

**DEVELOPING A SET OF LEGALLY COMPLIANT
INTANGIBLE ASSET VALUATION CRITERIA AND AN
EQUATION-SUPPORTED TEV (TOTAL ENTERPRISE
VALUE) VALUATION APPROACH**

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(BA LL.B (Hons.) LL.M)

A THESIS SUBMITTED

FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

DEPARTMENT OF LAW

NATIONAL UNIVERSITY OF SINGAPORE

ACKNOWLEDGEMENTS

I would like to acknowledge the unceasing support and encouragement of my supervisor Dr Robert “Ian” McEwin whose guidance and mentoring were irreplaceable assets.

I am also indebted to Mr Gordon V Smith for the experience of co-authoring an IP Academy research project with him and co-teaching the course *IP Valuation: Law and Practice* at NUS. These experiences greatly extended my understanding of the field of intangible asset valuation that he has helped pioneer.

I would like to thank the IP Academy (Singapore) for the scholarship that enabled me to pursue this research and for the opportunity to co-author the report *A Study of Intangible Asset Valuation in Singapore: Threats and Opportunities for Singapore’s Businesses* from which much practical enterprise intangible asset valuation experience was derived.

I would like to thank NUS for the opportunity to conduct my research as a participant in their PhD research program and for the opportunity to teach. I am also forever indebted to Dr Victor Ramraj, of NUS, who in one half hour meeting in early 2005 recommended both Dr McEwin as the ideal supervisor and the IP Academy (Singapore) as the ideal sponsor of my research; both proven, by the passage of time, to have been excellent recommendations. I thank him for his support.

I would also like to acknowledge the hospitality and generosity of Prof Schon, of the Max Planck Institute for Intellectual Property, Competition and Tax Law, in Munich, who welcomed my visit to his facility, and permitted me the use of his magnificent library for the purposes of invaluable field research.

And most of all I wish to acknowledge the loving encouragement of my wife, Lissa, my two sons, Robbie and Matthew, and my daughter, Caitlin, who recognised the importance of this task and supported me every step of the way.

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SUMMARY

Intangible assets are increasingly being recognised as the most important assets held by the modern business. Expensive to develop and maintain, intangible assets, from patents and trade marks through to less formal company trade secrets and employee-based know how, demand significant, and increasing, levels of investment from their enterprise owners.

Regular brand surveys typically depict the brand assets of the world's largest food, banking and technology companies as representing anything up to 80% or more of their overall value. Basing such estimates on the gap between the share market capitalisation of companies such as Coca Cola and Microsoft, and the value of the tangible assets they hold, commentators use them to support multi-billion dollar notional valuations for the intangible 'brand' assets held by these enterprises.

And yet, while the accounting treatment of tangible assets such as plant, property and equipment is subject to well established practices, the prevailing (cost, income and market-based) approaches to intangible asset valuation consistently deliver inadequate valuation outcomes for the enterprise owners of these. This inadequacy claim is based on the simple fact that the enterprise owners of brands and other intangibles, famous or not, consistently fail to reflect anything like the notional valuations claimed for these in their asset registers and financial statements. This suggests, quite reasonably, that there is a problem with the prevailing intangible asset valuation approaches.

That there is, in fact, such a problem of inadequacy, and that this must be resolved for enterprises to get fair recognition and value for their intangible assets, is the problem, and premise, around which this research activity is based.

Scope for resolving the problem seems to be supported by the emerging set of international accounting standards that have the improvement of the recognition, treatment and valuation of intangible assets as clear objectives. The clear endorsement of a 'fair value' approach to intangible asset valuation, and a fair value hierarchy that accommodates management representations and assumptions in the assertion and defence of valuations, in such standards as SFAS 157 (US), are cases in point.

Standards on their own, however, are not enough. The legal framework in which these standards operate is of critical importance to any effort to establish a more adequate approach to intangible asset valuation. The ongoing alignment of national intangible asset rules to the new international accounting standards referred to above is necessary if real improvement is to be achieved, as is the development of a compatible legal treatment of expert witness valuation testimony and a supporting body of case law.

Using as a platform the positive trends I observed in relation to emerging accounting and legal standards, I will proceed to recommend two elements that, together, offer scope to support a more adequate approach to intangible asset valuation.

The first of these is a comprehensive set of valuation criteria that can be used, by enterprises, to support fair value-premised representations for the applied value of

their intangible assets. The second element is the overall, equation-supported, TEV (Total Enterprise Value) approach that I offer as a means for asserting and defending adequate, and fair, intangible asset valuations.

Taken together, the valuation criteria, and the TEV approach they support (being compliant with international accounting standards, and consistent with the legal framework within which these operate), is offered, to enterprises, as a means for resolving the problem of inadequacy associated with the prevailing cost, income and market-based approaches to intangible asset valuation.

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Chapter 1 Introduction: Intangible Asset Valuation and the Enterprise

I. Introduction

Intangible assets are often simply defined as “assets (not including financial assets) that lack physical substance”¹

More expansive definitions may include “the soft assets of a company. Generally, intellectual properties are those the law creates. Intangible assets are of a similar nature. Often they do not possess a physical embodiment but are nonetheless still very valuable to the success of a business”²

The notion that intellectual properties and intangible assets are created by law, or more particularly, are typically defined by legal rights (to use, own or assign them, for instance) is important. Long surrendered to the realm of accounting, the definition, treatment and valuation of intangible assets, in fact, cannot be considered without meaningful reference to the legal standards, history and authorities that have evolved over at least as long a period as the accounting principles that more obviously apply (perhaps longer if the common law roots of property, exchange and contract standards are considered).

Corresponding definitions for tangible property and assets have tended to dwell on their opposing physical or real attributes, and around these have developed layers of legal and accounting practices, rules and standards governing their relatively simple identification, treatment, exchange and valuation.

¹ As outlined in SFAS No. 141 at p.124.

² See Berman, Bruce (2002); p.277.

Where a tangible asset is defined as “something having a physical existence, such a equipment, cash, and real estate. The opposite of intangible asset”³ it is no accident that in societies focussed on agricultural, and even later industrial, goods, and the physical means for their production and exchange, a comfortable legal certainty came to exist around such considerations as the legal identity, sale, transfer, and ownership of real property. In the centuries before our societies came to grasp the concept of intangible assets, much less the notion that these invisible assets could have real value, a corresponding lack of attention to intangible assets might be understood, if not excused.

Behind the simple definitions for intangible versus tangible assets, then, might be said to exist a body of legal and accounting standards that seemed, over time, to have developed a definite real property focus and bias. Owing in part to their unbroken development from pre-modern historical roots, these 15th Century accounting standards, and even earlier legal norms addressing such core considerations as property and contract, have created the problem of inadequacy that I will contend, and most acknowledge, exists in relation to the treatment, and valuation, of an enterprise’s intangible assets.

Taken together, the definitions and accompanying standards that relate to intangible assets have tended to highlight the characteristics of ‘notionality’ and ‘uncertainty’ that have come to shape their risk consideration-laden treatment and financial standing. For the enterprise, intangible assets, while representing the greatest, and

³ Retrieved June 5, 2008, from InvestorWords.com website: http://www.investorwords.com/4871/tangible_asset.html.

increasing, percentage of their asset base, have been relatively, and notoriously, difficult to identify, manage and value. Relative to tangible plant, property and equipment, intangible assets have been treated as the hidden rather than primary assets of an enterprise.

As has been asserted, the reasons for this are rooted in a long process of accounting and legal standard evolution that lies at the heart of the problem of inadequacy that shall be examined in Chapter 2.

While the modern (20th Century onwards) definition of a business' capital is the sum of its tangible and intangible assets ⁴ this is almost the only level at which anything approaching parity or like recognition is achieved. With investment in intangible asset generation being largely consumed in the development of the human workforce (skills and capability); business brands; new technologies; and work processes; there is no question as to the importance of such investment, or the general value of such assets, to any business.

There has, however, been serious, indeed often insurmountable, barriers to gaining real recognition (on the balance sheet, financial statement, or asset list) for the value of these enterprise intangible assets. As the relative significance of physical inventory, plant, property and equipment (or classic tangible assets) to a modern enterprise declines in relation to that of its intangible assets (such as brands, know how, trade secrets, processes and confidential information) accounting standards, most obviously, have failed to evolve from their historical focus on real property. Luca Pacioli would

⁴ See Webster and Wyatt (2007); p.3.

see much of his 1494 accounting framework reflected in the modern system he is acknowledged as helping to establish.⁵

The progression from the textiles, water power, and canal transport-focussed world of early mechanisation (1770) to the software, environmental technology, and computerised space travel of the biotech era (since 2000) that Dodgson and Marceau illustrate⁶ has been dramatic and is irreversible. Nonetheless, a physical inventory of textiles and the equipment used in their production would still be more amenable to valuation (under prevailing accounting standards) than the software, staff capabilities, processes and technologies expensively invested in to compete, as an enterprise, in the biotech era.

As Webster and Wyatt correctly observe⁷, rules obliging enterprises to expense most intangible asset investments, and to lump the business benefits they derive, entirely unsatisfactorily, under goodwill, can be identified as indicators of a deep, systemic, bias against intangible asset recognition and treatment. The classic view of intangible asset investment having been made in the “expectation of future economic benefits”⁸ while logical, has in fact been used to restrict intangible asset valuations through the often oppressive operation of risk considerations that serve to reduce what expected future benefits can be reported, or reflected on a balance sheet, to negligible levels. This means that it fails to completely satisfy one vision of what constitutes a just system of intangible asset valuation, in which “it is important that the application of

⁵ As Webster and Wyatt (2007); p.5, declare, modern accounting reflects many of the practices and elements laid out by Luca Pacioli in his 1494 accounting outline.

⁶ See Webster and Wyatt (2007); p.6.

⁷ See Webster and Wyatt (2007); p.7.

⁸ See Webster and Wyatt (2007); p.8. Irving Fisher is credited with firmly linking, in 1930, intangible asset value with reasonable expectations of future economic benefits that will flow from them.

valuation methods is practicable, and second, the valuation must result in an economically ‘fair’ allocation of income”⁹

II. Intangible Assets and the Enterprise

Against a backdrop of often conflicting standards that are skewed, it would seem, in favour of real, or tangible, assets, enterprises are increasingly obliged to invest an ever greater share of their resources in generating and maintaining their intangible asset base.¹⁰

Many valuation standards have historical roots in the centuries before intangible assets were even existing in forms other than the strict categories of IP (such as patents, trade marks and copyright). Even so, many of the practices applying to asset valuation and reporting have been unforgivably slow to address the great, and growing, significance of intangible assets to the modern enterprise. Commentators have long bemoaned the absence of a comprehensive framework “that comprehensively addresses the accounting treatment of intangible assets. It has been noted that the valuation of intangible assets is complex and widely misunderstood”¹¹

This creates real difficulties for the modern enterprise. Even in relation to the relatively settled areas of standards governing the treatment of formal categories of IP (patents, trade marks and copyright), treatment and valuation can be problematic. As Jon E Hokanson and Sa’id Vakili observed in the case of technology companies, the tendency of intangible asset rules to overly differentiate between categories of

⁹ See Boos (2003); p.x.

¹⁰ See Boos (2003); p.17.

¹¹ See McGinness (2003); p.335.

intellectual property often make defining and securing an intangible asset, let alone valuing it, extremely difficult.¹²

Perhaps simply because they are, after all, invisible; intangible assets, while their significance to the modern enterprise continues to increase, remain difficult to adequately identify, recognise and value in financial statements. This is certainly true by comparison with tangible assets (such as plant, property and equipment), the treatment for which is subject to well-established rules and procedures. Well developed standards of contract and legal certainty tend to map more easily to real property characteristics, it would seem.

So far in this chapter we have introduced the concept of intangible assets, and their significant, and increasing, value in relation to modern enterprises and business combinations.

As early as the dawn of the 20th Century, in 1900, John Stuart, Chairman of Quaker, seemed to understand that the real value of his enterprise existed in the intangible, rather than physical, assets it held¹³

Despite this, at the beginning of the 21st Century, we face a situation in which these vital assets are still relatively ignored and undervalued.¹⁴

¹² See Gruner (2006); p.8. A historical focus on identifying, and distinguishing categories of IP (Intellectual Property) such as patents and trademarks has made the identification, much less valuation, of non-IP (such as trade secrets and other know-how) intangible assets a relatively neglected activity.

¹³ See Interbrand (2004); p.1.

¹⁴ See Interbrand (2004); p.1. Jan Lindemann (Managing Director, Interbrand) notes the tendency to exclude intangible assets from the key evaluation of profitability or return on investment calculations in an enterprise

While sympathetic and useful definitions that assert the underlying significance of intangible assets abound¹⁵, these have not always been reflected in the all-important standards governing their financial treatment and valuation.

III. Approach and Objectives

This research will look to examine, and ultimately address, the problem that the currently inadequate valuation of intangible assets poses to the enterprise.

In this chapter, having introduced and examined the concepts of intangible and tangible assets, and the increasing significance of the former to the modern enterprise, I have also sought to place the treatment of intangible assets in a framework of legal and accounting standard development that does indeed seem to manifest a systemic tendency towards favouring real, or tangible, assets.

In Chapter 2, I will seek to firmly establish the problem of inadequacy that characterises the treatment, and ultimately the recognition and valuation, of enterprise intangible assets; the central problem with which this research is concerned.

In Chapter 3, I will examine some of the manifestations and consequences of this problem of inadequacy, illustrated by way of a case study, this being the willingness of MNE's to engage in the international transfer pricing of their intangible assets as a means of achieving the financial benefits denied them, they might argue, under the prevailing valuation approaches.

¹⁵ See Smith (1997); p.4. Gordon V Smith defines intangible assets as all the elements of a business enterprise that exist apart from the identified tangible and monetary assets.

In Chapter 4, I will seek to demonstrate that current accounting standards, and in particular the current process of international consolidation and harmonisation that is being undertaken under the leadership of such bodies as the IASB and FASB , actually have within them scope for addressing the historically inadequate valuation of intangible assets problem.

In Chapter 5, I will outline specific instances of US case law, and Australian and Singaporean standards and regulations, This is part of a legal framework that can be relied on to support the emerging single set of international accounting standards that, in turn, can be used to foster a dramatic and sustained improvement in the recognition and valuation of enterprise intangible assets.

In Chapter 6, a set of business valuation criteria that can be used by enterprises to defend management representations of fair value for their intangible assets will be provided.

Chapter 7 will contain a detailed outline of the TEV (Total Enterprise Value) approach that I have developed to allow a fuller recognition of the applied value of enterprise intangible assets; an equation supported model and approach that I contend is consistent with the developing legal framework and accounting standards that now govern the treatment of intangible assets.

In Chapter 8, I will look at future trends, and particular possible applications of the applied value TEV approach outlined in Chapter 7. The services, software and financial tools described will be enterprise-focussed applications designed to assist

business owners and managers extract maximum benefit from their crucial intangible asset base. I will also contemplate future activity, beyond the specific scope of this research, and make recommendations for capability development at the enterprise level that might help ground the potential utility of the TEV applied value approach. This will include the development of checklists and process support for enterprise owners and managers.

In Chapter 9, I will then seek, in conclusion, to restate the objectives and approach underpinning this research, and readdress the central problem of inadequacy affecting intangible asset valuation. I will also reprise the elements of the legal framework, international accounting standards, and my valuation criteria-supported TEV model, and its applications, that I offer as a solution to this problem.

IV. Conclusion

In valuing any intangible asset, context is key, as are supportable expectations of future benefits. At an enterprise level, the restrictive operation of risk factors, unmitigated by criteria that might help defend management representations, can make these critical future benefits hard to quantify or defend. This leaves the enterprise owners of intangible assets with an enormous problem as they increasingly asked to invest more resources in the generation of intangible assets for which corresponding recognition and book value can be impossible to depict. Accounting standards seem at times unhelpful, at least relative to the comprehensive treatment of tangible assets (such as plant, property and equipment). This discrimination is all too often mirrored in the legal (particularly contractual) framework's inherent comfort with transactions involving real, rather than intangible, property.

Chapter 2 The Problem of Inadequacy

I. Introduction

The last chapter introduced the concept of intangible asset valuation, and the growing significance that intangible assets, and their effective valuation, have to the modern enterprise. As the relative value of plant, property and equipment to the total value of a modern business diminishes¹⁶, enterprises are operating in an environment in which the great, and increasing, majority of their valuable assets, such as IP (Intellectual Property), and IA's (Intellectual Assets, of other types, such as trade secrets and know how) are intangible.

This chapter aims to establish, through a comprehensive review of the existing legal and accounting valuation literature, that the prevailing approaches to the valuation of intangible assets are inadequate. This inadequacy is widely recognised as a problem. It is an issue of real, and growing, concern for enterprises that are obliged, but often unable, to assert an appropriate level of recognition and value for intangible assets that draw on significant human and financial resources in their generation and maintenance.

II. The Problem of Inadequacy

The problem of inadequacy that we shall address is a deeply rooted one. It has developed out of accounting standards and treatment that historically have had as their overwhelming focus real, tangible, and financial, assets, rather than the intangible ones increasingly produced by the modern information-age enterprise. It is perhaps no surprise that accounting has proven to be more

¹⁶ See Interbrand (2004); p.4. McDonalds brand is estimated to represent 70% of the firms stock market value but is not recognised on the balance sheet.

sued to the management of plant, property and equipment, than self-generated IP and brands.

Deriving, and defending, fair value¹⁷ for their intangible assets is possibly the most difficult task confronting enterprises today. This makes any obstacles, or inadequacies, posed by, or rooted in, prevailing accounting methods all the more burdensome.

The problem can be perhaps best observed in, and explained by, some of the limitations of the basic valuation approaches to intangible valuation themselves. The three approaches to determining the fair value of assets, liabilities, and enterprises are the 1) cost, 2) market and 3) income approaches. An auditor (reviewer) perspective of these in operation was provided in *Auditing Fair Value Measurements and Disclosures: A Toolkit For Auditors*, produced by the AICPA.¹⁸

It is important to note that any, and all, of the approaches can be used for establishing fair value, and, generally, specialist valuers will use more than one when determining enterprise, or specific asset, value. Due to the notional, or assumption-laden, nature of many valuations, results derived using different methods may be used to corroborate each other, or demonstrate consistency in relation to, valuation results. Indeed, under the US Uniform Standards of

¹⁷ See SFAS 141 (2001);p.123. Defined as the amount at which an asset can be bought or sold in a current transaction between willing parties.

¹⁸ The AICPA or American Institute of Certified Public Accountants produces Statements on Standards for Valuation Services in the US.

Professional Appraisal Practice (USPAP)¹⁹, expert valuers are required to use all three approaches, and must explain why one, or more, of the approaches weren't used if this is the case in any particular valuation exercise.

III. The Valuation Approaches

The three main valuation approaches are:

1. **The Cost-Based Approach** – the general principle behind the cost-based approach is the valuation of an asset or enterprise based on the replacement cost of the asset, or collective assets of the enterprise. The replacement cost being “what it would cost today to acquire a substitute asset of comparable utility”²⁰, it is important to take note of the various methods that can be used to calculate this.

The cost-based approach seems fairly simple. It's focus on replacement cost for substitute comparable assets suggests a fairly non-complicated enquiry. In fact, the uniqueness of many intangible assets, and related transactions involving them, can make replacement cost quite difficult to determine. That said, there are a number of methods that are employed to derive cost-based results. These include:

- Fair Market Value in Continued Use – the fair market value of an item and its contribution to, for example, an operational facility or business. This usually amicable transaction between a willing buyer and willing seller presupposes

¹⁹ USPAP are produced by The Appraisal Foundation (authorised by the US Congress as the source of US appraisal standards and appraiser qualifications).

²⁰ See AICPA (2002); p.29.

that the current use of the asset will be maintained by the purchaser and that all other related assets will continue to be available, in their current forms and uses, as well. Especially attractive in enterprise level transactions when there is adequate 'similar or comparable use' data available.

- Replacement Cost New – the current cost, at the theoretical date, of the valuation, for a similar new asset having the closest assessable utility. This tends to disregard loss of value for age or wear and tear and is, as such, “generally not used for business valuations or fair value measurements made for the purposes of FASB Statement No. 141, FASB Statement No. 142 (both of which are dealt with in detail in Chapter 5), or FASB Statement 144 *Accounting for the Impairment or Disposal of Long-Lived Assets*.
- Depreciated Replacement Cost New – the most common method that, unlike the Replacement Cost New method, does make adjustments for depreciation based on certain physical, functional and economic factors that reasonably result in loss of value, such as wear and tear and lack of maintenance.

The cost-based methods limitations affect its usefulness. The strict focus on replacement cost 'on the valuation date', with little or no accommodation for such factors as the time value of money, inflation, or capitalised interest (all of which could come into play in an actual replacement-related scenario), or how difficult it can actually be to find an exact substitute, for the purposes of comparison, for what are often unique intangible asset transactions, can make

the apparently simple cost-based approach harder to deploy than might appear to be the case.

2. The Market-Based Approach – the market-based approach bases the fair value of an asset or enterprise on what other similar assets or enterprises, or comparable transaction involving those, indicate it to be. Financial statement data and metrics are frequently relied upon to support fair value-establishing comparisons. These include:

- Price to earnings ratios

- Price to cash flow ratios

- Price to revenue ratios

- Price to assets or equity ratios

- Market Value of Invested Capital (MVIC) to Earnings Before Interest and Taxes (EBIT) ratios

- MVIC to Earnings Before Interest, Taxes, Depreciation and Amortisation (EBITDA) ratios

- MVIC to revenue ratios

Nonfinancial metrics can also be used. These include:

- MVIC to future estimated revenue ratios
- Price to number of employees ratios²¹

Like the cost-based approach, the market-based approach is limited by the very real difficulty in finding actual, rather than theoretical, truly comparable enterprises, assets or transactions. It is in recognition of this that the use of supporting information generally, and non-financial metrics in particular, has been extended, perhaps grudgingly if the rule that these should only be used if they are “generally accepted in the industry”²² is any guide.

Even with this scope for including an expanding set of information types and data, otherwise ‘similar’ enterprises, and their related intangible assets, at different (for example, early or late) stages of business development, or depreciation, can produce huge variances in relation to any or all of the ratios and metrics outlined above, making the simple comparisons upon which the market-based approach relies sometimes much harder to bear out than advocates might suggest.

- 3. The Income-Based Approach** – the income-based approach views asset or enterprise value as based on expectations of future income (or incomes) and cash flows. Using both the Discounted Cash Flow (DCF) and Capitalisation-

²¹ A calculation of enterprise value on a ‘per employee’ basis can be used for comparative purposes.

²² See AICPA (2002); p.32.

Of-Earnings methods, the future-oriented income-based approach looks to derive a present fair value by applying an agreed rate of discount (based on risk factors and the like) to reasonable, and expected, future economic benefits, or income. The streams, or multiple streams of income, or periodic cash flows, are those attributable to the asset being valued.

Importantly, the cash flows to be discounted are discrete, rather than perpetual, and able to be characterised against several established patterns, namely:

- Equal in each period – for example cash paid against a pre-set loan
- Equal in each period with a final balloon payment or residual liability
- Growing each period by a specified amount or percentage – such as programmed CPI (Consumer Price Index) or % indexed arrangements
- Unequal and occurring at irregular intervals ²³

Assessing the risks operating in relation to these expected income streams and cash flows can be difficult, and is one of the great challenges in employing the income-based approach. Often accommodating risks by including consideration for them in the discount rate applied to the incomes and cash flows to derive present fair value for these (in a ‘the greater the risks identified, the greater the discount’ fashion) valuation experts often rely heavily on management inputs.

²³ Harder to project, such cash flows are difficult to incorporate into income method-related calculations.

The alternative, or the expected cash flow method, again relies heavily on the identification of possible future events or outcomes, and associated risks, but reflects these in estimated income streams and cash flows directly, with a standard discount rate to applying to all of these risk-weighted streams across the board. Both income-based approach methods rely heavily on key assumptions such as forecasted income streams and cash flows, and the identification and likelihood of risk-based threats to these.

The problem of inadequacy can, at times, look like a deliberate accounting policy; so consistent, and constant, can the negative reactions of established accounting to genuine movements to improve intangible asset recognition and valuation seem to appear. Serious reform efforts have been undertaken, and suppressed, before. What had been declared to be the emergence of scientific intangibles management ²⁴ was soon overwhelmed by traditional accounting; victim of a clampdown against inflated asset valuations in the context of a series of convenient scandals. These were somehow turned from examples of weak reporting controls, and a serious lack of accounting safeguards, to a campaign against intangible asset valuation in general, wrongly justified by particularly infamous asset value inflation by such companies as Enron.

No wonder then that observers are moved to assert that accounting seems to manifest, and demonstrate, a deliberate bias against intangible assets ²⁵ taking advantage of almost any opportunity to narrow and limit their recognition. For

²⁴ See Harrison and Sullivan (2006); p.15. They outline the work of Itami (Japan) and Sveiby (Sweden) in the 1980's which focussed on identifying the enterprise value represented by the competencies and knowledge of employees.

²⁵ See Harrison and Sullivan (2006); p.16. Established GAAP principles tend to be "difficult to apply to intangibles" being designed sensitive to tangible asset characteristics.

just as the above-noted significance of intangible assets to the enterprise was gaining prominence and real traction, spectacular accounting scandals, such as Enron, were used not only to appropriately highlight, and punish, the acts of individual or corporate mismanagement or misbehaviour involved, but to support often knee-jerk reactions (such as the Sarbannes-Oxley legislation) that constrained intangible asset valuation.²⁶

Under the guise of improving accountability and limiting the irresponsible inflation of asset values, in spirit if not specifically as it referred to real rather than fictitious asset value, such legislative efforts inevitably wound back what was a promising start to a genuine, and scientific, approach to intangible asset management and recognition.

As the overall reporting of enterprise asset value became micro-managed and limited, with an exclusionary focus on ‘real rather than illusionary assets’, it was hardly the time, one would suggest, to agitate for increased recognition of intangible assets and their value²⁷

All three (cost, market and income-based) prevailing valuation approaches were left in place, despite the promising 1980’s work that looked like supporting the “evolution of intangibles management, as a discipline”²⁸ to continue to manifest particular inadequacies in relation to an appreciation, and

²⁶ The Sarbannes-Oxley legislation has generally been regarded, in its opposition to notional valuations, as representing an obstacle to improved intangible asset treatment and recognition.

²⁷ See Harrison and Sullivan (2006); p.16. They note the tendency of CFO’s confronted with the task of valuing intangible assets as being unwilling to spend the time on dealing with assets that are often not reflected on the balance sheet.

²⁸ See Harrison and Sullivan (2006); p.15.

valuation, of intangible assets. Characterised, as intangible assets often are, by uniqueness (the enemy of establishing replacement cost or finding truly comparable assets) and risks, such as difficult to predict 'technological redundancy' rather than the more straight line depreciation or wear and tear that affects more physical or tangible assets, this problem of inadequacy proved resilient. Intangible assets present an especially difficult valuation challenge; a challenge that has, all too often, not been met, leaving us with a situation in which the value of intangible assets, and their contribution to enterprise value, is consistently less than adequately recognised.

IV. The Problem of Inadequacy and Legal and Accounting Standards

Moving from the general inadequacy of prevailing valuation approaches as means for recognising the unique characteristics, and value, of intangible assets to deficiencies at a specific legal and accounting standard level, obstacles built in to generally accepted accounting principles (GAAP) worldwide serve to limit the recognition of intangible asset value, through the operation of restrictive rules applying to their treatment.

The categorisation, or identification, of intangible assets tends to mirror, and favour, the formal classes of intellectual property, such as patents, copyright, and trade marks. By contrast the value of the general intangible assets of an enterprise, including brands, are often ignored or just lumped under goodwill. The related historical tendency to recognise acquired, but ignore self-generated, intangible assets also restricts the recognition of some key enterprise assets (such as brands and trade marks).

The recently introduced annual impairment testing of intangible assets is a positive step towards recognising that intangible assets can have indefinite lives and value over extended periods for the enterprise. The previously imposed US requirement to give intangible assets an arbitrary maximum life of 40 years²⁹ (regardless of scope for these to have indefinite, and renewable, income streams and cash flows), and amortise them accordingly, has served to historically limit the potential financial value of intangible assets to the enterprise owners of these.

Similarly, the tendency to recognise as sufficiently transferable only those intangible assets that, again, fit easily into such commonly traded formal intellectual property categories as patents, copyright, and associated rights has restricted the scope for the full recognition of whole classes of intangible assets.

Taken together, such standards have served to severely limit the extent to which many types of enterprise intangible assets can contribute, formally and financially, to the calculation of enterprise value. The recognition of intangible assets is all too often premised on standards “so narrow, that few, if any intangible assets or elements of intellectual property are ever reflected on a balance sheet”³⁰

²⁹ See SFAS No. 142 (2001); which notes at Summary (p.2) that the traditional mandatory ceiling of 40 years (under Opinion 17) for the life of an intangible asset no longer applies. Assets may now, were supportable, have infinite lives.

³⁰ See Smith (1997); p.25.

The strictly enforced practice of expensing Research & Development (R&D) investment, rather than treating it as capital investment vital to innovation, necessarily limits the value, in a book value or reportable sense, that such investment, with the associated intangible assets, can have for the enterprise. Only enterprises acquiring in-process R&D are given any latitude (and here only where real expectations of future benefit can be supported) to recognise real value and include amounts for these in financial statements. And even this is restricted, as under Financial Accounting Statement No.142 (FAS 142) intangible asset amounts assigned against in-process R&D “that are judged to have no alternative use beyond a specific R&D project (that is cannot be said to deliver post project future benefits) are to be charged to expense at the acquisition date”³¹. This effectively claws back, or negates, the financial benefit that the enterprise stood to enjoy in the form of intangible asset value reflected in its financial statements.

The unconsolidated nature of such specific rules and standards, which tends to camouflage the overall inadequacy of accounting standards, as a whole, to deal with intangible assets, and their valuation, is often criticised, or at least recognised. In jurisdiction after jurisdiction, commentators, especially those focussing on the needs of the enterprise owners of intangible assets, bemoan the situation. Paul McGinness, in *Intellectual Property Commercialisation: A Business Manager’s Companion*, noting that the valuation of intangible assets “is complex and widely misunderstood”³² then proceeds to identify a root cause of the disjointed, and ultimately inadequate, accounting treatment of

³¹ See Smith and Parr (2004). *New Developments in Accounting for Intangible Assets, Valuation of Intellectual Property and Intangible Assets* 3rd Ed. 2004 Cumulative Supplement; p.4.

³² See McGinness (2003); p.335.

intangible assets, when he asserts that “there is currently no Australian accounting standard that comprehensively addresses the accounting treatment of intangible assets”³³. It is the lack of a unified, comprehensive, approach that, up to now, has denied accounting standards scope to adequately treat, recognise and value enterprise intangible assets.

V. Intangible Asset Valuation: The Framework and the Concept of Value Accounting, The Law and Valuation

As outlined in the Sanders and Smith research project “were it not for the need to reflect *value information* in accounting statements and financial reports, the appraisal of intangible assets would be limited to transaction support (what is a fair price to pay or receive) and litigation support (quantifying damages)”³⁴

It is the scope to reflect value information in accounting statements and financial reports that drives valuation activity and serves, in the context of the TEV (Total Enterprise Value) model that will be outlined in Chapter 7 of this thesis, as an essential trigger for asserting adequate valuations for enterprise intangible assets.

Divergent national accounting standards are now converging, greatly assisted by the alignment of these to the new set of international accounting standard, outlined in Chapter 4, and the work of such bodies as the IASB³⁵. Out of this process is emerging a more consistent approach to financial reporting.

³³ See McGinness (2003); p.335.

³⁴ See Sanders and Smith (2008); p.7.

³⁵ The IASB, or International Accounting Standards Board, produces IASs, the International Accounting Standards

The valuation of intangible assets (including intellectual property), and the financial reporting of these, is greatly assisted by the focus that the developing set of international accounting standards is increasingly paying to them.

While “it has long been recognized that the *value* of a business enterprise is unrelated either to the rendition of its assets in the books of account, or to the *costs* incurred to assemble its underlying assets. The value of a business enterprise is measured in an external marketplace”³⁶, the ability to draw on market expectations to support intangible asset valuations has been restricted. The historical pressure to expense intangible asset development costs takes many intangibles out of play as capital assets. Restrictions on otherwise reasonable expectations of future benefits that might be derived from enterprise intangibles (due to risk considerations that all too often conspire to make the reportable expected future benefits fractions of what they might appear to guarantee³⁷) also reduce the performing value of these.

Business financial statements are all too often obliged to record assets at cost. This is especially harsh on investments in the ‘softer’ intangible asset-related areas of staff and technology development, as a simple cost approach fails to reflect the enormous enterprise value these investments can deliver. The concept of “goodwill”³⁸ which is supposed to reconcile the difference between the recorded cost of underlying assets and the value of these assets in the

³⁶ See Sanders and Smith (2008); p.7.

³⁷ Such considerations as the risk of technology compression or redundancy and scope for termination can sharply reduce the notional value of even large contracts and their associated future earnings.

³⁸ Goodwill is the value of the business attributable to its intangible assets, being the portion of the market value of a business not directly attributable to its tangible assets.

market does not, in fact, reflect anything like the actual value of these intangible assets to the enterprise.

Given this situation, and the fact that there can be a huge gap between the cost and real, or actual, value of enterprise intangible assets, how this gap is resolved is of key significance to their enterprise owners. A negative response might be to never reflect value (especially if this is ‘too hard’) and only cost. The disincentive to invest in intangible assets that this might logically be seen to represent makes it necessary to remove identified obstacles to adequate intangible asset valuation.

If real ‘extra value’ (rather than just goodwill) is to be reflected for intangibles, above the level of cost (which would seem essential if only to encourage, on the basis of the profit principle, continued and essential investment in them) how can value and cost co-exist?

