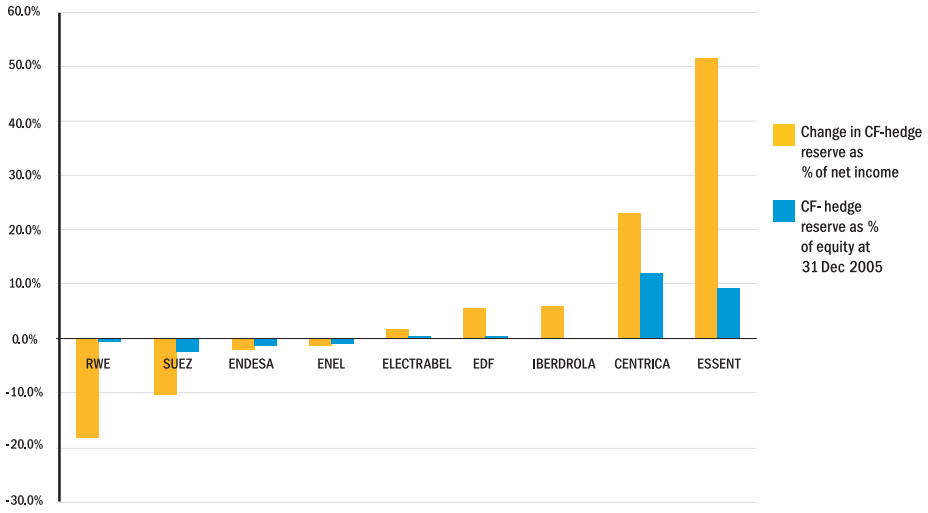
> An embedded derivative is a component of a hybrid (combined) instrument that also includes a non-derivative host contract – with the effect that some of the cash flows of the combined instrument vary in a way similar to a stand-alone derivative.
>
> The main Group contracts that may contain embedded derivatives are contracts with clauses or options affecting the contract price, volume or maturity. This is the case primarily of contracts for the purchase or sale of non-financial assets, whose price is revised based on an index, the exchange rate of a foreign currency or the price of an asset other than the contract's underlying.
>
> Embedded derivatives are separated from the host contract and accounted for as derivatives when:
>
> - the host contract is not a financial instrument measured at fair value through profit or loss;
> - if separated from the host contract, the embedded derivative fulfills the criteria for classification as a derivative instrument (existence of an underlying, no material initial net investment, settlement at a future date); and
> - its characteristics are not closely related to those of the host contract. The absence of a "close relationship" is determined when the contract is signed.
> - Embedded derivatives that are separated from the host contract are recognized in the consolidated balance sheet at fair value, with changes in fair value recognized in income (except when the embedded derivative is part of a designated hedging relationship).

Application of hedge accounting

All the utility companies reported that they apply hedge accounting to some of their derivatives. The derivatives held by the utility companies as hedging instruments related mainly to interest rate risk, foreign exchange risk or commodity risk. The purpose of these hedging instruments is to eliminate or reduce the risk in the underlying or forecast hedged transactions.

The chart below shows the impact of the application of hedge accounting for commodity derivatives on net income and equity, by presenting the change in cash flow hedge reserve expressed as a percentage of 2005 net income, and the balance of the cash flow hedge reserve expressed as a percentage of equity at 31 December 2005.

Impact of application of hedge accounting for commodity derivatives



As the chart shows, the application of hedge accounting may have a significant impact on net income and equity. If cash flow hedge accounting had not been applied, the change currently recorded in the cash flow hedge reserve would have been recorded immediately in profit and loss.

Under most previous GAAPs, it was common to account for these cash flow hedges as off-balance sheet items. As shown in the table above, the recognition of these cash flow hedges in the balance sheet had a significant impact on equity for a number of companies.

Utilities *continued*

Property, plant and equipment

The property, plant and equipment accounting issues of significance in the utilities sector include:

- the treatment of borrowing costs
- the adoption of IFRIC 4 *Determining whether an Arrangement contains a Lease*
- the application of the components approach
- accounting for decommissioning costs.

Borrowing costs

Five of the utility companies in our sample expensed all borrowing costs as incurred, while the remaining four capitalised borrowing costs attributable to the construction of assets as part of the cost of the asset concerned.

