



DISCUSSION PAPER

# Determination of Fair Value of Intangible Assets for IFRS Reporting Purposes

July 2007



# Determination of Fair Value of Intangible Assets for IFRS Reporting Purposes

This Discussion Paper is published by the International Valuation Standards Committee (IVSC) for comment only.

The International Valuation Standards Committee team is drawn from across the world and includes both valuation and accounting experts. We thank the team on their rigorous work to develop this discussion paper.

Comments should be submitted in writing so as to be received by 31 October 2007.

All replies may be put on public record unless confidentiality is requested by the commentator. If commentators respond by fax or email, it would be helpful if they could send a copy of the response by post. Comments should preferably be sent by e-mail to:

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# Glossary of Terms



**AICPA:** American Institute of Certified Public Accountants

**CAC:** Contributory asset charge

**Canadian Measurement Paper:** Discussion Paper, 'Measurement Bases for Financial Accounting—Measurement on Initial Recognition', prepared by the Canadian Accounting Standards Board and issued by the IASB in November 2005

**CAPM:** Capital Asset Pricing Model

**DCF:** Discounted cash flow

**EBIT:** Earnings before interest and tax

**EBITDA:** Earnings before interest, tax, depreciation and amortisation

**ED of Proposed Amendments:** Exposure Draft of Proposed Amendments to IFRS 3, issued by IASB June 2005

**FASB:** Financial Accounting Standards Board

**GAAP:** Generally Accepted Accounting Principles

**IAS 8:** International Accounting Standard 8, 'Accounting Policies, Changes in Accounting Estimates and Errors'

**IAS 36:** International Accounting Standard 36, 'Impairment of Assets'

**IAS 38:** International Accounting Standard 38, 'Intangible Assets'

**IAS 39:** International Accounting Standard 39, 'Financial Instruments: Recognition and Measurement'

**IAS 40:** International Accounting Standard 40, 'Investment Property'

**IAS 41:** International Accounting Standard 41, 'Agriculture'

**IASB:** International Accounting Standards Board

**IASB Fair Value Discussion Paper:** Discussion Paper, 'Fair Value Measurements' issued by the IASB in November 2006

**IFRS:** International Financial Reporting Standards

**IFRS 3:** International Financial Reporting Standard 3, 'Business Combinations'

**IFRS 5:** International Financial Reporting Standard 5, 'Non-current Assets Held for Sale and Discontinued Operations'

**IPR&D:** In-process Research and Development

**IVS:** The International Valuation Standards

**IVS 1:** International Valuation Standards, Standard 1, 'Market Value Basis of Valuation (revised 2005)'

**IVSC:** International Valuation Standards Committee

**IVSC Board:** Board of Directors of International Valuation Standards Committee

**NPV:** Net present value

**P/E ratio:** Price/Earnings ratio

**PFI:** Prospective Financial Information

**SFAS 157:** Statement of Financial Accounting Standards No. 157, 'Fair Value Measurements'

**TAB:** Tax amortisation benefit adjustment

**TAF:** The Appraisal Foundation

**The AICPA Practice Aid:** 'Assets Acquired in a Business Combination to be Used in Research and Development Activities: A Focus on Software, Electronic Devices, and Pharmaceutical Industries', issued by AICPA, January 2002

**The Framework:** IASB's Framework for the Preparation and Presentation of Financial Statements

**The or This Paper, The or This Discussion Paper:** IVSC Discussion Paper, 'Determination of Fair Value of Intangible Assets for Financial Reporting Purposes'

**WACC:** Weighted average cost of capital

**WARA:** Weighted average rate of return on assets





## Introduction

The International Valuation Standards Committee (IVSC) is a not-for-profit corporation registered in the State of Illinois, with its headquarters in London. It was originally founded in 1981 by the major real estate valuation institutes from the major economies. It has now broadened its membership to include professional associations for valuers of many types of assets, including plant and equipment, minerals, intangible assets and businesses. Its membership represents over fifty different countries. IVSC is committed to the development of a single set of global standards and requirements for the valuation of all assets and liabilities. The 8th edition of the International Valuation Standards will be published in July 2007.

At an extraordinary general meeting in April 2007, the current membership voted unanimously in favour of taking forward proposals to restructure IVSC with a broadly-based council of members. This council would appoint Trustees, who in turn would appoint a Standards Board of valuation experts that would be both autonomous, and independent, of the Trustees and any membership group. These proposals will enable IVSC to broaden its funding base and establish itself as a body independent of the professional institutes that currently provide funding and technical support.

The need for a clear set of internationally recognised and accepted valuation standards, involving consistent approaches, methods and definitions, is becoming increasingly clear, not least because of the convergence of accounting standards around the world. From its inception, one of the main motivators for the development of international valuation standards has been the use of fair value in International Financial Reporting Standards (IFRS). Although the current International Valuation Standards have contained a guidance note on the valuation of intangible assets since 2000, the development of IFRS in recent years - in particular the introduction of IFRS 3, 'Business Combinations', and the current debate on fair value measurements in financial reporting generally—has brought this topic into greater prominence.

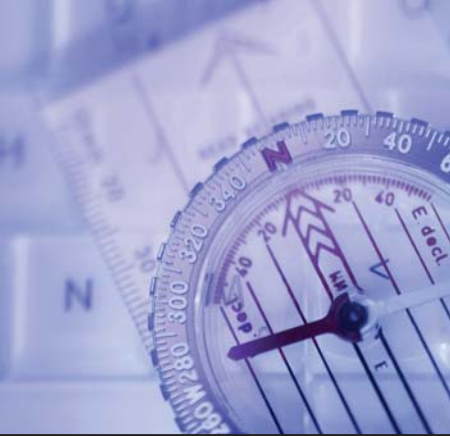
In 2006, IVSC established an expert group to consider the guidance that was required for the valuation of intangible assets, specifically for IFRS reporting purposes. This Discussion Paper is the work of that group and is now issued by the IVSC for public comment. The IVSC will consider responses to this Discussion Paper in developing an Exposure Draft of a Guidance Note on the *Determination of Fair Value of Intangible Assets for IFRS Reporting Purposes* for publication as an integral part of the International Valuation Standards.

# Section I.

## Scope and Purpose of Discussion Paper



- 1.1. The aim of this Discussion Paper, ‘Determination of Fair Value of Intangible Assets for IFRS Reporting Purposes’, (the or this Discussion Paper, the or this Paper) is to seek views from interested parties, regarding standardisation of the approach to take in the determination of the fair value of intangible assets for the purpose of reporting under International Financial Reporting Standards, ‘IFRS’.
- 1.2. The International Valuation Standards (IVS) set out generally accepted valuation principles together with guidance on the application of those principles to various asset classes, for different purposes. This Discussion Paper is published with a view to the future development of improved and more robust guidance on the valuation of intangible assets for financial reporting within the overall IVS framework.
- 1.3. The Discussion Paper assumes some familiarity with the topic of intangible asset valuations in its readers. It is not a text book for those with no knowledge of valuation techniques. IVSC is aware of the need for guidance to:
  - 1.3.1 act as a bridge between the requirements of IFRS to measure the fair value of intangible assets and the practical performance of such exercises;
  - 1.3.2 address valuation issues not covered by IFRS;
  - 1.3.3 codify existing best practice;
  - 1.3.4 clarify areas where there are differing interpretations in practice;
  - 1.3.5 address the strengths and weaknesses of different valuation methods; and
  - 1.3.6 improve the consistency and reliability of valuation results.
- 1.4. The Discussion Paper addresses the extent to which fair value measurements of intangible assets are required for IFRS and works through a consideration of technical valuation issues and available valuation methods. The Paper then sets out a proposed approach to the selection of valuation methods and provides practical application guidance



## Section I.

# Existing Publications Referenced in this Paper

- 1.1 Consistent with guidance of the International Accounting Standards Board, (IASB), in International Accounting Standard 8, 'Accounting Policies, Changes in Accounting Estimates and Errors', paragraphs 10–12, this Paper uses the following hierarchy in selection of sources to determine the approach to be taken:
  - 1.1.1 extant IFRS, to include all standards and interpretations currently in issue, in respect of matters that are covered by such IFRS;
  - 1.1.2 in respect of matters not covered by extant IFRS, the requirements and guidance in standards and interpretations dealing with similar and related issues; and if there is still no relevant guidance
  - 1.1.3 the most recent pronouncements of other standard-setting bodies that use a similar conceptual framework to develop accounting standards, other accounting literature and accepted industry practices, provided these do not conflict with either paragraph 1.5.1 above or the definitions, recognition or measurement concepts set out in the IASB's Framework for the Preparation and Presentation of Financial Statements, (The Framework).
- 1.2 There is limited guidance in respect of the valuation of intangible assets in extant IFRS. Consequently, this Paper draws in particular on guidance and discussion in the following documents in the hierarchical order set out below.
  - 1.2.1 Specific guidance in IFRS regarding the valuation of intangible assets:
    - IAS 38, 'Intangible Assets', (IAS 38);
    - IFRS 3, 'Business Combinations', (IFRS 3);
    - IAS 36, 'Impairment of Assets', (IAS 36).
  - 1.2.2 Specific guidance in IFRS regarding valuation issues in respect of assets other than intangible assets:
    - IAS 39, 'Financial Instruments: Recognition and Measurement', (IAS 39)
    - IAS 40, 'Investment Property', (IAS 40)
    - IAS 41, 'Agriculture', (IAS 41).
  - 1.2.3 Guidance issued by other standard setting bodies that use a similar conceptual framework to the IASB:
    - SFAS 157, 'Fair Value Measurements', issued September 2006 by the FASB, (SFAS 157).
  - 1.2.4 Guidance issued by other bodies and followed by valuation practitioners:
    - 'Assets Acquired in a Business Combination to be Used in Research and Development Activities: A Focus on Software, Electronic Devices, and Pharmaceutical Industries', issued by the American Institute of Certified Public Accountants, January 2002, (the AICPA Practice Aid)



## Section I. (cont.)

### Existing Publications Referenced in this Paper



- 1.2.5 Guidance under development by the IASB:
- Exposure Draft of Proposed Amendments to IFRS 3, (ED of Proposed Amendments), issued June 2005 by the IASB;
  - Discussion Paper, 'Fair Value Measurements' issued November 2006 by the IASB, (the IASB Fair Value Discussion Paper).
- 1.2.6 Guidance issued or under development by other bodies:
- Discussion Paper, 'Measurement Bases for Financial Accounting—Measurement on Initial Recognition', prepared by the Canadian Accounting Standards Board and published by the IASB in November 2005, (the Canadian Measurement Paper);
  - American Society of Appraisers, 'Business Valuation Standards, BVS-IX Intangible Asset Valuation, Draft, Revised 11/8/05';
  - The Appraisal Foundation: Uniform Standards of Professional Appraisal Practice, 'Standard 9, Business Appraisal and Development'; and Standard 10, 'Business Appraisal, Reporting';
  - The Appraisal Foundation: Working Group Topic 06-1, 'Best Practices for Intangible Asset Valuations in Financial Reporting: The Identification of Contributory Assets, and the Calculation of Economic Rents'.
- 1.3 The IVSC notes that guidance available in respect of the valuation of intangible assets is in an evolutionary state.
- 1.3.1 The IASB is currently working on Phase II of its Business Combinations project and, in June 2005, issued an Exposure Draft of Proposed Amendments to IFRS 3. This Exposure Draft includes proposed amendments in respect of the accounting for intangible assets arising from an acquisition.
- 1.3.2 The Exposure Draft also contains guidance on the measurement of fair values generally. In order to develop this guidance, the IASB published SFAS 157 as a Discussion Paper on Fair Value Measurements in November 2006. The IASB has indicated that SFAS 157 is a starting point for its deliberations on fair value measurement.
- 1.4 Thus, the IVSC is aware that it is drafting valuation guidance in respect of IFRS that is itself evolving. Consequently, guidance issued by the IVSC may be subject to revision as the IASB continues its work on Fair Value Measurements. The IVSC hopes that the draft guidance in this Discussion Paper will make a useful contribution to the IASB as it formulates its final views on Fair Value Measurements. This Paper, therefore, makes frequent reference to the requirements of SFAS 157 and discusses their suitability in the context of the determination of the fair value of intangible assets.
- 1.5 This Paper assumes that the valuer will prepare his Valuation Report consistently



## Section I. (cont.)

with existing IVSC guidance. Relevant guidance is set out in:

- 1.5.1 the IVSC Code of Conduct, Section 7;
  - 1.5.2 International Valuation Standard 3, 'Valuation Reporting (Revised 2005)' (IVS 3)<sup>1</sup>;
  - 1.5.3 International Valuation Applications, IVA 1, 'Valuation for Financial Reporting'; and
  - 1.5.4 International Valuation Guidance Note No. 4, 'Valuation of Intangible Assets (Revised 2005).
- 1.6 Where this Paper proposes the inclusion of specific documentation in the Valuation Report, this is noted in the relevant paragraph.



1. Further revisions have now been approved and are due to be published in July 2007.

## Section II.

### General approach of Discussion Paper

- 2.1 Standards and guidance published by IVSC are normally confined to high level principles. Although it has published “Technical Papers” that examine the application of different valuation methods by reference to worked examples, IVSC believes that this information should not form part of the standards because:
- IVSC Standards and Guidance should be confined to establishing a common framework for the execution and delivery of valuations for different purposes and promoting common terminology.
  - Issuing prescriptive instructions on how to value any particular class of asset or liability removes the vital element of discretion from the valuer, who must be free to adopt techniques that most accurately reflect those of market participants at the valuation date.
  - Like markets, valuation methods are dynamic and to enshrine a particular method in a standard could either inhibit valuers from embracing new techniques or lead to the standard being viewed as irrelevant.

Because IVSC encouraged the expert group to take a wide ranging view of all issues concerned with the valuation of intangible assets under IFRS, this paper discusses not only guidance on the principles underlying the valuation of intangible assets for inclusion in financial statements but also worked examples. IVSC invites comments on the following:

- 2.1.1 Do you consider that there is a need for guidance in respect of the valuation of intangible assets for IFRS purposes?
- 2.1.2 Do you consider that the guidance given in this Paper is at the right level of detail or should there be additional or less detail?
- 2.1.3 Do you consider that the Paper achieves the intentions set out in paragraph 1.4?
- 2.1.4 Do you agree that any future guidance issued by IVSC on this topic should be principles based, with detailed discussion of different methods and illustrative examples clearly distinguished in a Technical Paper?

## Section II. (cont.)

### Technical valuation issues

- 2.2 Section IV of the Discussion Paper addresses various technical valuation issues. These have been considered by the IVSC in the light of extant IFRS and other guidance as described.
- 2.2 In November 2006, IASB issued a Discussion Paper on Fair Value Measurements that included SFAS 157 as its basis. In developing this discussion paper, the expert group has taken an approach that is not fully consistent with SFAS 157 because it considers that the guidance in SFAS 157 is more appropriate for the valuation of financial than intangible assets.
- 2.4 This Paper has defined the following terms that are not used in SFAS 157:
- 2.4.1 ‘characteristics of intangible assets’;
  - 2.4.2 ‘active market’ and ‘inactive market’;
  - 2.4.3 ‘identical intangible assets’, ‘similar intangible assets’ and ‘different intangible assets’.
- 2.5 This Paper has addressed in paragraphs 4.25 et seq. the issue of entity-specific factors that are not specifically addressed in SFAS 157. Aggregation of intangible assets for measurement purposes is described in paragraphs 4.32 et seq.
- 2.6 This Paper does not specifically considered the following issues that are addressed in SFAS 157:
- 2.6.1 the difference between the ‘principal’ and ‘most advantageous’ market;
  - 2.6.2 the highest and best use of an asset and whether this is ‘in use’ or ‘in exchange’;
  - 2.6.3 the difference between ‘observable’ and ‘unobservable’ inputs; and
  - 2.6.4 a three-level hierarchy of reliability for valuation inputs.
- 2.7 The reasons for these differences in approach are set out in Section IV.
- 2.8 **Questions regarding technical valuation issues**
- 2.8.1 Do you agree with the approach taken as regards each of the issues set out in paragraphs 2.6–2.8 above?
  - 2.8.2 In particular, do you consider that ‘inactive market’ is a suitable term? If not, which other term would you use for an ‘inactive market’?
  - 2.8.3 Do you agree with the guidance in respect of entity-specific factors in paragraphs 4.25 et seq.? Do you consider that any additional guidance is required in respect of entity-specific factors?
  - 2.8.4 Do you agree with the approach taken in this Paper, paragraph 4.32 with regard to the aggregation of identical and similar assets that form a portfolio?