Accounting for Value versus Cost

There are problems reconciling asset value and cost, at the level of the enterprise, and enterprise financial reporting. When an enterprise acquires an asset, the price paid is assumed to equal the asset’s value. This acquisition value (which equals its cost at that instant) is allowed to be recorded on the balance sheet.³⁹

Almost immediately after this theoretical moment of purchase, though, the asset’s value begins to change due to the operation of external conditions. This

³⁹ Such standards as SFAS 141 and 142 (2001) are therefore concerned with identifying and recording the acquisition value of acquired intangible assets.

is especially true of intangible assets upon which the operation of multiple risk factors serve to drastically reduce the expected future economic benefits that can be asserted, and reported.

As cost and value diverge, accounting standards have all too often made the historically inadequate ‘choice’ of focussing on the cost (through expensing R&D and intangible asset generating activity) rather than engaging in the more difficult, but necessary, task of properly valuing intangible assets.

Valuation and Assets

Some of the rules that determine what can be included as assets on the balance sheet include:

- Assets are probable future economic benefits obtained or controlled by a particular entity as a result of past transactions or events.
- An asset has three essential characteristics: (a) it embodies a probable future benefit that involves a capacity, singly or in combination with other assets, to contribute directly or indirectly to future net cash inflows, (b) a particular entity can obtain the benefit and control others’ access to it, and (c) the transaction or other event giving rise to the entity’s right to or control of the benefit has already occurred.
- The common characteristic possessed by all assets (economic resources) is “service potential” or “future economic benefit,” the scarce capacity to provide services or benefits to the entities that use them. In a business

enterprise, that service potential or future economic benefit eventually results in net cash in-flows to the enterprise.

- Assets of an entity are changed both by its transactions and activities and by events that happen to it. [It obtains them by exchanges of cash or other assets.] It adds value to noncash assets through operations by using, combining, and transforming goods and services to make other desired goods and services. An entity's assets or their value [may be] increased or decreased by other events that may be beyond the control of the entity for example, price changes, interest rate changes, technological changes taxes and regulations.
- Once acquired, an asset continues as an asset of the entity until the entity collects it, transfers it to another entity, or uses it up, or some other event or circumstance destroys the future benefit or removes the entity's ability to obtain it.

While these rules and standards are supposed to apply equally to all assets, tangible and intangible, they collectively manifest a deep bias against intangible assets.

The more developed and settled rules for amortising (or aging off) tangible assets and reflecting the financial status of plant, property and equipment, generally, on the company financial statement contrasts sharply with the historical difficulty enterprise owners face treating intangible assets.

No wonder then that Gordon Smith and I were able to assert a well established tendency for accounting practices to resist “extending recognition to intangibles”.⁴⁰

Background – Intangible Assets

In revisiting the relative definitions of tangible and intangible assets I examined at the beginning of Chapter 1, enterprise intangible assets can therefore be defined as:

*All the elements of a business enterprise that exist separately from monetary and tangible assets. They are the elements, separate from working capital and fixed assets, that give the enterprise its character and often are the primary contributors to the earning power of the enterprise. Their value is dependent on the presence, or expectation, of enterprise earnings. They can shape, and reflect, the overall performance of the business and for that reason are typically the last key assets to be developed and the first to degrade when the enterprise is failing.*⁴¹

The importance of the law, and legal principles, to the concept and status of intangible assets is demonstrated by the fact that most intellectual properties or intangible assets are constituted of, or revolve around, specific legal rights, contractually determined relationships, or formal categories of IP (such as patents, trade marks or copyright).

⁴⁰ See Sanders and Smith (2008); p.9.

⁴¹ See Sanders and Smith (2008); p.9. Intangible asset development can be a focus of much of the preliminary investment in an enterprise and, without maintenance can be the first core assets to be neglected and degrade.

Legal rights, such as those created by general contractual, or technology licensing, agreements are often the determinants of an intangible assets parameters and value. Contractually defined relationships such as those between an enterprise and its suppliers, customers and staff are often key to business performance, and extremely valuable. This can be monetised in the context of such things as client lists.

Enterprise intangible assets, which might consist of the formal and legally well defined IP categories of patents, trade marks, copyrights and confidential information, and an enterprise's trade secrets and know how, properly protected, can generate value. Protected from infringing misuse, these specific types of intangible assets can be licensed for use, transferred or sold. These uses and rights can generate reportable value.

Further, a "business enterprise that owns intellectual property can either internally utilise its benefits or transfer interests in the property to others who will exploit it...As with other types of intangible property, not all intellectual property has value. Its value is usually determined by the marketplace, either directly or indirectly.⁴²

The status of intangible assets is not just an accounting issue. Legal principles and tests apply directly to the recognition, treatment and, ultimately, valuation of these key enterprise assets. Indeed:

⁴² Smith and Parr (2005); p.21.

“An intangible asset shall be recognized as an asset apart from goodwill if it arises from contractual or other legal rights (regardless of whether those rights are transferable or separable from the acquired entity or from other rights and obligations). If an intangible asset does not arise from contractual or other legal rights, it shall be recognized as an asset apart from goodwill only if it is separable, that is, it is capable of being separated or divided from the acquired entity and sold, transferred, licensed, rented, or exchanged (regardless of whether there is an intent to do so). For purposes of this Statement, however, an intangible asset that cannot be sold, transferred, licensed, rented, or exchanged individually is considered separable if it can be sold, transferred, licensed, rented, or exchanged in combination with a related contract, asset, or liability. For purposes of this Statement, an assembled workforce shall not be recognized as an intangible asset apart from goodwill.”⁴³

The importance of legal or other contractual rights and the separability test as a determinant of whether or not an intangible asset is even recognisable (which shall be further discussed in Chapter 6), is clear.

As was previously discussed, the general rule that any and all costs associated with “internally developing, maintaining, or restoring intangible assets (including goodwill) that are not specifically identifiable, that have indeterminate lives, or that are inherent in a continuing business and related to an entity as a whole, shall be recognized as an expense when incurred.”⁴⁴

⁴³ See SFAS No. 141 (2001); Paragraph 39.

⁴⁴ See SFAS No. 142 (2001); Paragraph 10.

To summarise, intangible asset valuation seems to have been limited by an accounting tendency to focus on cost, rather than on encouraging or accommodating a more expansive (and difficult) appreciation of an intangible asset's value to the enterprise. This is a far observation when you consider that:

- Self-created intangibles are to be excluded
- Only intangibles arising from contractual or legal rights are recognized
- Only intangibles that are separable (i.e. can be sold, licensed, rented, exchanged) are recognized
- Only such intangibles acquired from others are shown on financial statements.

Valuers and Appraisers: The Practice of Intangible Asset Valuation

The significance of context and the unique objectives and factors relevant to each valuation exercise, which attempt to provide a supportable estimate of future economic benefits that the subject assets might generate has already been explored.

As demonstrated in the table (below), in the standards that govern appraisal or valuation activity there tends to be much more focus on the ethical standards of a valuation report and reporter than a clear commitment to deriving an adequate value for the assets, including intangible ones, being examined.

Intellectual Valuation Report Certification ⁴⁵

<ul style="list-style-type: none"> ▪ the statement of facts are true and correct 	<ul style="list-style-type: none"> ▪ the valuation was prepared in accordance with USPAP
<ul style="list-style-type: none"> ▪ the appraiser has no interest in either the target IP or technology or either of the parties who may use the valuation 	<ul style="list-style-type: none"> ▪ the engagement of the appraiser was not contingent upon developing or reporting predetermined results
<ul style="list-style-type: none"> ▪ the fee payable to the appraiser is not influenced by the valuation, the achievement of any particular result or the occurrence of an event directly related to the use of the valuation report 	<ul style="list-style-type: none"> ▪ the analysis, opinions and conclusions are limited by the express assumptions and limiting conditions and are impartial and unbiased.

These may outline appropriate professional and ethical standards of conduct for the appraisal professionals, but do nothing to engender a focus on identifying and defending the highest possible value for an enterprise’s intangible assets.

It is to this end that the TEV (Total Economic Value) model, to be outlined in Chapter 7, will seek, through the consolidation of existing, and emerging global, standards, and the support for an ‘applied layer’ of intangible asset value (supported by the valuation business criteria outlined in Chapter 6), to help resolve this inadequacy.

The need to do this, as already discussed, is urgent; and increasingly so for enterprises that are now, more than ever, largely the sum of their intangible asset parts. While accounting approaches to intangible asset valuation may resist this, the “business and legal world has changed.....from a society and an

⁴⁵ Extracted from McGinness (2003); p.355.

industrial focus based on hard asset, hard work and machinery and equipment to one that owes its strength, growth and future to a much less visible group of attributes”⁴⁶.

Given that intangible assets consume a significant amount of enterprise resources (human and financial) as they are developed (R&D), protected (registration/legal costs), maintained (renewals/management) and exploited (commercialisation/legal costs), a failure to adequately recognise and value these on the balance sheet, due to the types of historical accounting obstacles we have observed, are all the more frustrating, and financially damaging, to the enterprise. The type of certainty that our real property system has developed⁴⁷ for tangible assets such as land, is still denied to increasingly economically more significant intangible enterprise assets. Indeed, as a result of recent scandals (such as Enron and WorldCom) it might even be the case that, in some respects, stringent new recognition and accounting rules could even be used to restrict, even further, the valuation of assets that are other than demonstrably ‘real’⁴⁸.

It is tempting, as noted previously, to see the appearance of the stringent new recognition and accounting rules that inevitably emerge as reactions to accounting scandals as detrimental to intangible asset recognition and their adequate valuation; a constant return to a tangible asset-premised accounting past. In their work, *An Accounting Approach For Intangible Investments*,

⁴⁶ See American Bar Association (2005); p.3.

⁴⁷ See Landes (2003); p.18, who notes that intangible assets lack the certainty and fixability of land, and are relatively expensive to define and protect.

⁴⁸ See Berman (2002); p.483, where he notes that it requires significant patience and resolve to define and assert the value of intangible assets in the face of the lack of business processes that assist and legislation (such as Sarbannes-Oxley) that seek to limit the valuation of notional assets.

Associate Professors Beth Webster and Anne Wyatt⁴⁹ note that the basic principles of asset accounting, set down by Luca Pacioli in 1494, “are little changed today”⁵⁰. The so-called ‘traditional accounting’ approach, as we have already observed, perhaps because of its roots in these early times, often appears inadequate in its scope to accommodate intangible assets. Because their existence, let alone value, is much less easy to identify compared to the tangible physical assets so central to historical accounting, they have been, it has been suggested, relatively ignored. As intangible assets have become the largest, and an increasing, component of enterprise value⁵¹ this inadequacy cannot be tolerated. The practices of expensing most intangible investments (such as R&D) and lumping these together (under goodwill) is no longer acceptable.

The prevailing, and inadequate, accounting and valuation approaches to valuing intangible assets leave too many questions unanswered. Without an accurate intangible asset value, we cannot calculate, or estimate, a rate of return based on the relationship between intangible asset value and the investment expended on them. Enterprise managers, investors, regulators and whole economies are left dealing with what are now our key assets without adequate information defining them and their fair value⁵².

⁴⁹ See Wyatt and Webster (2007).

⁵⁰ See Wyatt and Webster (2007); p.5.

⁵¹ See Wyatt and Webster (2007); p.9 where they claim a growth from 10% to 25% in the % of total Australian listed company assets that are intangible; even in a current environment where, as I contend, these are currently, inadequately, recognised and valued.

⁵² See Wyatt and Webster (2007); p.11.

Webster and Wyatt illustrate well the information and treatment vacuum that characterises the treatment and recognition of intangible assets⁵³. They also identify the shortcomings of accounting central to the problem of inadequacy characterising the valuation of these, in the context of the particular Australian accounting standards with which they concern themselves. Under Australian intangible asset definition rules⁵⁴ the requirements imposed serve to effectively limit the scope for intangible asset recognition⁵⁵. Under the already-mentioned AASB 138, the requirements to support the existence of, much less quantify, expected future benefits that might reasonably flow from an intangible asset weigh heavily on enterprise owners. Often required to make representations for these on their own (and feeling unsupported and legally exposed as we saw demonstrated in my Singapore Enterprise Survey issues list) making this step too onerous can discourage enterprise owners from identifying and reflecting intangible asset value in their financial statements. This is consistent with many of the particular obstacles to intangible asset valuation already identified⁵⁶

Professional service providers, academics, and authors who work to identify, support, and improve the recognition of, intangible asset value are consistent in their condemnation of the inadequacy of current accounting, and specifically, valuation approaches. The recognition of the value of internally

⁵³ See Wyatt and Webster (2007); p.13. These include the fact that intangible asset information is not subject to a common measurement system; does not employ consistent terminology; and can be expensive to collect, maintain and validate.

⁵⁴ See Wyatt and Webster (2007); p.21. AASB 138, in its focus on the significance of expected future benefits and control of the intangible asset nominates risk-limited valuation criteria, and fails to recognise total investment in the intangible as a factor or input for calculating value.

⁵⁵ See Wyatt and Webster (2007). The inability to adequately defend reasonable expectations of future benefits from risk factors restricts the valuations enterprises managers feel able to support for intangible assets/

⁵⁶ See Wyatt and Webster (2007); p.22. The survival of rules against recognising the value of internally-generated intangible assets, and the habit of expensing these (which necessarily limits the scope to get a return on such investment), are particularly onerous.

generated intangible assets (such as brands) being particularly constrained,⁵⁷ branding experts are particularly fierce critics⁵⁸. Noting the trend to increasingly outsource the physical production of goods and focus on brand development and recognition, brand value advocates and commentators depict an increasingly unsatisfactory situation. This is one in which the real and perceived value of 'the brand' is becoming, or already is, the greatest single asset of the enterprise that owns it, but is unrecognised as a specific and performing intangible asset; effectively lumped in under goodwill in the financial statements. In the case of Mercedes Benz, and other prominent brand owners⁵⁹ where the brand represents some 70% or more of the market value of the company, not being able to identify this as a specific asset, much less recognise the value of this internally generated intangible asset on the balance sheet, is an increasingly unacceptable situation⁶⁰.

VI. The Problem of Inadequacy and the Enterprise

The lack of (adequate recognition and valuation) reward for enterprises who undertake to better manage their intangible assets, under the prevailing accounting and valuation approaches, is directly linked to very low overall rates of formal assessment and management⁶¹. This is a direct consequence of the problem of inadequacy with which this research is concerned.

⁵⁷ See Wyatt and Webster (2007); p.27. Enterprises are still prohibited from recognising the value of internally-generated brands, even though these are often the most valuable intangible assets a business possesses.

⁵⁸ See Verlinden, Smits and Lieben (2004); p.3. Thomas Gad observes that a brand with a future is usually regarded as an enterprises greatest asset, which most recognise but valuation practice seems to ignore.

⁵⁹ See Verlinden, Smits and Lieben (2004); p.15. A value of USD 21.37 billion was estimated for the Mercedes Benz brand in the Interbrand survey of July, 2003.

⁶⁰ See Verlinden, Smits and Lieben (2004); p.17. Reasonable when it is now commonly accepted that more than 50% (a range of 50-80% is widely asserted) of total enterprise value is related to a businesses intangible assets.

⁶¹ See Verlinden, Smits and Lieben (2004); p.18. Insufficient attention is often paid to the treatment and maintenance of intangible assets that can appear to lack clear paths for generating a clear return on investment for the business.

Andreas Resch, in *Valuation of Internet Companies – Difficult or Impossible?*, considered how an enterprise, and its intangible assets, are typically treated when efforts are undertaken to establish its overall value. Dividing the three (cost, market and income-based) valuation approaches we have already considered into two categories:

- 1) approaches based on “asset values and the company’s book values”; and
- 2) approaches based on “the company’s ability to generate returns and the analysis of the expected future returns”⁶²

Resch found significant weaknesses and issues with both. For the types of reasons already identified, such as the lack of true comparables and the uniqueness of the intangible assets of an enterprise in particular, the valuation approaches fail to give a consistent, much less adequate, valuation for enterprise.

Even in their refined forms (such as Discounted Cash Flow Analysis as it relates to the income-based valuation approach favoured by financial industry users), “all the inputs are subjective and depend on individual opinions. Therefore different individuals applying the discounted cash flow approach will arrive at different values”⁶³

⁶² See Resch (2000); p.16.

⁶³ See Resch (2000); p.25.

The often entirely arbitrary ‘lives’ granted to intangible assets by tax authorities and legislators are themselves a huge obstacle to their adequate valuation and usefulness. Historical limits⁶⁴ meant that “lives allowed for computing tax depreciation are shorter than economic lives”⁶⁵. When an intangible asset can have a useful economic life far longer than any arbitrary limit placed on it, such artificial limits on their longevity is inappropriate. Enterprise owners of such intangible assets are not accorded fair value for them under such circumstances, as it is true that “the longer the life, the more valuable the asset. The shorter the remaining life, the less valuable the asset”⁶⁶

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Clearly, when risk considerations, generally, and the absence of easily identified ‘true comparables’ for often unique intangible asset transactions, makes adequate valuations for intangible assets under the cost, market and income-based approaches difficult, more practical approaches are required.

Like the TEV (Total Economic Value) approach to be outlined in Chapter 7, an approach, supported by relatively simple valuation criteria, that allows valuations that are based on the full range of available inputs, including assumptions and facts that reflect the best knowledge of the reporting entity, must be developed and protected by international accounting standards.

⁶⁴ Such as the mandatory 40 year lifespan limit on intangible assets under Opinion 17.

⁶⁵ See King (2003); p.81.

⁶⁶ See King (2003); p.81.

Such a practical approach to intangible asset valuation can and must be encouraged. It could help overcome some of the harshest constraints imposed by the prevailing valuation approaches. These include the overly stringent use of risk factor analysis to often nullify expectations of future benefits that the enterprise owners of intangible assets might otherwise reasonably assert.

Another burden is the general uncertainty attached to intangible assets and the resultant limitations on some of the financial scope for reporting and exploiting them, compared to their better treated tangible equivalents. Plant, property and equipment don't have to be consistently expensed, and thereby reflected on a cost versus value basis, or lumped together – as was once the case with all enterprise intangibles – under goodwill.

The practical approaches called for by Monica Boos to remedy the worst limitations of “the theoretical approaches of valuing intangible assets”⁶⁷ offer solutions. The overly theoretical application of the income, market and cost-based approaches, which seem to use risk considerations to limit, rather than validate – as perhaps should be the objective– the expected future benefits from intangible assets has certainly underpinned at least some of the valuation inadequacy observable in relation to core intangible enterprise assets.

Some of the most negative, limiting, impacts of risk analysis in the context of the income-based valuation approach could be softened by more of a ‘reasonable’ future expectations standard being applied to the enquiry. How

⁶⁷ See Boos (2003); p.73.

reasonably responses to the questions that Gordon Smith posed in his Valuation of Intellectual Property and Intangible Assets seminar in August, 2005⁶⁸, are assessed would directly affect the valuation outcomes. Enterprise owners' reasonable, and supportable, expectations of income from their intangible assets would almost always exceed the relatively small amounts that are certain enough to triumph over the historically harsh risk considerations that are imposed. A practical, balanced, approach would inevitably support more adequate valuations. Higher valuations must not be seen, as they often are, as a 'bad outcome' if the reasonableness tests are robust and objective. It could just be the case, as I'd contend, that the higher valuations are justified and truer reflections of the intangible asset's value and significance to the enterprise.

The transition to a fairer, more practical, valuation approach does not have to usher in a situation where intangible asset values are wildly inflated; this might be even more dangerous than the current, inadequate, approach. Reasonableness sits as a balance here. The mechanics of the income approach can, again, be used to illustrate the point. Being future oriented, some uncertainty must, almost by definition, attach to any expectations of future income benefits, from an intangible asset (such as software) even where a contractually secure long term license agreement exists which will, reasonably, seem to deliver millions of dollars of income to the asset owner. A risk analysis that renders this negligible or null as it approaches an absolute certainty standard for reporting would obviously be inappropriate. A more

⁶⁸ See Smith (2005). The framing questions require a reasonableness standard to be applied if enterprises are to use them as a basis for asserting valuation positions.

reasonable approach, delivering, reportable estimates of future income that both reflects its value on the financial statement, and justifies the enterprise's investment in the generation of the intangible asset itself, must be seen as the more appropriate outcome.

How things like the 'probability' standard described in the AICPA publication, *Auditing Fair Value Measurements and Disclosures: A Toolkit for Auditors*,⁶⁹ are actually applied can make critical differences to the reporting of intangible asset value at an enterprise level.

Intangible assets, lacking physical substance and defying the simple comparability analysis that physical form and attributes often facilitates, require a reasonableness standard to be applied for anything like an adequate valuation outcome to be forthcoming, as some level of risk, or uncertainty must almost, by definition, attach to their future performance.

As Monica Boos accurately observes in *International Transfer Pricing: The Valuation of Intangible Assets*, in identifying three distinct kinds of intangible assets⁷⁰, intangible assets can be sometimes difficult to identify at all, much less categorise or subject to valuation. The difficulty that Boos discerns and says can occur because "intangibles often interact with or are embedded in tangible or financial assets, which makes demarcation between the various

⁶⁹ See AICPA (2002); p.34.

⁷⁰ See Boos (2003); p.19.

types of assets relatively blurry”⁷¹ makes their ‘separability’, a prerequisite for recognising individual intangible assets within an enterprise⁷², sometimes hard to establish.

When the very definitions of what constitute intangible assets at all vary widely^{73 74}, the fact that they have historically been difficult to recognise and value should, perhaps, come as no surprise.

VII. ABA Section of Intellectual Property Law Survey of Valuation Trends, 2005: The Outlines of the Legal Framework and It’s Intersection with Accounting

The ABA Section of Intellectual Property Law (US) undertook, in 2005, a survey of its members in an attempt to identify why, how and when its members undertook to value intellectual property.

Assisted by valuation experts (Gordon Smith and Richard Realbuto), the Special Committee on Intellectual Property Valuation planned the member survey, which was limited to ABA Intellectual Property Law members (corporate and noncorporate) only.

Most of the respondents (85%) were noncorporate members, largely from law firms; the remainder were from corporations and valuation companies. The noncorporate members outsourced more than 80% of their valuation projects

⁷¹ See Boos (2003); p.21.

⁷² This relates to the separability test for recognising intangible assets as being apart from goodwill. Under it an intangible asset may be recognised as separate from the other general assets of a business, even in the absence of a strict legal-contractual basis for recognition, if it is capable of being sold, transferred or exchanged in its own right.

⁷³ See Boos (2003); p.22-23.

⁷⁴ See Verlinden, Smits and Lieben (2004); pp.34-41 where OECD and US definitions of intangible assets are compared and contrasted.

to specialist IP valuation firms and accounting firms, while the corporate respondents tended to do more of their valuation in-house. The corporate and noncorporate respondents represented a wide range of industries and company sizes.

While the ABA noted scope for inconsistency and overlap in relation to some responses and the overall data⁷⁵ the survey generated some interesting results. Eight kinds of Intellectual Property were included in the survey; namely:

- Patents
- Trade secrets
- Trademarks, domain names, and design patents
- Software
- Chip circuits
- Copyrights
- License agreements
- Nondisclosure agreements

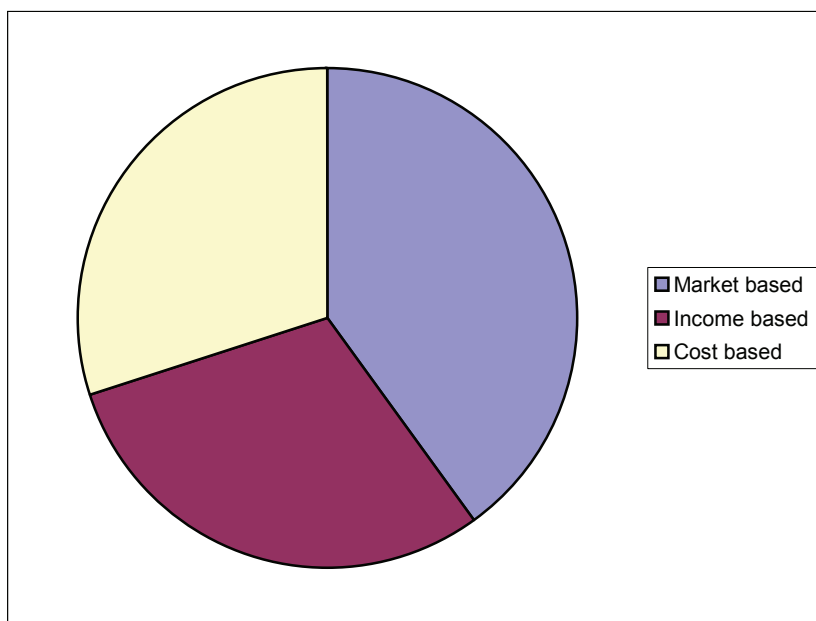
Some of the survey results aligned with commonly held views on IP valuation.

These included:

- That a great majority of corporate professional members had specialised IP valuation units in their organisations

⁷⁵ See American Bar Association (2005);p. 221.

- That patents and trade marks, in almost equal significance, represented the great majority of IP assets subjected to valuation.
- That license agreements, and their association with royalty rates and related income streams were prominently identified as IP assets
- The use of more than one valuation approach (for example, the market-based and the income-based approach) to establish and test valuation outcomes saw all equally prominently reported as utilised approaches.
- This was illustrated in the table (below) where preferences for the market-based approach (40%) and the income-based (30%) and cost-based (30%) approach were all quite even.



ABA Intellectual Property Valuation Survey (Table 21.1): What methods does your company use to value Intellectual Property? ⁷⁶

⁷⁶ See American Bar Association (2005); p.222.

The next major focus of the survey was the testing of why valuations were conducted. The purpose behind the valuation was questioned. Eight specific reasons or purposes could be chosen. These were:

- Sale and purchase
- Tax
- Transfer pricing
- Intellectual Property holding companies
- Litigation
- Licensing
- Financial reasons
- Other/Internal

The survey results here suggested that:

- The largest single group of valuations were those described as tax-related, with approximately 15% of all valuations being done for tax reasons.
- On top of this, more than 20% of valuations described in the survey had intercompany transfer pricing and IP holding company associations which, when combined with the 15% directly described as tax-related, means that more than 35% of all subject intellectual property valuations were, to some extent, driven by tax considerations.
- Despite the prominence of such an application, less than 10% of valuations were undertaken in relation to, or support, of litigation.
- A significant percentage of valuations (about 15%) had a licensing application or relevance.

- Finance issues (5%) and purchase price allocations/acquisitions (5%) accounted for about 10% of valuations.
- Among corporate users, the sale or purchase of a piece of Intellectual Property (20%) was the single most important reason for conducting a valuation.

As part of the survey, respondents were usefully asked to provide data on the number of valuations performed, the type of intellectual property (intangible assets) being valued, the methods used, why the valuations were being undertaken and whether the valuations were conducted in-house or outsourced (and if so, to what type of service providers). A summary results table (below) demonstrates the responses:

	Dedicated Intellectual Property	Internal Finance	Business Units	Outsiders
Litigation Support	39	13	29	6
Financing Issues	22	21	29	18
Set up Intellectual Property holding company	14	8	8	5
Management information	28	10	32	11
Tax-driven issues	62	58	41	42
Intercompany transfer	25	23	19	7
Joint venture	33	12	46	11
Licensing	65	16	60	15
Allocation of purchase price	23	28	22	14
Sale/purchase	84	37	98	38
	395	226	384	167

Extracted from ABA (2005); p.223

As the experts (Gordon Smith and Richard Realbuto) who assisted with the ABA survey were only too willing to acknowledge, the survey results were

preliminary and prone to some overlaps in relation to scope for multiple responses⁷⁷.

I would also characterise the data as more quantitative than qualitative in some respects. This affects the primary survey's usefulness. It would have been worthwhile exploring, then or later, for instance, whether the parties (corporate and noncorporate) who conducted their own in-house valuation exercises, or had these outsourced, were satisfied with the outcomes. This would be a useful raw indicator of at least the perceived adequacy, or inadequacy, of the current intangible asset valuation approaches.

On reviewing the results, one indicator that suggested itself to me as potentially useful was the ratio between those valuation exercises conducted for 'Finance issues and purchase price allocations/acquisitions' (10%) and 'intercompany transfer pricing and other tax reasons' (35%). This huge disparity could demonstrate a number of things.

Assuming that this is rational, and indicative, it is reasonable to deduce that enterprises may find the financial and 'value establishing' application of intangible asset valuation to be less adequate, and much less appealing, than the tax benefit-creating transfer pricing application. This does nothing to disprove, and in fact might support the view, examined later, that the prominence of the second application has a lot to do with its role as a workaround or 'offset' for the failed intangible asset valuation one.

⁷⁷ See American Bar Association (2005); p.221.

VIII. The Problem of Inadequacy: A Summary

Prevailing valuation approaches impose requirements for substitutability, true comparability, and transactional similarity that intangible assets, by their very unique and particular natures, frequently fail to meet. Indeed, some valuation requirements seem singularly incompatible with basic intangible asset characteristics. The already noted importance of identifying substitutes when ascertaining fair value, for instance, can affect the core value, even the very economic viability, of some intangible assets. Uniqueness is often “linked to the intangible owner’ ability to realise higher than normal profits”⁷⁸ because of demand for an asset of unique utility or usefulness, for which premium prices will be paid. In this situation, the very act of identifying substitutes, far from crystallising useful value, may reduce it (possibly to zero) if the substitutes are cheaper, more effective, or render the original intangible asset, catastrophically, technologically redundant.

The inadequacy of valuation approaches in relation to intangible asset recognition and treatment is consistent with a general neglect of intangible assets across the board in the context of accounting and financial standards; a neglect all the more inexplicable with the growing consensus that intangible assets represent the true wealth of enterprises in the information age. The oft-quoted example of Coca-Cola is a case in point⁷⁹. All too often recognised brands are financially unrecognisable, though vital, enterprise assets.

⁷⁸ See Boos (2003); p.32.

⁷⁹ See Interbrand (2004); p.11.

To say that “current accounting regulations are deficient in their treatment of intangible assets”⁸⁰ must, on balance, be regarded as gross understatement. Gordon Smith, in *Trademark Valuation*, acknowledges that accountants “have long grappled with how to treat the cost of intangible property, such as trademarks, in financial statements”⁸¹. This is reflected in different historical accounting standards around the world. While the IASC (International Accounting Standards Committee) has been working since 1973 to develop standards that its 50 member countries can all adopt, with increasing success (as we shall observe in Chapter 4) there exists particular differences that have served, in the absence of consistency, to preserve scope for diluting intangible asset valuation certainty⁸².

Acknowledging the Intangible Asset Valuation ‘Problem of Inadequacy’

The current accounting approach to intangible assets seems, at times, to not only constitute a problem (that is, the problem of inadequacy with which this research is concerned), but to cast accounting itself as in a sense fundamentally out of step with the increasingly intangible asset-based world economy. While the market, cost and income-based valuation approaches seem well suited to the treatment of tangible assets, they seem singularly unsuited, even hostile, to the recognition of intangible assets and their growing enterprise significance and value.

⁸⁰ See Interbrand (2004); p.11.

⁸¹ See Smith (1997); p.23.

⁸² See Smith (1997); p.25. This is well illustrated by the historically diverse rules for treating acquired goodwill in OECD nations, as Smith illustrates.

The disintegration of business assets, relationships and networks identified by Dr Gordon McConnachie as an appropriate strategic focus in an ICM (or Intellectual Capital Management) focussed business⁸³ in which intangible assets are embedded in tangible assets and products, would likely, under prevailing accounting approaches, lead to a reduction of the already slender scope for recognising intangible asset value. The ICM model is also, I believe, singularly unhelpful to enterprises whose proportion of ‘intangible asset value’ is increasing and who may soon, if they don’t already, lack a sufficiently ‘tangible’ asset base within which to embed, much less ‘value add’ with, their intangible assets.

IX. Conclusion

The inadequacy of prevailing valuation approaches in relation to intangible assets is well illustrated by the fact that while we universally acknowledge that the largest, and increasing, share of an enterprises’ value is represented by its intangible assets, and “the factors that have become most important to economic growth and societal wealth are intangible”⁸⁴ intangible asset generation, itself, has often been obliged to be treated as a ‘cost’ rather than ‘value’ related activity.

Such things as the historical accounting practice of lumping what have therefore often been regarded as ill-defined, or indefinable, intangible assets

⁸³ See McConnachie and Yap (2005); p.4.

⁸⁴ See Boos (2003); p.1.

under goodwill, seem to have sustained the theoretical objective of extending these key enterprise assets such lesser treatment.

By placing real obstacles in the path of enterprises seeking to assert real value based on reasonably expected future benefits, and obliging the expensing of the creative research and development, and staff and technology development (activities that generate the intangible assets themselves) current valuation approaches have not properly reflected the growing realisation that these are the most vital and significant assets that an enterprise has.

The prevailing valuation approaches fail to adequately recognise and reward intangible asset attributes, and, indeed, seem to penalise (through the consistently harsh application of risk factors that often inhibit a reasonable recognition of expected future benefit expectations) the generation of, use of, and increasing reliance by enterprises on, their intangible assets.

Chapter 3 Inadequate Intangible Asset Valuation and MNE International Transfer Pricing: A Case Study

I. Introduction

In the last chapter, the widely recognised problem of inadequacy that affects the prevailing approaches to intangible asset valuation was examined.

This chapter will detail some of the specific issues, and consequences, that this inadequacy gives rise to at the enterprise level. Identifiable consequences include, all too often, MNE disengagement from standard, and inadequate, intangible asset valuation activity itself, and a recourse to the use of international transfer pricing, and other mechanisms, to mitigate against the most onerous effects of an inadequate intangible asset valuation system. Such exertions might only cease to be necessary, or attractive, when an adequate intangible asset valuation approach is developed.