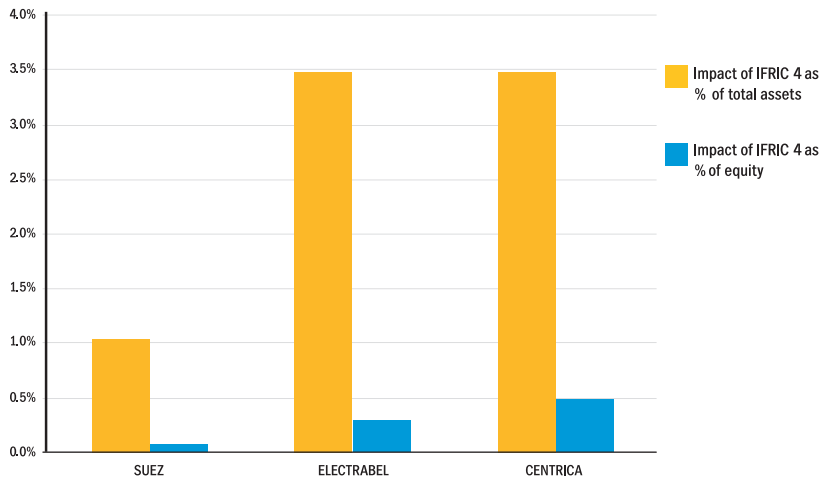
Companies that currently expense borrowing costs attributable to the construction of property, plant and equipment would have to cease doing so going forward if IAS 23 *Borrowing Costs* were to be amended in line with the recent exposure draft.

Adoption of IFRIC 4

Only three companies in the sample adopted IFRIC 4 early in their 2005 financial statements. These were CENTRICA (as lessee), ELECTRABEL and SUEZ (both as lessee and lessor). The impact of the first-time adoption of IFRIC 4 was the recognition of finance leases by lessees, thereby grossing up the balance sheet totals, and the reclassification of items from plant property and equipment to finance receivables by lessors.

The following chart shows the impact of first-time adoption of IFRIC 4 expressed as a percentage of total assets and equity:

Impact of early adoption of IFRIC 4



As the chart shows, the application of IFRIC 4 resulted in an increase in total assets (up to 3.5% of total assets) and had a minimal impact on equity (up to 0.5%). These effects relate almost entirely to the recognition of arrangements as leases by lessees, as the impact on lessors is largely to replace a tangible asset with a financial asset.

SUEZ reported the following accounting policy in respect of IFRIC 4:

SUEZ 2005 Reference Document, p189

2.3.4.11 Determining whether an arrangement contains a lease (IFRIC 4)

IFRIC 4 deals with the identification and accounting treatment of services, purchasing and sales contracts that do not take the legal form of a lease but convey to customers/suppliers the right to use an asset or a group of assets in return for a payment or a series of fixed payments. Contracts meeting these criteria should be accounted for as either operating leases or finance leases. In the latter case, a finance receivable would be recognized to reflect the financing deemed to be granted by SUEZ where the Group is considered as acting as lessor and its customers as lessees.

SUEZ is affected by this interpretation mainly with respect to:

- certain energy purchase and sale contracts, particularly where the contract conveys to the purchaser of the energy an exclusive right to use a production asset;
- certain contracts with industrial customers under which the Group operates the assets made available to them.

SUEZ also disclosed the following arrangements that it determined were leases under IFRIC 4, in relation to which it was in effect the lessor:

SUEZ Reference Document 2005, p261

31.2 Finance leases for which SUEZ acts as lessor

These leases fall mainly within the scope of IFRIC 4 guidance on the interpretation of IAS 17. They consist of (i) energy purchase and sale contracts, particularly where the contract conveys to the purchaser of the energy an exclusive right to use a production asset; and (ii) certain contracts with industrial customers relating to assets held by the Group. The Group has recognized finance lease receivables in relation to its co-generation plants for Solvay, Total (Belgium), Bowin (Thailand) and Air Product (The Netherlands).

In millions of euros	Dec. 31, 2005	Dec. 31, 2004
Undiscounted minimum lease payments	518.2	517.4
Unguaranteed residual value accruing to the lessor	25.3	23.8
Total gross investment in the lease	**543.5**	**541.2**
Unearned financial income (financial impact of discounting)	**177.0**	**194.3**
Net investment in the lease	**366.5**	**346.9**
of which present value of minimum lease payments	354.5	336.5
of which present value of unguaranteed residual value	12.0	10.4

Amounts recognized in the balance sheet in connection with finance leases are detailed in Note 20.2.