## Section II. (cont.)

### Intangible asset valuation methods

- 2.16 Section V of this Paper describes three approaches with five methods as subsets of those approaches for intangible assets.
- 2.17 **Questions regarding intangible asset valuation methods**
- 2.17.1 Do you agree that these are the five most regularly used methods for valuing intangible assets?
- 2.17.2 Do you think that there are any other valuation methods that should be covered?
- 2.17.3 Do you think that the description of each method is sufficient or do you think that further details are required for any of the methods?
- 2.17.4 Some simple examples regarding the intangible asset valuation methods are included. Do you consider that these examples are sufficient or do you think that more detailed examples should be included?
- 2.17.5 Do you agree with the approach taken in this Paper with regard to the tax amortisation benefit, as set out in paragraphs 5.25-5.28?
- 2.17.6 Section V includes an assessment of the possible ways in which reliability might be restricted for each of the valuation methods. Do you agree with this assessment? Do you think that any other factors should be included in this assessment?

### Determination and benchmarking of valuation inputs

- 2.18 Section VI of this Paper describes eight types of valuation input and a process for benchmarking them to assess their suitability for use in the valuation of the subject intangible asset.
- 2.19 **Questions regarding valuation inputs**
- 2.19.1 Do you agree that each of these eight key valuation inputs should be addressed?
- 2.19.2 Do you think that any additional valuation inputs should be addressed?
- 2.19.3 Do you think that sufficient guidance is provided in respect of each of the eight valuation inputs?
- 2.19.4 Do you think that there are any additional benchmarking processes that should be included?



## Section II. (cont.)

### Comparison of different approaches and proposed hierarchy for selection of valuation methods

2.20 Section VII of this Paper compares the different valuation approaches and examines the suitability of the SFAS 157 hierarchical approach to the determination of valuation inputs. The Section proposes an alternative hierarchical approach based on a selection of valuation methods for intangible assets.

#### 2.21 Questions regarding selection of valuation methods

- 2.21.1 Do you agree with the approach regarding selection of appropriate methods that follows an assessment of the relative reliability of data available in respect of eight key valuation inputs, as set out in paragraph 7.34 of this Paper?
- 2.21.2 Do you consider that this approach is more suitable to the valuation of intangible assets than that set out in SFAS 157 with regard to the level of reliability of valuation inputs used?
- 2.21.3 Do you agree that valuers should always seek to support the results from application of a primary valuation method with those obtainable from a secondary valuation method?
- 2.21.4 Do you agree with the proposal in paragraph 7.35 that whenever a valuation method is available without undue cost and effort that such method should be applied as either a primary or supporting valuation method?

### Valuation process

2.22 Section VIII of this Paper sets out a four-step valuation process covering identification of the asset to be valued, selection of appropriate valuation methods and determination of valuation inputs.

#### 2.23 Questions regarding valuation process

- 2.23.1 In the light of guidance earlier in the Paper, do you think that additional guidance is required in Section VIII?



## Section III.

### Key Standards Affected

#### IFRS involved

- 3.1 The Discussion Paper addresses the issues that are relevant when determining the fair value of intangible assets for the purpose of reporting under International Financial Reporting Standards, 'IFRS'.
- 3.2 Extant IFRS requiring or permitting the recognition of intangible assets at fair value include:
  - 3.2.1 IFRS 3 and IAS 38 in respect of initial recognition of intangible assets arising from a business combination;
  - 3.2.2 IAS 36 in respect of intangible assets measured at fair value less costs to sell for impairment testing purposes<sup>2</sup>;
  - 3.2.3 IAS 38 in respect of intangible assets carried under the revaluation model; and
  - 3.2.4 IFRS 5, 'Non-current Assets Held for Sale and Discontinued Operations', in respect of intangible assets whose carrying amount is intended to be recovered principally through a sale transaction rather than through continuing use.
- 3.3 The Discussion Paper does not address issues relevant to determining the carrying value of intangible assets when this is not fair value. For instance, it does not cover:
  - 3.3.1 the determination of the cost of capitalised development expenditure under IAS 38; or
  - 3.3.2 the determination of the value in use of intangible assets, which is a basis under which the recoverable amount of an intangible asset may be determined in accordance with IAS 36.

#### Initial recognition under IFRS 3 and IAS 38 of intangible assets arising from a business combination

- 3.4 IAS 38, paragraph 8, defines an intangible asset as an '*identifiable non-monetary asset without physical substance*'. In turn, paragraph 12 explains that an asset meets the identifiability criterion when it:
  - 3.4.1 '*is separable, i.e. is capable of being separated or divided from the entity and sold, transferred, licensed, rented or exchanged, either individually or together with a related contract, asset or liability; or*
  - 3.4.2 '*arises from contractual or other legal rights, regardless of whether those rights are transferable or separable from the entity or from other rights and obligations.*'
- 3.5 IFRS 3, paragraph 37 (c), and IAS 38, paragraph 34, require that intangible assets are recognised at fair value at the acquisition date, provided this fair value can be measured reliably<sup>3</sup>.
- 3.6 In its Illustrative Examples, IFRS 3 sets out a number of different types of intangible asset that might arise following an acquisition, whilst noting that this is not an exhaustive list. These are categorised as follows:
  - 3.6.1 Marketing-related, to include assets such as trademarks, trade names, newspaper mastheads, non-compete agreements;
  - 3.6.2 Customer-related, to include assets such as customer lists, order or production backlogs, customer contracts and the related customer relationships, non-contractual customer relationships;
  - 3.6.3 Artistic-related, to include assets such as copyrights for books, plays, music, films, photographs, pictures;
  - 3.6.4 Contract-based, to include assets such as licences, royalty agreements, construction permits, franchises, drilling rights, mortgage servicing contracts, employment contracts at below market rates; and

2. Under IAS 36, impairment testing is by reference to recoverable amount, defined as being the higher of 'fair value less costs to sell' and 'value in use.' In practice, many intangible assets being tested for impairment are measured at their value in use and so fair value less costs to sell is not measured for them.

3. A recent IASB monthly update indicates that, as part of Phase II of its Business Combinations project, the IASB has decided to remove the requirement that fair value be capable of reliable measurement when it revises IFRS 3. This is because the IASB is of the view that all intangible assets satisfying the identifiability criterion in IFRS 3 are capable of reliable measurement.

## Section III. (cont.)

- 3.6.5 Technology-based, to include assets such as patented and unpatented technology, computer software, databases, trade secrets such as formulae, processes and recipes.
- 3.7 The expert group considers the selection and application of valuation methods to measure the fair values of these and any other intangible assets recognised following an acquisition.
- 3.8 The expert group considers that the five categories noted in paragraph 3.6 above are “types” of intangible and the sub-divisions within these types are “sub-types” of intangible asset.
- 3.9 However, the expert group considers the appropriateness of different valuation methods to different intangible assets according to the reliability of the data available to value the intangible asset, see Section VII below, rather than according to their categorisation above. Thus, different methods may be appropriate for intangible assets within the same type and sub-type above but the same methods may apply to intangible assets coming from different types or sub-types.

### Intangible assets measured at fair value less costs to sell under IAS 36 or IFRS 5

- 3.10 Under IAS 36 intangible assets are tested for impairment at their recoverable amount which is defined as the higher of their ‘fair value less costs to sell’ and their ‘value in use’.
- 3.11 Under IFRS 5, intangible assets whose carrying amount will be recovered principally through a sale transaction rather than through continuing use, are carried at ‘fair value less costs to sell’.
- 3.12 The guidance in this Discussion Paper should be used in the selection and application of valuation methods to measure the fair value of intangible assets in the determination of their ‘fair value less costs to sell’ but not in the determination of their ‘value in use’, as the latter is not a measure of fair value.

### Intangible Assets carried under the IAS 38 revaluation model

- 3.13 Under IAS 38, intangible assets may be carried in the balance sheet under either the cost or, provided certain conditions are met, the revaluation model.
- 3.14 The revaluation model is permitted to be used only for those assets for which fair value can be determined by reference to an active market, as defined by IAS 38. IAS 38 requires that, if the revaluation model is used, all other assets in the same “class”<sup>4</sup> must also be revalued unless there is no active market for those assets. The expert group considers that it would be reasonable to interpret a class of intangible assets as being a “sub-type” as described in paragraph 3.8 above.
- 3.15 IAS 38, paragraph 39, notes *‘quoted market prices in an active market provide the most reliable estimate of the fair value of an intangible asset’*. Thus, that is the approach that should be taken to determining the fair value of intangible assets being carried under the IAS 38 revaluation model.

4. A ‘class’ of intangible assets is described in paragraph 119 of IAS 38 as ‘a grouping of assets of a similar nature and use in an entity’s operations’.

# Section IV.

## Technical Valuation Issues

### Summary

- 4.1 Several factors have been identified as needing to be addressed in the documentation of guidance on the determination of the fair value of intangible assets for IFRS reporting purposes. These include:
  - 4.1.1 characteristics of intangible assets
  - 4.1.2 identical, similar and different intangible assets
  - 4.1.3 active and inactive markets
  - 4.1.4 market participants
  - 4.1.5 fair value
  - 4.1.6 entity specific factors
  - 4.1.7 level of aggregation for measurement purposes
- 4.2 Some of the issues and terms higher in the list above are required in the definition and description of terms used lower in the list. Thus, discussion of the term 'fair value' is reliant upon definition and discussion of the terms set out at 4.1.1–4.1.4 above. Many of the issues and terms in paragraph 4.1 are required in the later sections of this document in order to describe valuation methods and how they are applied.
- 4.3 Where these issues are discussed in extant IFRS, that guidance is considered initially. Where they are not addressed in extant IFRS, guidance in other recognised GAAP, accepted valuation practice, and draft IFRS documents has been looked at and issues considered from first principles. The hierarchy in which these alternative sources are used is set out in paragraph 1.6.
- 4.4 The tentative conclusions reached on these matters are summarised in this section.

- 4.5 In addition to these issues, there are certain matters that are covered in SFAS 157 but which are not addressed in this section. These include:
  - 4.5.1 the difference between the 'principal' and 'most advantageous' market
  - 4.5.2 the highest and best use of an asset and whether this is 'in use' or 'in exchange';
  - 4.5.3 the difference between 'observable' and 'unobservable' inputs; and
  - 4.5.4 a three-level hierarchy of reliability for valuation inputs.
- 4.6 This section also addresses why the terms in 4.5.1 to 4.5.3 above have not been defined. Section VII considers an alternative approach to the SFAS 157 three-level hierarchy of valuation inputs.

### Characteristics of intangible assets

- 4.7 Intangible assets are defined and identified by attributes such as their function, market position, global reach, market profile, capability and image. For the purpose of this Paper, these attributes are known as the 'characteristics' of intangible assets.

### Identical, similar and different intangible assets

- 4.8 The expert group notes that intangible assets can be distinguished through having characteristics that differentiate them from other intangible assets. For instance:
  - 4.8.1 confectionery brands may be differentiated through differing taste, source of ingredients and quality; and
  - 4.8.2 computer software products will typically be differentiated by reference to their functional specifications.

## Section IV.

### Technical Valuation Issues (cont.)

- 4.9 It is rare, therefore, for intangible assets to come from a population of homogeneous items. Consequently, when considering market evidence regarding the fair value of an intangible asset, it is often not possible to find any evidence in respect of identical intangible assets—instead, the only available evidence is in respect of intangible assets that are similar, but not identical.
- 4.10 Intangible assets that are similar to one another will tend to share some, but not all, of their characteristics. Thus, similar assets are likely to come from the same type and sub-type as set out in paragraph 3.6 above. However, they will have certain differentiating features—such features will vary according to the type of intangible asset concerned but may include factors such as:
- 4.10.1 precise functionality
  - 4.10.2 specific taste
  - 4.10.3 life
  - 4.10.4 geographical region of use.
- 4.11 This Discussion Paper defines:
- 4.11.1 *identical intangible assets* as those that share all of the characteristics of the subject intangible asset and hence are homogeneous;
  - 4.11.2 *similar intangible assets* as those that share the principal, but not all, of the characteristics of the subject intangible asset—in particular, similar intangible assets will tend to have the same or similar function and to come from the same sub-type of intangible asset as set out in paragraph 3.6 above; and
  - 4.11.3 *different intangible assets* as those that are neither similar nor identical—thus any intangible assets coming from different sub-types as set out in paragraph 3.6 above will be different.
- #### Active and inactive markets
- 4.12 IAS 38, paragraph 8, defines an active market as one in which:
- 4.12.1 *‘the items traded in the market are homogeneous;*
  - 4.12.2 *willing buyers and sellers can normally be found at any time; and*
  - 4.12.3 *prices are available to the public.’*
- 4.13 The Discussion Paper notes that there are very few active markets for intangible assets. Some possible examples include markets for certain types of fishing licence and taxi licence.
- 4.14 As noted above, the majority of intangible assets have specific characteristics that differentiate them from other intangible assets and, hence, such assets do not come from a homogeneous population.
- 4.15 For those intangible assets that do come from a homogeneous population, only a small minority are of a type that are regularly bought and sold with prices being available to the public. For instance, a portfolio of individual customer contracts to subscribe for a particular magazine may contain homogeneous items, if it includes contracts of exactly the same type, such as three-year subscriptions paid upfront, such that there is no variation in the contracts between different customers. However, there is no regular supply of buyers and sellers for these individual contracts, nor are prices available to the public.
- 4.16 The expert group suggests, therefore, that it is helpful in the context of the valuation of intangible assets to consider markets that may not be active. This Paper defines an inactive market as any market that is not active and, hence, that does not satisfy one or more of the criteria at 4.12 above.



## Section IV.

### Technical Valuation Issues (cont.)

- 4.17 Typically, an inactive market in an intangible asset will show the features, and hence provide evidence, of:
- 4.17.1 infrequent transactions in identical assets; and/or
  - 4.17.2 frequent or infrequent transactions in similar assets.
- However, much of the data relating to inactive markets is not available publicly.

#### Market participants and market transactions

- 4.18 This Paper defines market participants as buyers and sellers in either an active or inactive market for an intangible asset that are:
- 4.18.1 independent, such that any buyer is independent, i.e. not a related party of, any seller;
  - 4.18.2 knowledgeable, having a reasonable understanding of the subject intangible asset and the transaction based on all available information, including information that might be obtained through due diligence efforts that are usual and customary; and
  - 4.18.3 able to transact for the asset, i.e. the buyer and seller are motivated to transact but not forced or otherwise compelled to do so.
- 4.19 A transaction between market participants is a market transaction.