II. The Problem of Inadequacy, MNE's and International Transfer Pricing: A Case Study

A specific consequence of the inadequate accounting treatment of intangible assets, and the poor recognition of their reportable enterprise value, may be a certain level of disengagement at the level of some MNE's (or Multinational Enterprises). These include those who look to derive improper tax benefits from the international transfer pricing of intangible assets as, arguably, a substitute for the often all-too-hard-to-achieve recognition of the value of these in their financial statements⁸⁵.

⁸⁵ See Boos (2003); p.1.

The fact that the international transfer pricing of intangible assets is becoming a major issue for both the MNE's and tax authorities at the same time as intangible assets are being widely recognised as the greatest, and increasing, component of enterprise wealth might suggest that there might be a link, and that the problem of inadequacy is a very real one that encourages enterprises to look for, even potentially illegal and risky, solutions to it.

The use of the international transfer pricing of intangible assets, and the tax benefits, or offsets, that this can provide, as a workaround and substitute for an unhelpful accounting system's approach to recognising intangible asset value may seem a simplistic thesis, but it is widely recognised as an offset strategy being pursued by some MNE's.⁸⁶

The basic usefulness of international transfer pricing to MNE's is well established. Because different tax jurisdictions have different tax rates, and different tax systems and rules, MNE's could be tempted to take advantage of these differences by shifting, where possible, reportable and taxable income from higher tax jurisdictions to lower tax ones. How this is achieved (that is, legally, as the result of allowable and effective tax planning, or illegally, by under-charging for exports to low cost jurisdictions and over-charging for imports in high cost ones) is the focus of significant attention and effort, at both the MNE and tax authority level.

⁸⁶ See Boos (2003). A key theme in Boos' work is that the transfer pricing of intangible assets is a determined strategy undertaken to derive direct tax benefits.

The response of the respective national tax authorities (particularly those of the higher tax rate jurisdictions) to international transfer pricing activity is predictable.⁸⁷ Transfer pricing rules, constantly updated in response to the latest tactics and methods developed by MNE's to enjoy advantages through engaging in the practice, are designed to limit its inappropriate (from the tax authority perspective) excesses.

Intangible assets are, naturally perhaps, an attractive target for international transfer pricing activity. If intangible assets are, as has been asserted, under recognised and undervalued assets, the temptation to derive a tax benefit, or offset, from these, wherever possible, might indeed be hard to resist⁸⁸.

Further, if, again as has been asserted; intangible assets are now also the greatest, and growing, category of enterprise assets, and the mechanisms for extracting income from these (through licensing and outright sale) are also increasing, it follows that intangible assets will be more attractive targets for international transfer pricing strategies and activity planned and undertaken by MNE's.

The arm's length standard (ALS)⁸⁹ that underpins most national regulatory approaches to controlling international transfer pricing is, as is the case with the application of tangible-asset focussed accounting rules in an asset valuation context, more difficult to apply to intangible asset transactions. This

⁸⁷ See Boos (2003); p.2. High tax national tax authorities fear an erosion of the enterprise tax base if largescale transfer pricing out of their jurisdictions occurs.

⁸⁸ See Boos (2003); p.1.

⁸⁹ See Boos (2003); p.3.

is especially the case when comparable transactions are hard to find, and when their intangibility is used to disguise some aspects of the transaction.

This could involve slicing the transaction up into categories of associated rights (to ownership, to use, to cross-license and so on) with differing amounts and terms applying. Less dramatically, the same difficulty in identifying a ‘similar transaction’ for an, often unique, intangible asset transaction that bedevils the establishment of intangible asset fair value applies in the ALS-related scenario as well.

As with intangible asset valuation, there are several ALS-applicable methods available⁹⁰. These include the:

- Comparable Uncontrolled Price Method (CUP)⁹¹

The Comparable Uncontrolled Price method (CUP) compares prices of controlled transactions (that is those controlled by the MNE and connected with the international transfer pricing activity being scrutinised) with those of comparable uncontrolled transactions in comparable circumstances. So long as comparable uncontrolled transactions can be found, of course, and an open market price can be established, based on there being enough similarity between the uncontrolled and controlled transaction facts and particulars to support one, then this can be a very effective tool for those seeking to

⁹⁰ See Boos (2003); p.4.

⁹¹ See article 2.6 and 2.7 OECD Guidelines.

scrutinise the controlled transaction undertaken by the MNE, including any investigating tax authorities.

- Comparable Uncontrolled Transaction Method (CUT) ⁹².

The Comparable Uncontrolled Transaction Method (CUT) is similar to that imposed for determining prices for tangible goods transfers. The company, usefully, bears the onus for setting a price, or royalty rate, based on its own transaction history – or nominated comparable transactions under the same, or substantially similar, circumstances – that investigators can then scrutinise. So long as comparable, past, transactions can be identified (and here the company has to find them), and any transaction differences can be adjusted for, this can be a very effective way to determine an arms length market price.

- Comparable Profit Method (CPM) ⁹³

The Comparable Profit Method (CPM) can be deployed for both tangible and intangible asset transactions and relies on the tax principle that ‘similarly situated’ taxpayers will tend to earn similar returns, or profits, over a reasonable period of time. How this reasonable period is fixed is important, as individual business circumstances, and events, could be raised to dispute that a similar situation actually exists. Nonetheless, this does, from a historical and

⁹² See s.1.482-4 (c) (1) and (2) US Regulations.

⁹³ See preamble to s.1.482 US Regulations, pp.97-109.

comparable profits perspective, create an interesting comparability platform for scrutinising international transfer pricing transactions.

- Transactional Net Margin Method (TNMM)⁹⁴

The Transactional Net Margin Method (TNMM) was adopted under the OECD Guidelines instead of the CPM, which the US favoured, due to OECD concerns about the extension of the comparability principle that, in their view, they felt that the US-favoured CPM represented.

Preferring to establish, and compare, the net profit margin (fixed against a cost, sales or assets base) that the taxpayer derived from particular controlled transactions, in place of the looser ‘similar situation over a reasonable period of time’ rule TNMM is perhaps ‘fairer’ to the taxpayer. It certainly puts more of an analysis burden on the investigating tax authority compelled to scrutinise more transactions in more detail, with the commensurate scope this creates for taxpayers to find obstacles to establishing the overall transactional comparability that the CPM produced by presuming that a generally similar situation should exist over reasonable periods of time between ‘similarly positioned’ taxpayers.

Arms Length Standard Tests and Valuation Approaches: Similar Difficulties

⁹⁴ See article 3.26 OECD Guidelines.

While clear, and energetic, attempts to address the MNE manipulation of international transfer pricing rules, all of the methods outlined above manifest some of the same difficulties that the cost, market and income-based approaches represent in the context of intangible asset valuation. Both sets of approaches have proven to be, to some extent, inadequate.

Both have suffered, to some extent, from the fact that it is extremely difficult to find comparable, or similar, transactions for different intangible assets that are, often, and, indeed, by their very legal natures declaredly, unique.

Suffice to say, at this point, that none of the methods listed above, or the related standards and rules provided by tax authorities, have adequately resolved the international transfer pricing problem they were designed to arrest either.

Just as intangible assets have proven difficult, historically, to adequately recognise and value, so can they prove elusive subjects for the tax authorities determined to track and monitor the international transfer pricing activity involving them.⁹⁵ Because of these difficulties, the authorities are often obliged to extrapolate from intangible asset-related revenue and income streams (such as license fees) to determine value for testing transfer pricing arrangements; a by no means simple task.

⁹⁵ See Boos (2003); p.7.

The share volume of MNE-related trade and activity also poses a huge, and growing, challenge⁹⁶. Tax authority resources are stretched to monitor MNE activity on such a scale, and limited by practical barriers to information gathering and enforcement outside their own borders. Given that a statistical majority of all world trade is now intra-firm trade⁹⁷ both the scope for MNE manipulation of such trade for the purposes of tax benefit-creating international transfer pricing, and the size of the monitoring task for tax authorities, is enormous.

III. Shortcomings of the Legal Approach to Managing MNE International Transfer Pricing

Assessing where the (legal) optimisation of tax liabilities through effective tax planning ends and evasion or manipulation begins in the context of large and sophisticated MNE operations is a difficult task, made all the more difficult when the international transfer pricing of intangible assets is the vehicle employed.

Inconsistencies in the treatment of such transactions between jurisdictions are exploited by MNE's. Tax authorities are often frustrated, even when they are quite satisfied, for instance, that "transfers of ownership of very profitable intangibles from a parent enterprise to its foreign controlled affiliates were inadequately compensated ie payments did not reflect the value of the transfers"⁹⁸, by the lack of a consistent international approach and any

⁹⁶ See Boos (2003); p.5.

⁹⁷ See Boos (2003); p.6.

⁹⁸ See Boos (2003); p.11.

shortcomings in the accurate and adequate valuation of the subject intangibles assets themselves.

The historical inadequacy of accounting in relation to intangible asset valuation might, therefore, be said to usefully disguise, even facilitate, the type of MNE abuse of international transfer pricing with which tax authorities are now so universally concerned.

When the US and OECD working definitions for intangible assets under their respective transfer pricing rules are inconsistent⁹⁹ and the very intangible assets themselves are inadequately and inconsistently valued, little wonder that MNE's can exploit the scope for uncertainty and obfuscation that this creates and leave tax authorities frustrated by an MNE abuse of international transfer pricing that they know is being perpetuated and ongoingly refined, but are unable to quantify.

The neutral international tax system inevitably “creates incentives to shift profits from high tax countries to low tax countries”¹⁰⁰. Individual tax authorities are, in essence, fighting an expensive, drawn out, campaign to discipline MNE's whose effective multinational status gives them advantages that the tax authorities (even the powerful United States IRS) lack. The globalised nature of the MNE's is, ironically perhaps, a clue to how the

⁹⁹ See Boos (2003); p.22-23.

¹⁰⁰ See Boos (2003); p.62.

campaign to end their abuse of the international transfer pricing of their intangible assets must be conducted.

I feel that it is not logical to look for a solution to the abuse of international transfer pricing by MNE's based on unilateral tax authority action. Undertaken in one jurisdiction that after another, in a piecemeal fashion, it will, and has, only encouraged MNE's (with their global reach) to react and shift subject assets to lower tax, or safer, jurisdictions. An adequate, and, international, coordinated approach to the problem both of international transfer pricing abuses, and the underlying, maybe motivating, inadequacy of intangible asset valuation, must instead be developed. A model exists in the increasingly harmonised international accounting standards that will be explored in the Chapter 4. A truly global set of adequate intangible asset valuation standards not only resolves a major enterprise problem but would immediately restrict the scope for MNE's to play the jurisdictional shell game that international transfer pricing has developed into. Resolving the core problem of inadequacy that exists in relation to the valuation of enterprise intangible assets would remove a root driver for enterprises to realise alternative, even illegal, sources of return, which mechanisms like international transfer pricing have come to represent.

Regardless of where, then, the assets are transferred to and from, an internationally consistent approach to valuing them, will allow the effective 'testing' of the adequacy of compensation paid for such transfers, which

interested tax authorities, anywhere, can then use when querying such MNE activity.

IV. International Transfer Pricing as a Means of Extracting Value or Business Benefit from Enterprise Intangible Assets

Going up to, and on occasion beyond, the limits of legal conduct, MNE international transfer pricing activity sees these enterprises take it upon themselves, with the advantages that the multi-jurisdictional nature of their business activities accord them, to extract business benefit from their intangible assets. By transferring these intangible assets between subsidiaries or related entities in high and low tax jurisdictions in a manner financially advantageous to themselves, MNE's seek to move over or around the barriers to this erected by national tax authorities. MNE's (especially those found to have acted illegally) may very well be seeking to derive direct business benefits from expensive to generate and maintain, but all too often hard to recognise and value, intangible assets; benefits denied them under prevailing valuation approaches.

International transfer pricing is one way for enterprises to extract value, or direct business benefit, from their intangible assets without the type of difficulty I've demonstrated can be associated with trying to recognise expected future benefit-premised value in an enterprise asset list or financial statement. Given the difficulty in adequately valuing intangible assets under

prevailing valuation approaches, such strategies seem to be a direct response; a move by enterprises to use intangible assets as tools to produce wealth ¹⁰¹.

So long as intangible assets are difficult for enterprises to define ¹⁰² and, by extension, value, such solutions will almost inevitably be sought. Something as apparently simple as the forced expensing of enterprise investment in intangible assets can have, as an albeit unacceptable consequence, the determination by an MNE to manipulate the international tax system. Engaging in even unacceptably creative international transfer pricing of the undervalued intangible assets that they have an overwhelming economic obligation to extract some kind of profit from, some enterprises will decide to push the limits of the tax system, and the law, in the furtherance of that objective. Compelled to innovate, and generate intangible assets in support of, and as a result of, this very process of innovation, enterprises are obliged to seek a return from this expensive and resource-intensive activity. Recovering the cost of this investment (by expensing related activities like Research and Development (R&D) and staff training and skill set development) is not an adequate outcome.

Intangible assets, by their very natures, are amenable to many forms of exploitation. In fact, in this respect, they display many useful characteristics that their tangible equivalents lack. Legally defined by the rights to use, own

¹⁰¹ See Poltorak and Lerner (2004); p.xv. The drive for profitability being so strong it seems that even illegally questionable transfer pricing practices will be considered.

¹⁰² See Berman (2006); p.13. Patents for example are highly complex, Berman notes, and their role (and value) in relation to products that include them can be difficult to specify.

and exploit them, rather than being physically fixed or limited, intangible assets, and their associated rights, can be licensed for multiple use, with different bundles of rights being made available for different applications. Where these rights are not exclusively assigned, sold or otherwise transferred to one party, intangibles can support a number of value or revenue streams from which a return can, as in theory it must, be derived by the intangible asset owner or generator.

This ability to generate more than one value stream from a single intangible asset is important. While this does not compensate for the inadequacy of the prevailing intangible asset valuation approaches identified as a problem in Chapter 2, which, as I would contend, encourages MNE workarounds such as recourse to even legally questionable forms of international transfer pricing and tax evasion in the search for some form of return, it nonetheless offers scope for extracting value and return from enterprise intangible assets.

Professor Baruch Lev of New York University's Stern School of Business noted the capacity for an intangible asset to support what he termed "multiple simultaneous value streams"¹⁰³. While tangible assets can almost always only support, or generate, a single value stream, intangible assets can, Lev contended, be used in many ways simultaneously without interfering with the other uses, or users, it is put too.

¹⁰³ See Harrison and Sullivan (2006); p.6.

While this distinction does not always hold true, and I would therefore not add the Multiple Simultaneous Value Streams test to the Legal-Contractual and Separability core tests or criteria for intangible assets that I will discuss further at the beginning of Chapter 6, it is valid enough to explore further as a mechanism for generating the profit or return enterprises need for their increasingly significant, and expensive to generate and maintain, intangible assets.

A clear example of the Multiple Simultaneous Value Streams concept, and the ability of intangible assets to generate them, is the licensing of a software product, such as Microsoft Office, one of Microsoft's most important intangible assets. The legal rights to use Microsoft Office can be, and have been, extended to millions of Microsoft customers worldwide. All Microsoft Office users can use the product without interfering with the ability, or paid for right, of other users to do the same. By comparison, a car, for example, would usually be sold, or leased, to a single party at a time, generating one value stream for the owner of this, tangible, asset. Clearly, this ability for intangible assets to generate and support multiple simultaneous value streams can, and should, be exploited by the owners of such assets.

This useful characteristic does not offset or resolve the core problem with which this research is concerned, however. The inadequate valuation of intangible assets under prevailing valuation approaches ultimately affects this as well; by subjecting the fruits of these multiple simultaneous value streams to cost, market and income-based valuation and, through these approaches, to

the full effect of the value-reducing process of risk evaluation these approaches impose.

As I have outlined, intangible asset valuation is concerned with identifying, and analysing the risks associated with deriving, expected future economic benefits from them.

Using the Microsoft Office example again this is nothing as simple as multiplying the number of expected sales by the per copy value, to Microsoft, of the software. The risks of technological compression and redundancy; the termination clauses in distribution and retail agreements that Microsoft puts in place to get Office out to its customers, and a whole range of other business, legal, technology, market and economic considerations and risks are used to reduce the total, and present, net value of the value streams that these Office revenues represent. In this way, even the most lucrative software licensing revenue streams, and their value to the intangible asset owner, can be severely reduced.

With prevailing approaches to intangible asset valuation being inadequate, it is perhaps logical that business, driven by the need to maximise profits and returns, looks to more creative solutions, such as international transfer pricing and other self help tax and financial strategies; even to the point of inviting tax authority scrutiny and legal action.

With the value of potentially lucrative licensing activity and revenues reduced through the operation of the prevailing intangible asset valuation approaches, and given that “more often than not, IP [and other intangible] assets are unvalued anywhere else on the financial sheets”¹⁰⁴, enterprises can feel compelled to explore any and all options to extract maximum financial advantage, in the form of tax or other business benefits, from assets whose direct reportable value is negligible or limited.

It is easy to see how an international transfer pricing strategy, where high returns can be derived just by shifting subject intangibles between high and low tax jurisdictions, can become attractive in situations like this. The disincentive and value minimising aspects of the prevailing valuation approaches do nothing to entice enterprises away from such alternatives.

Representing no, or little, value in themselves (it is, after all, the expected future benefits related to intangible assets that are determinants of their value) and with the extensive generation costs (R&D, technology and staff development) expensed (with no value premium) the temptation to find another value creating option is strong.

It is the same inadequate recognition of intangible asset value, under prevailing accounting approaches, that I have already generally observed that drives the business benefit choices of enterprise owners in these situations.

¹⁰⁴ See Berman (2002); pp.468-69.

A number of accounting system attributes run counter to the enterprise objective of recognising an adequate level of intangible asset value. To revise, and expand on, those I have already outlined, these include (consistent with the focus on estimates of expected future economic benefits) the unfortunate standard that intangibles, in themselves, have little or no bookable value at all.

So even though developed but not yet deployed intangible assets represent significant investment, and have immense value, to the enterprise itself, no value can be accounted for until it is realised, or a transaction has occurred, which may not be until years after investment in it has occurred.

The 15th Century roots of modern accounting are well demonstrated in some of its less progressive characteristics. This is particularly problematic when accounting premises an intangible asset's value on the expected future economic benefits they will realise; even as accounting is recognised as strong at recording past transactions and notoriously weak at predicting future revenue streams. This is well demonstrated by the typically drastic reduction of intangible assets future economic benefit, revenue or value projections that arguably occurs due to the too broad application of an unlimited array of risk considerations.

This situation is becoming increasingly unsustainable given the growing significance of intangible assets to the modern enterprise. The shift that Doctor Margaret Blair, of the Brookings Institution, observed over the 20 year period from 1978 to 1998, illustrates the transition to an intangible asset based

enterprise model. Her study group, consisting of thousands of companies, reported that 83 percent of their collective value was associated with their tangible assets in 1978. By 1998, “only 31 percent of the value of the firms studied was attributable to their tangible assets, while a stunning 69 percent was associated with the value of their intangibles”¹⁰⁵.

A changing legal environment, and increasingly developed intellectual property law system, in particular, is helping this transition. While more traditional contract and property law standards helped support, in some respects, the real, or tangible, property bias that the accounting system has long manifested, the growing awareness of intellectual property rights is helping to support an appropriate focus on enterprise intangibles. Recognition of the value and business significance of patents and trade marks, in particular, has been greatly assisted by the activity of the US Court of Appeals for the Federal Circuit, created in 1982.

This court has produced so many decisions in favour of the holders of IP rights, that patent holder rights, for instance, are now generally regarded as more enforceable. This has a direct impact on how valuable these rights are held to be in the market. This is not enough to offset the inadequacy of the accounting approach to intangible asset valuation, but it can positively support any shift in the overall treatment, given the essential role that the law plays in providing a framework that, with accounting, establishes rules for the overall operation of a market-based economy.

¹⁰⁵ See Davis and Harrison (2001); pp.6-7.

Having partnered with accounting in maintaining a traditionally inadequate valuation approach towards intangible assets, the law can, as we shall see further demonstrated in Chapter 5, now be seen as both driving, and reflecting, of a long overdue shift towards an emphasis on the value these have for the modern enterprise.

Indications of just such a shift are emerging. Layers are being added to a previously unsophisticated¹⁰⁶ intangible asset valuation approach to reflect subtle distinctions relevant to those with greater or lesser significance to the enterprises with which they are associated.

At the higher end of this spectrum is a new determination to recognise, and treat as more valuable, intangibles that are more tradeable, such as those that might support the Multiple Simultaneous Value Streams described earlier in this chapter. Such scope to reflect the increased value, and importance, of particular intangible assets must, in theory, make enterprises more willing to work inside the formal accounting and legal standard governed valuation system. Less motivated to choose more legally uncertain strategies for deriving business benefit, such as the international transfer pricing of their intangible assets, enterprises would be more content to work within a system that delivered them adequate valuation outcomes in the first instance.

¹⁰⁶ See McConnachie and Yap (2005); p.14 where the Skandia AFS case study is examined. Layers of employee and process-based IC (Intellectual Capital) value were sought and analysed as part of the IC Initiative.

Numerous international accounting and financial reporting and standards bodies are beginning to understand this, as national tax authorities and legislatures find the campaign to bring MNE manipulators of the international transfer pricing longer, harder and more difficult than they imagined. This reflects not only power and creativity of MNE's, but also, I'd contend, the desperate significance that international transfer pricing has taken on for them as an essential source of business benefit.

This significance will be maintained so long as international transfer pricing stands as a substitute for, or relief from, the inadequate level of intangible asset valuation delivered under the prevailing approaches for accounting for these core enterprise assets.

EFRAG, or the European Financial Reporting Advisory Group, which undertakes to sponsor, in its own words, 'proactive accounting activities in Europe', seems to convey an understanding of this situation when it questioned the very foundations of current enterprise financial reporting in its November, 2006 Discussion Paper, *The Performance Reporting Debate: What [if anything] is wrong with the good old financial statement?*¹⁰⁷.

Identifying as a reason for the project, that "the current formats for reporting performance of an entity were initially developed when the assets employed were mainly inventory, machinery and buildings and the operating activity mainly manufacturing or retailing. As entities have started to acquire more

¹⁰⁷ See EFRAG (2006)

diverse assets and liabilities carry out more complex operating and financial activities, and use more complex corporate structures, so the reporting model has to be adapted to try to cope with the issues that these developments have created”¹⁰⁸, EFRAG supported the need for accounting to become more complex and sophisticated and change the manner in which it reported and presented information about financial performance. Part of this development would necessarily involve “radical changes to the existing model”¹⁰⁹.

Such radical changes would, collectively, need to address the problem of inadequacy identified in Chapter 2, and the inevitable reaction of enterprises to this inadequate recognition of their intangible asset value; the employment of alternative means for deriving business benefit for them. These alternatives include the international transfer pricing of intangible assets, for those MNE’s that have the size, scope, will, and international operations in high and low tax jurisdictions necessary to undertake it, outlined as a case study in this chapter.

Part of the change could be the expansion of concepts like that of EVA (Economic Value Added) from means of measuring, but not necessarily addressing, the ‘gap’ between what true economic profit is, and should be, to a means of asserting fair returns for investment in such key assets as enterprise intangibles (which I think would at least serve to indicate the ‘deficit’ produced – at least in part – by the inadequate valuation of enterprise intangible assets). Until they have such useful applications, concepts such as

¹⁰⁸ See EFRAG (2006); p.4.

¹⁰⁹ See EFRAG (2006); p.4.

EVA will merely illustrate, rather than help to correct, the inadequacy problem associated with the valuation of intangible assets.

The TEV (Total Enterprise Value) model that I will outline in Chapter 7 of this research, supported by the set of valuation business criteria to be outlined in Chapter 6, is designed to meet this standard of usefulness.

The use of shareholder value as a measure of success, in relation to the real degree to which intangible asset valuation, and the financial reporting of this, is being improved, would be most welcome. Theoretically establishing that enterprise intangible assets are being undervalued is not enough. Relating this to foregone shareholder value, and revising both valuation approaches and the production of financial statements and enterprise asset lists, to reflect adequate value in these key assets would help address a number of historical issues of concern.

Legally risky strategies such as international transfer pricing would be less necessary, or attractive, if enterprises could see that the business benefit they were adopted to deliver could come, instead, from the more adequate valuation of the subject intangible assets that they needed to demonstrate a return against. It may be possible to reduce, or end completely, the abuse by MNE's of the international transfer pricing of intangible assets simply by giving enterprise intangible assets their due recognition.

When accounting mirrors the increased significance of intangible assets (such as brands) and develops real scope and practices that show “how big the economic contribution made by brands to companies can be ”¹¹⁰, and meaningfully incorporate them, and their fair enterprise value, into the evaluation of enterprise performance and profitability, many issues will be resolved. When enterprises can demonstrate a return for their investment in them, a common justification for such ‘alternatives’ as the international transfer pricing of enterprise assets, with all its abuses and the threat they represent to national tax authorities and revenues, such practices can be limited.

In relation to the issue of MNE abuse of the international transfer pricing of their intangible assets between high and low tax jurisdictions to obtain the required business benefit for them, the law is also demonstrating an increased sensitivity to the link between this behaviour and these same assets being undervalued in the context of the prevailing accounting system and the particular valuation approaches being applied to them.

Indeed, the difficulties that the US IRS was experiencing in enforcing international transfer pricing rules, such as Section 1.482 of the US Regulations, put the law in the position of first identifying the root cause of the mounting wave of activity as being the relative difficulty of gaining adequate recognition for the value of these same enterprise intangibles under prevailing valuation approaches.

¹¹⁰ See Interbrand (2004); p.2.

Most MNE international transfer pricing cases involve, frequently unsuccessful, actions by tax authorities against enterprises they accuse of manipulating the rules to gain an improper business benefit. This, they argue, rises to the level of tax evasion based on the practice of shifting intangible assets between (the typically prosecuting tax authority) high and low tax jurisdictions; clearly, where successfully prosecuted, to derive a business benefit related to the tax burden escaped.

Confronted with defences that this business benefit was a vital return for investment in the intangible assets; consistent with the enterprise obligation to maximise profits on behalf of shareholders; and a necessary substitute for the lack of adequate value recognised for these intangible assets under prevailing valuation approaches, a moment of truth was presented.

The courts were put in the position of being able to convey this to those, including the lawmakers and regulators who might be able to reform the clearly inadequate system of intangible asset valuation.

This started a long overdue process of reform but, unfortunately, the process became one of focussing on trying to close international transfer pricing loopholes for enterprises, rather than addressing the underlying inadequate recognition for enterprise intangible assets that many asserted as the trigger for the activity.

From the Tax Reform Act of 1986, and the series of proposed (1992), temporary (1993) and final (1994) regulations that supported it, while there was some differentiation between high and low value intangibles, and a focus on the transfer of these, there was no recognition of the inadequacy of the underlying intangible asset valuation approaches themselves.

The various Arms Length Standard methods (CUP, CUT, CPM and TNMM) outlined earlier in this chapter were deployed to frustrate those enterprises seeking to engage in the international transfer pricing of their intangible assets, rather than address and correct the inadequate valuation of enterprise intangible assets that was arguably the root cause of this behaviour.

The law, courts and lawmakers might be said to have failed to take advantage of this opportunity, presented some 20 years ago, to shift an accounting system that was intent, it seemed, on maintaining a relatively unsophisticated, and value-limiting, approach to valuing enterprise intangible assets. This, even as the relative significance of enterprise intangible assets to tangibles was increasing sharply, as Dr Blair's survey, outlined earlier, demonstrated [**Refer to footnote 105**].

Cases like **Carracci, et al v Commissioner of Internal Revenue 456 F.3d 444; 2006 U.S App. LEXIS 17370; 2006-2 U.S. Tax Cas. (CCH) P50, 395**¹¹¹, examined in more detail in Chapter 5, extend opportunities to legally assess the recognition and reliability of intangible asset values. Unfortunately,

¹¹¹ See Chapter 5.

the courts rarely directly highlighted the inadequacy of the prevailing approaches, leaving the established accounting standards, and the historically inadequate approach to intangible asset valuation, unchallenged and intact. Until *Daubert* and *Kumho*¹¹², expanded the scope for a greater variety of expert perspectives to be introduced, it was almost impossible for anything other than the status quo accounting approach to be introduced.

So the struggle between enterprises keen to exploit the international transfer pricing of intangible assets that some saw as an effective substitute for the value and business return denied them under an inadequate system of intangible asset valuation, and the tax authorities continues.

With enterprises so desperate to exploit it to derive essential returns for their intangible assets, enormous creative energy was expended to continually frustrate tax authorities in their efforts to contain, if not stamp out, the practice. And the practice continues. The less than effective campaign by tax authorities to curb the international transfer pricing of intangible assets by MNE's is demonstrated by the numerous indicators that suggest that MNE international transfer pricing of intangible assets affects a large segment of world trade by value.

The already mentioned ratio of intra-firm trade (where such transfer pricing activity would be reflected) to total world trade has grown rapidly (and is now greater than 60%). The potential level of tax revenue foregone by the tax

¹¹² See Chapter 5.

authorities of relatively high tax jurisdictions (such as the US, Europe and Australia) could be enormous, and probably explains the particularly active interest of tax office and legislatures from these same countries in investigating and curtailing this activity as an urgent priority.

Investigating and punishing it without addressing the root causes for it would will only ensure a drawn out, costly and uncertain struggle with MNE's. If MNE's feel that the international transfer pricing of their intangible assets is the only way of gaining, even a legally questionable, return for them they will continue to engage in this activity. Indeed, as Richard Caves has asserted, the very transactional model for MNE's now seems premised on evading the failures of the inadequate external market for intangible assets. More than this, it may even be that the very transactional model of MNE's may be hardwired to engage in activity like international transfer pricing to evade such market failures as the inadequate valuation of enterprise intangible assets may have come to constitute ¹¹³.

Indeed, some go so far as to say that the very existence of MNE's is now premised on securing such relief, or direct business benefit, from the international transfer pricing of their intangibles; assets that are relatively under recognised by the inadequate current valuation approaches which create the "non-existence or shortcomings of external markets for intangible assets"

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¹¹³ See Boos (2003); p.8. She quotes Richard Caves who states that "the transactional model for the MNE holds that international firms arise in order to evade the failures of certain arms-length markets especially those for intangibles"; a view often put to explain the attraction of transfer pricing behaviour.

¹¹⁴ See Boos (2003); p.9.

An interesting empirical exercise, outside the scope of this research, might be conducted to interrogate this claim. It might be possible to test that international transfer pricing is indeed directly linked to a deep need for enterprises to derive a business return for their under recognised intangible assets. If this is the case, then differences in pre-investment levels in the generation of these assets, between enterprises in different tax jurisdictions, might be reflected in the levels of international transfer pricing engaged in by them; a case of these enterprises having different levels of pre-investment to secure a return for ¹¹⁵.

There are certainly serious constraints on enterprises realising the significant pre-investment they must make in generating intangible assets under current rules and standards.

To treat such development expenditure in any other way than as an item to be expensed (at cost) there are six rules that must be satisfied ¹¹⁶. These are:

- **Technical Feasibility**

That the intangible asset will be completed so that it will actually be available for use or sale

¹¹⁵ The willingness of investors to invest in 'early stage' enterprises, which require high levels of intangible asset development funding, varies from jurisdiction to jurisdiction. Where this is higher (in the US for instance) there can be extra pressure to apply strategies (such as transfer pricing) that can deliver the necessary return on that investment.

¹¹⁶ See Wyatt and Webster (2007); p.26.

- **Intention to Complete**

That the intangible asset will actually be used or sold

- **Ability to Use or Sell**

That the enterprise has the ability, skills and opportunity to make the intangible asset available for use or sale

- **Knowledge as to How the Intangible Assets will Generate Benefits**

That the enterprise can identify a market for the intangible asset itself, the output of the intangible asset, or, if the enterprise will be utilising the intangible asset itself, that it has a specific utility or purpose

- **Adequate Technical, Financial and Other Resources**

That the enterprise has the resources to complete the development of the intangible asset and make it available for sale or use

- **Ability to Measure Reliably**

That the expenditure attributable to the development of the intangible asset can be reliably captured and reported

Individually, these rules seem fairly innocuous, even reasonable. Depending on how strictly they had to be complied, however, they could be extremely difficult to satisfy, especially where they require some certainty in relation to future, and therefore essentially uncertain, events or decisions. Once again, the future focus of intangible asset development is being subtly used to erode scope for the recognition of their present, and greater than cost, value.

The unfairness that an overly strict imposition of these six apparently reasonable rules, given the future uncertainty that necessarily characterises the development of intangible assets, is illustrated in the 2004 PriceWaterhouse Coopers report, *Intellectual Property Rights From a Transfer Pricing Perspective*.

In it, we are advised, an independent survey, commissioned by PWC in 2002, suggested that enterprise's typically looked to prepare for future downturns by endlessly reviewing, and improving their business model, and ensuring that they had sufficient internal resources, capability and intangible technological, staff and know how assets to prepare for even the most unforeseen future events¹¹⁷. This would clearly not fit too neatly within the Six Rules paradigm; a situation reflected in the relatively low (34%) of enterprises who even claimed to have the type of indicators that the Six Rules model would require in place.

¹¹⁷ See Verlinden, Smits and Lieben (2004); p.18. While only 34% of enterprises have actually assessed the value of their intangible assets, virtually all indicated that they were "sources of strategic advantage".

The link between the failure of accounting to adequately recognise and value intangible assets and the response of the MNE's that can to offset any 'gap' through the increasing international transfer pricing-related 'trade' in these same intangibles, seems arguable, compelling and supported. More than a coincidence is necessary to prove that these phenomena are related (and that such MNE behaviour is a direct consequence of the failure of current approaches to adequately value intangible enterprise assets) but, based on the material I have viewed and analysed here, the connection is logical and compelling.