Finance lease receivables are shown in the balance sheet within "Loans and receivables carried at amortized cost".

Utilities *continued*

Some of the companies that did not adopt early said they did not expect the application of IFRIC 4 from 1 January 2006 to have a significant impact. None of the companies indicated that they expected the application of IFRC 4 to have a significant impact.

Impact of first-time adoption of IFRS on property, plant and equipment

The first-time adoption of IFRS resulted in a number of changes to the carrying amounts of property, plant and equipment of the utilities companies in our sample.

The table below shows the impact of the reported first-time adoption (FTA) effects of IAS 16 expressed as a percentage of equity.

	Components approach	Useful life	Decommissioning of assets	Provision for major repairs	Other	Total
ENDESA	–	–	-1.5%	0.4%	–	-1.1%
ENEL	-0.1%	0.7%	-0.1%	–	1.0%	1.5%
SUEZ	0.6%	–	-0.6%	2.1%	2.8%	4.9%
IBERDROLA	–	–	–	–	–	–
EDF	–	–	–	–	4.8%	4.8%
ESSENT	0.8%	–	–	–	-4.6%	-3.6%
CENTRICA	–	–	–	–	–	–
ELECTRABEL	0.5%	–	1.3%	–	7.3%	9.1%

Components approach

IAS 16 *Property, Plant and Equipment* requires an entity to allocate the amount initially recognised in respect of an item of property, plant and equipment to its significant parts and to depreciate separately each such part. This is known informally as the 'components approach'.

The components approach in IAS 16 is more explicit than the approach in most GAAPs and therefore triggered a change in practice for most companies on first-time adoption of IFRS. Five of the nine companies in the sample specifically referred to the application of the components approach and disclosed the resulting impact. However, it is difficult to assess from the financial statements the extent to which the components approach was applied and to what level of detail it was implemented in practice.

As shown in the table above, four companies reported FTA effects as a consequence of the application of the components approach.

SUEZ referred to the application of the components approach as follows:

SUEZ 2005 Reference Document, p186-187

2.3.4.4.2 Components approach

Application of the components approach implies:

A. the use of different depreciation periods for each main component of any single item of property, plant and equipment that has a different useful life from the item to which it relates. In the French GAAP financial statements, the Group applies different depreciation periods only for significant components of specialized complex facilities with useful lives that are different from the useful life of the infrastructure as a whole.

B. An analisis to determine wheteher the capitalized costs comply with IAS 16.

The corresponding IFRS adjustments have been determined retrospectively for the period from the acquisition of the assets by the Group and December 31, 2003;

C. identifying and separately recognizing (in the initially recognized cost of the corresponding asset) the cost of major inspections and replacements under multi-year maintenance programs. These components are depreciated on a straight-line basis over their useful lives (i.e. over the period to the next replacement). When the replacements are performed, the related costs are capitalized and depreciated over the period to the next inspection or replacement. The corresponding IFRS adjustment has been determined retrospectively from the date when the assets were first recognized in the consolidated balance sheet up to December 31, 2003.

Other impacts of applying IAS 16

EDF reported a positive FTA on equity of 3.7% as a consequence of the capitalisation of nuclear safety expenses, as follows:

EDF Financial Statements 2005

In accordance with IAS 16, "Property, plant and equipment" (revised December 2003), certain nuclear safety expenses are capitalized. This applies to expenses incurred as a result of legal and regulatory obligations, where non-compliance is sanctioned by administrative prohibition on operation. Under French GAAP, until CRC (French Accounting Regulation Committee) regulation 2004-06 on the definition, recognition and measurement of assets is applied (starting with accounts opened on or after January 1, 2005), these expenses are written off as incurred.