#### Fair value

- 4.20 IAS 38, paragraph 8, defines the fair value of an asset as the amount for which that asset could be exchanged between knowledgeable, willing parties in an arm's length transaction. This Paper, therefore, uses the same definition of fair value.
- 4.20 The terms 'knowledgeable' and 'willing' are not defined in IAS 38 and can best be understood by reference to IAS 40, paragraphs 42 and 43, which clarifies these terms in the case of investment properties. Applying the same guidance to intangible assets would result in the following guidance in respect of intangible assets.
- 4.21.1 *'Knowledgeable' means that both the willing buyer and the willing seller are reasonably informed about the nature and characteristics of the [intangible asset], its actual and potential uses, and market conditions at the [valuation] date.*
  - 4.21.2 *A 'willing buyer' is motivated, but not compelled, to buy. This buyer is neither over-eager nor determined to buy at any price. The assumed buyer would not pay a higher price than a market comprising knowledgeable, willing buyers and sellers would require.*
  - 4.21.3 *A 'willing seller' is neither an over-eager nor a forced seller, prepared to sell at any price, nor one prepared to hold out for a price not considered reasonable in current market conditions. The willing seller is motivated to sell the [intangible asset] at market terms for the best price obtainable.*

## Section IV.

### Technical Valuation Issues (cont.)

- 4.22 The guidance in IAS 40 was in turn based on guidance included in International Valuation Standards, Standard 1, ‘Market Value Basis of Valuation’ (revised 2005), (IVS 1). IVS 1 provides a description of a ‘willing buyer’ in paragraph 3.2.4 and of a ‘willing seller’ in paragraph 3.2.5.
- 4.22.1 IVS 1, paragraph 3.2.4, describes a ‘willing buyer’ as *‘one who is motivated, but not compelled to buy. This buyer is neither over-eager nor determined to buy at any price. This buyer is also one who purchases in accordance with the realities of the current market and with current market expectations, rather than in relation to an imaginary or hypothetical market that cannot be demonstrated to exist. The assumed buyer would not pay a higher price than the market requires. The present property owner is included among those who constitute “the market”. A Valuer must not make unrealistic assumptions about market conditions nor assume a level of market value above that which is reasonably obtainable.’*
- 4.22.2 IVS 1, paragraph 3.2.5, describes a ‘willing seller’ as *‘neither over-eager nor a forced seller prepared to sell at any price, nor one prepared to hold out for a price not considered reasonable in the current market. The willing seller is motivated to sell the property at market terms for the best price attainable in the (open) market after proper marketing, whatever that price may be. The factual circumstances of the actual property owner are not a part of this consideration because the “willing seller” is a hypothetical owner.’*
- 4.23 A consequence of this definition is that fair value can be interpreted as being the value in a hypothetical market in a situation where there is no active market for the asset concerned.
- 4.24 If different market participants would pay different prices for an intangible asset, for instance as a result of different intended uses, the market participant that would pay the highest price, excluding entity-specific factors, see paragraph 4.25 et seq. below, is the one that would buy an asset in an exchange transaction. A rational seller would always sell to the buyer willing to pay the highest price.
- #### Entity-specific factors
- 4.25 Certain attributes of an intangible asset vary according to the party owning the asset—some examples are given below.
- 4.25.1 Some owning entities, as a result of the nature and structure of their own organisation, are able to use a brand name only in a restricted geographic region, whereas others are able to use a brand name globally.
- 4.25.2 Some owning entities, as a result of the nature and structure of their own organisation, are able to license a piece of software only for use in the business-to-business, (B2B), market whereas others have access to both the B2B and business-to-consumer, (B2C), market.
- 4.25.3 Some owning entities are able to realise either or both revenue and cost synergies that are not available to other owning entities.
- 4.26 Again, there is relevant guidance in IAS 40 but not in IAS 38. IAS 40, paragraph 43, provides guidance, again based on IVS 1, paragraph 3.2.5<sup>5</sup>, in respect of the owner of an investment property. Applying the same approach to intangible assets would result in the following guidance.
- 4.26.1 *‘The factual circumstances of the actual [intangible asset] owner are not a part of the consideration that would form the best price obtainable because the willing seller is a hypothetical owner (e.g. a willing seller would not take into account the particular tax circumstances of the actual [intangible asset] owner).’*
- 4.27 There is further guidance in paragraph 49 of IAS 40. Applying the same approach to intangible assets would result in the following guidance.
- 4.27.1 *‘...fair value does not reflect any of the following factors to the extent that they would not be generally available to knowledgeable, willing*

5. IVS 1 paragraph 3.2.5 concludes with the statement *‘The factual circumstances of the actual property owner are not a part of this consideration because the “willing seller” is a hypothetical owner.’*

## Section IV.

### Technical Valuation Issues (cont.)

*buyers and sellers:*

- a. additional value derived from the creation of a portfolio of [intangible assets] in the different locations [for different purposes];*
- b. synergies between [the intangible asset] and other assets;*
- c. legal rights or restrictions that are specific only to the owner; and*
- d. tax benefits or tax burdens that are specific to the current owner.’*

- 4.28 The extent to which such factors are taken into account in a valuation impacts the resulting value. Factors should be taken into account to the extent that they arise as a consequence of the characteristics of the intangible asset, rather than to the extent that they arise as a consequence of the specific circumstances of the owning or reporting entity.
- 4.29 Thus the following factors would generally be excluded in the determination of the fair value of an intangible asset:
- 4.29.1 cost of capital being lower than that available for the asset on a stand-alone basis because of the existence of other less risky businesses in the reporting entity; and
  - 4.29.2 tax charge being lower than that of market participants as a result of tax losses being available in respect of other parts of the business.
- 4.30 Conversely, the following factors would be included, as appropriate, in the determination of the fair value of an intangible asset as they would be considered to be synergies of market participants:
- 4.30.1 additional sales being achievable through linking the product with other product(s) of the reporting entity where such links are made by market participants, thus indicating that they relate to the characteristics of the asset rather than to the owning entity—e.g. increased confectionery sales as a result of confectionery and soft drinks being sold in the same outlets; and

4.30.2 reduced overhead costs where such reduction is available to other market participants, again indicating that they relate to the asset rather than the owning entity—e.g. reduced distribution costs as a result of an established distribution network being used and other market participants also having an established network.

- 4.31 It can be a difficult and judgmental area determining which attributes to retain and which to exclude when adjusting for entity-specific factors. It is an issue that regularly needs to be addressed when performing intangible asset valuations under IFRS 3 following a business combination.

#### Level of aggregation for measurement purposes

- 4.32 Some intangible assets can be valued on a stand-alone basis. For other intangible assets, however, it may be either impossible or impractical to value them other than in conjunction with other tangible or intangible assets.

#### Intangible assets arising from a business combination

- 4.33 IAS 38, paragraphs 36 and 37, addresses the circumstances in which it is appropriate to combine certain tangible and intangible assets for the purposes of initial measurement following a business combination.
- 4.34 IAS 38, paragraph 36, notes that it is appropriate to combine an intangible asset with another intangible asset or with a tangible asset, if the underlying intangible asset is not separable and its fair value is not reliably measurable. The paragraph cites:
- 4.34.1 as an example of intangible assets that may not be separable individually, a magazine’s publishing title and its subscriber database; and
  - 4.34.2 as an example of a tangible and intangible asset that may not be separable individually, a trademark for a natural spring water and the spring itself.

## Section IV.

### Technical Valuation Issues (cont.)

- 4.35 IAS 38, paragraph 37, considers the term ‘brand’. It notes that this term is a general marketing term that is often used to refer to a group of complementary assets such as a trademark and its related trade name, formulas, recipes and technological expertise. The paragraph notes the following.
- 4.35.1 *“The acquirer recognises as a single asset a group of complementary intangible assets comprising a brand if the individual fair values of the complementary assets are not reliably measurable”.* This is a required aggregation of the underlying assets.
- 4.35.2 *“If the individual fair values of the complementary assets are reliably measurable, an acquirer may recognise them as a single asset provided the individual assets have similar useful lives.”* This is a permitted aggregation of the underlying intangible assets.
- 4.36 The expert group notes that the guidance in paragraphs 36 and 37 of IAS 38 is used extensively in practice. The consequence of applying these paragraphs is that the number of intangible asset valuations required following a business combination is reduced. In practice, these paragraphs are generally applied in the case of different, rather than similar or identical, intangible assets. For instance, the individual component intangible assets comprising a brand are different, as are a magazine title and its subscriber database.
- 4.37 IAS 38 does not, specifically, address whether similar or identical intangible assets should be aggregated for the purpose of initial measurement. Similarly, this point is not discussed in the IASB Fair Value Discussion Paper, or SFAS 157, which it incorporates.
- 4.38 A related point is, however, discussed in the Canadian Measurement Paper. That paper identifies the issue of ‘portfolio creation’, such that, paragraph 67, ‘a portfolio is a group of similar assets... in which the individual items retain their identity’. The retention of the individual assets’ identities clearly differentiates portfolios of intangible assets from the intangible asset described in paragraphs 36 and 37 of IAS 38. The latter intangible assets are combined to form a different intangible asset from the underlying assets and, hence, the underlying assets lose their identity through the aggregation process.
- 4.39 The Canadian Measurement Paper proposes, paragraph 68, that, where portfolios of assets are acquired together, they should usually be valued together. IAS 38, however, whilst not addressing the issue of identical and similar intangible assets specifically, does not provide any exemption from individual measurement for them.
- 4.40 In practice, the types of intangible asset that might be acquired and that form portfolios are assets such as customer contracts and customer relationships, which are individually likely to be similar or even identical to one another. In practice, intangible assets such as these are frequently grouped or aggregated for valuation purposes. The groupings are likely to comprise all intangible assets with particular qualities—e.g. all rental contracts with a three-year term for the same piece of software. Another grouping might comprise all rental contracts with a five-year term for the same piece of software.
- 4.41 Groupings of this nature allow cancellations, renewals and default levels on contracts to be assessed on a portfolio basis rather than at an individual asset level. In this way, historical patterns for a portfolio can be used to predict future expectations. This is likely to lead to more robust assumptions than trying to predict patterns without using portfolio evidence.
- 4.42 This Discussion Paper supports the approach taken in practice whereby similar or identical intangible assets that form a portfolio are aggregated for the purposes of initial recognition at fair value. The valuer should take account of the extent to which the individual intangible assets share the same characteristics in deciding how this aggregation should be effected. Any such aggregation, the nature of the underlying assets, and the characteristics of the underlying assets rendering aggregation appropriate for valuation purposes should be disclosed in the Valuation Report.

## Section IV.

### Technical Valuation Issues (cont.)

- 4.43 IAS 38, paragraph 35, notes *‘The fair value of intangible assets acquired in business combinations can normally be measured with sufficient reliability to be recognised separately from goodwill.’*
- 4.44 Paragraph 38 of IAS 38 sets out the rare circumstances in which intangible assets arising in a business combination may not be capable of reliable measurement. The paragraph states *‘the only circumstances in which it might not be possible to measure reliably the fair value of an intangible asset acquired in a business combination are when the intangible asset arises from legal or other contractual rights and either:*
- 4.44.1 *is not separable; or*
- 4.44.2 *is separable but there is no history of evidence of exchange transactions for the same or similar assets, and otherwise estimating fair value would be dependent upon immeasurable variables.’*
- 4.45 Intangible assets that fall into this category and, hence, for which fair value cannot be reliably measured, are subsumed within purchased goodwill for reporting purposes<sup>6</sup>.

#### Intangible assets carried at fair value under the revaluation model

- 4.46 In order that they may be carried at fair value under the revaluation model, IAS 38 requires that such intangible assets are traded in an active market. Thus, the fair value of each intangible asset will be obtainable from the active market and, by definition, will be measurable at an individual level.

#### Intangible assets measured at fair value less costs to sell

- 4.47 The appropriate level of aggregation in the measurement of intangible assets carried at fair value less costs to sell is the level at which fair value less costs to sell can be measured for market participants.
- 4.48 IAS 36, paragraph 25, notes *‘the best evidence of an asset’s fair value less costs to sell is a price in a binding sale agreement in an arm’s length transaction, adjusted for incremental costs that would be directly attributable to the disposal of the asset.’*
- 4.49 Thus, if there is a binding contract in place for sale of the subject intangible asset, the level of aggregation implicit in the terms of the binding contract is the level at which fair value less costs to sell should be determined for the subject asset.
- 4.50 IAS 36, paragraph 26, notes *‘if there is no binding sale agreement but an asset is traded in an active market, fair value less costs to sell is the asset’s market price less the costs of disposal’.* Thus, for intangible assets traded in an active market for which there is no binding sale agreement, fair value less costs to sell will be measured by reference to the market price. As noted earlier, by definition, this will be available at the individual asset level.
- 4.51 IAS 36, paragraph 27, notes *‘if there is no binding sale agreement or active market for an asset, fair value less costs to sell is based on the best information available to reflect the amount that an entity could obtain, at the balance sheet date, from the disposal of the asset in an arm’s length transaction between knowledgeable, willing parties, after deducting the costs of disposal. In determining this amount, an entity considers the outcome of recent transactions for similar assets within the same industry.’*
- 4.52 As recent transactions must be considered for intangible assets that are not traded in an active market, the level of aggregation implicit in those transactions should be considered in determining the appropriate level of aggregation at which to estimate fair value.

6. As noted earlier in this Paper, a recent IASB monthly update indicates that, as part of Phase II of its Business Combinations project, the IASB has decided to remove the requirement that fair value be capable of reliable measurement when it revises IFRS 3. This is because the IASB is of the view that all intangible assets satisfying the identifiability criterion in IFRS 3 are capable of reliable measurement. Thus, the exception in paragraph 38 of IAS 38 would be removed.



## Section IV.

### Technical Valuation Issues (cont.)

#### Issues addressed by SFAS 157 but not covered in this Paper

- 4.53 The expert group Paper considers that SFAS 157 is of more relevance in the determination of the fair value of financial assets than of tangible or intangible assets. The characteristics of intangible assets are different from those of financial assets.
- 4.54 In particular, intangible assets are often unique in nature in that there are no other assets identical to them. Thus, market evidence is more likely to be available for financial assets than for intangible assets. Furthermore, whilst there may be some intangible assets that are similar in general terms, as in the case of different alcoholic beverage brands, for instance, the differences between these intangible assets lend themselves more to qualitative than to quantitative analysis. This contrasts with financial assets where differentiating factors, such as between interest rate swaps with different interest rates attaching to them, lend themselves more readily to quantitative than qualitative analysis.
- 4.55 The following issues are addressed by SFAS 157 but they are not considered in detail in this Paper.
- 4.55.1 the difference between the ‘principal’ and ‘most advantageous’ market;
  - 4.55.2 the highest and best use of an asset and whether this is ‘in use’ or ‘in exchange’;
  - 4.55.3 the difference between ‘observable’ and ‘unobservable’ inputs; and
  - 4.55.4 a three-level hierarchy of reliability for valuation inputs.
- 4.56 This Paper does not consider that a distinction between the principal and most advantageous markets is required. There is frequently very little market activity in the subject intangible asset or those similar to it. Thus, fair value is determined by reference to those market participants that do exist. As noted in paragraph 4.24, market price is determined by reference to the market participant that would pay the highest price after excluding entity-specific factors. There is no need to differentiate beyond this to a principal and most advantageous market.
- 4.57 This Paper does not discuss whether some intangible assets have a highest value ‘in use’ whereas others have a highest value ‘in exchange’. Many intangible assets are valued using an income capitalisation method, as discussed in Section V below, which effectively values the asset using an ‘in use’ approach. However, the income capitalisation approach is used in this Paper as a method of determining the amount expected to be achievable in an exchange transaction between market participants. Hence, there is no need to distinguish between valuations on an ‘in use’ and ‘in exchange’ basis. Indeed, describing an ‘in use’ approach to determining fair value can be confused with measurement of ‘value in use’. However, value in use is not a measure of fair value.
- 4.58 This Paper does not specifically define the terms observable and unobservable. This is because many inputs used in valuing intangible assets are based on parameters that are partially observed in the market but adjusted, often subjectively, to reflect differences from the market. This Paper takes the approach that these differences can best be addressed through a documented benchmarking exercise as described in Section VI.
- 4.59 Paragraphs 7.17 et seq. of this Paper explain why a different approach to selection of valuation methods is proposed from the hierarchical description of inputs set out in SFAS 157.

# Section V.

## Intangible Asset Valuation Methods

### Valuation methods and approaches

- 5.1 There are several different methods available for determining the fair value of intangible assets, each falling within one of the three fundamental approaches identified in current IVS. These are :
- 5.1.1 the sales comparison approach;
  - 5.1.2 the income capitalisation approach; and
  - 5.1.3 the cost approach
- 5.2 The objective of determining fair value is to estimate the price at which knowledgeable, willing parties would transact for an asset. It may often be appropriate to consider more than one approach to this estimate and within each approach there may be different methods available. The role of the valuer is to adopt the approach(es) and method(s) that most closely match those that would be used by market participants.
- 5.3 In order to apply a valuation method, assumptions regarding certain factors must be made. These assumptions are generally known as ‘valuation inputs’ and the factors they cover vary according to the valuation method adopted. IAS 38 does not specifically address valuation inputs.
- 5.4 This section of the Paper considers both the different valuation methods that can be used and their relative reliability in the context of providing information to be included in financial statements.

### Reliability of valuation methods and inputs

- 5.5 In its Framework, the IASB identifies the quality of ‘reliability’ as being one of the four principal characteristics that make the information provided in financial statements useful to users. This section of the Paper looks at how to improve the reliability of fair value measurement exercises for intangible assets.
- 5.6 The Framework, paragraph 31, explains that information is reliable ‘when it is free from material error and bias and can be depended upon by users to represent faithfully that which it either purports to represent or could reasonably be expected to represent’.