IV. Towards a Solution

Clearly, if MNE manipulation of the international transfer pricing of intangible assets is linked to the problem of inadequacy characterising their valuation, the simplest solution might be to correct this core inadequacy and improve the scope and quality of intangible asset recognition and valuation at the level of the operating enterprise.

Given that intangible assets are themselves defined, essentially, by the bundles of legal rights associated with them, it may be possible to look at how the individual strands, or elements, within intangible assets can become value maximisers. With aspects of both economic and legal ownership, might each of these be assessed separately as a value maximising opportunity? ¹¹⁸.

¹¹⁸ See Verlinden, Smits and Lieben (2004); p.64. The relative significance of economic and legal ownership of intangibles is discussed. If the economic ownership is seen as more significant, and a business or competitive advantage is gained from the assets, enterprises might be able to live with, the theory suggests, a less than perfect certainty of legal ownership.

Given that international transfer pricing, with its tax-oriented business benefit objective, has proven popular for enterprises (or at least those large and multinational enough to engage in it) the tax system, which should apply in some form to all enterprises, might be a starting point. Clearly the historical practice of simply expensing R&D and technology and staff development investment needs to be looked at as a value limiting practice. The offer of R&D credits, on their own, do not seem to have offset the huge disincentive that treating intangible asset development within an enterprise on a cost versus value basis has come to represent.

Measures that offer relief for, or recognition of, the value of the enormous investment typically made at the early stages of an intangible assets development should be considered. Not only can such early stage investments involve huge amounts of financial, technological and human resources, but they may precede, by many years, any kind of sale or use-related opportunities that might create the kind of direct value, or business benefit, that prevailing accounting approaches tend to treat as the only real types of recognisable value.

Any reforms would need to recognise the problem of inadequacy that lies at the heart of the flawed system, and aim to recognise the fullest possible value of enterprise intangible assets. Isolated efforts to fine tune the regulatory, tax, legal and economic aspects of intangible asset definition, management,

ownership, and even sale and use, will not prove meaningful unless they contribute to improving the overall valuation situation.

One concept that does hold some promise, and does seek to consolidate and reflect all stages of intangible asset development into a unified approach to fairly valuing intangible assets over their whole enterprise lifecycle is the ITTP (International Tax Transfer Pricing Regime) ¹¹⁹.

Fulfilling a condition that I suggested would characterise meaningful reform, it looks to an existing, and popular, MNE self help remedy for inspiration. Engaging in the international transfer pricing of intangible assets, and the manipulation of the tax system, to extract the business benefit that standard valuation approaches denied them, the MNE's essentially exploit the overlaps between national jurisdictions, playing high and low tax jurisdictions against each other. The simple proposition at the heart of the ITTP regime is that by encouraging tax authorities to reduce the gaps and distortions between their tax treatment regimes, they remove the incentive for enterprises to engage in the manipulation of the system; there being less to gain from the activity.

With transaction cost savings (it becomes less complex and expensive an exercise to trade in intangible assets when distortions and inconsistency are removed the reasoning goes) passed on to enterprises, and a larger global market for the trade in intangible assets encouraged, more opportunities are created for enterprises. In this way the removal of the international transfer

¹¹⁹ See Boos (2003); p.158. Here Eden's Theory is discussed. Justifying the ITTP (International Tax Transfer Pricing Regime) it looks to resolve the jurisdictional differences in tax rates that MNE's exploit through the international transfer pricing of intangible assets by entering into 'harmonising' voluntary agreements.

pricing loophole, in its current manifestation, is not an uncompensated for lost opportunity. A more consistent approach to the valuation of the subject intangible assets could also be developed.

As shall be outlined in Chapter 4, this is not dissimilar to how the effective harmonisation of international accounting standards has progressed to the point where, I shall suggest, real improvements to the currently inadequate intangible asset valuation system can be made.

The notional value of such things as transaction cost savings can, and should, be recognisable in some form. This will require a move away from the all-or-nothing approach currently, which sees no real value accorded to an intangible asset until some future benefit is realised, or extracted, in an actual (for example sale) transaction. A recognisable 'financial' component of an intangible asset, premised, for instance, on the value of a right to charge users of the asset ¹²⁰ can, and should, be reflected in the value of that asset.

In such a way might layers of value be created for intangible assets; layers not absolutely contingent on the ultimate disposal of the intangible asset, but represented as early as possible in its lifecycle, when the costs of generating and maintaining fall on the enterprise. In any case, discreet solutions that address theoretical issues alone will not suffice, or steer enterprises away from extracting business benefit through such devices as international transfer

¹²⁰ See IFRIC (2006); pp.8-9. IFRIC looks to secure and illustrate such a 'revenue for use' value proposition in relation to Service Concession arrangements.

pricing. Reforms must address the root problem of inadequate valuation if they are to achieve that result.

Enterprises can, and must, improve the level of intangible asset reporting and management they undertake to support any improved approach to their valuation. As outlined in the 2004 PriceWaterhouseCoopers report, *Intellectual Property Rights From a Transfer Pricing Perspective*, this information could include:

- management's view of the business and competitive environments, including opportunities and threats
- value creation strategies that the enterprise has developed to exploit opportunities with detailed implementation plans
- value propositions unique to the enterprise and its intangible asset base
- targets
- the enterprise's risk profile, with plans for managing identified risk factors
- the enterprise's legal and compliance procedures
- the enterprises governance and issues management processes¹²¹.

Taken together, such information and reporting depth serves to support the expectations of future benefits that the enterprise builds around its intangible assets.

¹²¹ See Verlinden, Smits and Lieben (2004); p.215.

The effective harmonisation of international accounting standards now being pursued through such bodies as the IASB ¹²², which will be outlined in detail in Chapter 4, offers a model for improving the valuation of intangible assets. The consolidation and improvement of basic standards, and the dissemination of these as member states align their own legal and accounting systems to the international best practices being developed, suggests a model for improving the adequacy of prevailing intangible asset valuation approaches.

Introduced into an environment of improved enterprise reporting and information gathering, a more concise set of valuation parameters and definitions will lead to a consistent, and improved, recognition of intangible asset value. As the IASB itself declared, “establishing a concise definition of fair value and a single source of guidance for all fair value measurements will improve the quality of fair value information included in financial statements” ¹²³, and, inevitably, the intangible asset valuations upon which these are based.

Legislative and legal support for this process is vital. As well as aligning their national laws and accounting standards with the harmonising international accounting standards that bodies such as the IASB are sponsoring, national governments can improve intangible asset valuation in their own jurisdictions. They can produce detailed intangible asset valuation guidelines, and use their own agencies (not insignificant holders of intangible assets in their own right)

¹²² International Accounting Standards Board

¹²³ See IASB *Comments on IASB Discussion Paper 'Fair Value Measurements'* (2007); p.1.

as best practice areas; reinforcing a more adequate approach to valuing these key assets generally.

By producing such guidance as *Optimising Intellectual Property: IP Management Guidelines for the Public Sector in Singapore*, the Singaporean Ministry of Law sets an excellent precedent. To seek to “promote, as a deliberate act of Government policy, creativity and the dissemination and application of its results for economic and social development”¹²⁴ is an admirable policy position.

Lawmakers can’t simply pursue the (up too now unsuccessful) strategy of stamping out creative attempts by enterprises to derive essential business benefit from their under valued intangible assets through the only mechanisms, such as international transfer pricing, that they feel are available to them. An effective intangible asset valuation approach must be offered as an alternative.

Progressive governments need to recognise, and work to alleviate, the core problem of inadequacy characterising the valuation of intangible asset valuation under prevailing approaches. Only then can a joint legal and accounting solution be found to resolve a situation that deeply affects modern enterprises who have come to rely, increasingly, on their base of intangible assets.

¹²⁴ See Singapore Ministry of Law (2003); p.15.

V. Conclusion

The inadequate valuation of intangible assets delivered under the prevailing valuation approaches encourages enterprises to extract the direct business benefits they must demonstrate as returns for their investment in these assets in other ways. Many MNE's, with the international reach necessary to engage in the practice, seek to manipulate the international transfer pricing of intangible assets, by internally shifting their intangible assets between high and low tax jurisdictions in pursuit of such returns, even in the face of a sustained effort by national tax authorities to hinder this activity.

Resolving the international transfer pricing problem, and the associated revenue issues this creates for national tax authorities, requires a resolution of the underlying problem that drives the MNE's to look for value creating opportunities outside the existing valuation system; a system that has traditionally failed to adequately recognise the value of their increasingly significant, and expensive to generate and maintain, intangible assets.

The only effective solution will be one that tackles the root cause of the problem and delivers a combination of strategies that will ultimately deliver a valuation system that provides enterprises an adequate recognition of, and return for, the intangible asset investments they have made.

Chapter 4 Current Trends: Harmonising International Standards and Improving Intangible Asset Valuation

I. Introduction

In the last chapter we examined the overall problem, and some of the manifestations and consequences, that the inadequate valuation of intangible assets represents and causes. The prevailing valuation approaches, attended by the unsatisfactory repository of enterprise intangible asset value that goodwill is supposed to represent, are inadequate. They have failed to recognise the specific, and anything like fair, value that enterprise intangible assets, expensive to develop and maintain, have for their enterprise owners.

In this chapter we will examine current trends, in particular in relation to the consolidation of useful, and increasingly accepted, international accounting, and supporting financial and legal, standards that, taken together, offer definite scope for improving the adequacy of intangible asset valuation.

And this is important because, perhaps ironically, given the historical opposition, even hostility, of traditional accounting to intangible asset recognition, general accounting standards are, in conjunction with a supportive legal framework, the best possible platform for establishing a consistent, and effective, approach to intangible asset valuation ¹²⁵.

¹²⁵ See Wyatt and Webster (2007); p.14.

A number of international accounting standards bodies have engaged, usefully, in an increasingly coordinated, and harmonised, campaign to improve and align international accounting standards.

An examination of these bodies, their missions, and, more importantly, their standards, will usefully illustrate the current, positive, trend that I have observed in relation to accounting standards, and the scope for applying these, and associated valuation rules and approaches, to the historically inadequate recognition and valuation of intangible assets.

II. International Legal and Accounting Harmonisation: The Background

Until the most recent, and increasingly effective, push to establish a truly international set of accounting standards, and supporting legal framework, got underway, the obstacle that separate and often irreconcilable sets of nationally specific accounting practices represented to the rapidly globalising world economy was often noted.

“Much of the world is still speaking different languages when it comes to financial reporting. It’s confusing, inefficient and outmoded...Disparities in financial reporting caused by differing accounting standards may have been tolerable when cross-border investment was a fraction of what it is today. In today’s global market, these disparities exact a high price”¹²⁶

¹²⁶ See Sanders and Smith (2008); p.11 quoting Turley, James S., “Mind the GAAP”, *Wall Street Journal*, November 9, 2007, page A18.

Mr James S Turley, Chairman and CEO of Ernst & Young, made this observation in support of his view that the International Financial Reporting Standards (IFRS) needed to be adopted universally in the place of such particular national standards such as those constituting the U.S. Generally Accepted Accounting Principles (GAAP).

As he probably knew then in calling for such an important reform, a week later it was reported that the U.S. Securities and Exchange Commission (SEC) had dropped the requirement for non-U.S. companies listed on a U.S. stock exchange to reconcile their financials with GAAP.¹²⁷

Henceforth, non-US companies could operate without reconciling their accounting to the US GAAP so long as they prepared their financials in accord with the standards of the International Accounting Standards Board (IASB). These standards are known as International Financial Reporting Standards (IFRS)

It is often observed that any set of accounting rules, global and particular to any specific jurisdiction, must have some flexibility and that this flexibility is enough to permit significant disparity between national business communities.

¹²⁸Further, increasingly globalising enterprises have, for some time, developed and shared 'best practice' approaches to financial and accounting issues that

¹²⁷ See Sanders and Smith (2008); p.11 quoting Reilly, David and Scannell, Kara, "Global Accounting Effort Gains a Step", Wall Street Journal, November 16, 2007.

¹²⁸ See Sanders and Smith (2008); p.11 quoting Reilly & Scannell and Hail et al, "Mandatory IFRS Reporting Around the World: Early Evidence on the Economic Consequences", Wharton School, University of Pennsylvania, 2007.

has relied on such flexibility in reconciling such approaches to local GAAP. This has helped ensure that an environment existed in which enterprises could begin the transition from local GAAP to IFRS compliance without the disruption and dislocation a complete break might have represented if these standards bore absolutely no relation to each other.

Both GAAP and IFRS development was shaped by a shared history in which the need to underlying to better recognise and treat the value of enterprise intangible assets has grown, slowly but surely.

Increasing Pressure for The Recognition of Enterprise Intangible Assets

As reported by Gordon Smith and myself, “During the 1970’s and 80’s we witnessed the explosive growth of companies in the semiconductor, software and personal computer segment. These were companies whose intangible assets and intellectual property were central to their earning power. We began to observe the growing disconnect between the value of these enterprises and the amounts carried on their books. Nowhere was the issue of accounting statement - intangible asset disparity more evident than in the case of the new e-commerce enterprises that more recently sprang into existence. These companies were the darlings of Wall Street and easily raised hundreds of millions of dollars from eager investors, and did this with essentially no visible assets”¹²⁹.

¹²⁹ See Sanders and Smith (2008); p.12.

This has been part of an irreversible trend which has seen the relative value of the real, tangible, enterprise assets so favoured by prevailing valuation approaches decline. Intangible assets are now the most significant; most expensive to develop and maintain; and, by any measure, the most valuable assets that a modern business possesses. This has ensured that pressure to more adequately recognise intangible asset value has grown, to the point where international accounting standards engendering a better approach are not just observed as necessary, but being implemented as well.

The contribution of intangible assets to business success, and competitive advantage, is well accepted. Increasingly, “The value of a firm is based on its capacity to generate cash flows and the uncertainty associated with those cash flows. Generally, more profitable firms have been valued more highly than less profitable ones. In the case of new technology firms, though, this proposition seems to have been turned on its head... The negative earnings and the presence of intangible assets is used by analysts as a rationale for abandoning traditional valuation models and developing new ways that can be used to justify investing in technology firms... This search for new paradigms is misguided... The value of a firm is still the present value of the expected cash flows from its assets...”¹³⁰

Performing enterprise intangible assets fit well into this ‘firm value’ analysis. The accommodation of adequate intangible asset valuation within accounting, and supporting legal framework, standards is not so much a revolution, as an

¹³⁰ See Sanders and Smith (2008); p.12 quoting Aswath Damodaran, “The Dark Side of Valuation”, Prentice-Hall, Inc., Upper Saddle River, NJ, 2001, pp.11-12.

appropriate recognition of the fact that the most significant class of assets could no longer be left untreated without affecting the relevance and coverage of the standards themselves. The international transfer pricing abuses covered in the last chapter demonstrate the type of ‘self help’, even illegal, remedies that enterprises will almost inevitably apply to such intolerable situations.

Harmonisation: Towards an International Set of Valuation Standards

The movement towards a more useful set of international intangible asset valuation standards is perhaps best embodied in the mission statements, priorities and activities of the international and national standards bodies that are helping to help drive this process.

These bodies are at the forefront of the process of aligning national accounting standards with a set of universal accounting standards that are already improving, and support scope to improve yet further, the recognition, treatment and valuation of enterprise intangible assets.

The IASB (International Accounting Standards Board)

As outlined in the Mission Statement of the IASB, extracted from the IASB website:

The International Accounting Standards Board is an independent, privately-funded accounting standard-setter based in London, UK. The Board members

come from nine countries and have a variety of functional backgrounds. The IASB is committed to developing, in the public interest, a single set of high quality, understandable and enforceable global accounting standards that require transparent and comparable information in general purpose financial statements. In addition, the IASB co-operates with national accounting standard-setters to achieve convergence in accounting standards around the world ¹³¹.

Constitution

Following is an extract from Part A of the IASB-related IASC Foundation. This usefully illustrates the international scope and representation of the body, and its focus on developing and promoting a single set of global accounting standards.

PART A

Name and Objectives

- 1 The name of the organisation shall be the International Accounting Standards Committee Foundation (abbreviated as “IASC Foundation”). The International Accounting Standards Board (abbreviated as “IASB”), whose structure and functions are laid out in Sections 18-32, shall be the standard-setting body of the IASC Foundation.

¹³¹ See IASB Website, Mission Statement at www.iasb.org.

- 2 The objectives of the IASC Foundation are:
- (a) to develop, in the public interest, a single set of high quality, understandable and enforceable global accounting standards that require high quality, transparent and comparable information in financial statements and other financial reporting to help participants in the world's capital markets and other users make economic decisions;
 - (b) to promote the use and rigorous application of those standards;
 - (c) in fulfilling the objectives associated with (a) and (b), to take account of, as appropriate, the special needs of small and medium-sized entities and emerging economies; and
 - (d) to bring about convergence of national accounting standards and International Accounting Standards and International Financial Reporting Standards to high quality solutions.

Governance of the IASC Foundation

- 3 The governance of the IASC Foundation shall rest with the Trustees and such other governing organs as may be appointed by the Trustees in accordance with the provisions of this Constitution. The Trustees shall use their best endeavours to ensure that the requirements of this Constitution are observed; however, they are empowered to make minor variations in the interest of feasibility of operation if such variations are agreed by 75% of all the Trustees.

Trustees

- 4 The Trustees shall comprise twenty-two individuals.
- 5 The Trustees shall be responsible for the selection of all subsequent Trustees to fill vacancies caused by routine retirement or other reason. In making such selection, the Trustees shall be bound by the criteria set forth in Sections 6 and 7 and in particular shall undertake mutual consultation with international organisations as set out in Section 7, for the purpose of selecting an individual with a similar background to that of the retiring Trustee, where the retiring Trustee was selected through a process of mutual consultation with one or more international organisations.
- 6 All Trustees shall be required to show a firm commitment to the IASC Foundation and the IASB as a high quality global standard-setter, to be financially knowledgeable, and to have an ability to meet the time commitment. Each Trustee shall have an understanding of, and be sensitive to the challenges associated with the adoption and application of high quality global accounting standards developed for use in the world's capital markets and by other users. The mix of Trustees shall broadly reflect the world's capital markets and a diversity of geographical and professional backgrounds.

The Trustees shall be required to commit themselves formally to acting in the public interest in all matters. In order to ensure a broad international basis, there shall be

- (a) 6 Trustees appointed from North America;
- (b) 6 Trustees appointed from Europe;

- (c) 6 Trustees appointed from the Asia/Oceania region; and
 - (d) 4 Trustees appointed from any area, subject to establishing overall geographical balance.
- 7 The Trustees shall comprise individuals that as a group provide an appropriate balance of professional backgrounds, including auditors, preparers, users, academics, and other officials serving the public interest. Two of the Trustees shall normally be senior partners of prominent international accounting firms. To achieve such a balance, Trustees should be selected after consultation with national and international organisations of auditors (including the International Federation of Accountants), preparers, users and academics. The Trustees shall establish procedures for inviting suggestions for appointments from these relevant organisations and for allowing individuals to put forward their own names, including advertising vacant positions.
- 8 Trustees shall normally be appointed for a term of three years, renewable once: in order to provide continuity, some of the initial Trustees will serve staggered terms so as to retire after four or five years.¹³²

IASC/IASB History

The International Accounting Standards Board (IASB) was preceded by the Board of the International Accounting Standards Committee (IASC), which operated from 1973 until 2001.

¹³² See IASB Website, Constitution at www.iasb.org.

IASC was founded in June 1973 as a result of an agreement by accountancy bodies in Australia, Canada, France, Germany, Japan, Mexico, the Netherlands, the United Kingdom and Ireland and the United States, and these countries constituted the Board of IASC at that time.

The international professional activities of the accountancy bodies were organised under the International Federation of Accountants (IFAC) in 1977. In 1981, IASC and IFAC agreed that IASC would have full and complete autonomy in setting international accounting standards and in publishing discussion documents on international accounting issues. At the same time, all members of IFAC became members of IASC. This membership link was discontinued in May 2000 when IASC's Constitution was changed as part of the reorganisation of IASC.¹³³

A recent history of the IASC/IASB is attached, at Appendix 4. It contains a chronology outlining key milestones and events that occurred during that period¹³⁴.

Activities

In support of its mission and desire to develop and encourage the adoption of a single set of international accounting standards, the IASB engages in research, standard drafting, and other related activities.

¹³³ See IASB Website at www.iasb.org.

¹³⁴ See Appendix 4.

The IASB Work Plan (attached at Appendix 2 and current as at June 2008) usefully illustrates the particular focus that the IASB devotes to the recognition and treatment of enterprise intangible assets.

Key Standards

The most important IAS (International Accounting Standard) produced by the IASB in terms of its impact on the recognition and treatment of enterprise intangible assets is undoubtedly IAS 38 – Intangible Assets. The following summary, produced by Deloitte outlines the main points.¹³⁵

SUMMARY OF IAS 38	
Objective	
The objective of IAS 38 is to prescribe the accounting treatment for intangible assets that are not dealt with specifically in another IAS. The Standard requires an enterprise to recognise an intangible asset if, and only if, certain criteria are met. The Standard also specifies how to measure the carrying amount of intangible assets and requires certain disclosures regarding intangible assets.	
Scope	
IAS 38 applies to all intangible assets other than: [IAS 38.2-3]	
* financial assets	
* mineral rights and exploration and development costs incurred by mining and oil and gas companies	
* intangible assets arising from insurance contracts issued by insurance companies	
* intangible assets covered by another IAS, such as intangibles held for sale, deferred tax assets, lease assets, assets arising from employee benefits, and goodwill. Goodwill is covered by IFRS 3 .	

¹³⁵ See Deloitte Resources at www.iasplus.com/standard/ias38.htm.

Key Definitions

Intangible asset: An identifiable nonmonetary asset without physical substance. An asset is a resource that is controlled by the enterprise as a result of past events (for example, purchase or self-creation) and from which future economic benefits (inflows of cash or other assets) are expected. Thus, the three critical attributes of an intangible asset are: [IAS 38.8]

- * identifiability

- * control (power to obtain benefits from the asset)

- * future economic benefits (such as revenues or reduced future costs)

Identifiability: An intangible asset is identifiable when it: [IAS 38.12] is separable (capable of being separated and sold, transferred, licensed, rented, or exchanged, either individually or as part of a package) or 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.

Examples of possible intangible assets include:

- * computer software

- * patents

- * copyrights

- * motion picture films

- * customer lists

- * mortgage servicing rights

- * licenses

- * import quotas

- * franchises

- * customer and supplier relationships

- * marketing rights

Intangibles can be acquired:

- * by separate purchase

- * as part of a business combination

- * by a government grant

- * by exchange of assets

- * by self-creation (internal generation)

Recognition

Recognition criteria. IAS 38 requires an enterprise to recognise an intangible asset, whether purchased or self-created (at cost) if, and only if: [IAS 38.21]

it is probable that the future economic benefits that are attributable to the asset will flow to the enterprise; and
the cost of the asset can be measured reliably.

This requirement applies whether an intangible asset is acquired externally or generated internally. IAS 38 includes additional recognition criteria for internally generated intangible assets (see below).

The probability of future economic benefits must be based on reasonable

and supportable assumptions about conditions that will exist over the life of the asset. [IAS 38.22] The probability recognition criterion is always considered to be satisfied for intangible assets that are acquired separately or in a business combination. [IAS 38.33]

If recognition criteria not met. If an intangible item does not meet both the definition of and the criteria for recognition as an intangible asset, IAS 38 requires the expenditure on this item to be recognised as an expense when it is incurred. [IAS 38.68]

Business combinations. There is a rebuttable presumption that the fair value (and therefore the cost) of an intangible asset acquired in a business combination can be measured reliably. [IAS 38.35] An expenditure (included in the cost of acquisition) on an intangible item that does not meet both the definition of and recognition criteria for an intangible asset should form part of the amount attributed to the goodwill recognised at the acquisition date. IAS 38 notes, however, that non-recognition due to measurement reliability should be rare: [IAS 38.38]

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:

- (a) is not separable; or
- (b) is separable, but there is no history or evidence of exchange transactions for the same or similar assets, and otherwise estimating fair value would be dependent on immeasurable variables.

Reinstatement. The Standard also prohibits an enterprise from subsequently reinstating as an intangible asset, at a later date, an expenditure that was originally charged to expense. [IAS 38.71]

Initial Recognition: Research and Development Costs

Charge all research cost to expense. [IAS 38.54]

Development costs are capitalised only after technical and commercial feasibility of the asset for sale or use have been established. This means that the enterprise must intend and be able to complete the intangible asset and either use it or sell it and be able to demonstrate how the asset will generate future economic benefits. [IAS 38.57]

If an enterprise cannot distinguish the research phase of an internal project to create an intangible asset from the development phase, the enterprise treats the expenditure for that project as if it were incurred in the research phase only.

Initial Recognition: In-process Research and Development Acquired in a Business Combination

A research and development project acquired in a business combination is recognised as an asset at cost, even if a component is research. Subsequent expenditure on that project is accounted for as any other research and development cost (expensed except to the extent that the expenditure satisfies the criteria in IAS 38 for recognising such expenditure as an

intangible asset). [IAS 38.34]

Initial Recognition: Internally Generated Brands, Mastheads, Titles, Lists

Brands, mastheads, publishing titles, customer lists and items similar in substance that are internally generated should not be recognised as assets. [IAS 38.63]

Initial Recognition: Computer Software

Purchased: capitalise

Operating system for hardware: include in hardware cost

Internally developed (whether for use or sale): charge to expense until technological feasibility, probable future benefits, intent and ability to use or sell the software, resources to complete the software, and ability to measure cost.

Amortisation: over useful life, based on pattern of benefits (straight-line is the default).

Initial Recognition: Certain Other Defined Types of Costs

The following items must be charged to expense when incurred:

internally generated goodwill [IAS 38.48]

start-up, pre-opening, and pre-operating costs [IAS 38.69]

training cost [IAS 38.69]

advertising and promotional cost, including mail order catalogues [IAS 38.69]

relocation costs [IAS 38.69]

For this purpose, 'when incurred' means when the entity receives the related goods or services. If the entity has made a prepayment for the above items, that prepayment is recognised as an asset until the entity receives the related goods or services. [IAS 38.70]

Initial Measurement

Intangible assets are initially measured at cost. [IAS 38.24]

Measurement Subsequent to Acquisition: Cost Model and Revaluation Models Allowed

An entity must choose either the cost model or the revaluation model for each class of intangible asset. [IAS 38.72]

Cost model. After initial recognition the benchmark treatment is that intangible assets should be carried at cost less any amortisation and impairment losses. [IAS 38.74]

Revaluation model. Intangible assets may be carried at a revalued amount (based on fair value) less any subsequent amortisation and impairment losses only if fair value can be determined by reference to an active market. [IAS 38.75] Such active markets are expected to be uncommon for

intangible assets. [IAS 38.78] Examples where they might exist:

Milk quotas.

Stock exchange seats.

Taxi medallions.

Under the revaluation model, revaluation increases are credited directly to "revaluation surplus" within equity except to the extent that it reverses a revaluation decrease previously recognised in profit and loss. If the revalued intangible has a finite life and is, therefore, being amortised (see below) the revalued amount is amortised. [IAS 38.85]

Classification of Intangible Assets Based on Useful Life

Intangible assets are classified as: [IAS 38.88]

Indefinite life: No foreseeable limit to the period over which the asset is expected to generate net cash inflows for the entity.

Finite life: A limited period of benefit to the entity.

Measurement Subsequent to Acquisition: Intangible Assets with Finite Lives

The cost less residual value of an intangible asset with a finite useful life should be amortised on a systematic basis over that life: [IAS 38.97]

The amortisation method should reflect the pattern of benefits.

If the pattern cannot be determined reliably, amortise by the straight line method.

The amortisation charge is recognised in profit or loss unless another IFRS requires that it be included in the cost of another asset.

The amortisation period should be reviewed at least annually. [IAS 38.104]

The asset should also be assessed for impairment in accordance with IAS 36. [IAS 38.111]

Measurement Subsequent to Acquisition: Intangible Assets with Indefinite Lives

An intangible asset with an indefinite useful life should not be amortised. [IAS 38.107]

Its useful life should be reviewed each reporting period to determine whether events and circumstances continue to support an indefinite useful life assessment for that asset. If they do not, the change in the useful life assessment from indefinite to finite should be accounted for as a change in an accounting estimate. [IAS 38.109]

The asset should also be assessed for impairment in accordance with IAS 36. [IAS 38.111]

Subsequent Expenditure

Subsequent expenditure on an intangible asset after its purchase or completion should be recognised as an expense when it is incurred, unless it is probable that this expenditure will enable the asset to generate future economic benefits in excess of its originally assessed standard of

performance and the expenditure can be measured and attributed to the asset reliably. [IAS 38.60]

Disclosure

For each class of intangible asset, disclose: [IAS 38.118 and 38.122]

- * useful life or amortisation rate
 - * amortisation method
 - * gross carrying amount
 - * accumulated amortisation and impairment losses
 - * line items in the income statement in which amortisation is included
 - * reconciliation of the carrying amount at the beginning and the end of the period showing:
 - * additions (business combinations separately)
 - * assets held for sale
 - * retirements and other disposals
 - * revaluations
 - * impairments
 - * reversals of impairments
 - * amortisation
 - * foreign exchange differences
 - * basis for determining that an intangible has an indefinite life
 - * description and carrying amount of individually material intangible assets
 - * certain special disclosures about intangible assets acquired by way of government grants
 - * information about intangible assets whose title is restricted
 - commitments to acquire intangible assets
- Additional disclosures are required about:
- * intangible assets carried at revalued amounts [IAS 38.124]
 - * the amount of research and development expenditure recognised as an expense in the current period [IAS 38.126]

The FASB (Financial Accounting Standards Board)

As extracted from the FASB website, the United States' FASB describes itself as:

“Since 1973, the designated organization in the private sector for establishing standards of financial accounting and reporting. Those standards govern the preparation of financial reports. They are officially recognized as authoritative

by the Securities and Exchange Commission (Financial Reporting Release No. 1, Section 101 and reaffirmed in its April 2003 Policy Statement) and the American Institute of Certified Public Accountants (Rule 203, Rules of Professional Conduct, as amended May 1973 and May 1979). Such standards are essential to the efficient functioning of the economy because investors, creditors, auditors, and others rely on credible, transparent, and comparable financial information.

The Securities and Exchange Commission (SEC) has statutory authority to establish financial accounting and reporting standards for publicly held companies under the Securities Exchange Act of 1934. Throughout its history, however, the Commission's policy has been to rely on the private sector for this function to the extent that the private sector demonstrates ability to fulfil the responsibility in the public interest.”¹³⁶.

As it itself describes, to accomplish its mission, the FASB acts to:

- Improve the usefulness of financial reporting by focusing on the primary characteristics of relevance and reliability and on the qualities of comparability and consistency;
- Keep standards current to reflect changes in methods of doing business and changes in the economic environment;
- Consider promptly any significant areas of deficiency in financial reporting that might be improved through the standard-setting process;

¹³⁶ See FASB Website at www.fasb.org.

- Promote the international convergence of accounting standards concurrent with improving the quality of financial reporting; and
- Improve the common understanding of the nature and purposes of information contained in financial reports.¹³⁷

The FASB develops broad accounting concepts as well as standards for financial reporting. It also provides guidance on implementation of standards. Concepts are useful in guiding the Board in establishing standards and in providing a frame of reference, or conceptual framework, for resolving accounting issues.

In helping to establish reasonable bounds for judgment in preparing financial information and to increase understanding of, and confidence in, financial information on the part of users of financial reports, the FASB serves a vital function. The TEV model and supporting business valuation criteria that I will outline in Chapters 6 and 7 would rely, in part, on enterprise owners confidently asserting, to auditors and tax authorities, for example, management representations as to the fair value of their intangible assets. The set of business valuation criteria are meant to support a TEV (Total Enterprise Value) approach that will defend enterprise owner value assertions. The work that the FASB and IASB undertake to improve the quality and reliability of information presented in financial statements themselves is absolutely vital.

¹³⁷ See FASB Website at www.fasb.org.

Helping the public, and enterprise owners, tax authorities, regulators, investors and auditors, to understand the nature and limitations of information supplied in financial reports increases confidence in them. This increased confidence reduces the level of risk attached to a reliance on them; benefiting all these stakeholders.

The FASB, increasing in collaboration with the IASB, has also taken on the task of assisting enterprises adapt to the new global accounting standards. The IFRS (International Financial Reporting Standards), in particular, have been the subject of an enormous implementation support effort on the part of the IASB/FASB.

Amendments proposed to IFRS 1 *First-time Adoption of International Financial Reporting Standards*, outlined in an Exposure Draft made available to the public in February 2007, were proposed “in order to remove difficulties that prevent some entities from adopting IFRSs”¹³⁸. These difficulties are assessed by the various international and national peak bodies, such as the IASB and FASB, and put forward as issues of concern whose resolution will ease the transition to the target single set of international accounting standards.

In a similar fashion, the DRSC (Deutsches Rechnungslegungs Standards Committee) or ASCG (Accounting Standards Committee of Germany), constantly monitors the enterprise environment in Germany with a view to ensuring that their requirements and issues of concern are considered while

¹³⁸ See IASB. Press Release : IASB Publishes Proposals to Help First-time Adopters of IFRSs (2007); p.2.

new international standards for the recognition of intangible asset value, and the overall financial reporting regime within which this is incorporated, are developed and implemented.

In a round-table discussion paper produced for a meeting of the DRSC in Dusseldorf/Frankfurt on 18/19 January, 2007, it was noted that many smaller German SME's (Small and Medium Enterprises) rarely provided financial statements for information purposes. Most of these SME's only tended to prepare such statements for tax purposes. Imposing the full IFRS standards on such firms, it was felt, when the IFRS rules were designed for broader information purposes, with investors in mind, would be an expensive, and unnecessary, burden.