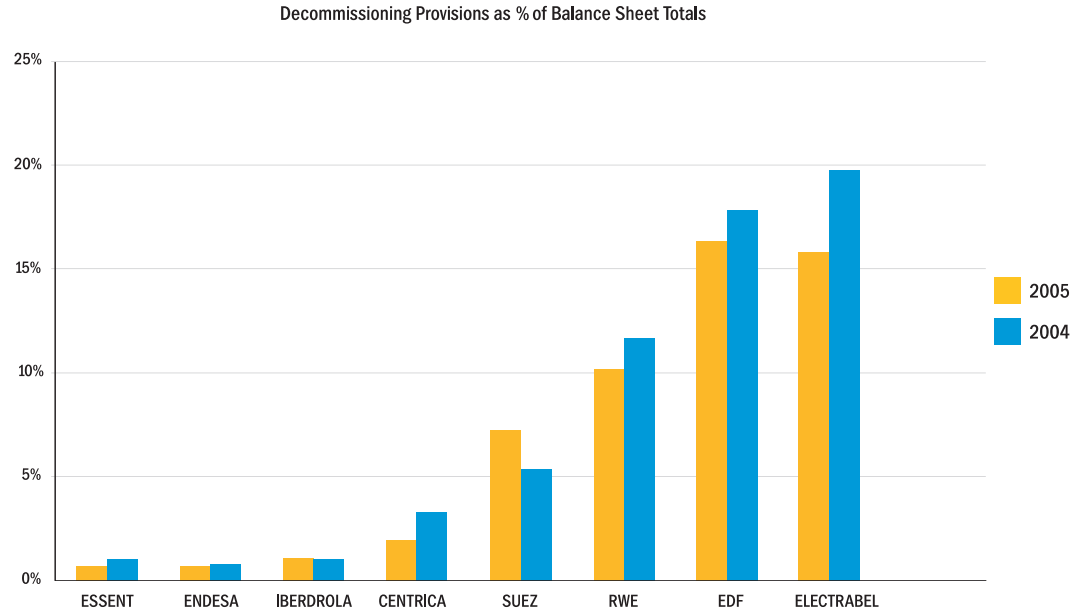
The restatement relating to EDF's nuclear power generation plants results in a €1,133 million increase in opening equity (€743 million net of taxes) and has a positive impact of €123 million on the 2004 net income (€80 million net of taxes).

Utilities *continued*

ELECTRABEL reported an increase of 9.1% in total equity as a result of FTA adjustments to property, plant and equipment. The adjustments mainly arose from ceasing to depreciate assets under construction (+6.3%), the capitalisation of borrowing costs (+1.0%), the components approach (+0.5%) and the capitalisation of decommissioning costs (+1.3%).

Decommissioning

The following chart shows the impact of decommissioning obligations expressed as a percentage of total assets in 2004 and 2005:

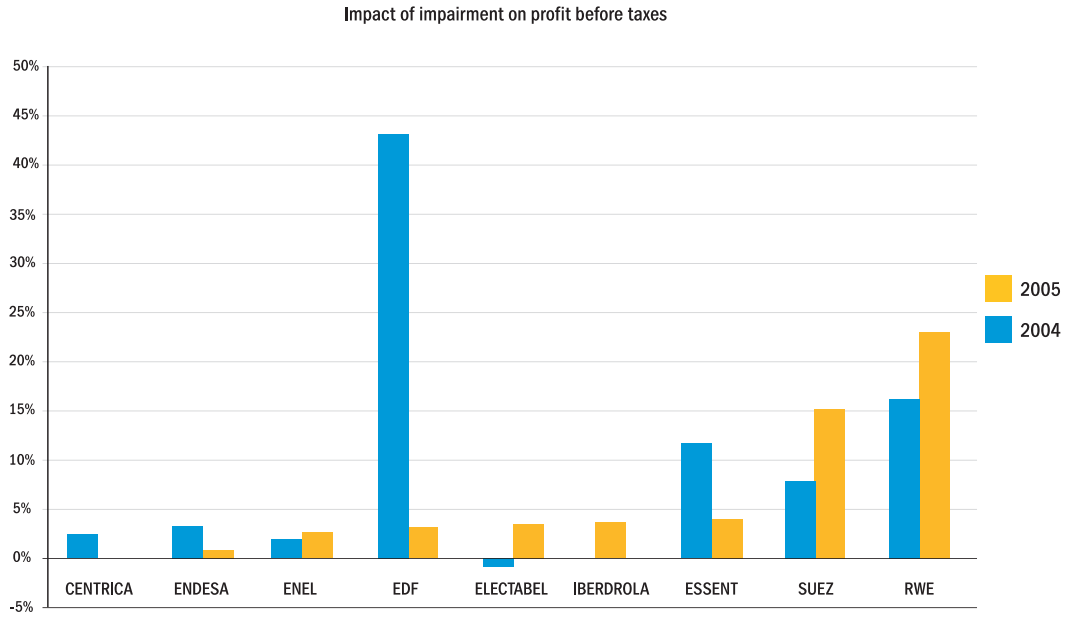


The chart shows that all but one of the companies in the sample disclosed decommissioning obligations.