- 5.7 The Framework further clarifies that to be reliable, information must:
- 5.7.1 ‘represent faithfully the transactions and other events it purports to represent or could reasonably be expected to represent’;
  - 5.7.2 be such that ‘transactions and other events that it purports to represent...are accounted for and presented in accordance with their substance and economic reality and not merely their legal form’;
  - 5.7.3 ‘be neutral, that is, free from bias’; and
  - 5.7.4 be prudent—‘prudence is the inclusion of a degree of caution in the exercise of the judgments needed in making the estimates required under conditions of uncertainty, such that assets or income are not overstated... However, the exercise of prudence does not allow, for example, ... the deliberate understatement of assets... because the financial statements would not be neutral and, therefore, would not have the quality of reliability’.
- 5.8 The expert group considers that the overall reliability of an intangible asset valuation exercise depends upon both:
- 5.8.1 the reliability of the underlying method—discussed in the rest of this Section; and
  - 5.8.2 the reliability of the valuation inputs—discussed in Section VI.

### Sales comparison approach

- 5.9 Valuation methods that use the sales comparison approach determine the fair value of an intangible asset by reference to transaction data in respect of an identical or similar asset.
- 5.10 The market transactions method is the only sales comparison valuation method that can be used in the valuation of intangible assets.

## Section V.

### Intangible Asset Valuation Methods (cont.)

#### Market transactions method

- 5.11 The market transactions method determines the fair value of an asset by reference to the transaction prices, or 'valuation multiples' implicit in the transaction prices, of identical or similar assets in the market.
- 5.12 A valuation multiple is a multiple determined by dividing the transaction price paid for an intangible asset by a financial parameter, such as historical or prospective turnover or profit at a given level. Some of the valuation multiples that are used in practice in the valuation of intangible assets are calculated as the transaction price divided by:
- 5.12.1 turnover generated by an intangible asset;
  - 5.12.2 profit contribution after deduction of certain costs, such as marketing costs; and
  - 5.12.3 Earnings before Interest and Tax, (EBIT) or Earnings before Interest, Tax, Depreciation and Amortisation, (EBITDA).
- 5.13 Valuation multiples are applied to the corresponding financial parameter of the subject asset in order to value it. For instance, if a valuation multiple of 1.5 times historical turnover is identified from a market transaction and the subject asset had historical turnover of Euro 50,000, the value indicated by use of the valuation multiple would be:
- $$1.5 * \text{Euro } 50,000 = \text{Euro } 75,000.$$
- 5.14 Adjustments are required to the transaction prices or valuation multiples to reflect the differentiating characteristics of the subject intangible asset and the assets for which the transaction prices or valuation multiples are known.
- 5.15 In some cases, more than one valuation multiple is obtained from each transaction identified. For example, both historical and prospective turnover and gross profit multiples could be calculated and applied. The valuer must apply judgement in assessing which resulting values to place the most reliance on, based on a comparison of the asset involved in the transaction and the subject asset, including factors such as their relative growth prospects.
- 5.16 For example, if a piece of software is being valued, prices might be observable for transactions between market participants for software that has a similar function. These could be used, subject to appropriate adjustments, to assist in determining the value of the subject software.
- 5.16.1 For example, if a price of Euro 10,000 was observed for software that has a similar function to, but is considered less sophisticated than, the subject software, a value of at least Euro 10,000 might be considered appropriate for the subject software.
- 5.16.2 With regard to the same observed transaction, the price of Euro 10,000 could, for example, correspond to a multiple of 1.2 times turnover in the previous financial year. If the subject software had reported turnover of Euro 12,000 in the previous financial year, applying the multiple of 1.2 times would result in a value of Euro 14,400.
- 5.16.3 If it were also known that the subject software had higher growth expectations than the software involved in the transaction, a higher value than indicated by the transaction price or valuation multiple might be considered appropriate. It might be possible to refine this valuation range by use of valuation multiples of prospective turnover implicit in the transaction.
- 5.17 The required inputs for the market comparables valuation method are:
- 5.17.1 if the asset is traded in an active market, prices for identical intangible assets in the market at the valuation date;
  - 5.17.2 if the asset is traded in an inactive market, transaction prices and/or valuation multiples in respect of identical or similar intangible assets;
  - 5.17.3 if the asset is traded in an inactive market, adjustments required to such transaction prices or valuation multiples, to reflect the differentiating characteristics of the subject intangible asset and the assets involved in the transactions.

## Section V.

### Intangible Asset Valuation Methods (cont.)

- 5.18 Thus, where the intangible asset is traded in an active market, there will be just one valuation input, comprising the price at the valuation date for that asset in the active market.
- 5.19 The market comparables method is required to be used by IAS 38 for intangible assets traded in an active market that are carried at their fair value under the revaluation model. In practice, very few intangible assets are traded in an active market and, hence, it is rare for intangible assets to be carried under the revaluation model.
- 5.20 There are practical difficulties that restrict the use of this method for intangible assets traded in an inactive market. Often, there are either no or very few transactions between market participants in similar assets for which price information is available in the public domain. Even where transactions in similar assets can be identified and information regarding prices paid is available in the public domain, it can be difficult to determine the appropriate adjustments to either the prices or the valuation multiples necessary to reflect the differentiating characteristics of the subject intangible asset and the assets involved in the transactions. In practice, such adjustments may only be determinable at a qualitative, rather than quantitative, level. For example:
- 5.20.1 a brand being valued may be considered to command a more dominant position in the market than those involved in transactions; or
- 5.20.2 a drug patent being valued may have greater efficacy and fewer side effects than those involved in transactions.
- 5.21 The difficulties described above may restrict the reliability of the market comparables method in the valuation of intangible assets traded in an inactive market. Consequently, in practice, this method is often used as a supporting method to cross-check the valuation results obtained by applying another valuation method than as the primary valuation method.

#### Income capitalisation approach

- 5.22 Valuation methods that use the income capitalisation approach determine the fair value of an intangible asset, by reference to the capitalised value of income, cash flows or cost savings that could hypothetically be earned or achieved by a market participant owning the asset.
- 5.23 Thus, any income capitalisation method is heavily reliant on prospective financial information, (PFI). PFI can be any type of forecast financial data and, hence, includes forecast:
- turnover
  - gross profit, operating profit and net profit
  - profits before and after tax
  - cash flows before or after interest and/or tax
  - length of remaining useful life
- 5.24 The principal intangible asset valuation methods that use the income capitalisation approach are:
- 5.24.1 relief-from-royalty method, (sometimes known as royalty savings method);
- 5.24.2 premium profits method, (sometimes known as incremental income method); and
- 5.24.3 multi-period excess earnings method.
- 5.25 In addition to capitalising the income, cash-flows or cost savings that may be derived from use of the asset, it is sometimes appropriate to adjust the resulting value to take account of the fact that, for certain assets in certain jurisdictions, tax relief is available on amortisation of the capitalised asset. Such an adjustment is known as the 'tax amortisation benefit' or 'TAB'.
- 5.26 The adjustment is made by determining the amount, if any, of tax deductions that would be obtained through amortising the asset for tax purposes and capitalising these over the tax life of the asset. There are various ways of calculating the TAB – one approach using an iterative method is set out below. The difficulty is in estimating what the fair value of the asset gross of the TAB which is needed before the TAB itself can be computed.

## Section V.

### Intangible Asset Valuation Methods (cont.)

- 5.27 Suppose an intangible asset is valued using an income capitalisation method and a value of Euro 80,000 pre TAB is obtained through application of, say, the relief-from-royalty method. Suppose the asset is amortised straight-line over a life of 5 years for tax purposes and that tax relief is available on the amortisation charge at a rate of 30%. Suppose also, that a post-tax discount rate of 10% was used in the relief-from-royalty valuation calculations. Then the value of the TAB could be calculated as follows:
- Annual amortisation for 5 years on net of TAB amount = Euro 80,000 \* 20% = Euro 16,000.  
Estimate TAB at, say, Euro 20,000 to give gross value estimate including TAB of Euro 100,000
  - Annual amortisation = 20% \* Euro 100,000 = Euro 20,000
  - Annual tax relief at 30% of amortisation = Euro 20,000 \* 30% = Euro 6,000
  - Discount each year's tax relief at 10%
  - Sum of discount factors for 5 years =  $10 - 6.209 = 3.791^7$
  - TAB = Euro 6,000 \* 3.791 = Euro 22,746
  - Adjusted estimated value of intangible asset including TAB = Euro 80,000 + Euro 22,746 = Euro 102,746.
  - Now perform iteration of calculation with estimate of TAB at Euro 22,746
  - Annual amortisation = 20% \* Euro 102,746 = Euro 20,549  
Annual tax relief at 30% of amortisation = Euro 20,549 \* 30% = Euro 6,165  
TAB = 3.791 \* Euro 6,165 = Euro 23,372  
Adjusted estimated value of intangible asset including TAB = Euro 80,000 + Euro 23,372 = Euro 103,372
  - Now perform iteration of calculation with estimate of TAB at Euro 23,372
  - Annual amortisation = 20% \* Euro 103,372 = Euro 20,674  
Annual tax relief at 30% of amortisation = Euro 20,674 \* 30% = Euro 6,202  
Estimated TAB = 3.791 \* Euro 6,202 = Euro 23,512  
Adjusted estimated value of intangible asset including TAB = Euro 80,000 + Euro 23,512 = Euro 103,512.
  - Cross check result
  - Take Euro 103,512 as gross value of intangible asset. Deduct amortisation at 20% = 20% \* Euro 103,512 = Euro 20,702. Apply tax relief at 30% = 30% \* Euro 20,702 = Euro 6,211. Capitalise over 5 years = 3.791 \* Euro 6,211 = Euro 23,546. This is close to TAB estimate of Euro 23,512 and, hence, TAB can reasonably be estimated at Euro 23,512.
- 5.28 Such an adjustment is not, however, appropriate when applying the sales comparison approach as transaction prices will implicitly encompass any perceived tax benefit. In this regard, it is noted that a tax amortisation benefit is not applied for either tangible assets or financial assets valued using a sales comparison approach.
- 5.29 As noted earlier, fair value is the amount at which knowledgeable, willing parties would transact for an asset in an arm's length exchange. Thus, it is a measure of market value and the amount payable will generally be determined by the market participant willing to pay the largest amount, as in an arm's length transaction a rational seller would always accept the highest offer. Thus, when using income capitalisation methods of measurement, the income derivable by a market participant paying market value, in turn likely to be the highest offer, must be determined, but entity-specific factors must be excluded in this determination.

7. Discount factors are computed using Gordon Growth Model—see paragraphs 6.84 et seq. The capitalisation factor for the sum from year 6 to infinity is deducted from the capitalisation factor for the sum from year 1 to infinity. The result is the capitalisation factor required for the sum from year 1 to year 5.

## Section V.

### Intangible Asset Valuation Methods (cont.)

#### Relief-from-royalty, or royalty savings, method

- 5.30 The relief-from-royalty method determines the fair value of an intangible asset by reference to the capitalised value of the hypothetical royalty payments that would be saved through owning the asset, as compared with licensing the asset from a third party.
- 5.31 In practice, the method involves estimating the amount of hypothetical royalty payments that would need to be made over the asset's life, by the reporting entity to a third party that owned the asset. The hypothetical royalty payments are capitalised either through use of present value techniques and a suitable discount factor or a suitable capitalisation multiple.
- 5.32 Royalty rates are typically applied as a percentage of the turnover expected to be generated when using the asset. In some cases, royalty payments may include an upfront lump sum in addition to periodic amounts based on turnover or some other financial parameter.
- 5.33 For example, a royalty of 5% of turnover generated by a licensee using the asset might be chargeable, perhaps with the addition of an upfront fee of Euro 10,000.
- 5.34 Maintenance and other support expenditure must be treated consistently—either:
- 5.34.1 if the licensor is responsible for maintenance expenditure, such as advertising or maintenance research and development, the royalty rate should reflect this; or
  - 5.34.2 if the licensee is responsible for maintenance expenditure, the cash flow projections should include appropriate deductions.
- 5.35 Similarly tax must be treated consistently in the calculations—either:
- 5.35.1 tax should be deducted from the notional royalty payments, which are then capitalised using present value techniques and a post-tax discount rate or using a capitalisation multiple; or
  - 5.35.2 tax should not be deducted from the notional royalty payments which are then capitalised using a pre-tax discount rate or capitalisation multiple.
- In practice, tax is usually deducted from notional royalty payments.
- 5.36 The following valuation inputs are required to apply the relief-from-royalty method:
- 5.36.1 the royalty rate and corresponding financial parameter, such as a percentage of turnover, that would hypothetically be paid in an arm's length transaction by a willing<sup>8</sup> lessee to a willing lessor to lease the rights to use the subject intangible asset;
  - 5.36.2 projections for the financial parameter, such as turnover, that the royalty rate would be applied to over the life of the asset together with an estimate of the life of the asset;
  - 5.36.3 rate at which tax relief would be obtainable on hypothetical royalty payments;
  - 5.36.4 an appropriate capitalisation multiple or discount rate to enable estimated periodic royalty payments to be brought to a single capital value.
- 5.37 Generally, this method is applied when royalty arrangements can be observed in the market—either for the asset itself or for similar intangible assets. In practice, such data are often available for brands, technology and patents.

8. The term 'willing' in this sentence should be assumed to have a similar meaning to that in paragraph 4.21.



## Section V.

### Intangible Asset Valuation Methods (cont.)

- 5.38 For example, suppose hypothetical royalty rates are required for use in the valuation of a piece of software. Rates might be found of, say, 5%–7% of turnover, for similar software and, based on these data, a rate of 6% might be used for the subject intangible asset. Tax relief might be obtainable at 30%. If turnover were assumed to be £10,000 per annum in perpetuity and 10% was an appropriate post-tax discount rate, the capital value of the software before any TAB would be
- $6\% \times (1-30\%) \times £10,000 / 0.1^9 = £4,200$ .
  - A TAB adjustment should then be applied to this capitalised value as described earlier.

#### Premium profits, or incremental income, method

- 5.39 The premium profits method determines the fair value of an intangible asset by reference to the capitalised value of incremental profits, cost savings, or cash flows that would accrue to a market participant owning the asset as compared with one not owning the asset.
- 5.40 In practice, applying the method involves comparing the forecast profit stream or cash flows that would be earned by a market participant using the intangible asset with those that would be earned by a market participant that does not use the asset. The forecast incremental profits or cash flows achievable through use of the asset are then computed. Forecast periodic amounts are capitalised through use of either a suitable discount factor or suitable capitalisation multiple.
- 5.41 Some or all of the following valuation inputs are required to apply the premium profits method:
- 5.41.1 forecast periodic profit, cost savings or cash flows expected to be generated by a market participant using the intangible asset;
  - 5.41.2 forecast periodic profit, cost savings or cash flows expected to be generated by a market participant not using the intangible asset;
  - 5.41.3 an appropriate capitalisation multiple or discount rate to capitalise forecast periodic profit or cash flows.
- 5.42 The method can be used to value both intangible assets whose use will save costs and intangible assets whose use will generate additional profit.
- 5.43 A simple example of use of the premium profits method could be as follows. Suppose a brand is being valued and the profit after tax in the most recent reporting period for the business using the brand was \$12,000. A comparable business is identified that does not use a brand and its profit after tax in the most recent reporting period was \$10,000. Thus, the incremental post-tax profit achieved through using the brand was \$2,000.
- 5.43.1 If comparable businesses to that owning the brand are quoted in the market at 12 times profit after tax, and the brand is the most significant asset in the business, a suitable capitalisation multiple might be an uplift of, say, 25%<sup>10</sup> on the market P/E multiple, i.e. 15.
  - 5.43.2 The brand would then have a value of 15 times the incremental post-tax profits of \$2,000, i.e. \$30,000 before any TAB adjustment. As with the relief from royalty example, a TAB adjustment is then required to this capital value.