Suggested solution, such as the 3-tiered model to be applied in Germany¹³⁹, is an example of a national accounting standards body seeking to harmonise or align local and national conditions and international accounting standards. Acknowledging that enterprises needed to be assisted in the transition to a new single set of international accounting standards, and providing vital implementation support, such bodies serve a useful role.

The wording of the 'responsibility statement' (or Bilanzzeit) that the DRSC would henceforth oblige entities in Germany to sign when producing a consolidated financial statement (for a group that may contain enterprises from

¹³⁹ See ASCG. *Minutes: Round Table Discussions with Paul Pacter* (2007); p.4. This looks to impose reporting obligations sensitive to the status and size of enterprises: large companies (full IFRS); SME's (IFRS for SME's) and small companies (prepare commercial financial statements only for tax purposes).

across any of the 3 tiers outlined above) is an example of a reform sensitive to providing maximum confidence for the users of financial statements even as the burden on enterprises themselves was being minimised, wherever possible.

An expanded contemplation of a ‘fair’ enterprise intangible asset value would fit well within the scope of a commitment that the financial statement, “to the best of our knowledge, and in accordance with the applicable reporting principles, the consolidated financial statements give a true and fair view of the assets, liabilities, financial position and profit and loss of the group, and the group management report includes a fair review of the development and performance of the business and the position of the group, together with a description of the principal opportunities and risks associated with the expected development of the group”¹⁴⁰.

IV. Current Trends

FASB Convergence with the IASB

As extracted from the FASB website, in October, 2007, the Overview of FASB’S International Activities report illustrates the significance that achieving a convergence between national accounting systems, and the emerging set of international accounting standards, has for the FASB.

¹⁴⁰ Extracted from p. 1 of the “Bilanzzeit” – or responsibility statement – that German enterprises must sign as part of their annual financial reporting process. This is required under German Accounting Standard (GAS) 16.

The enormous number of convergence projects, proudly outlined by the FASB on their website, and consistently represented in the IASB Work Plan (attached at Appendix 2) is a good indication of this primary strategic objective.

With “no direct powers of enforcement or scrutiny”¹⁴¹ the IASB relies on the commitment of such national bodies as the FASB in the US to effect the convergence it must achieve to fulfil its goal of enacting a single set of international accounting standards.

The standards that the IASB controls (IAS and IFRS) have been adopted through a process of international cooperation, alignment and harmonisation unparalleled in the history of accounting standards.

The efficiency dividend that a genuinely global set of accounting standards delivers makes it immediately attractive; particularly for entities operating in more than one national jurisdiction. The harmonisation of accounting standards, which the IASB has so successfully assisted, has a compelling logic given that “Accounting is essentially concerned with measurement, so it would be reasonable to expect that principles of measurement should be the same in any country. Companies operating and reporting in more than one country should not experience different measures of financial outcomes solely

¹⁴¹ See Roberts, Weetman and Gordon (2005); p.xii.

because of the accounting principles of the country in which head office is located”¹⁴²

Where measurement is historically contentious and currently inadequate, such as with respect to the valuation of enterprise intangible assets with which we are concerned, a single set of accounting standards clarifying rules for recognising and asserting this value is potentially extremely useful. And the greater scope that IFRS have allowed for enterprises to reflect the value of intangible assets in their financial statements has been pronounced.

IFRS (International Financial Reporting Standards)

January 2005 represented a key milestone in the progress towards the acceptance of a set of truly international financial reporting standards (IFRS). From that point on listed companies in all EU member states were required to apply IFRS (rather than their national accounting standards or GAAP) in producing their consolidated financial statements. Beyond the EU, there was a flow on effect; as non-EU companies with trading links into Europe found extra reason to mirror, or at least accommodate IFRS in their own financial reporting.

The February, 2007 Exposure Draft of a Proposed IFRS for Small and Medium Sized Entities, circulated by the IASB, is evidence both of the extent to which the January, 2005 EU milestone was part of a global transition to

¹⁴² See Roberts, Weetman and Gordon (2005); p.3.

IFRS and of how deeply compliance with IFRSs has penetrated in that short period of time.

An examination of the Exposure Draft also illustrates the much greater focus IFRS pays to the recognition and treatment of intangible assets at the enterprise financial reporting level.

Section 17 – Intangible Assets other than Goodwill – provides comprehensive guidance for enterprises seeking to give adequate recognition to, and assert adequate valuations for their intangible assets. The essential recognition of an intangible asset is made subject to a simple 2 step test:

- 1) it is probable that the future economic benefits that are attributable to the asset will flow to the entity; and
- 2) the cost or value of the asset can be measured reliably ¹⁴³.

The scope for entities to use their own judgement in assessing the degree of certainty that can reasonably associated with lies at the heart of the Level 3 input ‘management representations’ that that can be made to defend intangible asset-related future economic benefit estimates. These in turn, are key to the operation of the TEV model, and supporting business valuation criteria, that I will outline in Chapters 6 and 7.

¹⁴³ See IASB. *Exposure Draft of a Proposed IFRS for Small and Medium-sized Entities* (2007); p.111.

The ability to defend an enterprise view of the ‘useful life’ of an intangible asset, under Section 17.24¹⁴⁴ creates scope for increasing the future economic benefit estimates associated with an intangible asset. Supported by SFAS 157, and its useful expansion of intangible asset ‘fair value’ criteria, such IFRS guidance encourages enterprises to assert greater lifespans, and inevitably valuations, for performing intangible assets, freed from the old rule under US GAAP, for example, of mandating an entirely arbitrary 40 year limit for these.

An excellent example of IASB and FASB convergence; the expansion of a useful ‘fair value’ approach to intangible asset valuation; and the role IFRSs are playing in consolidating progress in both areas is the project, carried out as a joint IASB-FASB activity, to “develop a single set of guidance that will apply to all fair value measurements required by IFRS”¹⁴⁵. In seeking to clarify, simplify and codify this key determinant of defensible intangible asset value, the IASB and FASB are acting in the truest spirit of the convergence objective that they have set for themselves.

The transition arrangements that IFRIC (International Financial Reporting Interpretations Committee)¹⁴⁶ establishes for recognising intangible assets under IAS 38 is typical in usefully obliging enterprises to apply the new rules for intangible asset recognition and treatment as soon as possible in their financial reporting cycle.

¹⁴⁴ See IASB. *Exposure Draft of a Proposed IFRS for Small and Medium-sized Entities* (2007); p.115.

¹⁴⁵ See IASB. *Comments on IASB Discussion Paper ‘Fair Value Measurements’* (2007); p.7.

¹⁴⁶ See IASB. *Comments on IASB Discussion Paper ‘Fair Value Measurements’* (2007); p.14.

While there are still particular, and significant, limitations placed on the recognition, treatment and, inevitably, valuation of enterprise intangible assets; such as in relation to internally generated brands and other assets the development of which must generally be expensed¹⁴⁷, acquired intangible assets are particularly well treated under the new international accounting standards. In fact, improvements in the recognition and valuation of acquired intangibles (particularly illustrated in SFAS 141 and 142 which I shall outline below) represent a beachhead that will, in the long run, see a much more adequate approach to intangible asset valuation, overall, being established.

In a Memorandum of Understanding published by the IASB and FASB in February, 2006, these bodies reaffirmed their commitment to a “convergence of US generally accepted accounting principles (GAAP) and International Financial Reporting Standards (IFRS) and their shared objective of developing high quality, common accounting standards for use in the world’s capital markets”¹⁴⁸. This commitment had as a centrepiece a project to clarify and consolidate the measuring of fair value.

Recognising the vital role that an effective fair value measurement approach plays in the treatment of enterprise intangible assets, the FASB also issued a supporting SFAS (SFAS 157 – Fair Value Measurements) that “establishes a

¹⁴⁷ See Wyatt and Webster (2007); p.27-28. Recognition of internally generated intangible assets is severely restricted.

¹⁴⁸ See IASB. *Discussion Paper: Fair Value Measurements: Part 1 – Invitation to Comment and Relevant IFRS Guidance* (2006); p.5.

single definition for fair value together with a framework for measuring fair value for US GAAP”¹⁴⁹.

Determined to see an improved single definition for fair value prevail, the IASB asserted for itself the right to review all IFRS standards and exclude from the Exposure Draft all standards inconsistent with the new expanded fair value definition; a clarifying activity that assists the improved fair value measurement of enterprise intangible assets.

The 2005 Consolidated Financial Statements of the Bayer Group (Germany), contained within their 2005 Annual Report, illustrate how quickly these enabling new standards were being put into effect by enterprises. True to the IFRIC determination, outlined above, that entities must, even retrospectively, apply the improved rules for recognising intangible assets in their financial reporting cycles, Bayer referred to this in the General Information section of the Financial Statement.

Noting that “the retrospective application of new or revised standards requires that amounts recognised in the financial statements for the preceding annual period and the opening balance for the reporting period be restated as if the new recognition and valuation principles had been applied in the past”¹⁵⁰, Bayer happily complied and proceeded to exploit the new value that an expanded recognition of enterprise intangible assets, extended by this

¹⁴⁹ See IASB. Discussion Paper: Fair Value Measurements: Part 1 – Invitation to Comment and Relevant IFRS Guidance (2006); p.5.

¹⁵⁰ See Bayer (2005); p.87.

transition arrangement, allowed. This is being repeated by enterprises all over the world keen to adopt the new financial reporting standards and improve the recognition, treatment and valuation of their intangible assets.

V. The Legal and Accounting Framework and Valuation: Some Observations

Singapore: A National Perspective

Financial Accounting Standards (SFAS) 141 and 142 (outlined at VI. SFAS Statements below), and the ongoing enactment of corresponding standards in Singapore, is typical of an ongoing alignment of national laws and accounting rules with an international set of standards that, as I shall demonstrate later, allows for, and even demands, improved valuation of enterprise intangible assets.

While “business people, investors, lenders, the accounting profession, valuation professionals, and academics continue to voice opinions about how to get more and better financial information in the hands of lenders and investors”¹⁵¹ the ongoing harmonisation of international standards helps ensure that these improvements are consolidated.

As outlined in the Sanders and Smith report [op cit], suggestions for reform in Singapore, similar to those in other countries faced with the problem of

¹⁵¹ See Sanders and Smith (2008); p.33.

inadequate valuation of intangible assets, have generally aligned with one of the following concepts:

1. A whole new financial reporting scheme is required.
2. Financial reporting should be modified so that internally-generated intangible assets and intellectual property could be recognised.
3. Leave the financial statements alone but add additional supplemental information that would provide outsiders with some information about the intangible asset value drivers of a business.
4. Leave the financial statements as they are.¹⁵²

Consistent with the view that a whole new financial reporting approach is required was the view expressed in a report produced under the Canadian Institute of Chartered Accountants performance reporting initiative, commenced in 1994, in which it was noted that:

“In addition to the pragmatic concerns registered by business executives, a strong theoretical case can be made that the current accounting model does not adequately reflect economic reality for knowledge-intensive businesses.”

¹⁵² See Sanders and Smith (2008); p.33.

“This is, however, not easily remedied, since accounting adequately for knowledge-based business will ultimately require the invention of a new accounting model.”¹⁵³

In a similar vein, the American Institute of Certified Public Accountants noted that:

“Increased competition and rapid advances in technology are resulting dramatic changes. To survive and compete, companies are changing everything – the way they are organized and managed, the way they do work and develop new products, the way they manage risks, and their relationships with other organizations...[they] are changing their information systems and the types of information they use to manage their businesses...Can business reporting be immune from the fundamental changes affecting business?”¹⁵⁴

At the “don’t change anything” end of the spectrum, a 1997 magazine article expressed this view:

“The most troubling idea of the IC [intellectual capital] generation is to tinker with financial statements, so companies full of smart people who don’t make profits look more attractive to investors. Some want to include the capitalized value of workers’ ideas on the balance sheet. Some want to include cultural

¹⁵³ See Sanders and Smith (2008); p.33, quoting Robert I. G. McLean, *Performance Measures in the New Economy*, Canadian Institute of Chartered Accountants, Toronto, 1995. As reported in Financial Accounting Series No. 219-A, *Special Report: Business and Financial Reporting Challenges from the New Economy*, Wayne S. Upton, Jr., Financial Accounting Standards Board, April, 2001, page 13.

¹⁵⁴ See Sanders and Smith (2008); p.34 quoting *Improving Business Reporting – A New Customer Focus*, AICPA, New York, 1994. As reported in Financial Accounting Series No. 219-A, *Special Report: Business and Financial Reporting Challenges from the New Economy*, Wayne S. Upton, Jr., Financial Accounting Standards Board, April, 2001, page 10.

factors, such as the gender composition of the workforce, as if it is somehow a driver of the profitability of a company...Monkeying with financial statements, for almost any reason, is a terrible idea. Investors have 500 years of practice interpreting financial statements...they have developed methods to adjust for many of the anomalies (for example, amortization of goodwill, which can only be defined by describing what it is not) that emerge from our archaic double-entry bookkeeping practices from time to time.”¹⁵⁵

Demonstrating how far we have already come since the 1990's, and interesting given the key role that such bodies as the IASB and FASB now play in improving the international standard base for improved intangible asset recognition and valuation, it is obvious that the FASB (at least at the time of developing Statements 141 & 142) clearly intended to continue the exclusion of self-created intangible assets and intellectual property from the financial statements:

“Costs of internally developing, maintaining, or restoring intangible assets that are not specifically identifiable, have indeterminate lives, or are inherent in an continuing business and related to an enterprise as a whole shall be recognized as an expense when incurred”¹⁵⁶

Despite any such FASB reservations at the time, SFAS 141, 142 and 157, taken together, support a much more adequate approach to recognising and

¹⁵⁵ See Sanders and Smith (2008); p.34 quoting John Rutledge, “You're a Fool if You Buy Into This”, *Forbes ASAP*, April, 1997. As reported in Financial Accounting Series No. 219-A, *Special Report: Business and Financial Reporting Challenges from the New Economy*, Wayne S. Upton, Jr., Financial Accounting Standards Board, April, 2001, page 4.

¹⁵⁶ See Sanders and Smith (2008); p.34. This was carried forward from Opinion 17.

valuing intangible assets then has ever been extended by the prevailing valuation approaches (or the simple cost, income and market-based methods).

As shall be outlined in detail (again at VI. below) the SFAS 141, 142 and 157 have dramatically improved the scope for recognising the value of intangible assets, and reflecting this value in financial statements. By actually creating a positive obligation for enterprises to do so in relation to acquired intangibles, these standards support a culture of asserting, and defending, an expanded enterprise intangible asset value.

In a letter to Sir David Tweedie, Chairman of the IASB, the GASB (German Accounting Standards Board) congratulated the IASB and FASB on the development of an improved standards framework; this being “of fundamental importance to the high quality of the IFRS”¹⁵⁷.

VI. SFAS (Statement of Financial Accounting Standards)

Of particular significance to the improvement, and ongoing consolidation, of international accounting standards, and for the improved recognition and treatment of enterprise intangible assets in particular, are SFAS 141, 142 and 157.

¹⁵⁷ See ASCG. *Discussion Paper: Preliminary Views on an Improved Conceptual Framework for Financial Reporting*. (2006); p.1.

SFAS No. 141

Statement of Financial Accounting Standards No. 141 (Business Combinations) addresses financial accounting and reporting for business combinations. An immediate improvement, in terms of consistent treatment at least, is that all business combinations are to be accounted for using one method, the purchase method. Under the superseded APB Opinion No. 16, *Business Combinations*, and SFAS Statement No. 38, *Accounting for Preacquisition Contingencies of Purchased Enterprises*, one of two methods, the pooling-of-interests (or pooling) method, or purchase method, could be used.

As the pooling method was required to be used whenever 12 specific criteria¹⁵⁸ were met; and the 12 criteria did not differentiate between economically distinguishable transactions, “similar business combinations were accounted for using different methods that produced dramatically different financial statement results”¹⁵⁹

As a result, in the pre SFAS 141, Opinion 16, environment:

- Users of financial statements often indicated that it was difficult to compare the financial results of entities because different accounting methods were being used.

¹⁵⁸ See SFAS No. 141, at Summary p.1. Opinion 16 outlined the 12 criteria.

¹⁵⁹ See SFAS No. 141, at Summary p.1.

- Users of financial statements also indicated a need for better intangible asset information as these assets became an increasingly important economic resource for enterprises, and an increasingly large proportion of the assets being acquired in business combinations generally. The pooling method was especially inadequate here as only assets previously recorded by the acquired entity are recognised.
- Enterprise managers also indicated that differences between the pooling and purchase methods (and particularly the inadequacies of the pooling method in relation to the recognition of intangible assets) adversely affected their merger and acquisition activity.

This situation could not support the consistent, and adequate, valuation of intangible assets within an enterprise, given that accounting for the overall business combination itself was subjected to such a confusing, even conflicting, choice of accounting approaches.

SFAS 141 improves the accounting for business combinations in several important ways, namely:

- All business combinations will be accounted for by a single method (the purchase method). As previously discussed, this addresses the inconsistency and confusion caused by the previous co existence of the two methods (purchase and pooling) in relation to the recognition of intangible assets.

- Intangible assets can be separately recognised (in themselves and as separate from goodwill) if they meet one of two criteria (the contractual-legal criterion or the separability criterion). SFAS 141 also provides a list of representative ‘intangible assets’ that meet these criteria to assist in their identification.
- When the amounts of goodwill and intangible assets are significant in relation to the purchase price for the business combination, disclosure of supporting information relating to the intangible assets is required. This information, such as the amount of goodwill by reporting segment and the component of the purchase price relating to each major intangible asset, or asset class, ultimately supports a higher, and more secure, valuation for these increasingly significant intangible enterprise assets; and, ultimately, the enterprise itself.

As it leaves largely intact many of the existing rules and provisions that related to the application of the purchase method, SFAS 141’s introduction does not create widespread and unnecessary confusion or a problematic transition. By simply removing the confusing co-existence of the purchase and pooling methods, and the chilling effect this often had on the consistent recognition of intangible asset, as a subset of overall enterprise, value, it represents a welcome improvement.

A key, and beneficial, outcome of the changes to business combination accounting required under SFAS 141 is that the resulting financial statements will now, consistently, better reflect the underlying economics of the transactions involved. Insisting on a uniform, purchase method-based, accounting approach, SFAS 141 will:

- Better reflect the investment made in an acquired entity – as the purchase method records a business combination based on the values exchanged, it makes the transaction clearer and more transparent to those subsequently seeking to evaluate the ongoing performance of that investment, and the its value.
- Improve the comparability of reported financial information – as all business combinations are accounted for using a single, purchase, method, users of the related financial information can directly compare performances of business combinations on a ‘like for like’ basis.
- Provide more complete financial information – as there are now clear criteria for recognition of other than goodwill intangible assets, the resulting greater disclosure provides users of the financial information with more information about the assets acquired, allowing them, in turn, to more accurately assess future profit expectations and resulting value.

Taken together, these SFAS 141-related improvements will improve the quality of intangible asset-related information and, by extension, support an overall improvement in the recognition of enterprise intangible asset value.

The core usefulness of stipulating one, purchase, method for business combination accounting cannot be over emphasised.

Consistently accounting for economically similar transactions ensures greater comparability; a condition whose absence has historically bedevilled those seeking to assert expanded scope for recognising intangible asset value. In the

words of the Financial Accounting Standards Board (FASB) “a necessary and important characteristic of accounting information is neutrality; [the use of a single, purchase, accounting method] will neither encourage or discourage business combinations but rather provide information about these combinations that is fair and even handed”¹⁶⁰.

SFAS 141 effectively harmonises standards of financial accounting and reporting and supports an improved recognition of the value of intangible assets. This is achieved through a disciplined and consistent treatment of intangible assets from the initial recognition and measurement of them. Recognising that assets (including intangible ones) are usually acquired in exchange transactions (an exchange for consideration in the form of cash, liabilities or equity that can be determined), SFAS 141 makes it quite simple, through its determination to ensure that such considerations are calculated and recognised at the date of acquisition to establish a ‘value baseline’ for calculating the future treatment, performance, and valuation, of these intangible assets.

By insisting on a fair value approach, SFAS 141 also assists in the improved treatment and recognition of the value of intangible assets. It assumes the value of the assets acquired and the consideration paid for them to be equal, except where there is obvious evidence to the contrary (such as in situations where the purported value of the intangible assets exceeds the cost of acquiring the whole entity of which they form a part). This is a very effective

¹⁶⁰ See SFAS No. 141; at Summary p.4.

way to establish a baseline value for all assets; and can work equally well for any defined assets, be they tangible or intangible. Given that even non-cash consideration can still have an equivalent value defined for it, this operates as a near universal means for establishing the acquisition, or initial, value of intangible assets.

The fair value principle embraced within SFAS 141 also creates another simple means for assessing the value of intangible assets in a business combination. The gap between the cost of the entity and the sum of amounts assigned to the identifiable tangible assets is, prima facie, evidence of unidentified intangible assets if the fair value 'general rule' applies.

Paragraph 39 of SFAS 141¹⁶¹ usefully reinforces the standard that intangible assets shall be recognised as assets apart from goodwill (1) wherever they arise from contractual or other legal rights or, failing that, are nonetheless (2) separable, that is "capable of being separated or divided from the acquired entity and sold, transferred, licensed, rented or exchanged (regardless of whether there is an intent to do so)"¹⁶². These extremely inclusive criteria support the recognition of a wide range of intangible assets, as illustrated in Appendix A of SFAS 141, at A14 *Examples of Intangible Assets That Meet the Criteria for Recognition Apart From Goodwill*¹⁶³.

SFAS 141 also supports the improved recognition and valuation of intangible assets by insisting on the improved disclosure of information relevant to these.

¹⁶¹ See SFAS No. 141; p.12.

¹⁶² See SFAS No. 141; p.12.

¹⁶³ See SFAS No. 141; p.27.

Outlined at 51 (a)–(d) ¹⁶⁴ these mandatory disclosures give increased comfort to a prospective acquirer of the intangible assets and help assert and defend the related valuation of these.

SFAS 141 is also useful in that it provides (at Appendix A) substantial implementation guidance to enterprise managers. In particular, in relation to the recognition of intangible assets apart from goodwill, the basic criteria (intangible assets arise from contractual-legal rights or are, failing that, otherwise separable from the acquired entity) are supported by an extensive list (at A14) of illustrative examples of intangible assets. These include:

- Marketing-related intangible assets (such as trade marks, internet domain names and noncompetition agreements)
- Customer-related intangible assets (such as customer lists, order or production records and customer contracts and customer relationships)
- Artistic-related intangible assets (such as books, musical works and video and audiovisual material)
- Contract-based intangible assets (such as licensing and royalty agreements, lease and franchise agreements, and employment contracts)
- Technology-based intangible assets (such as patented technologies, computer software, unpatented technologies, databases and trade secrets)

As previously asserted, I contend that obliging management to use the purchase method is a key improvement achieved under SFAS 141. As the

¹⁶⁴ See SFAS No. 141; p.16.

Financial Accounting Standards Board itself observed “the [alternative] pooling method is an exception to the general concept that exchange transactions are accounted for in terms of the fair values of the items exchanged.”¹⁶⁵ The pooling method is an obstacle to identifying and ongoingly measuring (ongoing measurement?), from the baseline value an acquisition event represents, intangible asset value because it focuses on the carrying amounts of the parties to a transaction rather than the investment made in the combination itself. Captured, that investment, in a fair value sense, can be used to recognise the value of individual assets (including intangible assets) from which subsequent performance, and value, can be ongoingly measured.

This key acquisition, and ongoing, value measurement feature helps to support the enhanced recognition and treatment of intangible asset value in financial statements as, for example, management are ongoingly obliged to make SFAS 141 and 142-related allocations and adjustments, annually, to update the fair values of assets and liabilities.

To support management in the fulfilment of their not insignificant responsibilities, SFAS 141 also provides implementation guidance in the form of recognition criteria that should apply to asset, and asset value, recognition decisions. These criteria are:

¹⁶⁵ See SFAS No. 141; p.49.

1. Definitions – The item (asset or liability) meets the definition of an element of financial statements.
2. Measurability – The item can actually be measured with sufficient reliability
3. Relevance – Information about the item is material and has the potential to make a difference to the decisions made by users of the financial statements
4. Reliability – Information about the item is faithfully represented, can be verified and is neutral

Deliberations that preceded the 1999 Exposure Draft demonstrated the need for such framing criteria. Given that the characteristics that distinguish intangible assets from tangible ones (that they are (a) without physical substance (b) not financial instruments and (c) not current assets) are so general, it is reasonable that management would need further assistance in actually recognising specific intangibles, and the value that could be recognised against them, for the purposes of financial statements. The four criteria above are meant to provide management just such guidance in making these decisions.

Similarly, the legal-contractual and separability criteria already noted, are gatekeeper criteria for the fundamental starting point of recognising intangible assets distinguishable from goodwill.

Given the widely recognised problem of inadequacy that attends the valuation of intangible assets at the enterprise level (the core problem related to this research), any consistently applied, criteria supported, and fair value-based

approach to recognising the initial, and ongoing (in the context of allocations and amendments managers must now make, annually, as they prepare their financial statements) value of intangible assets should be welcomed.

While a key aim of this research is to assert a more comprehensive set of legally and accounting standard compliant valuation criteria, and a TEV applied value model and equation that will facilitate even more adequate intangible asset valuation, recognition must be given to the improvement SFAS 141 represents. Resolving the pooling or purchase method confusion, in itself, was a key improvement; firmly entrenching a fair value approach to intangible asset recognition and valuation was another.

Together with the specific accounting guidance for intangible assets acquired in a business combination provided in SFAS Statement No. 142, *Goodwill and Other Intangible Assets* (or SFAS 142) which shall be examined below, SFAS 141 usefully supports the consistent (purchase method-based) initial recognition and measurement of these. Without such support, the valuation of intangible assets, at the point of acquisition and, ongoingly, as performing assets from the valuation baseline this provides, would remain inadequate. The improvement in the consistent treatment, recognition and valuation of intangible assets represented by SFAS 141 is key to overcoming the problem of inadequacy that has historically affected the valuation of intangible assets under the prevailing (income, cost and market-based) accounting approaches.

SFAS No. 142

Statement of Financial Accounting Standards No. 142 (Goodwill and Other Intangible Assets) addresses financial accounting and reporting for acquired goodwill and other intangible assets. It supersedes APB Opinion No. 17, *Intangible Assets*. In outlining how intangible assets, acquired individually or with other assets, should be accounted for in financial statements upon their acquisition (excepting those acquired in a business combination, for which SFAS 141 is the guide), SFAS 142 is important. In addressing how goodwill and other intangible assets should be accounted for after they have been initially recognised in the financial statements, SFAS 142 usefully goes further; establishing, I would contend, the very basis for an ongoing and consistent treatment, and recognition, of intangible asset value within the enterprise.

The enterprise demand for SFAS 142 was clear. Enterprise managers, and the users of the financial statements they produced, had long noted the failure of accounting approaches to keep up with the fact that intangible assets were often, and increasingly, the major proportion of the assets acquired in transactions. With better, and more detailed, information being required to facilitate such transactions and render the valuations of the intangible assets involved more secure and reliable, SFAS 142 can be seen as an effort to satisfy a major historical requirement.

The specifics of this requirement, and the significant differences in the way that intangible assets will now be accounted for, can be seen by comparing SFAS 142 with the preceding Opinion No. 17, *Intangible Assets*. An important change is that goodwill (and those intangible assets regarded as having indefinite lives) will no longer be amortised. As the balance of the intangible assets will be amortised, there will be more volatility in reported income, and greater care will need to be taken to measure and report any impairment losses (as these will occur irregularly and in varying amounts when denied the average, or straight line, certainty that general amortisation represented).

This reporting burden, successfully fulfilled, however, will ensure that a much more comprehensive picture (on an individual amortised intangible asset versus goodwill, and impaired asset by asset basis) is provided in the financial statements. This can only, in theory, assist in producing a much better individual intangible asset valuation outcome, on an asset by asset basis; a sure means of improving the adequacy of these for enterprise managers, a reasonable trade off, I contend, for the extra effort involved in treating the assets (and making allocations and the like) in a more individualised and focussed manner.

Consistent with this, some of the major differences between SFAS 142 and the preceding guidance in Opinion No. 17 include:

- A much more consolidated, and integration benefit sensitive, approach to acquisition – by adopting a more aggregated view of goodwill and other

intangible assets, the reporting of acquisition amounts can better reflect the fact that premiums are often paid in expectation of synergies, or benefits, created. This can then be reflected on an asset-by-asset basis in the recognition of individual intangible asset values. The 'stand-alone' treatment of entities under the preceding Opinion 17 denied such opportunities, hiding any strategic premium or reasonable expectation of future benefit under goodwill.

- A removal of the presumption that goodwill and other intangible assets are all wasting, or degrading, assets that should be simply amortised (under Opinion 17 an arbitrary ceiling of 40 years was imposed) – annual testing for impairment may be more work but it should, in theory, produce a truer asset-by-asset profile, enhancing the chances for asserting and defending an adequate value for intangible assets separately and regularly (annually) assessed in this manner.
- The provision of specific guidance for testing goodwill for impairment – providing consistency with the fair value approach to intangible asset recognition and valuation, and the testing of these for impairment.
- The provision of specific guidance on testing intangible assets against the recorded amounts of these in financial statements – constantly comparing therefore more tested and defensible fair values for these assets against the amounts recorded for them at acquisition.
- An improvement in the disclosure of information about goodwill and other intangible assets – this can only improve the certainty and detail around these for the benefit of the users of financial statements and create an environment conducive to the improved (that is, more adequate) valuation of these assets.

The scope of SFAS 142 covers intangible assets acquired individually or in a group with other assets, but not those acquired in a business combination (which are covered under SFAS 141). Like SFAS 141, the fair value approach is embraced, and it is established that “the cost of a group of assets acquired in a transaction other than a business combination shall be allocated to the individual assets acquired based on their relative fair values and shall not [simply] give rise to goodwill”¹⁶⁶.

While the potentially limiting practice of recognising the costs associated with the development of internally developed (but not specifically identifiable) intangible assets as expenses when incurred is maintained, SFAS 142 usefully reformed the amortisation of intangible assets situation.

Whereas previously, goodwill and intangible assets were all regarded as having finite, and therefore amortisable, lives (up to an entirely arbitrary ceiling of 40 years), enterprise management is now free to assert, manage and reflect in financial statements, a more detailed and individualised status and value profile, related to the so-called useful life¹⁶⁷ of its intangible assets.

Intangible assets with finite lives will continue to be amortised, but those with indefinite lives will henceforth be tested for impairment annually, ensuring that the actual defendable change in their value is reflected in financial statements. This can be used to support a more accurate, detailed, and ultimately more adequate, valuation approach sensitive to the real fair value of

¹⁶⁶ See SFAS No. 142; p.3.

¹⁶⁷ See SFAS No. 142; p.4.

individual intangible assets. Guidance to management now obliged to carefully assess the useful life of intangible assets is also provided, at Paragraph 11 of SFAS 142. The pertinent factors include:

- The expected use of the asset.
- The expected useful life of another related asset or group of assets.
- Any legal, regulatory or contractual provisions that may affect the life of the intangible asset.
- Any legal, regulatory or contractual provisions that may extend or renew the life of the subject intangible asset without substantial cost.
- The effects of obsolescence, market, competition and other factors (such as technological redundancy or compression, legislative or legal threat, or other environmental or regulatory threats to the stability of the intangible asset)
- The level and cost of maintenance required to obtain the expected future benefits (such as cash flow) from the intangible asset.

At Paragraph 12, SFAS 142 usefully outlines the new rules for the amortisation of recognised intangible assets. As provided, a “recognised intangible asset shall be amortised over its useful life to the reporting entity unless that life is determined to be indefinite. If an intangible asset has a finite useful life, but the precise length of that life is not known, that intangible asset shall be amortised over the best estimate of its useful life”¹⁶⁸.

¹⁶⁸ See SFAS No. 142; p.5.

Most importantly, perhaps, in support of a commitment to individually and accurately treating intangible assets, rather than subsuming them into goodwill or otherwise neglecting them, an intangible asset cannot be written down or off in the period of acquisition unless it becomes impaired during that period. At Paragraph 15, further, an intangible asset subject to amortisation shall be periodically reviewed for impairment and impairment losses shall only be recognised if the carrying amount of the asset is not recoverable and this, in turn, exceeds its fair value. After an impairment loss is recognised, the adjusted carrying amount shall become the new basis for accounting purposes. Clearly, under SFAS 142, amortisation will not be allowed to operate as the automatic, straight line, lazy option for limiting, or disposing of the requirement for management to carefully assess, the fair value of intangible assets.

Under SFAS 142, if the intangible asset is determined to have an indefinite useful life, it shall not be amortised. Tested regularly for impairment, the status, and performing value, of such intangible assets are thereafter, defendably, measured against the acquisition baseline value, providing management and the users of their financial statements with improved certainty. This establishes the ongoing obligation of the annual testing for impairment that is one of the most significant, and important, obligations placed on management under SFAS 142.

The fair value approach is, as was the case with SFAS 141, firmly entrenched in the language and operation of SFAS 142. In insisting that acquired

intangible assets are assigned an initial fair value, and regularly assessed and reviewed for impairment so that amendments to this initial value are themselves defensible and consistent, the reported value of intangible assets, in financial statements, becomes more accurate, and adequate for the purposes of the various enterprise owner, investor, and regulator user groups.