The annual reports of ELECTRABEL, EDF, RWE and SUEZ disclosed significant decommissioning obligations, mainly as a consequence of obligations relating to nuclear power stations and nuclear fuel.

Impairment of assets

As the chart below shows, the impact of impairment losses on profit before taxes could be significant:



The range of impacts over 2004 and 2005 was as follows:

- 2004: 0% - 43%, with an average of 9%. (Note that the EDF impairment charge in 2004 arose largely from legislation requiring the company to transfer assets to local authorities for no consideration)
- 2005: 0% - 23%, with an average of 9%.

Disclosures relating to the use of estimates in impairment testing, and to the determination of cash-generating units, varied greatly. Some of the companies in our sample limited their disclosure to a general description of the circumstances in which impairment tests are performed and in which impairment losses are recognised. Others described in much more detail the determination of cash-generating units and provided key disclosures such as cash flow estimates, length of forecast period and long-term growth rates.

Utilities *continued*

The assumptions used by some companies in our sample were as follows (dashes indicate that no information was disclosed):

Company[1]	Range of discount rates used	Post / Pre-tax rate	Number of years of explicit cash flows	Range of growth rates used
SUEZ	5.00% – 14.60%	Post-tax	–	Max. 2%
IBERDROLA	5.74% – 16.00%	Pre-tax	–	–
ENEL	6.00% – 10.90%	Pre-tax	10 - 20 yrs	0% - 2%[2]
ELECTRABEL	6.50% – 8.50%	–	4 yrs	–
RWE	7.50% – 10.50%	Pre-tax	5 yrs	0% - 1%
CENTRICA	8.60% – 11.40%	Pre-tax	5 yrs	0% - 3%

[1] Range results from the variety of geographic areas involved and the variety of risks specific to assets tested for impairment.
[2] ENEL specified that for some assets, no terminal value was determined,

As shown above, five companies disclosed whether these discount rates were on a pre- or post-tax basis.

Below are some of the disclosures made by the utility companies relating to the impairment of assets:

EDF Financial Statements 2005, p35

4.13 Impairment of intangible assets other than goodwill and of property, plant and equipment

At the year-end and at each interim reporting date, the Group assesses whether there is any indication that an asset could have been significantly impaired. If so, an impairment test is carried out as follows:
- the Group measures any long-term asset impairment by comparing the carrying value of these assets, classified into cash generating units where necessary, and their recoverable amount, usually determined using the future discounted cash flow method;
- the discount rates used for these purposes are based on the weighted average cost of capital for each asset or group of assets concerned, determined by economic and geographical area and by business segment where appropriate. The pre-tax discount rate is calculated using an iterative process based on after-tax rates;
- future cash flows are based on medium-term plan projections.

The impairment test is based on business plans and assumptions approved by the Group.

As these assessments are highly sensitive to macro-economic and segment assumptions, the impairment tests used are updated regularly.

SUEZ 2005 Reference Document, p209

Note 9
Impairment

As a result of a series of significant unfavorable events (contractual disputes, downturn of the economic environment for certain business segments and countries), the Group reviewed the value in use of the assets affected by these events and recognized impairment losses on some of these assets, particularly those relating to SUEZ Environment's international activities (Brazil, Argentina, etc.), SUEZ Energy International in the US, and SUEZ Energy Services in the Netherlands.

The discount rates used to calculate discounted cash flows in the annual impairment test ranged from 5.0% to 14.6%.

At December 31, 2005, impairment losses were recorded for €114.8 million on goodwill, €448.0 million on property, plant and equipment and intangible assets, and €117.0 million on financial assets.

In the particular case of the US, given the persistently unfavorable market conditions with no prospective upturn in sight, the Group has decided to include certain production units within its asset renewal policy.

Impairment tests were established on the basis of future cash flows discounted at a rate of 9% after tax, resulting in the recognition of a pre-tax impairment loss of €217 million.

At December 31, 2005, reversals of impairments were recorded in an amount of €10.2 million on property, plant and equipment and intangible assets, and for €11.7 million on financial assets.