#### Multi-period excess earnings method

- 5.44 The multi-period excess earnings method determines the fair value of an intangible asset as the present value of the cash flows attributable to the subject intangible asset. As the subject intangible asset will generally earn cash flows through interaction with other tangible and intangible assets, the contributions to cash flows of those other assets must be removed.
- 5.45 In practice, application of the method involves forecasting the cash flows that a market participant would expect to derive from the business or businesses that use the subject intangible asset. From this

9. Paragraphs 6.84 et seq. discuss conversion of discount factors to capitalisation multiples using Gordon Growth model.

10. In practice, additional research and analysis work would be undertaken in estimation of this 25% figure.

## Section V.

### Intangible Asset Valuation Methods (cont.)

forecast of cash flows, a deduction is made in respect of the contribution to the cash flows that is made by assets, tangible and intangible, other than the subject intangible asset.

- 5.46 The effects of goodwill must also be excluded from the cash flows. This can be done by ensuring that new business is reflected only to the extent that it arises from the assets in existence at the valuation date.<sup>11</sup> Thus, if for example, customer relationships were being valued, only the relationships in place at the valuation date should be taken into account in the forecasting of cash flows. If some new relationships were expected to be developed in future periods, these would arise as a result of goodwill in the business or a strong brand name and, hence, should not be included in the valuation of valuation date customer relationships. Also, an adjustment is usually made in respect of the workforce as that is part of the goodwill of the business.
- 5.47 Estimated periodic amounts are brought to a capital value by application of present value techniques and a suitable discount rate, or a suitable capitalisation factor.
- 5.48 The contribution to cash flows made by other assets is known as the ‘contributory asset charge’, (CAC), or ‘economic rent’. The CAC is discussed further in Section VI. It is generally computed as a fair return on and of the capital value of the underlying asset. Thus, the capital values of all other assets contributing to cash flows are required to be determined. Any subjectivity or uncertainty in estimating such capital values will restrict the reliability of the multi-period excess earnings method and should be considered when comparing the reliability of the multi-period excess earnings method with that of other available valuation methods.
- 5.49 The inputs required to apply the multi-period excess earnings method include:
- 5.49.1 forecast cash flows obtainable from the business(es) of a market participant to which the subject intangible asset contributes to cash flows—this will involve allocating both income and expenses appropriately to the smallest group of assets that includes the subject intangible asset;
- 5.49.2 contributory asset charges in respect of all other assets in such business(es), including other intangible assets; and
- 5.49.3 an appropriate discount rate, or capitalisation multiple, to enable expected cash flows attributable to the subject intangible asset alone to be brought to a present value.
- 5.50 As an example, the multi-period excess earnings method might be applied to determine the value of customer relationships in a branded consumer products business. The other tangible and intangible assets, and workforce, that are involved in generation of the cash flows, together with estimated fair returns on those assets might be as shown below.

11. The valuation date is the date at which the valuation is required to be effective for IFRS reporting purposes

## Section V.

### Intangible Asset Valuation Methods (cont.)

Example of determination of CAC when capital value and deemed fair return on and of assets is known

Other assets including those not recognisable under IFRS that contribute to cash flows	Deemed fair return on and of such assets	Capital value of assets Euro k	Calculated CAC Euro k
Tangible assets	6.5%	350	22.75
Working capital	4.5%	100	4.50
Brand names	12% <sup>12</sup>	250	30.00
Workforce	10%	100	10.00

5.51 These CACs could then be applied to the forecast profit of the business to determine the remaining value in the cash flows as shown below.

Example of application of CAC to determine residual cash flow and value of intangible asset

	Euro k
Forecast pre-interest after tax cash flow in following year from business using subject customer relationships	75.00
CAC in respect of tangible assets	(22.75)
CAC in respect of working capital	(4.50)
CAC in respect of brand names	(30.00)
CAC in respect of workforce	(10.00)
<b>Residual pre-interest after tax cash flow deduced as forecast to arise from subject customer relationships</b>	<b>7.75</b>
Capitalisation multiple applied	6.00
<b>Resulting value for customer relationships pre TAB<sup>13</sup></b>	<b>46.50</b>

12. Where the brand value has been determined by using the relief from royalty method, it may be more appropriate to deduct the brand contribution in the cash flow forecast by reference to the royalty rate applied.

13. As with all intangible assets valued using an income capitalisation approach, a TAB adjustment is then required.

## Section V.

### Intangible Asset Valuation Methods (cont.)

- 5.52 Typically, the types of intangible asset that are valued using the multi-period excess earnings method are those that contribute to cash flows in combination with other assets in a group and for which other valuation methods are not available.
- 5.53 The method is frequently used in practice for in-process research and development, (IPR&D), projects. These are difficult to value by other methods. As each IPR&D project is likely to be unique, it is unlikely that there will be comparable market transactions so a sales comparison approach is likely to be impossible. The nature of an IPR&D project is that additional development time and costs will be incurred prior to the asset generating cash flows (or cost savings). A discounted cash flow exercise, such as multi-period excess earnings, can be adapted to reflect these costs prior to the asset generating cash flows (or cost savings), whereas such adaptation would not be possible with either the relief-from-royalty or premium profits methods.
- 5.54 The method is also frequently used in practice to value customer relationships or customer contracts. Again, there are rarely any market transactions available in respect of such assets as they tend to be unique in nature. Also, it is difficult to apply relief-from-royalty to such assets as these assets are not leased in the market and so there is no data available on which to base royalty rates. Similarly, it is almost impossible to apply the premium profits method as it would be difficult to find a comparable business that did not have customer relationships.
- 5.55 The document, 'Assets Acquired in a Business Combination to be Used in Research and Development Activities: A Focus on Software, Electronic Devices, and Pharmaceutical Industries', issued by AICPA, January 2002, (The AICPA Practice Aid), provides useful guidance in respect of the valuation of IPR&D acquired as a result of a business combination, using the multi-period excess earnings method.
- 5.56 Much of the guidance can be adapted for use in the valuation of other intangible assets using the multi-period excess earnings method. The guidance includes a 10-step approach as follows:
- 5.56.1 *“Step 1: Select the Prospective Financial Information that best reflects the final purchase price:*
- 5.56.2 *Step 2: Evaluate and document the key assumptions relating to the elements that make up the PFI and ascertain that the PFI reflects management’s good-faith best estimates;*
- 5.56.3 *Step 3: Eliminate synergies from the selected PFI, resulting in the adjusted PFI;*
- 5.56.4 *Step 4: Identify assets acquired including assets to be used in R&D activities;*
- 5.56.5 *Step 5: Confirm the existence of assets to be used in R&D activities including specific IPR&D projects;*
- 5.56.6 *Step 6: Eliminate effects of non-IPR&D activities from the PFI resulting in the final PFI;*
- 5.56.7 *Step 7: Apply contributory asset charge for assets that contribute to the generation of the cash flows:*
- 5.56.8 *Step 8: Calculate present value of the cash flows using a discount rate appropriate for the specific asset acquired being valued;*
- 5.56.9 *Step 9: Compute the related income tax benefits resulting from the amortisation of the asset acquired for income tax purposes;*
- 5.56.10 *Step 10: Evaluate overall reasonableness of the asset’s value relative to the other assets acquired and the overall purchase price.”*

## Section V.

### Intangible Asset Valuation Methods (cont.)

- 5.57 Steps 1 and 3 in combination can be seen to be one way to forecast the required PFI to apply the method and exclude entity-specific factors, such as synergies. An alternative way of doing this would be to forecast the cash flows for a market participant directly. In practice, however, it is often easier to use the entity's own PFI and adjust this for entity-specific inputs, although there may be factors additional to synergies to adjust for. Forecasting PFI is described in more detail in paragraphs 6.3 et seq.
- 5.58 Step 7 shows the CAC being applied and Step 9 shows the determination of the TAB.
- 5.59 Step 10 provides a reasonableness check on the results that can be applied in the determination of the fair values of all intangible assets arising from a business combination.
- #### Cost approach
- 5.60 The cost approach determines the fair value of an intangible asset by calculating the cost of replacing it with a similar or identical asset. This provides a ceiling or maximum for the fair value of the intangible asset—a rational purchaser would not pay more for an asset than he would need to pay to replace it.
- 5.61 Replacement cost is the principal method within the cost approach.
- #### Replacement cost method
- 5.62 The replacement cost method determines the value of an asset as the amount that it would cost to replace its production or service capacity. It represents fair value only in those circumstances where the asset could be exchanged in a transaction for the same amount as the determined replacement cost.
- 5.63 For example, suppose a piece of voice recognition software is being valued. It might be possible to identify in the market the cost of software that would serve the same purpose as the subject asset, but the subject asset may not have as high a value because it is cheaper to produce. Similarly, the cost of a replacement patented drug might be available that would treat the same condition as a subject patented drug, however the subject asset might have a lower value because it is cheaper to manufacture as it uses less costly ingredients.
- 5.64 To apply the method, the replacement cost of an identical asset or one with the same or similar service potential must be estimated. This may be done either by:
- 5.64.1 identifying the price of a replacement asset in the market; or
- 5.64.2 by determining the cost of developing or building the asset.
- 5.65 In practice, there are only a few types of intangible asset for which either of these can be estimated.
- 5.65.1 The method is sometimes applied to software as the price of software with the same or similar service capacity can sometimes be obtained in the market. The market price then provides evidence that the replacement cost is indicative of the price that would arise in an exchange transaction for that replacement asset, although not necessarily for the subject asset.
- 5.65.2 It is sometimes applied to web sites as it may be possible to estimate the cost of constructing a web site—moreover the price of a web site in an exchange transaction is likely to be directly linked to the cost of developing it. Thus, development cost might be representative of fair value.
- 5.65.3 It is sometimes applied to value the intangible benefit of the workforce through determining the cost of building up the workforce. Although the workforce is not a recognisable intangible asset under IAS 38, it is often considered necessary to include a contributory asset charge for the workforce when applying the multi-period excess earnings method and for that reason it may need to be valued—see paragraphs 6.54 et seq. for a discussion of determination of contributory asset charges.

## Section V.

### Intangible Asset Valuation Methods (cont.)

- 5.66 The cost method is not suitable for valuing intangible assets for which there are no assets with equivalent service potential on which to base a value and the cost of replacing them cannot be determined reliably.
- 5.66.1 For instance, the cost of developing a brand or publishing title is hard to determine. There is frequently no set project to develop the asset and development may have taken many years. The cost of development will often bear no relationship to the amount that could be realised in an exchange transaction. This is because a brand or publishing title may have a value significantly greater or smaller than its cost of development.
- 5.66.2 Patented technology, including drug patents, may have taken many years of research to develop. There may have been substantial costs incurred in unsuccessful research projects before the final patented technology was developed. There would be uncertainty regarding whether the costs of such unsuccessful projects should be included<sup>14</sup>.
- 5.67 The valuation inputs required to apply the replacement cost method include some or all of:
- 5.67.1 the cost of developing or purchasing an identical asset with the same production or service potential;
- 5.67.2 the cost of developing or purchasing a similar asset with the same or similar production or service potential;
- 5.67.3 in the case of the cost of a similar, rather than identical, asset with the same or similar production or service potential being identified, the adjustments required, including amortisation if appropriate, to that cost in order to reflect the characteristics of the subject asset; and
- 5.67.4 the expected difference between the cost price of the replacement asset and the exchange price of the subject asset—as fair value is a measure of the amount that could be obtained in an exchange transaction.
- 5.68 A tax amortisation benefit adjustment, as described earlier, is not required when applying the cost approach by reference to the amount payable in the market to obtain an intangible asset with the same or similar service capacity. The tax amortisation benefit may, however, be appropriate when the cost approach is applied by considering the cost of creating the asset directly.
- 5.69 In practice, it is likely that the inputs at paragraph 5.67.3 and 5.67.4 may be estimable only on a judgmental and qualitative basis. This may restrict the reliability of cost approaches to the valuation of intangible assets for which the cost of an identical asset cannot be obtained.

14. This could be viewed as similar to the issue of whether oil and gas exploration assets are valued using a 'full cost' approach or a 'successful efforts' approach.



## Section VI.

# Determination and Benchmarking of Valuation Inputs

### Valuation inputs

- 6.1 From the description of the various inputs required for specific valuation methods set out in Section V above, the following eight inputs have been identified as being those most frequently involved in the valuation of intangible assets:
- 6.1.1 prospective financial information;
  - 6.1.2 comparable transaction prices and implied valuation multiples;
  - 6.1.3 royalty rates;
  - 6.1.4 premium profits;
  - 6.1.5 contributory asset charges;
  - 6.1.6 discount rates;
  - 6.1.7 capitalisation multiples; and
  - 6.1.8 replacement cost
- 6.2 In practice, there may be further inputs—it is not possible to provide an exhaustive list of all valuation inputs. The following paragraphs look at steps that can be taken to improve the reliability of these inputs in practice.

### Prospective financial information, (PFI)

- 6.3 All intangible asset valuation methods based on an income capitalisation method involve some use of PFI. The income stream capitalised might relate to financial parameters such as turnover, operating profit, cash flow or some other measure. Estimates of these financial parameters are critical to the reliability of the resulting valuation.
- 6.4 PFI is often required in application of a sales comparison approach also, as valuation multiples are frequently applied to prospective financial parameters as well as to historic financial parameters.

- 6.5 There is a link between the basis under which the PFI is forecast and the basis under which an appropriate discount rate is determined.
- 6.5.1 Under the ‘traditional’ approach, one estimate of forecast cash flows is made and all risks attaching to both the cash flows and the business are reflected in the discount rate. Thus, this approach concentrates on the discount rate.
- 6.5.2 Under the ‘expected cash flow approach,’ the expected cash flows are forecast and hence variations in the cash flows do not need to be captured by the discount rate.
- 6.6 The traditional approach and the expected cash flow approach are discussed in Appendix A to IAS 36, paragraphs A4-A14. When making estimates of PFI, it is important to be clear which approach is being used, so that risks are not double counted. The implications on the selection of an appropriate discount rate are discussed in paragraphs 6.70 to 6.81 below. In practice, because of the difficulty of establishing expected cash flows through the use of multiple scenarios, the traditional approach is generally applied in preference to the expected value approach.
- 6.7 Where calculations are required of the present value of net cash flows, these should be determined from discounted cash-flow forecasts based on documented assumptions in respect of:
- 6.7.1 turnover;
  - 6.7.2 operating margins;
  - 6.7.3 taxation charges;
  - 6.7.4 working capital needs;
  - 6.7.5 capital expenditure requirements;
  - 6.7.6 expected remaining useful life; and
  - 6.7.7 long-term or perpetuity growth rates.