In upgrading the accounting treatment of intangible assets, SFAS 142 directly contributes to an improvement in financial reporting. Acknowledging that intangible assets constitute an increasing share of overall enterprise assets and, in fact, in many cases, almost the entire asset base of some enterprises, the Financial Accounting Standards Board saw SFAS 142 as an important contribution. Recognising the current situation, in terms that reflect the identified problem of inadequacy central to this research, as one in which “information about the intangible assets owned by those entities is often incomplete or inadequate”¹⁶⁹, the FASB determines to address and correct this problem through such improvements in standards as that represented by SFAS 142.

In simply ensuring, at a fundamental reporting level, that more information about intangible assets will be provided to the users of financial statements going forward, SFAS 142 is an important improvement. The changes it brings to the way intangible assets are accounted for, post acquisition, cannot but provide users of financial statements with more and better information with respect to the economic value of those assets and their material contribution to

¹⁶⁹ See SFAS No. 142; p.92.

the subject enterprises performance and earnings. This could, and should, support a more comprehensive and adequate treatment and valuation of intangible assets going forward.

SFAS No. 157

Statement of Financial Accounting Standards No. 157 (Fair Value Measurements) “defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles (GAAP) and expands disclosures about fair value measurements”¹⁷⁰. Seeking to ensure consistency and comparability in fair value measurement, and related disclosures, and, perhaps most importantly, in the understanding of what the term fair value itself means, the FASB produced this SFAS 157 to support the grounding of fair value as the appropriate principle for establishing and subsequently measuring the value of intangible assets.

Based on the pre-existing notion that fair value relates to the price at which an asset would be sold, or a liability transferred, in an orderly transaction, in the most likely (principal or most advantageous) market that the reporting entity would select for such a transaction, the definition is focussed on the price that the reporting entity would have to receive to sell (the exit price) not what a would-be purchaser would be willing to pay (the entry price).

¹⁷⁰ See SFAS No. 157; at Summary p.1.

Under this approach, fair value is very much a market-based measurement, not an entity-based one, and must be asserted and defended in market terms. The requirement to accommodate market-based risk, or risks, is inherent in this definition of fair value, the need to demonstrate a sensitivity to even hard-to-quantify risk factors a key consideration. Existing or potential market restrictions are a consideration, as are any risks of non-performance.

Financial instrument-related positions, and the active market considerations that affect, or might affect, their performance, need to be considered in establishing fair value, and as broad and inclusive as possible an approach to disclosure is encouraged. Guidance (for example, an encouragement to include fair value-relevant information required under such other accounting standards as FASB Statement No. 107, *Disclosures About Fair Value of Financial Instruments*) is provided, the apparent rule of thumb being that the more relevant and supportive the information utilised, the more supported and reliable are the related fair value statements produced.

Fair value being simply “the price that would be received to sell an asset or transfer a liability in an orderly transaction between market participants at the measurement date”¹⁷¹ is nonetheless important conceptual support for an improved recognition of intangible asset value. The notion of fair value can, and will henceforth, be used to support the valuation of intangible assets that meet the legal-contractual or separability criteria for initial recognition and

¹⁷¹ See SFAS No. 157; p.2.

underpin the ongoing, annual, revaluation of intangible assets required under SFAS 142.

The implementation guidance provided within SFAS 157 is invaluable. As well as establishing the concept of fair value, generally, guidance is also provided as to how this can be applied, in the context of prevailing valuation techniques, inputs, and rules, to appropriately recognise the value of intangible assets. Overall, the idea that the value of intangible assets can, and should, be maximised (within the consistent and responsible standards provided by SFAS 141, 142 and 157) is tremendously useful, and empowering, for the enterprise owners of intangible assets.

The concept of ‘highest and best use’ (developed at A6 in Appendix A) is a case in point. The valuation premise¹⁷² underpinning this positively encourages intangible asset owners to assess these assets based on the use, or market scenario, that would maximise asset value. Contrary to at least the spirit of the risk-constrained approach encouraged under the prevailing cost, market and income-based approaches to intangible asset valuation, the ‘highest and best use’ concept supports valuations based on the best possible combination of fair value and the ‘best case scenario’ use of the intangible asset by the market participants to whom it would most useful and valuable.

The problem of inadequacy that affects the way in which the prevailing cost, market and income-based accounting approaches deal with the valuation of

¹⁷² See SFAS No. 157; p.18-19.

enterprise intangible assets was explored at length in Chapter 2, and is the central problem with which this research is concerned. Like SFAS 141 and 142, SFAS 157 and the fair value-related improvements it supports in relation to intangible asset recognition, treatment and valuation contributes, directly, to addressing this problem.

And the improvements are not just theoretical. Much more than a notional commitment to 'fair value' and 'highest and best use' is achieved under SFAS 157. The detailed description of the fair value hierarchy of inputs that can, and should, be used to support intangible asset valuations is most useful. By immediately separating, and defining, observable and unobservable inputs, SFAS 157 then proceeds to identify and specify the fair value hierarchy of Level 1, 2 and 3 inputs that might be used to support acceptable fair value-based intangible asset valuations.

Given that observable inputs¹⁷³ are given far more priority and weighting than unobservable ones, the immediate effect is to encourage intangible asset valuations to be based on the more reliable, market-derived, observable inputs rather than a reporting entity's own assumptions, wherever possible. This inevitably improves the quality and consistency of intangible asset valuations, as the observable inputs themselves are more likely to be accepted by the market from which, after all, they would be derived.

¹⁷³ See SFAS No. 157; p.9.

In still allowing, albeit with less formal priority and weighting, an entity's own assumptions, however, and acknowledging that, depending on the situation, these may be all, or much, of what can be used to derive a fair value position, SFAS 157 still protects scope for intangible asset owner-asserted, and other than strictly external market-imposed, intangible asset valuations.

Consistent with the above, Level 1 inputs are "quoted prices (unadjusted) in active markets for identical assets or liabilities that the reporting entity has the ability too access at the measurement date"¹⁷⁴. There are a number of requirements and elements in this that can, and will, affect the real ability for reporting entities to meet this standard. Intangible assets often being unique propositions, a frequent enough level of transactions in identical assets or liabilities to satisfy this standard can be difficult if not impossible to achieve. This inevitably obliges those seeking fair value to incorporate Level 2, and 3, inputs into a fair value calculation.

Level 2 inputs are "inputs other than quoted prices included within Level 1 that are observable for the asset or liability, either directly or indirectly"¹⁷⁵ and are to some extent expected to "vary depending on factors specific to the asset or liability"¹⁷⁶. This immediately relaxes the high market-proved standard expected of Level 1, creating more scope for valuers of the intangible asset to include, for example, quoted prices for similar assets in non-active markets; inputs other than quoted prices; and co-related or corroborated inputs, in asserting fair value.

¹⁷⁴ See SFAS No. 157; p.10.

¹⁷⁵ See SFAS No. 157; p.11.

¹⁷⁶ See SFAS No. 157; p.11.

Level 3 inputs, or unobservable inputs often based on the reporting entity's own assumptions, are obviously less reliable than Level 1 or 2 inputs, but can be used "to measure fair value to the extent that observable inputs are not available"¹⁷⁷. Given the high standard required of observable inputs (particularly Level 1 inputs) this is likely to be the case in many fair value-establishing scenarios. There being a high likelihood that there will be little or no market activity in relation to identical intangible assets on any given measurement date (Level 1), for example, or quoted prices for similar assets or liabilities in active markets (Level 2), scope for reporting entity input into the establishment of fair value for their intangible assets is definitely contemplated.

SFAS 157 usefully expands the information disclosure requirements around this activity, an entirely appropriate step given the potentially high reliance on reporting entity-provided assumptions and information that it also supports. In fact, specifically in support of the scope for the Level 3 inputs that it allows, SFAS 157, at Paragraph 32, obliges the reporting entity to "disclose information that enables users of its financial statements to assess the inputs used to develop those measurements"¹⁷⁸, so that the users can test, if you like, the assumptions underpinning them.

¹⁷⁷ See SFAS No. 157; p.11.

¹⁷⁸ See SFAS No. 157; p.12.

The supporting information to be disclosed is extensive. In each annual and interim reporting and, separately, for each major category of assets and liabilities, the reporting entity must disclose:

- The fair value measurements at the reporting date
- The level (1, 2 and 3) within the fair value hierarchy in which the fair value measurements fall, with appropriate distinctions between observable and unobservable (assumption-based) inputs
- Total gains or losses; purchases, sales, issuances and settlements; changes in observability (for Level 3 inputs that may have been, at an earlier stage, Level 1 or 2 inputs, for example)
- The total losses and gains for the reporting period; and
- The valuation techniques used, by annual period, and discussion of any changes in valuation techniques used, if any

This realistically gives the users of the financial statements, even ones in which Level 3-related inputs were used, the opportunity to interrogate and put these in some sort of overall context. Tracking Level 3 inputs against overall gains or losses, or overall business performance, for example, could prove useful, as would – in a general sense – testing assumptions of fair value against the overall health of the reporting entity’s business.

Essentially, by encouraging a fair value approach that maximises the use of observable inputs, and minimises the use of the more questionable, unobservable, ones, SFAS 157 aims to “increase consistency and

comparability in fair value measurements”¹⁷⁹. By extending supporting disclosure requirements it looks to make this as transparent and defensible an exercise as possible. As extensive a disclosure around what may be largely assumption-based reporting entity statements of fair value, for example, can only improve the acceptability and supportability of these. As a result, and because SFAS 157 does contemplate actual scope for Level 3 inputs, or a reporting entity’s own assumptions in establishing fair value, it is inherently more inclusive, and user friendly, than the prevailing cost, market and income-based approaches, which look much more exclusively to market-accepted data than the assumptions or positions of the actual enterprise owners of intangible assets in establishing their fair value.

Just as SFAS 141 is regarded as having improved the financial accounting and reporting of business combinations, and related intangible assets, by championing a single, purchase, method in accounting for them, SFAS 157 is designed to achieve a similar outcome by asserting a single definition for, and approach to, fair value. It is clear in its objective to support better consistency and comparability, like SFAS 141, in the context of economically similar transactions. Again like SFAS 141, the policy objective is to support, in its case via consistent fair value and expanded disclosures, the users of financial statements with better and more reliable information. Like SFAS 141 and 142, success would most dramatically be demonstrated in the context of satisfaction with the initial, and subsequent, recognition of a subject entity’s otherwise contested, or inadequately valued, intangible assets.

¹⁷⁹ See SFAS No. 157; p.9.

VII. Proposed Statement of Financial Accounting Standards – Business Combinations and Intangible Assets (Exposure Draft, September, 1999)

The Exposure Draft, produced by the FASB in September, 1999, inviting public comment on the Boards support for, and concerns with, the, at that stage, draft SFAS Statements 141 and 142, provides useful background and context to their intended purpose and effect.

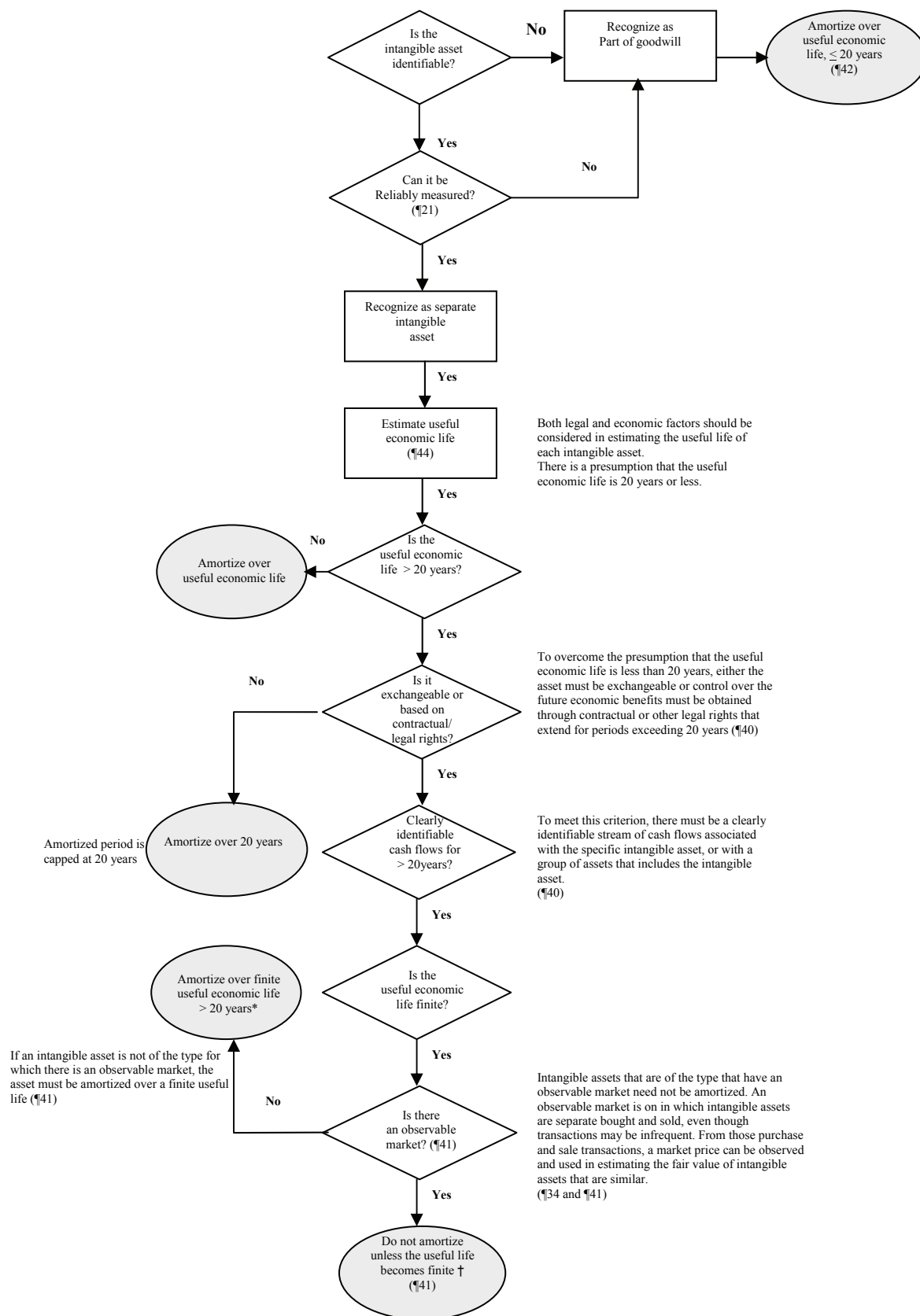
Discussions around the concept of an observable market indicated the perceived need to improve the consistency and reliability of market-derived intangible asset valuations based on the sale and purchase of various types of intangible assets. Making the most of whatever data, or instances, were available to give the resulting valuations some semblance of market validity, even if the observable markets themselves were statistically tiny sub-sets of the overall market itself, illustrates the desire of the FASB to, wherever possible, improve the consistency, perception and acceptability of intangible asset valuations. As was observed earlier, the move away from the simple amortisation of goodwill and other intangible assets was a key improvement achieved under SFAS 142. While increasing the monitoring and reporting burden on management, annual impairment testing for intangible assets with an indefinite life does create scope to ensure values recognised for these intangible assets is more accurate and reliable than those produced by an arbitrary and inflexible general amortisation approach.

The 1999 Exposure Draft documented early challenges to the blanket amortisation approach by noting how, for example, the “presumption that an intangible asset has a useful life of only 20 years may be overcome if the intangible asset generates clearly identifiable cash flows that are expected to continue for more than 20 years and either the asset is exchangeable or control over the future economic benefits of the asset is obtained through contractual or other legal rights that extend for more than 20 years”¹⁸⁰; early sentiments that ultimately manifested themselves in the legal-contractual criteria for recognising intangible assets (SFAS 141) and the perceived value in the annual testing (for impairment) of intangible assets for more accurate recording in financial statements (SFAS 142). The consistent SFAS 141 and 142 insistence on the desirability of recognising the value of individual intangible assets within a reporting entity, and reflecting these in financial statements, had clear support at the 1999 Exposure Draft stage. The case for separately recording any identifiable intangible assets that can be reliably measured at fair value was put strongly; even to the point of recommending that identifiable intangible assets that were not necessarily ‘reliably measurable’ should be considered for inclusion and reporting based on ‘individual facts and circumstances’. Overall, the effort to recognise, and reliably measure the fair value of, as expanded a set of intangible assets as possible must be seen as beneficial to the modern enterprise. In particular, the comprehensive effort supported the more rigorous assessment of intangible assets, and, coincidentally, the production of some of the first useful process maps to assist the enterprise in undertaking such assessment themselves.

¹⁸⁰ See FASB. *Exposure Draft Proposed Statement of Financial Accounting Standards: Business Combinations and Intangible Assets* (2001); pp.35-36.

The flowchart (below) was included in the FASB's Exposure Draft, Proposed Statement of Financial Accounting Standards, Business Combinations and Intangible Assets, No. 201-A, September 7, 1999. This Exposure Draft was the forerunner to SFAS 141 and 142 which I examined earlier in this Chapter. In facilitating the assessment of subject intangible assets against the recognisability, reliability, useful life, exchangeability, and observable market tests and criteria an early version of the more comprehensive set of business valuation criteria I will outline in Chapter 6 was provided. My expanded set of business valuation criteria, in turn, will be used to support the TEV (Total Enterprise Value) approach I will outline in Chapter 7; an approach designed to allow the adequate valuation of enterprise intangible assets.

In supporting such an objective assessment of intangible assets, a key step in allowing enterprises' to confidently assert and defend representations as to their value was achieved. While I would contend that its coverage of all available valuation criteria was incomplete, it represented a crucial first step.



181 See FASB, *Exposure Draft Proposed Statement of Financial Accounting Standards: Business Combinations and Intangible Assets* (2001); p.52.

* These intangible assets should be reviewed for impairment in accordance with FASB Statement No. 121, *Accounting for the Impairment of Long-Lived Assets and for Long-Lived Assets to Be Disposed Of*. (¶40)
 † These intangible assets should be reviewed for impairment annually, and an impairment loss should be recognized if the carrying amount of the asset exceeds its fair value (¶50).

That a general improvement in relation to the accounting treatment of intangible assets was sought as an outcome from the SFAS 141 and 142 activity was also demonstrated, at the preliminary Exposure Draft stage, by the criticism of goodwill (the historical ‘catch all’ or alternative for the recognition of individual intangible asset valuation within an enterprise). It was judged to be of dubious, and at least incomplete, value as an asset value indicator, in and of itself, and in the specific context of a business combination.

Lacking the central measurability, from the point of initial recognition on, that the FASB sought to achieve for intangible assets as a central objective of SFAS 141 and 142, goodwill is depicted as a less than adequate repository for intangible asset value within a business combination or, indeed, working enterprise ¹⁸².

VIII. Conclusion

In the context of this research, the historical failings of goodwill noted within the Exposure Draft are directly relevant to the identified, overall, problem of inadequacy that characterises the accounting treatment of intangible assets.

Based on the prevailing cost, market and income-based approaches, intangible asset valuation has failed to deliver adequate valuation outcomes at the enterprise level.

¹⁸² See FASB. *Exposure Draft Proposed Statement of Financial Accounting Standards: Business Combinations and Intangible Assets* (2001); pp.98-99.

By replacing the ineffective, and insufficient, operation of goodwill as an inadequate repository for an enterprise's intangible asset value, with the more individual assessment of the fair value of individual recognisable intangible assets, a key improvement has been achieved. The emerging set of international accounting standards, through championing fair value for each recognisable enterprise intangible asset, have moved a long way towards addressing the central problem of inadequacy that has characterised intangible asset valuation up to the present.

The key US fair value standard SFAS 157 – Fair Value Measurement – along with SFAS 141 and 142, have been mirrored, through IASB-FASB convergence activity, in the IFRS with which all IFRS countries are now aligning their own accounting standards¹⁸³. These provide a robust global standards platform for the more effective recognition, treatment and valuation of enterprise intangible assets.

Overall, the ongoing development and implementation of a single set of much improved international accounting standards provides a much firmer base for adequately recognising and valuing intangible assets. The IASB-FASB convergence activity has been a key driver.

Clearly illustrated in the mission, and standards output, of the IASB and FASB, the desire for a harmonised system, that seeks and recognises, and fairly values, assets that represent the most significant, and growing, wealth of

¹⁸³ Chapter 5 contains accounts of alignment activity in Australia and Singapore.

a modern enterprise is to be applauded and encouraged. The alignment of a mixed bag of national standards with a single set of international accounting standards always promised, at least, a more, efficient and consistent approach.

Central to this research, though, is the view that the international standards platform, however improved, is only one element in solving the problem of inadequacy characterising the valuation of enterprise intangible assets.

An improving legal and regulatory environment, which I contend, in the next Chapter, is now developing, is also necessary. It is vital, for example, that 'fair value-premised' intangible asset valuations produced under the newly improved standards can be defended in any subsequent litigation. Intangible asset valuations must experience, and survive, such legal scrutiny and testing before enterprise owners and the other users of financial statement information (such as investors, auditors, tax authorities) can have full confidence in them.

It is only with the standards and legal framework elements in place, that a comprehensive, and fully supportable approach to providing enterprises with an adequate intangible asset valuation approach can be developed and provided to enterprises.

The business valuation criteria (Chapter 6) and the TEV (Total Enterprise Value) model that these in turn support (Chapter 7) will be offered, in this research, as the logical extension of the excellent progress that has been made, over many years, in the accounting, and supporting legal, standards areas.

Chapter 5 The Law and Intangible Asset Valuation: Towards A Supportive Case Law, Regulatory and Standards Framework

I. Introduction

In the last chapter I examined current trends, in particular in relation to the development of a useful new set of international accounting standards, that created real scope for improving the adequacy of enterprise intangible asset valuation.

In this chapter I will examine industry and legal perspectives in the US and Australia, regulations and standards in Singapore, and, finally, authoritative and useful US case law, that are indicative of a legal framework that is in place and can be called on to support this positive trend. This supportive legal framework is key to improving the current, inadequate, state of intangible asset valuation. The situation might be, indeed is being, improved by taking advantage of recent decisions, and emerging positive standards and rules, that address particular shortcomings of the current approach.

The examination of the materials covered in this chapter should also contribute to an understanding of how this problem of intangible asset valuation inadequacy has come to exist and why it is so entrenched. An appreciation of the scope for improvement represented by the authorities, regulations and standards, can, in my view, be drawn upon to directly support an improved intangible asset valuation approach.

II. AUS INC Consultants Survey

The U.S. experience

AUS INC, based in Moorestown, New Jersey, undertook a study of SEC forms 10-K filed by U.S. companies during the period 2004 – 2006. This study was undertaken to support the valuation efforts of enterprise managers and valuation practitioners by giving some well supported indications of the quantum and significance of reported intangible assets and related transactions.

Gordon Smith (Chairman, AUS INC) and myself also used the study in support of a research project “A Study of Intangible Asset Valuation in Singapore: Issues and Opportunities for Singapore’s Businesses”, carried out for the IP Academy of Singapore, for which we wanted to identify the level of allocations being made for acquired intangible assets by enterprises¹⁸⁴.

A computer search and selection was made in order to identify reports that contained information relating to allocations of purchase price made by the respondents. Of a total of 5,600 filings were collected, approximately 10% (or 550) of these had been reviewed, at the time of writing, to make sure they contain relevant information. Where allocation information existed, this was extracted for analysis. The following discussion relates to these 550 selected extracts.

¹⁸⁴ We examined the 10 company reports listed earlier in this Chapter for allocations information.

The reports represent acquisitions with a total value of tangible and intangible assets of approximately \$380 billion. That total is allocated among asset classes as follows:

Tangible assets	\$ 120 billion	31.6%
Intangible assets	\$ 260 billion	68.4% ¹⁸⁵

Within the intangible asset category, the identified intangible assets were sorted into the typical appraisal categories shown in the table below. In the extracts themselves there were an enormous range of intangible asset descriptions. The variety of these asset descriptions itself illustrates the increasing complexity of the valuation task and the growing significance of an increasing array of intangible assets to the enterprise.

Marketing Intangibles	\$	73.9
Technology Intangibles		884.9
Copyrights		-
Software		50.1
Customer Intangibles		597.2
Non-Compete		125.5
Contract Intangibles		256.7
Workforce		0.3
In-Process R&D		1,859.6
Goodwill		170,913.9
Core Deposit Intangibles		1,396.1
Backlog		73.8
Customer Relationships		9,744.2
Other Intangibles		461.6
Trademarks		4,100.3
Core Technology		666.1
Various Other Intangibles		66,438.4
Total Intangibles	\$	257,642.8

Extract from Sanders and Smith [op cit p.28]

¹⁸⁵ See Sanders and Smith (2008); p.27.

M&A activity was seen to be a significant driver of intangible asset valuation activity, as enterprises sought to appropriately maximise enterprise value through a consideration of all asset types. This was a spur, undoubtedly, to the increasing number of intangible asset classes and types being ventured by enterprises.

Overall, the overwhelming, and growing, significance of intangible assets to the enterprise was well demonstrated, as was the historical, and unsatisfactory, role of goodwill as a repository for the value these represent.

As I discussed in Chapter 4, the recognition of the value of particular intangible assets has been greatly assisted by such standards statements as SFAS 141 and 142. These create positive obligations on enterprises to both reflect, on acquisition, the value of these assets and to test these for impairment on a regular basis. Increased M&A activity creates, by definition, more opportunities for enterprises to engage in such activity; taking more intangible asset value out of the unsatisfactory reach of goodwill.

The US case law I shall examine later in this Chapter will demonstrate a corresponding willingness of the courts to support this by, on the one hand, encouraging the fair and reasonable valuation of enterprise intangible assets (and obliging tax authorities and government to do the same – as in Carracci), while also carving out increased scope for the admissibility of evidence

introduced by enterprises, and their expert witnesses, that will assert, and defend, the valuations themselves – in Daubert and Kumho.

III. Australia: Aligning Australian and International Valuation Standards

Introduction

The alignment of Australian GAAP and specific standards with the developing single set of international accounting standards is progressing in a manner consistent with the experience in other developed economies. Australia's accounting standards setters have a long and proud association with such international bodies as the IASB, and have been active in the development and implementation of new standards.

Australia has followed a typical path of achieving alignment by amending local standards to reflect the new international standards that are being developed. Australian accounting standards (AASB's) are, if you like, being redrafted or created where gaps or no local equivalents existed, to give effect to the IASs on a standard by standard basis.

The activity in Australia is well supported by legal research and analysis, and there is a useful focus on the interrelationship between accounting standards, and the corresponding legal framework; a focus that reflects itself in a high volume of quality research that seeks to identify and resolve the tension between accounting, and legal, approaches to intangible asset recognition and valuation.

The endeavours of Associate Professor Beth Webster (Intellectual Property Research Institute of Australia (IPRIA), University of Melbourne) and Associate Professor Anne Wyatt in their work “An Accounting Approach for Intangible Investments”¹⁸⁶ is a case in point.

By noting the historical roots, and inadequacy, of prevailing intangible asset valuation approaches and the new (IFRS) standards that are being developed and implemented, in part, to address the shortcomings of the former, Webster and Wyatt also observe scope for, and the necessity of, a more than simple standards-based approach to the problem. By introducing concepts of rate of return, and return on investment, as valid considerations in measuring the business performance of, and establishing fair value for, enterprise intangible assets, Webster and Wyatt encourage enterprise owners to use the standards. Approaches consistent with, but representing real applications of, the standards can and should, we are told be deployed to then define, extract and defend the business value of the subject intangible assets.

Such a position is consistent with my own effort (in Chapters 6 and 7) to propose a model (TEV) and supporting set of valuation criteria to allow enterprises to extract the actual enterprise intangible asset value that the simple development of, even much improved. accounting standards, on its own, cannot deliver.

¹⁸⁶ Wyatt and Webster (2007); op cit.

The tension between accounting standards and the legal framework within which they operate is well demonstrated in the commentary of professional service providers who, perhaps unsurprisingly, are harsh critics of the aspects of the transition to a new single set of international standards that disrupt the practices they have developed and sustained in their national markets.

In the Bradley Elms Article “Valuation of Intangible Assets: All Is Not Well”¹⁸⁷ the firm is very critical of some aspects of the Australian transition to the new set of international accounting standards.

A detailed review of the article’s main points will demonstrate some typical concerns about, and opposition to, the alignment process. In examining and, where appropriate, responding to these concerns and clarifying some issues, a useful and balanced view of the alignment experience, and outcomes, in Australia can be derived.

To begin, I don’t think that the case put in the article proves, at all, that the particular costs and discomforts of Australian transition to a new single set of international accounting standards outweighs the efficiency benefits and improved scope for recognising intangible assets that are gained through this fundamental alignment process. I believe, however, that the article highlights some aspects of the relationship between Australian accounting standards and the associated legal framework that are worth exploring.

¹⁸⁷ This article is extracted, and reviewed, in the body of Chapter 5.

While I believe that some of the article's criticisms are more dire and dramatic than they should be, the fact that this article was being provided to clients to excite business means that this is probably to be expected. Addressing the issues will still allow me to explore the current Australian legal framework that exists, and is developing, around the new set of accounting standards from which an improved intangible asset valuation approach might reasonably be expected.

Valuation Of Intangible Assets: All Is Not Well¹⁸⁸

As extracted:

Just as aspects of the system of legal justice often fails to provide a security of right over wrong, the recent adoption of AASB 138 by the Australian Accounting Standards Board, is symptomatic of the accounting equivalent. AASB 138 has the same class of mutation that besets the law. Lawyers say good cases create bad law. The members of the AASB should be saying, good cases create bad accounting standards.

The adoption of AASB 138 will distort a true view of a companies financial position. Companies rich in Intangible Assets will no longer be able to produce "a true and fair view" of their worth in their annual accounts as required under the Corporations Act. Why? This will mislead a lot of people who rely on that information.

¹⁸⁸ Bradley Elms. *Valuation of Intangible Assets. All is Not Well*. Copyright Bradley Elms Pty Ltd (2005).

It is interesting to note that a recent paper by the Intellectual Property Research Institute of Australia either made or repeated the claim that the purpose of accounting was never to provide a valuation of a firm or an asset, but to establish inputs. What does that mean? The paper disregards the proposition that "a true and fair view" is an aggregation of those inputs and should represent valuation. In doing so, it very adequately demonstrates the problem. Accounting standards should reflect principles that provide "a true and fair view" the need for which is ordained by law. Accounting theorists see no need to be proactive in measuring inputs to make that view relevant.

Response: AASB 138 (outlined and discussed in Appendix 3) has as a fundamental objective the support of accurate ‘fair value-premised’ intangible asset valuations. The disclosure requirements imposed under AASB 138, alone, greatly assist the fulfilment of this objective, with intangible asset owners obliged, amongst other things, to assess the useful life of the intangible asset. Determining the finite, or infinite, life of the intangible asset, on top of meeting the rigorous identification, recognition, and measurement standards imposed in AASB 138 will ensure a truly accurate information basis upon which more accurate, and adequate, valuations can be carried out.

Moving from a position in which there “is currently no specific Australian Accounting Standard on accounting for intangibles”¹⁸⁹ this can only be regarded as an improvement.

¹⁸⁹ See McGinness (2003); p.335.

One can only assume that the article's authors might resent the transparency and detail which now attends the reporting and treatment of intangible assets. This would, inevitably, diminish valuations that were unsupported, but adequate valuations are not necessarily over-maximised or inflated ones. The fact that enterprise owners who have never been able to safely value intangible assets before now have clear guidelines, in AASB 138, for doing so is enough to ensure that the great majority of enterprises will benefit from its introduction.

For a similar reason I find the criticism of IPRIA position on the proper role of standards like AASB 138 unfair. IPRIA is quite correct, I believe, in holding to the view that the proper role of accounting standards is to define and guide the operation of a useful and appropriate set of valuation inputs (and rules) not to produce actual valuations themselves.

Establishing definite categories of inputs, or information types, that are appropriate for the activity is enough of a contribution. It must always be left to the enterprise owners themselves to assert and defend legally, where necessary, appropriate actual representations of value for their intangible assets. No standards could, or should, act as more than a framework for guiding this activity.

The TEV model (Chapter 7), operating with the benefit of supporting business valuation criteria (Chapter 6) that I have developed, is itself envisaged as a

guide for enterprise owners whose inputs against each of the criteria I list, and into the TEV model itself, will determine the valuation outcomes.

Asset strippers must be rubbing their hands in anticipation of the opportunities that are going to emerge as asset values becomes consistently under reported. It is inevitable that this will impact with lower share prices. Historically such opportunities were created in the 70s and 80s by a legacy of poor revaluation practices. Managements and Boards of the period, saw the non-revaluation of assets as a way to deceptively demonstrate to shareholders how well they were doing on an ROA basis. But their bluff was called and survival at that time meant accounting practices that were being used for reporting purposes, had to change. And they did. Undervalued assets were no longer seen on the balance sheet. Now the adoption of AASB 138 standard means the clock has been turned back, just at a time when companies are becoming rich in this class of asset. New opportunities are now emerging for the asset stripping operators.

Response: The ‘asset stripper’ references and misrepresentation of the lack of historical intangible asset valuations as a positive, rather than disastrous, outcome are dramatic but unfounded.

It is inconceivable that the introduction of AASB 138 will lead to asset values being consistently under reported (in any instance other than in cases where over-inflated and unsupported valuations already exist). Quite to the contrary, with AASB 138, enterprise owners, for the first time in the history of

Australian accounting standards, have effective guidance for the production and defence of intangible asset valuations.

Relying on the bluff of substandard valuers in the 70's and 80's being called, in the place of real standards guidance, is not an adequate basis for improving the reporting of intangible asset values. The invisibility of intangible assets on the balance sheet is not a validation of the anti-AASB 138 approach that the articles authors recommend, but rather proof that the lack of effective standards guidance has retarded this vital valuation activity.

We are told that the adoption of the new standards was to bring Australia into line with international practice. Given the very large number of Australian variations in other parallel standards such as AASB 116 Property Plant and Equipment, why could not similar variations have been adopted for AASB 138. The hard line that has been taken in this area means that something is not right.