Impairments recognized in 2004 related to the assets of concession holders in Argentina and to international contracts in the Environment segment.

Excluding the goodwill recognized on the acquisition of an additional 48.54% interest in Electrabel in November 2005 (currently under review), no single Cash Generating Unit (CGU) accounts for a material amount of goodwill as a proportion of the Group's total goodwill.

CENTRICA included a table showing the amount of goodwill per cash-generating unit and the related acquisition. Additionally it included a description of its impairment test methodology and provided specific information for each cash-generating unit as follows:

CENTRICA Annual Report and Accounts 2005, p65

15. Impairment testing of goodwill and intangibles with indefinite useful lives continued

Goodwill and indefinite lived intangibles are tested for impairment annually, or more frequently if there are indications that amounts might be impaired. The impairment test involves determining the recoverable amount of the cash-generating units, which corresponds to the fair value less costs to sell or the value in use. Value in use calculations have been used to determine recoverable amounts for the cash-generating units noted above. These are determined using cash flow budgets, which are based on business plans for a period of five years. These business plans have been approved by the executive boards and are valid when the impairment test is performed. The plans are based on past experience as well as future expected market trends. Cash flows beyond the five year plan period used in the value in use calculations are increased in line with historic long-term growth rates in the UK, or where applicable the US, Canada and the Netherlands. Discount rates applied to the cash flow forecasts in determining recoverable amounts are derived from the Group's weighted average cost of capital and for North American cash-generating units range from 8.8% to 11.3%, and for UK and Europe cash-generating units range from 8.6% to 11.4%, on a pre-tax basis. Growth rates used to extrapolate cash flow projections beyond the period covered by the most recent forecasts range from 0% to 3%. The key assumptions in the value in use calculations determining recoverable amounts for the specific cash-generating units noted above are:

Canada residential energy – west
Budgeted gross margin – For existing customers this is based on contracted margins. For new customers this is based on achieved margins in the period immediately prior to the approval of the business plan, uplifted in certain markets for expected improvements arising from increased market penetration and brand awareness. Management believes that the assumed improvements are reasonably achievable. Budgeted market share – For the regulated business this is based on the market share immediately prior to the approval of the business plan, with adjustments made for the expected growth in the market offset by increased competition. For the other businesses, budgeted market share is based on average market share achieved in the period immediately prior to the approval of the business plan, uplifted for a forecast increase due to expected regional inflation and economic growth. Management believes that the assumed improvements are reasonably achievable. Budgeted market price – This is based on Centrica's view of forward gas and forward power prices in Canada immediately prior to the approval of the business plan.

Appendix – Abbreviations Used

CGU	Cash-generating unit
EITF	Emerging Issues Task Force
FASB	Financial Accounting Standards Board
FTA	First-time adoption (of IFRS)
GAAP	Generally Accepted Accounting Practice
IAS	International Accounting Standard
IASB	International Accounting Standards Board
IFRIC	International Financial Reporting Interpretations Committee
IFRS	International Financial Reporting Standard
R&D	Research and development
SEC	United States Securities and Exchange Commission

Appendix – The Survey Sample

- Ahold
- Air Liquide
- Alcatel
- Anglo American
- AP Moller-Maersk
- Arcelor
- AstraZeneca
- BASF
- Bayer
- BMW
- Bouygues
- BP
- British American Tobacco
- Cadbury Schweppes
- Carlsberg
- Carrefour
- CRH
- Danone
- Deutsche Post
- Deutsche Telekom
- EADS
- EDF
- Endesa
- ENEL
- ENI
- Ericsson
- Fiat
- France Telecom
- GlaxoSmithKline
- Heineken
- Iberdrola
- InBev
- Lafarge
- L'Oréal
- LVMH
- Metro
- Nestlé
- Nokia
- Novartis
- Pearson
- PSA Peugeot Citroën
- Philips
- PPR
- Publicis
- Reed Elsevier
- Renault
- Repsol
- Rio Tinto
- Roche
- Royal Dutch Shell
- RWE
- Saint-Gobain
- Sanofi-aventis
- Schneider Electric
- STMicroelectronics
- Suez
- Telecom Italia
- Telefonica
- Tesco
- Total
- Unilever
- Vivendi Universal
- Volkswagen
- Westfield
- WPP

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