## Section VI.

### Determination and Benchmarking of Valuation Inputs (cont.)

- 6.8 PFI should be estimated with respect to factors such as:
  - 6.8.1 turnover anticipated in the market generally and the reporting entity's share of the market;
  - 6.8.2 historic profit margins achieved and any variations from those margins anticipated taking account of market expectations to provide realism to management's expectations;
  - 6.8.3 tax charges on income derived from the asset in the jurisdiction in which the reporting entity is assessed to tax on such income but not on tax losses or other factors specific to the reporting entity;
  - 6.8.4 working capital and capital expenditure requirements of the business unit in which the asset is used excluding any factors arising from the reporting entity's other businesses; and
  - 6.8.5 growth rates after the explicit forecast period appropriate to the asset's expected life reflecting the industry involved, the economies involved and market expectations to provide realism to management's estimates.
- 6.9 The forecast period needs to be assessed appropriately so that it matches the life of the intangible asset being valued. Guidance is provided in IAS 38, paragraphs 88–96, regarding determination of the useful life of an intangible asset and, in particular, whether the life is finite or indefinite. The useful life of an intangible asset should be based on the factors set out in IAS 38. The forecast period for PFI should be consistent with the useful life of the asset.
- 6.10 The AICPA Practice Aid provides, in paragraph 5.3.08, a useful list of potential sources of PFI in respect of valuations of IPR&D projects, required consequent upon a business combination:
  - 6.10.1 *historical financial statements of the acquired company for an appropriate period of time (for example, the most recent five years);*
  - 6.10.2 *transaction documents (that is the purchase agreement and related exhibits);*
  - 6.10.3 *press releases and other public disclosures of the transaction;*
  - 6.10.4 *PFI prepared by the acquired company;*
  - 6.10.5 *PFI prepared by the acquired company's advisers;*
  - 6.10.6 *PFI prepared by the acquiring company;*
  - 6.10.7 *PFI prepared by the acquiring company's advisers;*
  - 6.10.8 *PFI prepared for lenders;*
  - 6.10.9 *reports of outside analysts, market experts, governmental agencies, or other third parties, that relate to the transaction*
  - 6.10.10 *Board of directors' presentations prepared for the acquired company*
  - 6.10.11 *Board of directors' presentations prepared for the acquiring company*
  - 6.10.12 *technical analysis that relates to the acquired company's products or technologies (whether it be prepared by the acquiring company, acquired company, or a third party)*
  - 6.10.13 *sales or marketing materials used to sell the acquired company's products and services;*
  - 6.10.14 *data on patents held by the acquired company;*
  - 6.10.15 *acquired company's analysis of its specific IPR&D, projects, including analysis supporting management's approval of the projects and periodic status reports;*
  - 6.10.16 *R&D budget of the acquired company;*
  - 6.10.17 *historical R&D expenditures by the acquired company;*
  - 6.10.18 *product road map or other similar detail of the acquired company's expected evolution from current products and technologies to future products and technologies;*
  - 6.10.19 *licensing agreements that exist for either the development of technologies or ultimate marketing of product manifestation;*
  - 6.10.20 *identification of market participants and relevant market participant data;*
  - 6.10.21 *government or industry publications;*
  - 6.10.22 *market surveys;*
  - 6.10.23 *engineering studies;*
  - 6.10.24 *general economic indicators;*

## Section VI.

### Determination and Benchmarking of Valuation Inputs (cont.)

- 6.10.25 *industry statistics;*
- 6.10.26 *trends and patterns developed from the acquired company's operating history (for example, life cycles of prior generations of products and rate of changes in average selling prices);*
- 6.10.27 *internal data and analyses, accompanied by their supporting objective evidence.'*
- 6.11 Whilst certain of the above sources of data clearly specifically relate to IPR&D projects, many of them are useful PFI for all intangible asset valuations.
- 6.12 PFI obtained from different sources should be benchmarked to assess its appropriateness for use in intangible asset valuations. Specific comparability factors to benchmark include as appropriate to the PFI concerned:
  - 6.12.1 comparison of growth rates with market participants;
  - 6.12.2 comparison of margins with market participants;
  - 6.12.3 check that tax rates are consistent with those in the jurisdictions in which tax would arise for a market participant;
  - 6.12.4 comparison of working capital and capital expenditure needs with those of market participants; and
  - 6.12.5 consideration of perpetuity growth rates in the context of the countries where business is undertaken—see paragraph 6.13 below.
- 6.13 There is guidance in IAS 36, 'Impairment of Assets', (IAS 36), which is relevant to the consideration of perpetuity growth rates. In the context of performing an impairment test by reference to the net present value of the cash-generating unit in which an asset belongs, IAS 36, paragraph 33(c) provides the following guidance in respect of long-term extrapolated growth rates. *'This growth rate shall not exceed the long-term average growth rate for the products, industries, or country or countries in which the entity operates, or for the market in which the asset is used, unless a higher rate can be justified.'* Similar constraints on long-term extrapolated growth rates should be considered when valuing intangible assets with an indefinite life.
- 6.14 If the reporting entity is not expected to derive as much income from the asset as other market participants, PFI should be estimated with respect to other market participants rather than the reporting entity. This could be the case if the reporting entity buys, for example, a brand or publishing title with the intention of removing it from the market as a competitor, rather than using it to generate income and cash flows. In such cases, it may be possible to obtain the former owner's expectations in respect of prospective financial information. If this is not available, it may be harder to obtain prospective financial information estimates as noted at paragraph 6.12 above.
- 6.15 The overall reasonableness of any cash flow forecasts should, in the case of intangible assets arising from an acquisition, be cross checked against the purchase price paid for the acquisition. The implied internal rate of return from the forecast cash flows and price paid in an acquisition, when intangible assets are being valued in accordance with IFRS 3, should be compared with the weighted average of the costs of capital of the business units involved. Differences should be documented and interpreted in the Valuation Report.
- 6.16 Even where forecasts required for a valuation method are at the level of turnover only, for instance in application of the relief-from-royalty method or the market transactions method, such turnover forecasts should be assessed for suitability for inclusion in the valuation method by reference to the check described at 6.15 above.
- 6.17 When using PFI to determine the value of an intangible asset, a sensitivity analysis of the resulting asset value should be performed to assess the impact of possible variations in the measurement of underlying assumptions. Those elements of the PFI to which the resulting asset value is most sensitive, should be reviewed to ensure that the assumptions underlying them are as robust as possible with all available relevant factors being reflected.

## Section VI.

### Determination and Benchmarking of Valuation Inputs (cont.)

#### Comparable transaction prices—active market

- 6.18 For intangible assets traded in an active market, the most reliable method of valuing them, and that required under IAS 38, is the price in the active market. In such cases, this price (the only required valuation input in this case) will, by definition, be readily available.
- 6.19 The reasons why the subject intangible asset is considered to be traded in an active market should be documented in the Valuation Report.

#### Comparable transaction prices and valuation multiples—inactive markets

- 6.20 For intangible assets traded in an inactive market, fair value may be estimated by reference to transactions in that inactive market. Valuation inputs may take the form of:
  - 6.20.1 transaction prices; and
  - 6.20.2 valuation multiples implicit in those prices, such as multiples of price/historic turnover, price/prospective turnover, price/EBIT etc.
- 6.21 Any adjustments required to transaction prices and valuation multiples, as described in Section 5.12 above, as inputs will depend upon:
  - 6.21.1 whether the transactions involve identical or similar assets;
  - 6.21.2 if the transactions involve identical assets, the extent of factors (such as the transaction not being at arm's length, involving a forced seller or being at a date different from the valuation date) that would cause the transaction price not to be representative of the fair value of the asset;
  - 6.21.3 if the transactions involve similar assets, the extent of factors at paragraph 6.21.2 above together with the extent of differentiating characteristics of the subject asset and the assets involved in the transaction that might cause the transaction price not to be representative of the fair value of the asset.
- 6.22 Suitability of transaction prices and valuation multiples should be determined by reference to a benchmarking exercise that is documented in the Valuation Report. This involves, for each comparable transaction, addressing a number of relevant factors, and concluding as to whether these factors result in the transaction price or valuation multiple needing to be increased or decreased, in order to represent an appropriate price or multiple for the subject asset. If possible, any increase or decrease should be quantified – if this is not possible, as much qualitative information as available should be documented, such as whether the factor is likely to 'significantly' or 'slightly' increase value as compared with the asset transacted. Where several factors have been grouped together below, the benchmarking exercise should assess the impact of each difference separately.
- 6.23 Comparability factors to benchmark include:
  - 6.23.1 differentiating characteristics of the assets involved such as market position, geographical coverage, functionality, whether they are used in the business-to-business, (B2B), market or business-to-consumer, (B2C) market etc.;
  - 6.23.2 specific purchaser or seller factors that might impact price such as forced sale or related party transaction as part of group restructuring; and
  - 6.23.3 transaction date as compared with the valuation date and market changes between the two dates.
- 6.24 The extent of adjustments to observed transaction prices, and any preference for certain transactions over others as indicators of value, should be made by reference to this benchmarking exercise and documented in the Valuation Report.
- 6.25 A typical benchmarking exercise used when comparing transactions in various brands for suitability to value a subject brand could take the form shown below.

## Section VI.

### Determination and Benchmarking of Valuation Inputs (cont.)

Example of benchmarking of market transactions in valuation of a brand

Brands involved in transactions	Market position	Geographic coverage	B2C or B2B market	Multiple of most recent historic turnover implicit in transaction	Subject brand multiple higher or lower than comparable
<i>Subject brand</i>	<i>Medium</i>	<i>Europe</i>	<i>B2B</i>	<i>N/A</i>	<i>N/A</i>
Brand A	Strong	Europe	B2C	1.1	Lower
Brand B	Weak	UK	B2C	0.9	Similar
Brand C	Medium	Australasia	B2B	0.8	Similar
Brand D	Strong	Europe, Middle East, Africa	Both	1.6	Significantly lower

6.27 The benchmarking exercise should be used to determine a range of suitable turnover multiples with the conclusion and rationale documented in the Valuation Report. In the case above the following conclusions might be reached:

6.27.1 with respect to comparable Brand A, the subject brand has a weaker market position, operates in the same geographic area and is in the B2B market, which is assumed in this case to be less valuable than the B2C market—combining these factors suggest that an historic turnover multiple for the subject brand of less than 1.1 is appropriate;

6.27.2 with respect to comparable Brand B, the subject brand has a stronger market position and wider geographic coverage but operates in the B2B rather than B2C market—combining these factors suggests that an historic turnover multiple close to 0.9 is appropriate;

6.27.3 with respect to comparable Brand C, the subject brand has a similar market position and is also in the B2B market, but it operates in a different geographic region, although it is known that the Australian and European markets are equally developed in the industry concerned—combining these factors suggests that an historic turnover multiple close to 0.8 is appropriate;

6.27.4 with respect to comparable Brand D, the subject brand has a weaker market position, operates in a smaller geographic area and is confined to the B2B market only—combining these factors suggest that an historic turnover multiple significantly below 1.6 is appropriate.

6.28 Thus, the conclusion from a benchmarking exercise such as that above could be that an historic turnover multiple in the range 0.8-0.9 times turnover is appropriate for the subject brand.

## Section VI.

### Determination and Benchmarking of Valuation Inputs (cont.)

#### Royalty rates or amounts

- 6.29 Under the relief-from-royalty method, a hypothetical royalty rate that would be paid by a willing licensee to a willing licensor to license the asset over its useful life is required.
- 6.30 In practice, this is obtained either by reference to any existing or previous arrangements in which the subject asset was licensed or by reference to licensing arrangements in the market for identical or similar assets.
- 6.31 Royalty rates in respect of identical or similar assets should be obtained by a search of:
  - 6.31.1 existing arrangements for the reporting entity—both as licensor and licensee;
  - 6.31.2 publicly available databases;
  - 6.31.3 publicly available or proprietary surveys; and
  - 6.31.4 any proprietary database that the valuer may have developed from his own research.
- 6.32 Once royalty rates have been obtained in the market, they should be adjusted to reflect the differentiating characteristics of the asset being licensed and the subject asset. As for comparable transaction prices, a benchmarking exercise should be undertaken to improve the robustness of identified royalty rates and amounts.
- 6.33 Comparability factors to benchmark include:
  - 6.33.1 specific licensor or licensee factors that might impact the royalty rate such as their being related parties;
  - 6.33.2 exclusivity of both the subject asset and the license;
  - 6.33.3 whether the licensor or licensee has responsibility for certain costs, such as advertising;
  - 6.33.4 licence inception date as compared with valuation date;
  - 6.33.5 duration of licence as compared with expected life of the subject asset; and
  - 6.33.6 characteristics differentiating the assets being licensed from the subject asset such as market position, geographical coverage, functionality, whether they are used in connection with B2B or B2C products etc.
- 6.34 The extent of adjustments to royalty rates obtained from the market and any preference for certain royalty agreements over others as indicators of value should be made and documented in the Valuation Report by reference to this benchmarking exercise.
- 6.35 If royalty rates were required in order to value a piece of technology, a typical benchmarking exercise to compare the suitability of different royalty rates observed in the market could take the form shown below.



## Section VI.

### Determination and Benchmarking of Valuation Inputs (cont.)

#### 6.36 Example of benchmarking exercise used to determine royalty rate in application of relief-from-royalty method to value technology

Comparable technology for which royalty observed	Period of licence	Sophistication of technology	Geographic region of licence	Exclusive licence?	Royalty rate as multiple of turnover	Subject asset royalty rate higher or lower than comparable?
Subject technology	Expected life of asset—5 years	High	Europe	To be valued on an exclusive basis	N/A	N/A
Technology A	5 years	High	USA	No	5%	Higher
Technology B	2 years	Medium	Europe, Middle East, Africa	Yes	7% plus upfront fee of \$25k	Similar
Technology C	10 years	Low	UK	No	3%	Significantly higher
Technology D	3 years	Medium	Europe	Yes	6%	Higher

6.37 A range of suitable royalty rates should be determined following the benchmarking exercise and the rationale documented in the Valuation Report. In the case above the following conclusions might be reached:

6.37.1 with respect to Technology A, the subject technology has the same expected life, is also highly sophisticated but operates in Europe rather than the USA, although the markets are considered to be equally developed, and is required to be valued on an exclusive rather than non-exclusive basis—combining these factors suggests that a royalty rate for the subject brand of at least 5% is appropriate;

6.37.2 with respect to Technology B, the subject technology has a longer expected life, is more sophisticated, is similarly to be valued on an

exclusive basis, but operates in a smaller geographic region, and it is known that substantial opportunities exist in the Middle East,— combining these factors suggests that a royalty rate for the subject brand in the region of 7% is appropriate;

6.37.3 with respect to Technology C, the subject technology has a shorter life but is significantly more sophisticated, operates in a larger geographic area and is to be valued on an exclusive rather than non-exclusive basis—combining these factors suggests that a royalty rate for the subject brand significantly higher than 3% is appropriate;

6.37.4 with respect to Technology D, the subject technology has a longer life and is more sophisticated whilst operating in the same

## Section VI.

### Determination and Benchmarking of Valuation Inputs (cont.)

geographic region and also being valued on an exclusive basis—combining these factors suggests that a royalty of more than 6% is appropriate.

- 6.38 Thus, the conclusion from a benchmarking exercise such as that above could be that a royalty rate of approximately 7% is appropriate for the subject technology.
- 6.39 There is a further reasonableness check that can be performed in respect of a selected royalty rate. This is to consider the total profit at a particular level, such as gross or operating profit, and how much of that profit would accrue to each of licensee and licensor if a selected royalty rate is used in determination of the licence fee. The reasonableness of such a profit split can then be reviewed in the light of any market surveys that are available regarding expected profit splits—these may vary for different industries.

- 6.40 If the resulting profit splits are significantly different from the ranges indicated by market evidence:

6.40.1 this may be explicable by reference to specific factors—for instance, the subject asset may be especially complex and, hence, expected to earn a higher than normal return for the licensor; or

6.40.2 it may be necessary to reconsider whether the selected royalty rate is appropriate.

- 6.41 As an example of how to apply this reasonableness check, suppose a 10% royalty, chargeable on turnover, has been identified as being most appropriate for a subject intangible asset following a search for royalty rates in the market and a benchmarking exercise. Suppose also that the turnover from the business using the intangible is expected to be £15m in the forthcoming year and that the business is expected to generate a gross profit margin of 70%. Then, the profit split, gross profit is used in the example, between hypothetical licensor and licensee would be estimated as shown below.

#### 6.42 Example of reasonableness check on royalty rate using profit split between licensee and licensor

	Total for licensor and licensee £k	Licensor £k	Licensee £k
Turnover	15,000	0	15,000
Gross profit margin	70%	N/A	70%
Gross profit	10,500	0	10,500
Hypothetical royalty income or charge @ 10% of turnover	0	1,500	(1,500)
Adjusted gross profit after notional royalty charge	10,500	1,500	9,000
Share of total gross profit earned by licensor and licensee	100%	14.3%	85.7%

## Section VI.

### Determination and Benchmarking of Valuation Inputs (cont.)

6.43 In the example above the licensor earns approximately 14% of the total gross profit and the licensee approximately 86% of the total gross profit, after adjusting for the notional royalty payment. If industry surveys indicated that a profit split in the region of 85%-90% to the licensee and 10%-15% to the licensor were usual, the results above would be consistent with the industry survey. In such a case, this cross-check would support the use of the calculated 10% royalty rate.

#### Premium profits

6.44 Premium profits are estimated by comparing the income stream or cash flows that would be earned by a market participant through using the intangible asset with those that would be earned if the intangible asset were not used. Thus, premium profits are a type of PFI.

6.45 Generally, entities owning intangible assets that they need to value are able to forecast the profits they expect to make from use of the asset. They are also likely to be able to estimate the adjustments required, if any, to these forecast profits to remove entity specific factors so that such forecast profits are representative of a market participant. The difficulty in determining premium profits tends to arise in forecasting profits from a market participant that does not use the intangible asset.