Response: The adoption of AASB 138 does most definitely bring Australia into line with the developing set of international accounting standards, such as IAS 38 – Intangible Assets. I would respectfully suggest that the lack of variations adopted in relation to well-established areas of accounting practice, such as the treatment of Property, Plant and Equipment is to be expected, given the historically well developed rules and local practices that have emerged around them.

If, as I have indicated, prior to AASB 138 there was no specific Australian accounting standard on accounting for intangibles there would simply be no scope to need, much less include, variations; there being no effective standards to accommodate. This is a real accounting and legal standards ‘green fields’ opportunity if ever there was one. AASB 138 was, and is, a rare opportunity to adopt a new standard to cover off on intangible asset valuation; an area requiring urgent recognition and treatment. The representation of Australia on all significant international accounting standards bodies (including the IASB) ensured our standard setting bodies had every opportunity to ensure that the guiding best practice standards (such as IAS 38) harmonised with our local requirements and conditions. Again, the lack of variations is proof of this, rather than evidence that something is being imposed, without consideration, on Australian enterprises.

The legal definition of an Intangible Asset in AASB 138 is “an identifiable non-monetary asset without physical substance”. We are not discussing will-of-the-wisps here. We are talking about assets that can be significant contributors to the profits of a company. Take for example air-bridge rights at a major airport and their relevance to any of the lessee airline’s bottom line (these are intangible but are they IP – no – you need to show the relationship between intangible non-IP and IP). Or the sub-artesian water rights to a rice farmer in drought prone areas. These things have real and continuing value. There is not an active market for them as each is unique, so they are reported at cost for their lifetime. So much for investment.

Response: Correct. AASB 138 does define an intangible asset as “*an identifiable non-monetary asset without physical substance*”¹⁹⁰. The authors immediate correlation between assets without physical substance and ‘will-of-the-wisps’ is an unfortunate, but telling, example of the recognition and valuation difficulties that intangible assets have faced relative to their ‘real’, or tangible, counterparts.

The description of intangible assets as identifiable, non-monetary without physical substance description merely distinguished intangible from tangible assets. The authors’ problem with the ‘without physical substance’ attribute is more indicative of the a deep-seated misconception about the recognisability of intangible assets despite this than any disrespect on the part of the drafters of AASB 138. That the authors then proceed to identify very good examples of intangible assets (such as rights to use airport air bridges and water resources rather than the simple ownership of the physical assets and resources themselves) proves the point that such non-physical assets (rights to use) can be valuable in their own right.

The fact that there are other potential users of these rights (indeed in the context of Australian water rights and international air bridges some very motivated competitors exist) means that these can be tested in corresponding active markets when, and as, necessary to establish fair value. Competition authorities around the world are, after all, very interested in ensuring such

¹⁹⁰ See AASB 138; p.1.

markets exist. Automatically equating the non-physical status of intangible assets with an inability to test these in active markets is simply wrong.

One of the difficulties that the AASB 138 standard is trying to overcome, is the lack of consistency of valuations associated with any particular intangible asset and the reason for that is the valuations have been usually struck with an agenda to achieve a specific level of worth. The Dotcom boom proved that. But good cases do not on their own make good law. And that is the case here.

Other forms of property assets in the form of property, plant and equipment can be revalued under AASB 116 during their life by reference to an active market. Failing such a market existing, then value can be determined by depreciated replacement, and failing that by income methods. The last two methods are not available with Intangibles and the question really has to be asked why not.

In the past most have jumped immediately into one of the income methods for valuing intangibles. This is the crux of the problem. Recent court cases in which individual valuations of particular item of IP were attended by expert evidence of valuations ranging 600% which is significant when the lowest value was \$10m. With so called world experts unable to agree, it means that something at that time was not well in the accepted valuation theory in this area.

Response: As shall be demonstrated later in this Chapter, the improving set of accounting, and supporting legal, standards, are being reflected in a very useful body of case law. Good cases are, in this case, emerging to support good laws and standards.

These US authorities (the US being the jurisdiction where many of the related issues were first identified and examined) are establishing scope and rules for admitting fair value, useful life, active market evidence, and, overall, expert witness testimony that can support management representations, and subsequent defences, of intangible asset valuations. This vital legal activity demonstrates the core role that the law plays in grounding the useful, but, on their own, insufficient accounting standards that are being developed to guide, and improve the adequacy of, intangible asset valuation.

The unsubstantiated criticism that the article directs at the operation of this increasingly effective legal and accounting standards framework fails against the specific improvements in intangible asset recognition, treatment and valuation that are facilitating. SFAS 157 - *Fair Value Measurements* – which usefully outlines the 3 levels of inputs that can be used to support an intangible asset valuation, is a case in point.

While the authors are correct in claiming that the uniqueness of intangible assets, and therefore related transactions can make Level 1 (true market comparables) and even Level 2 (related market transactions) difficult to identify, they disregard the key role that Level 3 (Management

Representations) inputs can usefully play. Obligated to reflect acquired intangible asset values on their financial statements, and test these regularly for impairment, enterprise owners of such assets can provide increasingly well supported representations as to their value. These can, and are, being tested in court. The very fact that such a wide range of competing valuation evidence was being admitted in court at all (in the articles' 600% disparity case study) is proof of this. The courts, and their decisions, are proving themselves willing and able to admit and treat such evidence and support, or reject, the valuations based on these.

Income methods, which usually means NPV methods, rely on business model forecasts both for income and discount rates. Within untutored hands, both are open to manipulation and can usually be challenged. Very infrequently are forecasts tested on a probability basis using models that are extremely complex. The knowledge base for such analytics is not readily available, but with out a requirement to use them, they will never be available in a way that would support a realistic standard.

Response: Many complex but increasingly well-tested models for compiling forecasts do in fact exist. While they are too numerous to list, suffice to say that many iterations of processes through which probability-based forecasts are compiled and tested exist, and are being utilised. The knowledge base for such analysis, far from being non-existent, is extensive and growing.

Key authorities, such as Daubert and Kumho, which shall be examined later, are establishing rules around the admission, interrogation and acceptance of a wide range of such information and analysis, to the extent that even the most complex models and approaches can be admitted and examined. Expert witnesses, rather than untutored hands, are far more likely to be called upon to deal with, and challenge, such evidence; a process that allows the courts to increasingly confidently rule on intangible asset valuation issues.

For those who know the business of Intangible Asset valuation this is routine, but too often a newly certificated graduate is tasked with determining value and all the faults come forth. Despite what graduates are taught and the Board of the AASB think, it is possible to determine an arms-length value with a high degree of precision and consistency.

Why is this an issue? The reason is that accounts which includes the detail that makes them up, are meant to reflect as closely as possible the value of an organisation. Why is that important? The measurement of assets both real and intangible, underpin three important issues in the modern day firm.

- 1. They communicate to owners the value of their ownership in a way that agents (management) can not distort to their advantage and at the expense of owners.*
- 2. They provide data and other information that help management make relevant decisions about future operational needs.*
- 3. They help in the formulation and execution of strategy within the firm with common and relevant measures.*

Response: Contrary to what the articles authors contend, AASB 138 facilitates, rather than frustrates, the determination of an intangible asset's "arms-length value with a high degree of precision and consistency".¹⁹¹ Assets central to an enterprises future earning capacity or functions, under such standards as the already outlined SFAS 141, 142 and 157, must have their acquisition value identified and tested for impairment on a regular basis so that management decisions about the asset can be made from reasonable data, and not just supposition. The 3 important issues to the modern firm that the article outlines are all well served in this way. With the benefit of well-developed accounting standards, enterprise representations as to the value of their intangible assets are being produced, and legally tested, in a fashion that makes these easier to assert, and communicate to all stakeholders

Overall, given the fact that the authors are consultancy targeting and servicing enterprise owners, the 'dangers' that Bradley Elms highlights in relation to AASB138 were always bound to be dramatically stated. Nonetheless, they indicate, even if loosely, some of the sensitivities that enterprises might have in relation to any alignment of familiar national practices with a 'new' single set of accounting standards. Given the historical inadequacy of intangible asset valuation, well indicated by the fact that prior to the 'new' AASB 138 being produced there was no specific Australian standard for accounting for intangibles, this is fairly easy to address, I would suggest. In the absence of a national standard approach there is now a comprehensive and useful new standard to guide enterprises in relation to valuing their intangible assets.

¹⁹¹ AASB 138 very usefully establishes a firm grounding for the Arms-Length Standard (ALS) in Australia.

The counter arguments to the various article extracts, I trust, demonstrates how, contrary to the articles contentions, the new AASB 138 has been developed and implemented to address these historical intangible asset valuation concerns, and deliver an improved intangible asset valuation capability for enterprises to exploit.

Australian Alignment with International Accounting Standards

The alignment of Australian accounting standards with the new single set of international accounting standards is being energetically pursued.

As outlined in Appendix 1, in which the Australian accounting standards and corresponding international standards are identified and compared, this has been a comprehensive and thorough process.

I noted above that, in the absence of a single standard governing the accounting for intangible assets, AASB 138 did not require significant variations to be made to accommodate what was after a non-existing area of coverage in the Australian framework. Overall, however, in the context of the collective AASBs and IASs there are some differences. Where necessary accommodations have been made to ensure the alignment with, or more specifically transition to, the new international standards is as smooth as possible for the enterprises and other stakeholder 'users' of these standards.

The table (below) indicates some of the differences:

- (c) There are two areas of difference between AASB 1016 and IAS 28:
 - (i) IAS 28 requires the equity method to be applied in the investor's own financial report where the equity method is applied in the consolidated financial report. AASB 1016 requires the cost method to be applied in the investor's own financial report except where a consolidated financial report is not required to be prepared.
 - (ii) IAS 28 requires the carrying amount of an investment to be written down to its recoverable amount which is determined as the higher of its value in use and net selling value. AASB 1016 provides that the carrying amount of the investment must not exceed its recoverable amount but does not specify how the recoverable amount is to be determined.
- (d) IAS 2 requires the disclosure of the cost of inventories recognised as an expense during the reporting period; or the operating costs applicable to revenues, recognised as an expense during the reporting period, classified by their nature. This disclosure requirement will be included in a forthcoming AASB standard that harmonises with the requirements of IAS 1 (Presentation of Financial Statements).
- (e) There are two areas of difference between AASB 1032 and IAS 30:
 - (i) Where there are differences between the requirements of IAS 30 and IAS 32, AASB 1032 and other standards conform with the requirements of IAS 32, rather than with the requirements of IAS 30.
 - (ii) A parent entity need comply with only the basic profit and loss account and balance sheet disclosure requirements of AASB 1032 when the parent entity's financial report is presented with the economic entity's financial report, and the economic entity applies AASB 1032. In contrast, IAS 30 does not require the preparation of parent entity financial reports or contain any exemption for parent entity reports when they are prepared. There is no difference in the scope of AASB 1032 and IAS 30 in application to economic entity financial reports, which are the focus of the AASB's harmonisation policy.
- (f) There are two areas of difference between AASB 1033 and IAS 32:
 - (i) The requirement to classify component parts of compound instruments separately does not apply to instruments issued prior to 1 January 1998. IAS require retrospective application of component part accounting only when initial adjustments are reasonably determinable. The AASB considers that in many cases it would be difficult to determine the initial adjustments required for retrospective application. Accordingly, AASB 1033 does not require (but does allow) retrospective application. The significance of this exception will diminish over time.
 - (ii) A parent entity need not comply with the disclosure requirements of AASB 1033 when the parent entity's financial report is presented with the economic entity's financial report, and the economic entity applies AASB 1033. In contrast, IAS 32 does not require the preparation of parent entity financial reports or contain any exemption for parent entity reports when they are prepared. There is no difference in the scope of AASB 1033 and IAS 32 in application to economic entity financial reports, which are the focus of the AASB's harmonisation policy.

Acknowledgement

This table has been compiled by Treasury staff using information contained in:

(a) AASB-series accounting standards made by the Australian Accounting Standards Board (AASB);

(b) draft accounting standards (referred to as exposure drafts or EDs) prepared by the AASB and the Public Sector Accounting Standards Board;

(c) information on the web site of the Australian Accounting Research Foundation; and

(d) information on the web site of the International Accounting Standards Committee.

As outlined by Cameron Rider, in his 2006 paper, *Taxation Problems in the Commercialisation of Intellectual Property*, the Australia's tax laws "are very old-fashioned when they come to the treatment of intellectual property"¹⁹². It is important to remember that accounting standards do not exist in a vacuum. Legislation and legal codes form part of an overall framework in which intangible asset valuation is undertaken. Adoption of new, usually purpose-built accounting standards will inevitably be tested in the courts and, as they are, and a body of Australian case law, like the US case law I shall examine below, begins to take shape these can be used with increased certainty. Reference to the wider legal framework within which accounting standards operate is vital.

In Australia, the process of legally validating these accounting standards is only just beginning, and it will be sometime before Australia has the

¹⁹² See Rider, Cameron (2006); p.1.

substantial body of case law that we can refer to in the US to judge how effective this has been.

Nonetheless, the necessary alignment of Australian accounting standards with the new single set of international standards seems to be proceeding well, and given the consistent applications of similar IFRS in both jurisdictions, the US experience and authorities are a useful guide for how many of the same issues now resolved, or settling, in the US will be handled in the Australian context.

IV. Singapore: An Alignment Case Study

The alignment of Singaporean accounting standards with the emerging single set of international accounting standards has been particularly successful. A decidedly corporatist approach has been undertaken, driven by government agencies and lawmakers in conjunction with the key accounting bodies and professional service organizations, who very early on agreed to manage, and minimise, any disruption a standards transition might have caused.

This commitment is well demonstrated in the following Deloitte and Touche account of how the formal alignment effort might be described:

“The Institute of Certified Public Accountants of Singapore (ICPAS) has almost completed the process of aligning the Singapore Statements of Accounting Standards (SAS) with the International Accounting Standards (IAS). This coincides with the recommendation by the Disclosure and Accounting Standards Committee (DASC) that Singapore adopt IAS and the

Minister of Finance's decision to accept their recommendation. Just as the IAS are being renamed the International Financial Reporting Standards or IFRS, Singapore accounting standards are likely to be known as Financial Reporting Standards (Singapore) or FRS (S)."¹⁹³

With the declared objective of "bringing Singapore into line with International Accounting Standards ("IAS") as soon as possible"¹⁹⁴, the Institute of Certified Public Accountants of Singapore ("ICPAS") issued a series of new or revised Statements of Accounting Standards ("SAS") and Interpretations of Accounting Standards ("INT") that took effect, in stages, during calendar year 2000.

The schedule was as follows:

SAS Effective 1 January 2000

SAS 1 (Revised) Presentation of Financial Statements (superseding SAS 1 – Disclosure of Accounting Policies, SAS 5 – Information to be disclosed in Financial Statements; and SAS 13 – Presentation of Current Assets and Current Liabilities)

SAS 15 (Revised) Leases

SAS 23 (Revised) Segment Reporting

Amended:

SAS 2 (Revised) Inventories

¹⁹³ Sanders and Smith (2008); p.22 quoting Deloitte & Touche, *Changes to Singapore Accounting Standards*, 2002 Edition.

¹⁹⁴ See Moore Stephens (2001); p.1.

SAS 14 (Revised) Property, Plant and Equipment

SAS 25 (Revised) Accounting for Investments

SAS Effective 1 July 2000

SAS 8 - Net Profit or Loss for the Period, Fundamental Errors and Changes in
Accounting Policy

SAS 6 (Revised) Earnings Per Share

SAS Effective 1 October 2000

SAS 10 (Revised) Events After The Balance Sheet Date

SAS 17 (Revised) Employee Benefits

SAS 22 – Business Combinations

SAS 31 – Provisions, Contingent Liabilities and Contingent Assets

SAS 34 – Intangible Assets

SAS 35 – Discontinuing Operations

SAS 36 – Impairment of Assets

INT 9 – Plant, Property and Equipment – Compensation for Impairment or
Loss of Items

INT 10 – Cost of Modifying Existing Software

INT 11 – Business Combinations – Classification Either as an Acquisition or
Uniting of Interests

For the purposes of this research, the following 5 SAS and 1 INT will be analysed:

SAS 22 – Business Combinations

SAS 25 (Revised) Accounting for Investments

SAS 31 - Provisions, Contingent Liabilities and Contingent Assets

SAS 34 - Intangible Assets

SAS 36 - Impairment of Assets

INT 11 - Business Combinations – Classification Either as an Acquisition or Uniting of Interests

SAS 22 – Business Combinations

Consistent with SFAS 141, SAS 22 insists that the purchase method must be used for a business combination which is an acquisition, a change from the 1986 version which, like many other international standards, permitted a choice between the purchase and pooling methods. The pooling method must be used, however, for transactions which qualify as events achieving a ‘uniting of interests’.

The treatment of goodwill is also considered. While under the 1986 version of SAS 22, goodwill could be immediately written off against shareholders funds, under the revised standard it must be capitalised and amortised. While the presumption that the useful life of goodwill cannot exceed 20 years from initial recognition is less useful than at least the scope for ‘indefinite lived’

intangible assets contemplated in other (such as US) standards, the scope created for relating goodwill to the fair value of identifiable acquired assets (including intangible ones)¹⁹⁵ is positive.

I believe that SAS 22 has effectively aligned Singapore's treatment of business combinations with international standards, though future revisions, to specifically insert scope for the acquisition of indefinite lived intangible assets, that will then rely on annual impairment testing, and revaluations, for the assessment of their fair value, might be necessary.

Such latitude for amending, and extending, the value of intangible assets will, in turn, allow the business criteria-supported TEV model (outlined in Chapter 7) theoretical scope to operate, and improve the accounting treatment of intangible assets, most specifically in relation to their recognition and valuation.

SAS 25 (Revised) Accounting for Investments

ICPAS has usefully extended theoretical scope for offsetting specific revaluation surpluses against deficits affecting other intangible assets that can be said to constitute the same class of investment. The author believes that, as annual revaluations of intangible assets become the norm, this capacity could prove extremely useful.

¹⁹⁵ See Moore Stephens (2001); p.5.

By requiring the term ‘same investment’ to be interpreted as ‘same class of investment, for the purposes of SAS 25, and allowing for an offset mechanism to operate in the context of, for instance, equal impairment losses and positive revaluations occurring in relation to intangible assets in the same category or class, the reporting entity can effectively net these off. Previously any isolated loss would have to have been charged to the profit and loss account, affecting the apprehension of the financial position of the enterprise.

SAS 31 - Provisions, Contingent Liabilities and Contingent Assets

Under SAS 31 provisions, including those relating to intangible assets, should be recognised when:

1. An enterprise has a present obligation flowing from a past event
2. An outflow of resources/economic benefits will be required to meet that obligation; and
3. The obligation can be reliably estimated

Beyond their specific operation, these provisions are important in the scope for the recognition of legal obligations. Not only those flowing from past transactions and events, but also those (including intangible asset-related ones) that can be reliably estimated. This is compatible with the developing latitude, in the context of improving intangible asset recognition standards, for extending (for example in a legal-contractual-based sense) the lives of intangible assets on the basis of reasonably expected future benefits.

Taken together, the contingent liability and contingent asset definitions and provisions in SAS 31 are also consistent with the protection and assertion of scope for expected future benefits (or impairment or losses) so relevant to an improved, and adequate, intangible asset valuation approach. The positive requirement to disclose contingent assets (including evolving intangible ones) even when the outcome is only probable (or more likely than not) is a material improvement, and puts a useful pressure on reporting entities to take full stock of their entire asset base.

SAS 34 – Intangible Assets

SAS 34 usefully addresses the reporting of expenditure incurred on intangible assets, and, in doing so, introduces a broader and more useful definition for intangible assets and test for their recognition; key elements for any effort to improve their identification, management and valuation.

Beyond simply defining an intangible asset as “an identifiable non-monetary asset without physical substance held for use in the production or supply of goods and services, for rental to others, or for administrative purposes”¹⁹⁶

SAS 34 also asserts that intangible assets are also resources:

¹⁹⁶ See Moore Stephens (2001); p.8.

1. That are controlled by the enterprise as a result of past events (allowing scope for linking these, and their value, back to their initial recognition for valuation purposes); and
2. From which future economic benefits are expected to flow for the enterprise

The second characteristic is especially important. Certainly, in relation to the operation of my proposed TEV (Total Enterprise Value) model, and the supporting set of business criteria it is suggested that reporting entities can utilise to support fair value for intangible assets, that will be outlined in Chapters 6 and 7 of this research, allowances for future benefits, or impairments, against specific intangible assets, that are then reflected in the annual revaluations now obligatory under international accounting standards, will be the vital 'trigger events' for an improved and adequate intangible asset valuation approach.

In place of the previous default position of expensing R&D costs, a more positive provision allowing for the capitalisation of development expenditure, as intangible assets, where all of the following attributes are demonstrated:

1. Technical feasibility
2. Market feasibility
3. Financial feasibility
4. Intention to complete
5. Ability to complete; and
6. Attributable expenditure can be reliably measured

is included.

Key support for the now well-established annual revaluation of intangible assets is provided, when, in order to establish impairment losses, and general changes to an intangible assets value, enterprises are obligated to revalue their intangible assets on a regular basis “to ensure the carrying value does not differ materially from the fair value”¹⁹⁷.

I feel that SAS 34 is fundamentally consistent with international accounting standards that are improving both the scope for, indeed obligation to, regularly revalue intangible assets, and, thereby, more adequately value these in terms of their current value, and assessing and asserting their overall, fair, value on a continuing basis¹⁹⁸.

SAS 35 – Discontinuing Operations

The extensive list of disclosures required under SAS 35, including:

1. The description of the discontinuing operation
2. The business or geographical segments in which it is reported
3. The date and nature of the initial disclosure event
4. The timing of expected completion
5. The carrying amount of the total assets and liabilities to be disposed off

¹⁹⁷ See CCDG (2006); p.9.

¹⁹⁸ See Sanders and Smith (2008); p.25.

6. The amounts of revenue, expenses and pre-tax profit or loss attributable to the discontinuing operation, and related tax position
7. The net cash flows attributable to the operating, investing and financing activities of the discontinuing operation
8. The amount of gain or loss recognised upon the disposal of the assets or settlement of liabilities; and
9. The net selling prices from the sale of net assets subject to sale agreements, the expected timings for these sales, and the carrying amounts for those assets

will, in and of themselves, provide information directly relevant to assessing any related impacts on included intangible assets and their fair value. While generally improving the quality of financial statements, such detailed information will support the production of generally reliable statements and assist in the assessing positions for all assets, including recognisable intangible ones.

SAS 36 – Impairment of Assets

SAS 36 very directly, and usefully, supports the standard for the impairment testing of intangible assets required under international accounting rules.

Requiring reporting entities to recognise an impairment loss whenever “the recoverable amount of an asset is less than its carrying amount”¹⁹⁹ develops a useful reporting discipline, and obligation, that will carry over to the general recognition and continuous assessment of intangible asset values.

¹⁹⁹ See CCDG (2006); p.10.

I believe that this provision, together with the imposition of a strict ‘value in use’²⁰⁰ standard for calculating relevant future cash flows, whose present values will, in turn, be calculated using appropriate discount rates, and necessitate a focus on an assets actual ‘useful life’ (the extension of which, based, for instance, on possible legal-contractual events or triggers can be accommodated) in determining its present, and future fair value, has a general usefulness. This must, by its very exercise, allow, and support, a more comprehensive, and adequate, intangible asset valuation approach.

SAS 36 also provides for an improved, consistent, recognition of impairment losses in a manner conducive to determining, and maintaining, an accurate net asset position for the reporting entity²⁰¹.

INT 11 – Business Combinations – Classification Either as an Acquisition or Uniting of Interests

Interpretation of Accounting Standard 11 (INT 11) provides useful guidance in relation to the distinction between ‘acquisitions’ (which as per international standard practice will need to use the purchase method for business combination accounting) and a ‘uniting of interests’ (which will utilise the pooling method). Essentially a business combination will be accounted for as a (purchase method-based) acquisition “unless an acquirer cannot be identified”²⁰². As an acquirer can almost always be identified, scope for a pooling method-utilising ‘unifying of interests’ event is extremely limited. This

²⁰⁰ See CCDG (2006); p.10.

²⁰¹ See CCDG (2006); p.10.

²⁰² See CCDG (2006); p.11.

provides useful guidance in relation to SAS 22 – Business Combinations by clarifying the default ‘acquisition’ position and suggesting the relative rarity, even unlikelihood, of any ‘unifying of interests’ scenario.

The significance of the wide-ranging changes to Singaporean accounting standards that these revisions and new provisions constituted can be gauged from the intra-firm announcements and briefings that were produced.

The ‘Updates on Recent Changes to the Financial Reporting Framework in Singapore’ report²⁰³ provided by the firm of Philip Liew & Co to its clients clearly indicated that the new Financial Reporting Standards (FRS), so clearly aimed at bringing Singapore into line with international standards, being “now legislated by the (itself amended) Companies Act [now] have the weight of law”²⁰⁴.

A very enlightening schedule (attached to the report) demonstrated how the new FRS corresponded to old, or existing, SAS, and made the point that, as a general rule, from January 1, 2003, the FRS would apply (except for FRS 39 – Financial Instruments, which would apply from 2005). A clear sign that the new FRS would prevail over the Singaporean Statements of Accounting Standards (SAS) was the rule that “Companies with financial periods starting on or after 1 January 2003 have to comply with the Financial Reporting Standards (FRS) issued by the Council on Corporate Disclosure and

²⁰³ See Philip Liew & Co (2004); p.1.

²⁰⁴ See Philip Liew & Co (2004); p.1.

Governance (CCDG)²⁰⁵ instead of Statements of Accounting Standards (SAS) issued by the Institute of Certified Public Accountants of Singapore (ICPAS)”²⁰⁶.

The CCDG also provided, in its ‘Prescribing Accounting Standards for Singapore’ document²⁰⁷ a roadmap for ongoingly aligning, or harmonising, Singaporean accounting standards with international standards. The 4-stage (and 15 step) process²⁰⁸ is designed to fulfil very clear policy objectives. The policy, as stated, is “to adopt International Financial Reporting Standards (IFRSs) and International Accounting Standards (AISs) issued by the International Accounting Standards Board (IASB). Convergence with international standards will achieve greater transparency and comparability of financial information among companies”²⁰⁹; essential preconditions, in my opinion, for an improved intangible asset valuation approach.

A case study that illustrates both the popular apprehension of these changes in Singapore, and the significance the changes have, in particular, for the treatment, and valuation of intangible enterprise assets, was the DBS Group Holdings announcement of a \$1.13 billion impairment charge, in the fourth quarter of 2005 ‘under the new reporting standards’²¹⁰.

²⁰⁵ See CCDG (2002); p.1. The Singapore Council on Corporate Disclosure and Governance (CCDG) is empowered under the Singapore Companies Act to prescribe accounting standards for use by all companies incorporated in Singapore and by branches of foreign companies in respect of their Singapore operations.

²⁰⁶ See Philip Liew & Co (2004); p.5.

²⁰⁷ See CCDG (2002); p.1.

²⁰⁸ See CCDG (2002); p.1-3.

²⁰⁹ See CCDG (2002); p.1.

²¹⁰ This was the first instance of a new impairment charge observed in Singapore under the new standards.

Singapore Enterprise Survey

In support of the already mentioned research project that I co-authored with Gordon Smith for the IP Academy (Singapore)²¹¹, the annual financial reports (2005, and 2006 where available) of 10 Singaporean enterprises were examined for evidence of annual intangible asset revaluations and/or allocations consistent with SFAS 141 and 142 (and SAS 34) requirements.

The following summaries are extracted from the report and demonstrate the significance of, and high level of compliance with, accounting, legal and financial standards in the Singaporean financial reporting process:

Armstrong Industrial Corporation Limited

At December 31, 2005, the company disclosed \$287,000 of intangible assets on its balance sheet that were attributed to licensed technology and know-how.

Biosensors International

At 21 March, 2006, the company recorded Intangible Assets in an amount of US\$ 1.182 million and Goodwill of US\$14.410 million. The intangible assets are recorded at their *cost*, presumably because they are self-developed computer software, development costs and distribution & licensing rights. The goodwill is presumably from business acquisitions.

²¹¹ See Sanders and Smith (2008); pp.29-32.

Financial statements also noted the adoption of a number of new IAS and IFRS accounting policies.

Eu Yan Sang International Ltd.

The company's balance sheet at 30 June 2006 indicated Goodwill in the amount of \$624,000 and Intangible Assets of \$263,000. FRS accounting policies were adopted and the company recorded an impairment of Goodwill value in both 2005 and 2006 fiscal years. Intangible Assets were identified as patents and trademarks stated at their purchase cost.

OSIM International Ltd.

In its 2005 annual report, the company reported intangible assets on its balance sheet in the amount of \$35.8 million. Of this, \$19.5 million was identified as Franchise Rights, Development Rights, Trademark, Distribution Rights and Club Membership. These intangibles arose primarily from the company's acquisitions of subsidiaries or additional interests in subsidiaries.

OSIM also noted its adoption of new FRSs. The company also recorded an impairment loss in connection with its intangibles.

Overseas-Chinese Banking Corporation Limited

OCBC's balance sheet as of 31 December 2006 "Goodwill and Intangible Assets" in the amount of \$3,520,949,000. Of this amount, \$2,699,829 is ascribed to Goodwill and \$821,120 represents acquired Intangible Assets less amortisation. Intangible Assets are described as the value of in-force life assurance and the acquisition of additional interest in the business of Great Eastern Holdings Limited.

An impairment charge was made in 2005, but not in 2006. OCBC provides a description of the valuation method it employs. Since it is more informative than generally provided in the financial statements observed, I reproduce it here:

"The value-in-use calculations apply a discounted cash flow model using cash flow projections based on financial budgets and forecasts approved by management covering a five-year period. The discount rates applied to the cash flow projections are derived from the pre-tax weighted average cost of capital plus a reasonable risk premium at the date of assessment of the respective CGU [cash generating unit]. The discount rates used ranged from 10% to 19% (2005: 9% to 20%). Cash flows beyond the fifth year are extrapolated using the estimated terminal growth rates (weighted average growth rate to extrapolate cash flows beyond the projected years). For 2006, the terminal growth rates ranged from 2% to 11% (2005: 2% to 15%). The terminal growth rate for each CGU used does not exceed management's

expectation of the long term average growth rate of the respective industry and country in which the CGU operates.”²¹².

As Gordon Smith noted “This description closely conforms to the valuation methodology that professional appraisers would employ in similar circumstances. I include the description herein because it provides insight into the complexity of the valuation task that company management can face”²¹³.

StarHub Ltd.

The balance sheet at 31 December reports Intangible Assets of \$339,737,000 distributed as follows:

Telecommunications licenses	\$71,343,000
Software	43,787,000
Software in development	4,315,000
Goodwill	220,292,000

In 2006, the company recorded impairment losses against the values of intangibles, excluding goodwill.

²¹² See Sanders and Smith (2008); p.30.

²¹³ See Sanders and Smith (2008); p.30.

ASL Marine Holdings Ltd.

This company's 2007 annual report lists no Intangible Assets on its balance sheet. The notes to financial statements list the FRS and IFRS that are pending effectiveness. It is not surprising that intangibles do not play a large role in this enterprise.

Telechoice International Limited

Intangible Assets of \$1,918,000 appear on the balance sheet at 31 December 2006, distributed as follows:

Computer software	\$310,000
Paging license costs	-0- ²¹⁴
Retail business infrastructure	771,000
Customer and agent network	742,000
Goodwill	96,000

In Note 5 of the financial statements, the company reported the July 2006 acquisition of the business of providing telecommunications services to customers in Malaysia. TeleChoice reported that the allocation of the approximately \$1 million purchase price to the identifiable tangible and intangible assets was not completed as of 31 December.

²¹⁴ See Sanders and Smith (2008); p.30. TeleChoice noted that the original paging license value of \$250,000 was fully amortised during 2006.

Questionnaire Activity

Two of the ten companies agreed to confidential face-to-face interviews, and I conducted 30 minute confidential discussions with the most senior financial officer (typically Finance Manager or CFO) available.

In both cases, while there was a clear commitment to comply with these accounting standards (and associated reporting obligations and intangible asset treatment rules), there was a universal uncertainty and concern with regards to the exact requirements these created for enterprise managers.

Consistent with the determination of both auditors (at one end) and valuers/appraisers (at the other) to have enterprise managers, themselves, provide representations as to, for example, expected future benefits from reported intangible assets, enterprise managers reported feeling 'unsure' and 'unsupported' in relation to these key responsibilities.

As illustrated in the issues list (below) this is an issue that must be addressed. A draft management checklist and targeted training menu were provided as attachments to the Final Report as indicators of where Singaporean enterprise managers require further support and assistance in meeting their obligations, and converting opportunities that the annual revaluation of intangible assets represent.

I recommended, in the IP Academy (Singapore) research project Final Report, that these be used, post project, as starting points, for further work, and specific projects, to provide support to Singaporean enterprise managers in these key areas as their adoption of improved, adequate, intangible asset valuation approaches supported by new international accounting standards would be restricted by lack of certainty in relation to how these might be adopted and used.

Issues List

The confidential discussions conducted with two of the surveyed enterprises highlighted several important issues. These included:

- 1) That the actual support provided from auditors and the independent valuation experts was insufficient, with management “left to make their own estimates” of fair value-related future income and benefits. The Big 4 firm and the valuation expert both insisted that these had to be management representations. This was described as “more of an issue” now with the SFAS 141 and 142-related requirement to annually revalue intangible assets and test for impairment, and the increasing separation of valuation/appraisal and audit functions.
- 2) That the increasing separation of audit and appraisal/valuation functions seemed to leave both the sets of service providers more insistent on management estimating their own expected future benefits and valuation positions.