6.46 A search for the profits of comparable market participants and their profits should be made by reference to:

6.46.1 other activities of the reporting entity;

6.46.2 any market participants for which information is available publicly; and

6.46.3 any proprietary databases of the valuer.

6.47 In some cases, a market participant can be identified internally. For instance, some businesses may sell alcoholic beverages under both a branded and non-brand-

ed label. In such situations, the reporting entity could use its own forecast profits from the comparable product without the subject intangible asset subject to adjustment in respect of any entity-specific factors.

6.48 In other cases, a market participant cannot be identified internally. Premium profits would need to be determined by reference to a market participant that does not have access to the subject brand or a similar one. However, even if such a market participant could be found, it is likely that its profits or cash flows could not be forecast, as such information is rarely in the public domain. In such a case, the premium profits method could not be used.

6.49 As another example, suppose a piece of technology used in a manufacturing process were being valued. The reporting entity, as a market participant, might be able to forecast profits with and without use of the technology and, hence, deduce premium profits directly. Such forecasts should exclude entity-specific factors as set out in Section IV.

6.50 Similarly, if a non-compete agreement were being valued, the reporting entity, as a market participant, might be able to forecast profits with and without the non-compete agreement and, hence, deduce premium profits directly. As above, such forecasts should exclude entity-specific factors as set out in Section IV.

6.51 In other cases, a comparable business can be identified in the market. For instance the price at which unbranded confectionery is sold could be identified in the market. In order to compare unbranded confectionery with branded confectionery, however, and forecast premium profits, both margin and volume information in respect of the unbranded comparator product would need to be obtained.

6.52 As for the valuation inputs described earlier, a benchmarking exercise should be undertaken to improve the robustness of identified premium profits.

## Section VI.

### Determination and Benchmarking of Valuation Inputs (cont.)

- 6.53 Comparability factors to benchmark include:
- 6.53.1 the extent to which the profit forecast, excluding use of the intangible asset, is tainted to any degree through reliance on another intangible asset. This could happen, for instance, through the comparable profits being reliant on an ‘own-name’ brand rather than no brand. In such cases, the identified premium profit and, hence, value attributable to the intangible subject asset would be understated; and
  - 6.53.2 other PFI used in forecasting profits (see paragraphs 6.3 et seq. above for a fuller description of PFI).

#### Contributory asset charges

- 6.54 When applying the multi-period excess earnings approach, the contributions of assets other than the subject asset to cash flows must be removed from the cash flows. The process of doing this is to make a contributory asset charge in respect of such other assets. Such charges are a type of PFI. As CACs are applied to post-tax cash flows, they are determined on a post-tax basis.
- 6.55 The determination of CACs comprises three steps:
- 6.55.1 identification of the assets contributing to the cash flows;
  - 6.55.2 measurement of the fair values of such assets; and
  - 6.55.3 determination of an appropriate fair return on the capital value of such assets.
- 6.56 Useful guidance can be found in the AICPA Practice Aid. Paragraph 5.3.55 of that document describes the cash flows attributable to the subject asset as ‘those in excess of fair returns on all the assets that are necessary to the realization of the cash flows’.
- 6.57 The Appraisal Foundation, (TAF), has a project underway to review how contributory asset charges are determined in practice and to provide specific guidance on their determination. This project is at an early stage and TAF is currently performing an exercise to gather examples of how valuers determine CACs in practice. Once the TAF guidance is issued, the IVSC will update and expand its own guidance in this complex area.
- 6.58 The AICPA Practice Aid provides guidance that is often used by valuers in determining the contributory asset charge. Step 7 of the approach set out in that guidance addresses how to apply a CAC. The following guidance includes points taken directly from the AICPA Practice Aid.
- 6.58.1 Paragraph 5.3.59: ‘Contributory asset charges should be made for all assets (including elements of goodwill) that contribute to the realization of the expected future cash flows.’
  - 6.58.2 The assets include working capital, fixed assets intangible assets and workforce-based intangible assets that related to the established employees of a company.
  - 6.58.3 Paragraph 5.3.61: ‘The total return earned by an asset should be spread over the projects that benefit from that asset.’
- 6.59 CACs should be determined by reference to both returns on the contributory assets and returns of the contributory assets.
- 6.59.1 A return of a contributory asset is a fair return required on the capital value of the asset; and
  - 6.59.2 a return on a contributory asset reflects the fact that the contributory asset may depreciate over time and require replacement.
- 6.60 Care needs to be taken to ensure that there is no double counting between charges in the profit and loss account and the CACs made, and similarly that no CACs are omitted.
- 6.61 For tangible assets, a fair return on and of the asset is the amount that would be required to be paid for use of the asset. This might be determinable from leasing or hire purchase arrangements which would provide a composite figure for returns on and of the asset.

## Section VI.

### Determination and Benchmarking of Valuation Inputs (cont.)

- 6.62 Alternatively, a notional depreciation charge or apportioned capital expenditure charge (as the multi-period excess earnings method uses discounted cash flows, depreciation should be added back initially as a non-cash charge), could be used as a surrogate for the return of the asset. A return on the asset could then be determined by reference to interest rates that would be charged in the market to purchase the asset.
- 6.63 In respect of working capital, care must be taken by reference to whether interest charges are deducted in the cash flow forecasts. Typically, interest charges are excluded from cash flows but are reflected through discounting at a cost of capital that reflects the extent of debt financing for tangible and intangible assets. In order to reflect an additional fair return on working capital, interest rates on bank lending with an appropriate term should be used.
- 6.64 In respect of the workforce, there is a cost associated with getting this in place and a return of the workforce charge is required in that respect. Returns on the workforce are reflected through payroll charges in the profit and loss account. Returns of the workforce can be determined as a return charged on the fair value of the workforce asset. The workforce asset is usually valued using a cost approach, as described in paragraphs 5.60 et seq. above, and a fair return on and of this capital value is usually determined by reference to the cost of capital for the business employing the workforce.
- 6.65 A fair return on an intangible asset can be determined as a composite return on and of the asset by reference to a hypothetical royalty rate that would be charged to lease the asset. Alternatively, the composite rate could be determined by reference to a hypothetical cost of capital for a business using the asset on a stand-alone basis.
- 6.66 A check should be performed on the reasonableness of all CACs used. The weighted average rate of return on assets, (WARA), should be calculated by multiplying the CAC for each asset by its fair value and summing the results. The total should be divided by the total fair value of all assets. The result should approximate to the WACC for the entity.
- 6.67 The following is an example of a cross-check of the WARA implicit in CACs with the WACC for a business using the assets.

#### 6.68 Example of WARA reasonableness check on CACs

Contributory asset	Fair value of asset £k	Fair return on contributory asset	Contributory asset charge, CAC £k
Tangible assets	500	6.5%	32.5
Goodwill	250	14.0%	35.0
Trade marks	300	11.0%	33.0
Net current assets	200	34.5%	9.0
<b>Total</b>	<b>1,250</b>	<b>N/A</b>	<b>109.5</b>
<b>WARA</b>	<b>= (109.5/1,250) * 100% = 8.8%</b>		

## Section VI.

### Determination and Benchmarking of Valuation Inputs (cont.)

6.69 In the above check, the WARA is 8.8%. If the WACC for the business is 8.8% or close to that, the reasonableness of the CACs will have been proved. If it is significantly different, the process involved in determining CACs should be checked.

#### Discount rates

6.70 When applying an income capitalisation method, forecast periodic amounts are required to be brought to a single capital amount either by discounting periodic amounts or by applying a capitalisation multiple.

6.71 As discussed in paragraphs 6.5 et seq. above, the appropriate discount rate to use depends upon whether the traditional approach or the expected value approach to determining present value has been used. As noted earlier, the traditional approach is virtually always used in the valuation of intangible assets.

As noted earlier, the traditional approach is virtually always used in the valuation of intangible assets.

#### Determination of discount rate using traditional approach to present value calculations

6.72 Under the traditional approach, a discount rate is required that reflects all of the time value of money, the risks attaching to the single asset being valued and possible variations in the cash flow. This is a different rate from that attaching to the business or businesses that use the asset.

6.73 The following methods are available to determine this discount rate:

6.73.1 the 'build-up' approach that attaches premia or discounts to a rate observed in the market to reflect different risks; and

6.73.2 direct observation in the market of the cost of capital for a business that relies only on the subject asset or a similar intangible asset.

6.74 In applying the build-up approach, the starting point is often to find the weighted average cost of capital, (WACC), for the business or businesses using the asset. The WACC is the weighted average of the cost of debt for the business and the cost of equity for the business.

6.75 The cost of debt is generally determined by reference to interest rates typically available to entities involved in similar business.

6.76 The cost of equity may be determined by use of a suitable model. The Capital Asset Pricing Model, (CAPM) is often used. This model is not described in detail here as there are numerous text books and other sources that can be used to provide guidance on determination of the CAPM. Care should be taken, however, to ensure that specific risk factors, such as countries where business is undertaken, are reflected as appropriate.



## Section VI.

### Determination and Benchmarking of Valuation Inputs (cont.)

- 6.77 This WACC is adjusted to reflect:
- 6.77.1 differences in gearing that would be available to finance the subject assets as compared with the business(es) involved; and
  - 6.77.2 differences between the risk of the business and the risk attaching to the subject asset alone.
- 6.78 When assessing differences at 6.77.1 above, consideration should be given to whether debt finance that is available to businesses that use the subject asset, or a similar intangible asset, is effectively linked to the subject intangible asset or to another intangible asset or tangible asset(s) used in the business. If the hypothetical availability of debt finance is not linked to the subject intangible asset, an appropriate adjustment should be made to both the availability of debt finance and the assumed interest rate on it.
- 6.79 When assessing differences at 6.77.2 above, consideration should be given to the manner in which the intangible contributes to the business and, in particular, whether the business would be more or less risky without the intangible asset. A risk premium or reduction should be made to the WACC, as already adjusted in respect of factors at 6.77.1, accordingly.
- 6.80 In practice, it is usually difficult to observe costs of capital in the market for similar assets as most businesses rely on more assets than just the subject asset. However, it may be possible to use rates from the market as reasonableness cross-checks of results from application of the build-up method.

#### Determination of discount rate using expected value approach to present value calculations

- 6.81 Under the expected value approach, the discount rate does not need to reflect potential variations in the cash flows as these are captured by using the expected value of the cash flows. Thus, an appropriate discount rate would be based on the weighted average cost of capital for a market participant using the asset.

#### Capitalisation multiples

- 6.82 Forecast cash flows can be brought to a single capital amount either through discounting at a suitable discount rate to calculate the present value or by applying an appropriate capitalisation multiple.
- 6.83 Capitalisation multiples can be applied to forecast cash flows either:
- 6.83.1 by use of valuation multiples, such price/earnings multiples, for similar assets in the market—this information is available only rarely; or
  - 6.83.2 by adjusting the discount rate obtained above to reflect the life of the subject asset.
- 6.84 The Gordon Growth Model provides the formula from which the capitalisation multiple can be derived from the discount rate. It calculates mathematically the precise sum in perpetuity, provided that the discount rate is no smaller than the compound growth rate. By deducting one perpetuity sum from another with an earlier start date, a precise capitalisation multiple for a finite period can be derived using the Gordon Growth Model.
- 6.85 Suppose:
- 6.85.1 cash flow at year 1 = C
  - 6.85.2 annual real growth = r
  - 6.85.3 annual inflationary growth = i
  - 6.85.4 cost of capital and, hence, discount rate for asset = d
- 6.86 Then the sum of all cash flows into perpetuity:
- 6.86.1 if cash flows grow at a real rate, r, and inflationary rate, i:
    - $\text{Sum} = C * (1+i)^*(1+r) / [(1+d) - \{(1+i)^*(1+r)\}]$
  - 6.86.2 if cash flows grow at a nominal rate, g:
    - $(1+g) = (1+i)^*(1+r)$
    - $\text{Sum} = C * (1+g)/(d-g)$
  - 6.86.3 if cash flows are constant, i.e. growth is nil,
    - i.e.  $g = 0$
    - $\text{Sum} = C/d$

## Section VI.

### Determination and Benchmarking of Valuation Inputs (cont.)

- 6.87 From the above, it can be seen that for cash flows growing at constant rate,  $g$ , in perpetuity, the appropriate multiple is  $\{(1+g)/(d-g)\}$ .
- 6.88 For cash flows that are constant, the appropriate multiple is  $(1/d)$ , i.e. the reciprocal of the discount rate.
- 6.89 The Gordon Growth model can also be used to derive multiples for assets with finite lives.

#### Replacement cost

- 6.90 The replacement cost of an intangible asset is the amount it would cost to replace its production or service capacity.
- 6.91 Replacement cost can be obtained by:
  - 6.91.1 identifying the price of a replacement asset in the market; or
  - 6.91.2 determining the cost of developing or building the asset.
- 6.92 The robustness of the replacement cost used as a valuation input will depend upon:
  - 6.92.1 if a replacement asset cost is used, whether an asset with identical or similar production or service capacity is involved;
  - 6.92.2 if the cost of developing or building a replacement asset is used, how that cost was measured and whether it is the cost for an identical or similar asset;
  - 6.92.3 where cost is determined by reference to similar assets and similar production or service capacity rather than by reference to identical assets and identical production or service capacity, the extent of adjustments required to the measured replacement cost to reflect the differentiating characteristics of the asset whose cost is known and the subject asset.
- 6.93 A benchmarking exercise should be performed to assess the suitability of the replacement cost measures obtained in the valuation of the subject asset.
- 6.94 Factors to benchmark include:
  - 6.94.1 differentiating characteristics of the replacement asset measured and the subject asset, such as service and production capacity;
  - 6.94.2 date at which replacement cost has been estimated as compared with valuation date.
- 6.95 The extent of adjustments to replacement cost measured in the market and any preference for one measure of cost over another, if more than one has been found, should be made and documented in the Valuation Report by reference to this benchmarking exercise.

## Section VII.

# Comparison of different approaches and proposed hierarchy for selection of valuation methods

### Comparison of different approaches

- 7.1 There is a key factor differentiating the sales comparison approach and the income capitalisation approach to the valuation of intangible assets traded in an inactive market.
- 7.1.1 The sales comparison approach will generally use valuation inputs relating to similar, but not identical, assets with such inputs being adjusted to reflect those of the subject asset. Reliability can be restricted if it is difficult to make a quantitative estimate of the appropriate adjustments to reflect the differentiating characteristics of the subject asset and the assets involved in the transactions.
- 7.1.2 By contrast the income capitalisation approach uses valuation inputs that are determined as being appropriate to the subject asset specifically rather than to a similar asset. Reliability can be restricted if there are numerous inputs to the valuation and subjectivity is involved in forecasting them.
- 7.2 As with the sales comparison approach, it is often difficult to find market evidence to enable the cost approach to be used. Even where there is evidence of replacement cost, adjustments may need to be made to the replacement cost to reflect the differentiating characteristics of the asset for which replacement cost has been found and the subject asset. Again, these adjustments may need to be estimated subjectively based on a qualitative assessment of differences, thus impairing the reliability of the approach.
- 7.3 Cross checks of one valuation method against another can be used to improve the reliability of the results. For instance, if the fair value of a piece of software were valued using a cost approach, the royalty rate implicit in this valuation should then be determined. This implied royalty rate should be cross-checked for reasonableness to support the result, see paragraphs 6.29 et seq..
- 7.4 Similarly, if the multi-period excess earnings method were used to determine the value of a brand, the royalty rate that would arise from applying the relief-from-royalty method and that is implicit in the resulting value should be determined. This implied royalty rate should be cross-checked for reasonableness to support the result.
- 7.5 If the relief-from-royalty method is used to value a brand, it may be possible to apply a reasonableness cross check with the sales comparison approach. The multiple of a financial parameter such as turnover could be derived and compared with corresponding valuation multiples for other brands for which market transaction evidence is available. The extent of differences between the implied turnover multiple derived from the results of the relief-from-royalty method should be considered for reasonableness in the light of the differentiating characteristics of the subject brand and the brand(s) for which market transaction evidence is available.

## Section VII.

# Comparison of different approaches and proposed hierarchy for selection of valuation methods (cont.)

### Fair Value Hierarchy

#### **Sales comparison and income capitalisation methods**

- 7.6 IAS 38 does not explicitly set out a hierarchy of valuation levels but provides the following guidance.
- 7.7 *“Quoted market prices in an active market provide the most reliable estimate of the fair value of an intangible asset”, paragraph 39.*
- 7.8 *“If no active market exists for an intangible asset, its fair value is the amount that the entity would have paid for the asset, at the acquisition date, in an arm’s length transaction between knowledgeable and willing parties, on the basis of the best information available. In determining this amount, an entity considers the outcome of recent transactions for similar assets”, paragraph 40.*
- 7.9 Paragraph 41 notes the following. *“Entities that are regularly involved in the purchase and sale of unique intangible assets may have developed techniques for estimating their fair values indirectly. These techniques may be used for initial measurement of an intangible asset acquired in a business combination if their objective is to estimate fair value and if they reflect current transactions and practices in the industry to which the asset belongs. These techniques include, when appropriate:*
- *applying multiples reflecting current market transactions to indicators that drive the profitability of the asset (such as revenue, market shares and operating profit) or to the royalty stream that could be obtained from licensing the intangible asset to another party in an arm’s length transaction (as in the ‘relief-from-royalty’ approach); or*
  - *discounting expected future net cash flows from the asset”.*
- 7.10 As noted earlier, quoted market prices in an active market will rarely be available for intangible assets<sup>15</sup>. As set out above, where there is no active market for an intangible asset, IAS 38 requires that an entity considers the outcome of recent transactions and also suggests using valuation multiples, the relief-from-royalty method and discounting expected future cash flows, where such techniques reflect current transactions and practices in the industry concerned. Thus, IAS 38 supports the use of both sales comparison and income capitalisation valuation approaches.
- 7.11 It is clear, however, that IAS 38 requires that the outcome of recent transactions in ‘similar’ assets is always considered. IAS 38 does not define the term, ‘similar’. In practice, it may be difficult to obtain information in the public domain regarding transactions in similar (as defined in this Paper, paragraph 4.11.2) assets. Thus, in practice, reliance is frequently placed by valuers on income capitalisation approaches with market transactions, to the extent available, being used as supporting evidence to cross check results.
- 7.12 There is also relevant guidance in IAS 39, ‘Financial Instruments: Recognition and Measurement’, IAS 40, ‘Investment Property’, and IAS 41, ‘Agriculture’.

15. This fact is also acknowledged in IAS 38, paragraph 78.

## Section VII.

### Comparison of different approaches and proposed hierarchy for selection of valuation methods (cont.)

- 7.13 IAS 39, paragraphs AG 74- AG 75, notes the following in respect of measuring the fair value of financial instruments:
- 7.13.1 Paragraph AG 74: *‘If the market for a financial instrument is not active, an entity establishes fair value by using a valuation technique. Valuation techniques include using recent arm’s length market transactions between knowledgeable, willing parties, if available, reference to the current fair value of another instrument that is substantially the same, discounted cash flow analysis and option pricing models. If there is a valuation technique used by market participants to price the instrument and that technique has been demonstrated to provide reliable estimates of prices obtained in actual market transactions, the entity uses that technique.’*
- 7.13.2 Paragraph AG 75: *‘The objective of using a valuation technique is to establish what the transaction price would have been on the measurement date in an arm’s length exchange motivated by normal business considerations. Fair value is estimated on the basis of the results of a valuation technique that makes maximum use of market inputs, and relies as little as possible on entity-specific inputs. A valuation technique would be expected to arrive at a realistic estimate of the fair value if (a) it reasonably reflects how the market could be expected to price the instrument and (b) the inputs to the valuation technique reasonably represent market expectations and measures of the risk-return factors inherent in the financial instrument.’*
- 7.14 IAS 40, paragraphs 46-47, notes the following in respect of measuring the fair value of investment properties:
- 7.14.1 Paragraph 46: *‘In the absence of current prices in an active market . . . , an entity considers information from a variety of sources, including:*
- a. *current prices in an active market for properties of a different nature, condition or location (or subject to different lease or other contracts), adjusted to reflect those differences;*
  - b. *recent prices of similar properties on less active markets, with adjustments to reflect any changes in economic conditions since the date of the transactions that occurred at those prices; and*
  - c. *discounted cash flow projections based on reliable estimates of future cash flows, supported by the terms of any existing lease and other contracts and (when possible) by external evidence such as current market rents for similar properties in the same location or condition, and using discount rates that reflect current market assessments of the uncertainty in the amount and timing of the cash flows.’*

7.14.2 Paragraph 47: *‘In some cases, the various sources listed in the previous paragraph may suggest different conclusions about the fair value of an investment property. An entity considers the reasons for those differences, in order to arrive at the most reliable estimate of fair value within a range of reasonable fair value estimates.’*

## Section VII.

# Comparison of different approaches and proposed hierarchy for selection of valuation methods (cont.)

- 7.15 IAS 41, paragraphs 18–20, notes the following in respect of measuring the fair value of biological assets and agricultural produce:
- 7.15.1 Paragraph 18: *‘If an active market does not exist, an entity uses one or more of the following, when available, in determining fair value:*
- a. the most recent market transaction price, provided that there has not been a significant change in economic circumstances between the date of that transaction and the balance sheet date;*
  - b. market prices for similar assets with adjustment to reflect differences; and*
  - c. sector benchmarks such as ...’*
- 7.15.2 Paragraph 19: *‘In some cases, the information sources listed in paragraph 18 may suggest different conclusions as to the fair value of a biological asset or agricultural produce. An entity considers the reasons for those differences, in order to arrive at the most reliable estimate of fair value within a relatively narrow range of reasonable estimates’.*
- 7.15.3 Paragraph 20: *‘In some circumstances, market-determined prices or values may not be available for a biological asset in its present condition. In these circumstances, an entity uses the present value of expected net cash flows from the asset ...’*
- 7.16 The guidance in each of IAS 38, IAS 39, IAS 40 and IAS 41 is considered in reaching the proposed IVSC approach to determining which valuation methods to use, set out in paragraphs 7.21 et seq. below.

### SFAS 157 hierarchy for valuation inputs

- 7.17 SFAS 157 describes, paragraphs 24, 28 and 30, a hierarchy that is dependent upon the source of the inputs as follows:
- 7.17.1 *“Level 1 inputs are quoted prices (unadjusted) in active markets for identical assets that the reporting entity has the ability to access at the measurement date.”*
- 7.17.2 *“Level 2 inputs are inputs other than quoted prices included in Level 1 that are observable<sup>16</sup> for the asset..., either directly or indirectly. If the asset...has a specified (contractual) term, a Level 2 input must be observable for substantially the full term of the asset.”*
- 7.17.3 *“Level 3 inputs are unobservable inputs for the asset.... SFAS 157 requires that unobservable inputs are used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset at the market date.”*
- 7.18 The expert group notes that Level 1 inputs are rarely available for intangible assets and further that Level 2 inputs are likely to be of more use in the valuation of financial assets than in the valuation of intangible assets.
- 7.19 For example, Level 2 inputs are likely to be factors such as risk-free interest rates or exchange rates that have been interpolated or extrapolated from market data. As regards the determination of an appropriate discount rate to apply in the valuation of intangible assets, however, it is likely that rates obtained from the market would be adjusted by applying a judgmentally assessed premium than that they would be interpolated or extrapolated from market data. This is because of the scarcity of data in the market relating to transaction prices in intangible assets, in contrast to the ready availability of data in the market relating to transaction prices in financial assets. The judgmental adjustments required would render the discount rates used as inputs at Level 3 under the SFAS 157 hierarchy.

16. SFAS 157, paragraph 21, defines ‘observable inputs’ as inputs that reflect the assumptions market participants (as defined by SFAS 157) would use in pricing the asset developed based on market data obtained from sources independent of the reporting entity.



## Section VII.

### Comparison of different approaches and proposed hierarchy for selection of valuation methods (cont.)

7.20 It appears that, under SFAS 157, most valuation assumptions for intangible assets would be Level 3 inputs. The expert group considers, therefore, that repeatedly disclosing that inputs are at Level 3 would provide no additional information to users. The hierarchy proposed in this Paper for determining the fair value of intangible assets is set out below.

#### Proposed hierarchy for selection of valuation methods

7.21 The proposed hierarchy reflects guidance in IAS 38 together with that in IAS 39, IAS 40 and IAS 41.

7.22 If the asset is traded in an active market, it should be valued by reference to prices in that active market as indicated by IAS 38. No other valuation methods should be applied in such cases.

7.23 If the asset is traded in an inactive market, consideration should be given to the data that could be obtained or estimated that could be used as a valuation input. In particular, the extent to which the following data could be obtained should be considered:

7.23.1 prospective financial information;

7.23.2 comparable transaction prices and valuation multiples;

7.23.3 royalty rates;

7.23.4 premium profits;

7.23.5 capitalisation multiples;

7.23.6 discount rates;

7.23.7 contributory asset charges; and

7.23.8 replacement cost.

7.24 The relative robustness of the potential input data above in the context of the valuation methods and the factors that could cause their reliability to be restricted, see Section V above, should be considered. Section VI looks at each of these valuation inputs and considers how available data should be 'benchmarked' to check its suitability in valuing the subject intangible asset. Section VI also looks at ways of improving and checking the robustness of valuation inputs.

7.25 A primary valuation method should be selected, being the method for which the most reliable valuation results are expected to be determinable, taking into account both the reliability of the method and the robustness of the required valuation inputs in the context of application of the method. This selection should be documented in the Valuation Report.

7.26 Consideration should also be given to whether data is available that would allow the use of one or more secondary, supporting, valuation methods. Alternatively, sufficient data may be available that the required parameters to apply a secondary method could be deduced, (this is sometimes called 'reverse engineering') from the value for the intangible asset arising from application of the primary method. For instance:

7.26.1 if an intangible asset is valued using relief-from-royalty or premium profits as the primary method, the implied multiples of, say, turnover and contribution after marketing charges could be deduced ('reverse engineered') and compared with those from identified comparable market transactions;

7.26.2 if an intangible asset is valued using multi-period excess earnings or replacement cost as the primary method, implied royalty rates could be deduced that would have applied if relief-from-royalty were used; such rates could then be considered for reasonableness.

7.27 For each intangible asset to be valued, the existence of data in each of the eight categories at paragraph 7.23 above should be documented, together with an assessment of how reliable the data is considered to be. An example of typical documentation is shown below.

## Section VII.

### Comparison of different approaches and proposed hierarchy for selection of valuation methods (cont.)

- 7.28 In practice, many intangible assets are valued primarily using an income capitalisation method. This is because:
- 7.28.1 most intangible assets are not traded in an active market, so that if a sales comparison method were used it would generally relate to transactions in an inactive market;
  - 7.28.2 the adjustments required in the use of transaction data from an inactive market are qualitative and subjective in nature thus impairing the reliability of the sales comparison approach for such intangible assets; and
  - 7.28.3 the replacement cost of most intangible assets cannot be obtained from available market data.
- 7.29 However, the income capitalisation approach itself can be subject to restricted reliability, given the large number of inputs that may be required to apply it. This can be especially pertinent if any given method is particularly sensitive to an assumption that is difficult to make other than subjectively.
- 7.30 Cross-checks of the results of valuing intangible assets under an income capitalisation method should be used, wherever possible, to increase the reliability of any specific method.

## Section VII.

### Comparison of different approaches and proposed hierarchy for selection of valuation methods (cont.)

#### 7.31 Example documentation for assessment of valuation methods available for a brand

Data type	Availability	Reliability of data	Impact on valuation methods available
Comparable transaction prices and valuation multiples	Two transactions in similar asset available—each more than one year before the valuation date	Low—assets are not closely comparable	Market transactions method available as supporting, not primary, method
Prospective financial information	Forecasts could be made based on reporting entity's expectations adjusted to exclude entity-specific factors	Medium/high—reporting entity is a market participant and there are few entity-specific factors to adjust for	Income capitalisation methods may be available depending on other data required
Royalty rates	Details of 10 comparable licensing arrangements are available	High	Relief-from-royalty method could be used as primary method
Premium profits	A comparable unbranded business is identified in the market but it would not be possible to obtain a forecast of PFI for this business	Not available	Premium profits method is not available
Capitalisation multiples	Price/earnings multiples of other branded businesses are available	Medium—some adjustments required between market P/Es and subject brand capitalisation multiple	Multiples could be used for market transactions method or income capitalisation approach
Discount rates	Could be calculated using build-up method by reference to WACC for quoted companies using similar brands and the WACC of the reporting entity	High	Can use an income capitalisation approach
Contributory asset charges	The capital value of other assets contributing to cash flows is needed. However, one of those other assets is customer relationships—these are not known.	Not available as one of the inputs cannot be estimated	Multi-period excess earnings method is not available as value of customer relationships is not known.
Replacement cost	No replacement evidence available	Not available	Cost approach not available

## Section VII.

### Comparison of different approaches and proposed hierarchy for selection of valuation methods (cont.)

- 7.32 In the example above, the relief-from-royalty, with cash flows being capitalised by use of discounting periodic amounts rather than by application of a capitalisation multiple, would be indicated as the primary method, with a supporting cross check using the market transactions method. When using the sales comparison method to cross check the results of an income capitalisation method, the result from application of the sales comparison method should be cross checked against the post TAB income capitalisation result.
- 7.33 The Valuation Report should include an explanation of differences in valuation results between the primary method and any secondary methods or cross-checks applied. This explanation should highlight the valuation inputs that are perceived as being the most and least robust and, hence, the relative reliability of the different results obtained.
- 7.34 In summary, the Paper proposes that the order of reliability in which valuation methods should be applied is as follows:
- |   |
|---|
| 7.34.1 sales comparison method for intangible assets traded in an active market; and thereafter:  |
| 7.34.2 either a cost, sales comparison or income capitalisation method as the primary method depending on the availability of reliable data to support application of the method; and                         |
| 7.34.3 where possible, the results obtained using the primary method should be cross-checked for reasonableness against another valuation method that uses either the same or a different valuation approach. |
- 7.35 This Paper proposes that wherever data is available without undue cost or effort that would allow an intangible asset valuation method to be performed, that method should be used either as a primary valuation method or as a secondary method to cross-check results. The primary method of valuation and the methods used in any secondary methods or reasonableness cross-checks of results should be disclosed in the Valuation Report.
- 7.36 The expert group considers that this more adaptable approach is better suited to the valuation of intangible assets than the three-level input hierarchy set out in SFAS 157.

# Section VIII.

## Valuation Process

### Introduction

- 8.1 This section sets out a four-step approach to the valuation of intangible assets:
  - 8.1.1 Step 1—identifying the subject asset
  - 8.1.2 Step 2—identifying data available to be used as a valuation input
  - 8.1.3 Step 3—selection of appropriate valuation methods
  - 8.1.4 Step 4—performing and documenting the valuation

### Step 1: identifying the subject asset

- 8.2 The first step in any intangible asset valuation exercise is to identify and describe precisely the subject intangible asset. In some cases, provisional identity of the asset may already have been made by another party. In such cases, the identity and description should be confirmed by the valuer prior to proceeding. A clear description of the asset and how it satisfies the IAS 38 definition of an intangible asset should be included in the Valuation Report.
- 8.3 As described earlier in this Paper, paragraph 4.32 et seq. above, there are situations in which intangible assets arising from a business combination must or may be aggregated for measurement purposes. Prior to undertaking any valuation work in respect of an intangible asset, the extent to which it should be aggregated with other intangible assets should be determined.
- 8.4 The intangible asset should then be described and allocated to a type or sub-type as set out in IFRS 3 and Section 3.6 of this Paper. If the asset does not appear to come from any of the asset types or sub-types set out in IFRS 3, a description of the asset should be provided. This could be the case, for instance, for workforce intangible assets that need to be valued so that the multi-period excess earnings method can be applied to value another intangible asset.

### Step 2: identifying data available to be used as a valuation input

- 8.5 The process set out in Section VI should be followed.

### Step 3: selection of appropriate valuation methods

- 8.6 Section VII, paragraph 7.34 sets out the proposed approach to selection of valuation methods.

### Step 4: performing and documenting the valuation

- 8.7 The valuation should be performed by applying the methods selected at Step 3 above. Guidance from this Paper should be used in the application of the methods, Section V, and determination of valuation inputs, Section VI.