- 3) That support for management, in the form of targeted training and even a checklist tool, was required to help them meet their new responsibilities.
- 4) That things “would get tougher” for management with an increase in M&A activity and increasing numbers of acquired intangible assets to treat.

Overall, the two enterprises interviewed appeared to have a compliant and effective financial and accounting approach, with an expected future benefit-sensitive approach to making allocations for intangible assets. As such, they could be regarded as fairly representative of other Singaporean firms in their outlining of concerns, and declared requirements of support, including, but not limited to, targeted training and support tools (such as checklists) enabling them to better understand and meet their IFRS responsibilities (including annual revaluation of intangible assets in financial statements).

Compliance with the accounting and legal standards that govern the recognition, treatment and, ultimately, valuation of their intangible assets is a foremost consideration for Singaporean enterprises. As the emerging set of new international accounting standards are gradually supported by a wider legal framework, and tested in the courts, these will become an increasingly reliable platform upon which to assert, and defend, increasingly more adequate valuations for enterprise intangible assets.

The overriding importance that this legal framework has in relation to the accounting standards that ultimately rely on it for successful adoption is clear. Without a firm legal basis, these standards would lack the certainty enterprises

need to see demonstrated to take advantage of the scope for more adequate intangible valuation that they offer. The new single set of international accounting standards might provide the promise of improved intangible asset valuation but they have to be legally tested, and validated, to properly resolve the problem of inadequacy that exists in relation to the prevailing approaches.

Like Australia, Singapore is likely to soon embark on the legal testing phase of its new standards. The US experience and authorities, examined below, will prove useful.

V. US Case Law

The US has seen some useful authorities emerge that both examine, and expose, historically entrenched rules and standards that have sustained an inadequate accounting approach to intangible asset valuation. Some key decisions have usefully extended opportunities to amend or restate these underlying standards and rules in a way that can support better approaches to intangible asset valuation going forward.

The reliability of an intangible asset valuation approach is deeply affected by the interaction between accounting standards and the legal system and overall framework within which these operate.

This is why resolving the problem of inadequacy that afflicts enterprise intangible asset valuation can, and should, be the subject of legal research. No

single set of accounting standards, in themselves, can resolve the problem. The legal testing and validation of these accounting standards will inevitably determine the depth and quality of their impact.

US case law in the area of intangible asset valuation, while relatively recent and limited, in absolute terms, represents the established case law on the subject. Thanks to the increasing global adoption of a single set of international accounting standards, many of which are the same as, or significantly resemble, those that have been tested in the US, these authorities are valuable precedents for all IFRS-compliant jurisdictions. They provide a legal baseline for projecting future outcomes in other courts, such as those in Australia and Singapore, that are yet, but will inevitably be called on to, test many of these issues themselves.

Carracci: Testing the Reliability of Intangible Asset Valuation

In **Carracci, et al v Commissioner of Internal Revenue 456 F.3d 444; 2006 U.S App. LEXIS 17370; 2006-2 U.S. Tax Cas. (CCH) P50, 395**, the reliability of intangible asset valuation was a central issue. In a situation perhaps contemplated by the FASB when it drafted the Statement of Financial Accounting Standards No. 141 (Business Combinations), or SFAS 141, principles underpinning the concept of fair value are explored, and ultimately, I would suggest, strongly asserted.

The essential relationship between consideration (or the amount paid for or invested in an enterprise intangible asset) and what might, or should, be properly be regarded as the net, and fair, value of subject assets is examined and a fair value standard firmly imposed.

Facts Summary

In a consolidated action, three appellant tax payers from the same family (Carracci), sought review of a decision of the US Tax Court which had upheld taxes and deficiencies (penalties) imposed by the respondent, the US Commissioner of Internal Revenue when the Carracci's, who owned 3 nursing homes, changed from an exempt to a non-exempt tax status.

Despite being provided with professional valuations that showed that, after years of involvement in the Medicare reimbursement system under which the “taxpayers effectively had no ability to realize profits”²¹⁵, the taxpayers, when converting, had actually paid more for the assets than they were worth, the Commissioner of Internal Revenue deemed that a taxable “net excess benefit” had still occurred and imposed excise taxes on the transaction.

At the initial trial, despite the fact that “the Commissioner acknowledged that the deficiency notices were wrong, the Tax Court still upheld them”²¹⁶. On appeal, the court, in a key case that would forever oblige even tax authorities to follow established, fair value-premised valuation approaches, found that “the Tax Court erred as a matter of law in affirming the excise taxes after the

²¹⁵ See Carracci, et al v Commissioner of Internal Revenue 456 F.3d 444; 2006 U.S App. LEXIS 17370; 2006-2 U.S. Tax Cas. (CCH) P50, 395; p.1.

²¹⁶ See Carracci [op cit]; p.1.

Commissioner failed to meet his burden of proving that the taxes were correctly assessed, in selecting the method to value the assets and liabilities transferred, and in making clearly erroneous fact findings in applying that valuation method”²¹⁷.

Significance for Intangible Asset Valuation

Carracci is significant, and useful, for a number of reasons. Firstly, in imposing a burden of proof on all parties involved in a valuation situation (including regulatory and tax authorities) the court ensured that the fair value-based approach would be universally applied.

Secondly, the firm imposition of a fair value standard was so general as to make it a useful authority for the widest possible range of valuations, including intangible asset valuations. The examination of the expert witness testimony, and criticism of the Commissioner of Internal Revenue, and the Tax Court itself, for not properly adopting the proven valuation techniques admitted in evidence, was also important. Overall, the decision was an endorsement of a consistent, fair value-based approach to asset valuation that is now firmly established as a norm.

This is a vital support for the new set of international accounting standards that, as in Australia and Singapore, are being developed and implemented to encourage an improved, and consistent, approach to enterprise intangible asset valuation.

²¹⁷ See Carracci [op cit]; p.1.

Daubert: Admissibility of Expert Witness and the Relevance to Intangible Asset Valuation

One of the most important intangible asset valuation authorities, Daubert effectively helps establish ground rules for the use of expert testimony, and its admissibility; rules that would be extended even further under the next case, Kumho, that we shall examine.

The fact that accounting standards are part of a wider legal framework and open to legal testing and validation, means that appraisal and valuation experts may be called on to defend their valuations in court.

Pre-Daubert, the theoretical nature of the prevailing, inadequate, valuation approaches tended to reduce the legal enquiry around these to a largely scientific one. The enquiry usually only extended to the determining whether the method asserted was generally accepted or not. In such an environment, anything less than absolutely proved was easily rejected; and the search was not for any reasonable basis for asserting a defensible fair value for an asset, but for the most authoritative valuation method. This was quite contrary, one might suggest, to the spirit of the new international accounting standards which seek to facilitate even non-specialist management representations as to what the fair value of subject intangible assets might be.

Daubert is significant because it established, and Kumho expanded, the very scope for admitting, and examining, a wide enough array of evidence as to

allow, ultimately, management fair value representations to be asserted and defended.

DAUBERT v. MERRELL DOW PHARMACEUTICALS, INC., 509 U.S. 579, 125 L Ed 2d 469, 113 S Ct 2786 (1993)

Facts:

Petitioners, two minor children and their parents, alleged in their suit against respondent that the children's serious birth defects had been caused by the mothers' prenatal ingestion of Bendectin, a prescription drug marketed by respondent. The District Court granted respondent summary judgment based on a well-credentialed expert's affidavit concluding, upon reviewing the extensive published scientific literature on the subject, that maternal use of Bendectin has not been shown to be a risk factor for human birth defects.

Although petitioners had responded with the testimony of eight other well-credentialed experts, who based their conclusion that Bendectin can cause birth defects on animal studies, chemical structure analyses, and the unpublished "reanalysis" of previously published human statistical studies, the court determined that this evidence did not meet the applicable "general acceptance" standard for the admission of expert testimony. The Court of Appeals agreed and affirmed, citing *Frye v. United States*, 54 App. D.C. 46, 47, 293 F. 1013, 1014, for the rule that expert opinion based on a scientific

technique is inadmissible unless the technique is "generally accepted" as reliable in the relevant scientific community.

Ruling:

Held:

The Federal Rules of Evidence, not Frye, provide the standard for admitting expert scientific testimony in a federal trial. Pp. 4-17.

- (a) Frye's "general acceptance" test was superseded by the Rules' adoption.

The Rules occupy the field, *United States v. Abel*, 469 U.S. 45, and, although the common law of evidence may serve as an aid to their application, *id.*, at 51-52, respondent's assertion that they somehow assimilated Frye is unconvincing. Nothing in the Rules as a whole or in the text and drafting history of Rule 702, which specifically governs expert testimony, gives any indication that "general acceptance" is a necessary precondition to the admissibility of scientific evidence. Moreover, such a rigid standard would be at odds with the Rules' liberal thrust and their general approach of relaxing the traditional barriers to "opinion" testimony. Pp. 4-8.

- (b) The Rules - especially Rule 702 - place appropriate limits on the admissibility of purportedly scientific evidence by assigning to the trial judge the task of ensuring that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand. The reliability standard is established by Rule 702's requirement that an expert's testimony pertain to

"scientific . . . knowledge," since the adjective "scientific" implies a grounding in science's methods and procedures, while the word "knowledge" connotes a body of known facts or of ideas inferred from such facts or accepted as true on good grounds. The Rule's requirement that the testimony "assist the trier of fact to understand the evidence or to determine a fact in issue" goes primarily to relevance by demanding a valid scientific connection to the pertinent inquiry as a precondition to admissibility. Pp. 9-12.

- (c) Faced with a proffer of expert scientific testimony under Rule 702, the trial judge, pursuant to Rule 104(a), must make a preliminary assessment of whether the testimony's underlying reasoning or methodology is scientifically valid and properly can be applied to the facts at issue. Many considerations will bear on the inquiry, including whether the theory or technique in question can be (and has been) tested, whether it has been subjected to peer review and publication, its known or potential error rate and the existence and maintenance of standards controlling its operation, and whether it has attracted widespread acceptance within a relevant scientific community. The inquiry is a flexible one, and its focus must be solely on principles and methodology, not on the conclusions that they generate. Throughout, the judge should also be mindful of other applicable Rules. Pp. 12-15.

- (d) Cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof, rather than wholesale exclusion under

an uncompromising "general acceptance" standard, is the appropriate means by which evidence based on valid principles may be challenged. That even limited screening by the trial judge, on occasion, will prevent the jury from hearing of authentic scientific breakthroughs is simply a consequence of the fact that the Rules are not designed to seek cosmic understanding but, rather, to resolve legal disputes. Pp. 15-17.

Comments:

As held in the 4 points of the court's ruling above, the rejection of the Frye 'general acceptance' standard in favour of the more liberal and inclusive US Federal Rules of Evidence replaced a rigid evidentiary standard (Frye) with one in which opinions from a much wider range than those few that would meet the standard of being "generally accepted" in particular scientific communities could be admitted.

This initial break with the generally accepted standard would be expanded, in Kumho and beyond, and ultimately allows the admission of expert testimony, generally, and the courts consideration of these opinions, on the widest possible range of issues. After all, the US Federal Rules of Evidence standard, as we shall see discussed in the judgement (below) must be interpreted (given these Federal rules were legislatively enacted) like any statute. And the interpretation, in cases such as Beech Aircraft Corp v

Rainey²¹⁸ has been a consistently liberal one. Consistent with Rule 402 of the US Federal Rules of Evidence:

"All relevant evidence is admissible, except as otherwise provided by the Constitution of the United States, by Act of Congress, by these rules, or by other rules prescribed by the Supreme Court pursuant to statutory authority. Evidence which is not relevant is not admissible."

"Relevant evidence" is defined as that which has "any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." The Rule's basic standard of relevance thus is a liberal one.

Of particular relevance to this legal research, this logically extends to valuation expert witnesses who would be free, in theory, to assert and defend their valuation approaches that, premised on the new single set of international accounting standards, support the more adequate valuation of enterprise intangible assets.

The TEV (Total Enterprise Value) model asserted in Chapter 7 of this research could be introduced into evidence in a future intangible asset valuation challenge or defence, and in that way be insinuated into the increasing range of legally validated valuation approaches and techniques.

A model tested against, and consistent with, the new single set of

²¹⁸ See *Beech Aircraft Corp. v Rainey*, 488 US 153 (1988)

international accounting standards, and premised on facilitating management representations of fair value for previously inadequately valued enterprise intangible assets, could in such a fashion be introduced into evidence, and examined by the courts in their ongoing, and critical, legal testing and validation of such standards.

The court process ensures that all such evidence is carefully considered, of course, and expert witnesses, while allowed to provide their opinions, will have these scrutinised and cross-examined, so models and approaches subjected to this legal process are critically reviewed and usefully validated. This is well demonstrated in the judgement of Blackmun J, extracted below.

Judgement:

OJ JUSTICE BLACKMUN delivered the opinion of the Court ²¹⁹

“In this case, we are called upon to determine the standard for admitting expert scientific testimony in a federal trial.

Petitioners Jason Daubert and Eric Schuller are minor children born with serious birth defects. They and their parents sued the respondent in California state court, alleging that the birth defects had been caused by the mothers' ingestion of Bendectin, a prescription antinausea drug marketed by

²¹⁹ See *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 US 579, 125 L Ed 2d 469, 113 S Ct 2786 (1993)

respondent. Respondent removed the suits to federal court on diversity grounds.

After extensive discovery, respondent moved for summary judgment, contending that Bendectin does not cause birth defects in humans and that petitioners would be unable to come forward with any admissible evidence that it does. In support of its motion, respondent submitted an affidavit of Steven H. Lamm, physician and epidemiologist, who is a well-credentialed expert on the risks from exposure to various chemical substances. Doctor Lamm stated that he had reviewed all the literature on Bendectin and human birth defects - more than 30 published studies involving over 130,000 patients. No study had found Bendectin to be a human teratogen (i.e., a substance capable of causing malformations in fetuses). On the basis of this review, Doctor Lamm concluded that maternal use of Bendectin during the first trimester of pregnancy has not been shown to be a risk factor for human birth defects.

The District Court granted respondent's motion for summary judgment. The court stated that scientific evidence is admissible only if the principle upon which it is based is "sufficiently established to have general acceptance in the field to which it belongs." 727 F.Supp. 570, 572 (S.D. Cal. 1989), quoting *United States v. Kilgus*, 571 F.2d 508, 510 (CA9 1978). The court concluded that petitioners' evidence did not meet this standard. Given the vast body of epidemiological data concerning Bendectin, the court held, expert opinion

which is not based on epidemiological evidence is not admissible to establish causation. 727 F.Supp., at 575.

The United States Court of Appeals for the Ninth Circuit affirmed. 951 F.2d 1128 (1991). Citing *Frye v. United States*, 54 App. D.C. 46, 47, 293 F. 1013, 1014 (1923), the court stated that expert opinion based on a scientific technique is inadmissible unless the technique is "generally accepted" as reliable in the relevant scientific community. 951 F.2d, at 1129-1130. The court declared that expert opinion based on a methodology that diverges "significantly from the procedures accepted by recognized authorities in the field . . . cannot be shown to be 'generally accepted as a reliable technique.'" *Id.*, at 1130, quoting *United States v. Solomon*, 753 F.2d 1522, 1526 (CA9 1985).

The court emphasized that other Courts of Appeals considering the risks of Bendectin had refused to admit reanalyses of epidemiological studies that had been neither published nor subjected to peer review. 951 F.2d, at 1130-1131. Those courts had found unpublished reanalyses "particularly problematic in light of the massive weight of the original published studies supporting [respondent's] position, all of which had undergone full scrutiny from the scientific community." *Id.*, at 1130.

The court concluded that petitioners' evidence provided an insufficient foundation to allow admission of expert testimony that Bendectin caused their

injuries and, accordingly, that petitioners could not satisfy their burden of proving causation at trial.

We granted certiorari in light of sharp divisions among the courts regarding the proper standard for the admission of expert testimony. Compare, e.g., *United States v. Shorter*, 257 U.S. App. D.C. 358, 363-364, 809 F.2d 54, 59-60 (applying the "general acceptance" standard), cert. denied with *DeLuca v. Merrell Dow Pharmaceuticals, Inc.*, 911 F.2d 941, 955 (CA3 1990) (rejecting the "general acceptance" standard).

In the 70 years since its formulation in the *Frye* case, the "general acceptance" test has been the dominant standard for determining the admissibility of novel scientific evidence at trial. See E. Green & C. Nesson, *Problems, Cases, and Materials on Evidence* 649 (1983).

The *Frye* test has its origin in a short and citation-free 1923 decision concerning the admissibility of evidence derived from a systolic blood pressure deception test, a crude precursor to the polygraph machine. In what has become a famous (perhaps infamous) passage, the then Court of Appeals for the District of Columbia described the device and its operation and declared:

"Just when a scientific principle or discovery crosses the line between the experimental and demonstrable stages is difficult to define. Somewhere in this twilight zone, the evidential force of the principle must be recognized, and

while courts will go a long way in admitting expert testimony deduced from a well-recognized scientific principle or discovery, the thing from which the deduction is made must be sufficiently established to have gained general acceptance in the particular field in which it belongs." 54 App. D.C., at 47, 293 F., at 1014 (emphasis added).

Because the deception test had "not yet gained such standing and scientific recognition among physiological and psychological authorities as would justify the courts in admitting expert testimony deduced from the discovery, development, and experiments thus far made," evidence of its results was ruled inadmissible.

The merits of the Frye test have been much debated, and scholarship on its proper scope and application is legion. Petitioners' primary attack, however, is not on the content, but on the continuing authority, of the rule. They contend that the Frye test was superseded by the adoption of the Federal Rules of Evidence. We agree.

We interpret the legislatively enacted Federal Rules of Evidence as we would any statute. *Beech Aircraft Corp. v. Rainey*. Rule 402 provides the baseline:

"All relevant evidence is admissible, except as otherwise provided by the Constitution of the United States, by Act of Congress, by these rules, or by other rules prescribed by the Supreme Court pursuant to statutory authority. Evidence which is not relevant is not admissible."

"Relevant evidence" is defined as that which has "any tendency to make the existence of any fact that is of consequence to the determination of the action more probable or less probable than it would be without the evidence." The Rule's basic standard of relevance thus is a liberal one.

Frye, of course, predated the Rules by half a century. In *United States v. Abel*, 469 U.S. 45 (1984), we considered the pertinence of background common law in interpreting the Rules of Evidence. We noted that the Rules occupy the field, *id.*, at 49, but, quoting Professor Cleary, the Reporter, explained that the common law nevertheless could serve as an aid to their application:

"In principle, under the Federal Rules, no common law of evidence remains. "All relevant evidence is admissible, except as otherwise provided. . . ." In reality, of course, the body of common law knowledge continues to exist, though in the somewhat altered form of a source of guidance in the exercise of delegated powers." *Id.*, at 51-52.

Here there is a specific Rule that speaks to the contested issue. Rule 702, governing expert testimony, provides:

"If scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or to determine a fact in issue, a witness qualified as an expert by knowledge, skill, experience, training, or education, may testify thereto in the form of an opinion or otherwise."

Nothing in the text of this Rule establishes "general acceptance" as an absolute prerequisite to admissibility. Nor does respondent present any clear indication that Rule 702 or the Rules as a whole were intended to incorporate a "general acceptance" standard. The drafting history makes no mention of Frye, and a rigid "general acceptance" requirement would be at odds with the "liberal thrust" of the Federal Rules and their "general approach of relaxing the traditional barriers to 'opinion' testimony." *Beech Aircraft Corp. v. Rainey*, 488 U.S., at 169 (citing Rules 701 to 705). See also Weinstein, Rule 702 of the Federal Rules of Evidence is Sound; It Should Not Be Amended, 138 F.R.D. 631 (1991) ("The Rules were designed to depend primarily upon lawyer-adversaries and sensible triers of fact to evaluate conflicts"). Given the Rules' permissive backdrop and their inclusion of a specific rule on expert testimony that does not mention "general acceptance," the assertion that the Rules somehow assimilated Frye is unconvincing. Frye made "general acceptance" the exclusive test for admitting expert scientific testimony. That austere standard, absent from, and incompatible with, the Federal Rules of Evidence, should not be applied in federal trials.

That the Frye test was displaced by the Rules of Evidence does not mean, however, that the Rules themselves place no limits on the admissibility of purportedly scientific evidence. Nor is the trial judge disabled from screening such evidence. To the contrary, under the Rules, the trial judge must ensure that any and all scientific testimony or evidence admitted is not only relevant, but reliable.

Proposed testimony must be supported by [appropriate validation] - i.e., "good grounds," based on what is known. In short, the requirement that an expert's testimony pertain to "scientific knowledge" establishes a standard of evidentiary reliability.

Rule 702 further requires that the evidence or testimony "assist the trier of fact to understand the evidence or to determine a fact in issue." This condition goes primarily to relevance. "Expert testimony which does not relate to any issue in the case is not relevant and, ergo, nonhelpful." 3 Weinstein & Berger ¶ 70202., p. 702-18. See also *United States v. Downing*, 753 F.2d 1224, 1242 (CA3 1985) ("An additional consideration under Rule 702 - and another aspect of relevancy - is whether expert testimony proffered in the case is sufficiently tied to the facts of the case that it will aid the jury in resolving a factual dispute"). Rule 702's "helpfulness" standard requires a valid scientific connection to the pertinent inquiry as a precondition to admissibility.

That these requirements are embodied in Rule 702 is not surprising. Unlike an ordinary witness, see Rule 701, an expert is permitted wide latitude to offer opinions, including those that are not based on firsthand knowledge or observation. See Rules 702 and 703. Presumably, this relaxation of the usual requirement of firsthand knowledge - a rule which represents "a `most pervasive manifestation' of the common law insistence upon `the most reliable sources of information,'" Advisory Committee's Notes on Fed. Rule Evid. 602, 28 U.S.C. App., p. 755 (citation omitted) - is premised on an assumption that the expert's opinion will have a reliable basis in the knowledge and experience of his discipline.

Faced with a proffer of expert scientific testimony, then, the trial judge must determine at the outset, pursuant to Rule 104(a), whether the expert is proposing to testify to (1) scientific knowledge that (2) will assist the trier of fact to understand or determine a fact in issue. This entails a preliminary assessment of whether the reasoning or methodology underlying the testimony is scientifically valid, and of whether that reasoning or methodology properly can be applied to the facts in issue. We are confident that federal judges possess the capacity to undertake this review. Many factors will bear on the inquiry, and we do not presume to set out a definitive checklist or test.

Throughout, a judge assessing a proffer of expert scientific testimony under Rule 702 should also be mindful of other applicable rules. Rule 703 provides that expert opinions based on otherwise inadmissible hearsay are to be admitted only if the facts or data are "of a type reasonably relied upon by experts in the particular field in forming opinions or inferences upon the subject." Rule 706 allows the court at its discretion to procure the assistance of an expert of its own choosing. Finally, Rule 403 permits the exclusion of relevant evidence "if its probative value is substantially outweighed by the danger of unfair prejudice, confusion of the issues, or misleading the jury. . . ." Judge Weinstein has explained: "Expert evidence can be both powerful and quite misleading because of the difficulty in evaluating it. Because of this risk, the judge, in weighing possible prejudice against probative force under Rule 403 of the present rules, exercises more control over experts than over lay witnesses." Weinstein, 138 F.R.D., at 632.

Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof are the traditional and appropriate means of attacking shaky but admissible evidence. Additionally, in the event the trial court concludes that the scintilla of evidence presented supporting a position is insufficient to allow a reasonable juror to conclude that the position more likely than not is true, the court remains free to direct a judgment.

These conventional devices, rather than wholesale exclusion under an uncompromising "general acceptance" test, are the appropriate safeguards where the basis of scientific testimony meets the standards of Rule 702.

To summarize: "General acceptance" is not a necessary precondition to the admissibility of scientific evidence under the Federal Rules of Evidence, but the Rules of Evidence - especially Rule 702 - do assign to the trial judge the task of ensuring that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand. Pertinent evidence based on scientifically valid principles will satisfy those demands.

The inquiries of the District Court and the Court of Appeals focused almost exclusively on "general acceptance," as gauged by publication and the decisions of other courts. Accordingly, the judgment of the Court of Appeals is vacated, and the case is remanded for further proceedings consistent with this opinion."

Comments:

Blackmun J's judgement is concise and well reasoned. The harsh "general acceptance" standard, or Frye test ²²⁰ is categorically replaced by the more liberal and open admissibility standard extended by the US Federal Rules of Evidence.

With anything like a Frye standard being applied, a court's consideration of intangible asset valuations would be fatally constrained. Despite their demonstrated inadequacy in relation to the treatment of intangible asset valuations, only the prevailing valuation approaches, representing the established science on the subject, would meet the narrow "general acceptance" standard. Any attempts to admit expert witness testimony asserting the improved scope for intangible asset recognition and valuation (and genuine fair value approaches) provided for under the new single set of international accounting standards would be frustrated.

Expert witnesses will, in all likelihood, be called on to support enterprise owners seeking to apply the new accounting standards if, and as, these are tested in the courts. The assertion and defence of valuations based on management representations allowed for as valid Level 3 inputs under SFAS 157, and IFRS equivalents, rather than inadequate, but generally accepted, prevailing approaches, would not pass the application of anything like the Frye test.

²²⁰ The Frye test (from *Frye v. United States*, 54 App. D.C. 46, 47, 293 F. 1013, 1014 (1923)), holds that expert opinion based on a scientific technique is inadmissible unless the technique is "generally accepted" as reliable in the relevant scientific community. 951 F.2d, at 1129-1130.

Replacement of a “general acceptance” standard for admitting expert witness testimony for the more liberal US Federal Rules of Evidence standard is therefore a positive step, generally, with a significance that extends far beyond the realm of scientific knowledge with which it was actually concerned.

The general question of admissibility with which it dealt, and the clear rejection of the Frye test, makes it authoritative, and led inevitably to a wider application of its liberal position in other areas of expert witness testimony and technical and specialist knowledge.

Rejecting the Frye test and the narrow “general acceptance” standard for admitting expert witness testimony did not, however, create the chaotic ‘free-for-all’ situation that critics feared. Being subject to rigorous enquiry and cross-examination, any expert witness testimony would be scrutinised, and the courts, armed with extensive other powers and obligations to assess the reliability and relevance of the testimony, would act as a gate-keeper.

Blackmun J asserted that the courts, and legal process, are equipped to invite, and treat, the greatly expanded scope for expert witness testimony that the decision would inevitably invite.

I contend that the transition from Frye to the more liberal Rules of Evidence standard, and the general improvement this represents for the admissibility of a wider array of expert witness testimony, creates a much improved environment for courts, far beyond even the scope Blackmun J might have contemplated, to legally admit, test and validate the useful single set of

international accounting standards that, in turn, support a more adequate, fair value-asserting approach to intangible asset valuation.

The transition provided the beachhead that Kumho would exploit to extend the Daubert contemplation of scientific knowledge to general technical and specialist knowledge, including the area of intangible asset valuation.

Kumho: Extending Daubert From Scientific to Technical and Specialist Knowledge

Kumho Tire Co., Ltd, et al v Carmichael, 526 US 137, 119 S Ct 1167, 1999 US LEXIS 2189 (March 23, 1999)

Facts:

When a tire on the vehicle driven by Patrick Carmichael blew out and the vehicle overturned, one passenger died and the others were injured. The survivors and the decedent's representative, respondents here, brought this diversity suit against the tire's maker and its distributor (collectively Kumho Tire), claiming that the tire that failed was defective. They rested their case in significant part upon the depositions of a tire failure analyst, Dennis Carlson, Jr., who intended to testify that, in his expert opinion, a defect in the tire's manufacture or design caused the blow out. That opinion was based upon a visual and tactile inspection of the tire and upon the theory that in the absence of at least two of four specific, physical symptoms indicating tire abuse, the tire failure of the sort that occurred here was caused by a defect.

Kumho Tire moved to exclude Carlson's testimony on the ground that his methodology failed to satisfy Federal Rule of Evidence 702, which says: "If scientific, technical, or other specialized knowledge will assist the trier of fact ... , a witness qualified as an expert ... may testify thereto in the form of an opinion." Granting the motion (and entering summary judgment for the defendants), the District Court acknowledged that it should act as a reliability "gatekeeper" under *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U. S. 579 in which this Court held that Rule 702 imposes a special obligation upon a trial judge to ensure that scientific testimony is not only relevant, but reliable.

The court noted that *Daubert* discussed four factors--testing, peer review, error rates, and "acceptability" in the relevant scientific community--which might prove helpful in determining the reliability of a particular scientific theory or technique, *id.*, at 593-594, and found that those factors argued against the reliability of Carlson's methodology.

On the plaintiffs' motion for reconsideration, the court agreed that *Daubert* should be applied flexibly, that its four factors were simply illustrative, and that other factors could argue in favor of admissibility. However, the court affirmed its earlier order because it found insufficient indications of the reliability of Carlson's methodology.

In reversing, the Eleventh Circuit held that the District Court had erred as a matter of law in applying *Daubert*. Believing that *Daubert* was limited to the

scientific context, the court held that the Daubert factors did not apply to Carlson's testimony, which it characterized as skill- or experience-based.

Ruling:

Held:

1. The Daubert factors may apply to the testimony of engineers and other experts who are not scientists. Pp. 7-13.
 - (a) The Daubert "gatekeeping" obligation applies not only to "scientific" testimony, but to all expert testimony. Rule 702 does not distinguish between "scientific" knowledge and "technical" or "other specialized" knowledge, but makes clear that any such knowledge might become the subject of expert testimony. It is the Rule's word "knowledge," not the words (like "scientific") that modify that word, that establishes a standard of evidentiary reliability.
 - (b) Daubert referred only to "scientific" knowledge because that was the nature of the expertise there at issue. *Id.*, at 590, n. 8. Neither is the evidentiary rationale underlying Daubert's "gatekeeping" determination limited to "scientific" knowledge. Rules 702 and 703 grant all expert witnesses, not just "scientific" ones, testimonial latitude unavailable to other witnesses on the assumption that the expert's opinion will have a reliable basis in the knowledge and experience of his discipline. *Id.*, at 592. Finally, it would prove difficult, if not impossible, for judges to administer evidentiary rules under which a "gatekeeping" obligation depended upon a distinction between "scientific" knowledge and "technical" or "other specialized" knowledge, since there is no clear line

dividing the one from the others and no convincing need to make such distinctions. Pp. 7-9.

- (c) A trial judge determining the admissibility of an engineering expert's testimony may consider one or more of the specific Daubert factors. The emphasis on the word "may" reflects Daubert's description of the Rule 702 inquiry as "a flexible one." 509 U. S., at 594. The Daubert factors do not constitute a definitive checklist or test, *id.*, at 593, and the gatekeeping inquiry must be tied to the particular facts, *id.*, at 591. Those factors may or may not be pertinent in assessing reliability, depending on the nature of the issue, the expert's particular expertise, and the subject of his testimony. Some of those factors may be helpful in evaluating the reliability even of experience-based expert testimony, and the Court of Appeals erred insofar as it ruled those factors out in such cases. In determining whether particular expert testimony is reliable, the trial court should consider the specific Daubert factors where they are reasonable measures of reliability. Pp. 10-12.
- (d) the court of appeals must apply an abuse-of-discretion standard when it reviews the trial court's decision to admit or exclude expert testimony. *General Electric Co. v. Joiner*, 522 U. S. 136, 138-139. That standard applies as much to the trial court's decisions about how to determine reliability as to its ultimate conclusion. Thus, whether Daubert's specific factors are, or are not, reasonable measures of reliability in a particular case is a matter that the law grants the trial judge broad latitude to determine. See *id.*, at 143. The Eleventh Circuit erred insofar as it held to the contrary. P. 13.

Comments:

As discussed in the introduction to Kumho, the extension of Daubert factors and rules *to engineers and other experts who are not scientists*²²¹, made this much more obviously relevant to, and supportive of, the admissibility of the widest possible array of expert testimony.

This has immediate, and important, significance for the inevitable legal testing, and endorsement, of the emerging set of international accounting standards that offer much needed scope for improving the currently inadequate recognition and valuation of enterprise intangible assets under prevailing approaches.

Ensuring that expert witness testimony in support of the new international accounting standards, and any improved valuation approaches (such as the TEV model outlined in Chapter 7) based on them, can be reviewed by the courts and, in theory, found to be sufficiently reliable to be applied, Daubert and Kumho, together, demonstrate how a supportive legal framework is essential to securing the more adequate approach to intangible asset valuation that these support.

Judgement:

Justice Breyer delivered the opinion of the Court.

In *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U. S. 579 (1993), this Court focused upon the admissibility of scientific expert testimony. It pointed out

²²¹ See *Kumho Tire Co. v. Carmichael*, 526 US 137, 119 S Ct 1167, 1999 US LEXIS 2189 (Mar 23, 1999)

that such testimony is admissible only if it is both relevant and reliable. And it held that the Federal Rules of Evidence "assign to the trial judge the task of ensuring that an expert's testimony both rests on a reliable foundation and is relevant to the task at hand." *Id.*, at 597. The Court also discussed certain more specific factors, such as testing, peer review, error rates, and "acceptability" in the relevant scientific community, some or all of which might prove helpful in determining the reliability of a particular scientific "theory or technique." *Id.*, at 593-594.

This case requires us to decide how *Daubert* applies to the testimony of engineers and other experts who are not scientists. We conclude that *Daubert*'s general holding-- setting forth the trial judge's general "gatekeeping" obligation--applies not only to testimony based on "scientific" knowledge, but also to testimony based on "technical" and "other specialized" knowledge. See Fed. Rule Evid. 702. We also conclude that a trial court may consider one or more of the more specific factors that *Daubert* mentioned when doing so will help determine that testimony's reliability.

But, as the Court stated in *Daubert*, the test of reliability is "flexible," and *Daubert*'s list of specific factors neither necessarily nor exclusively applies to all experts or in every case. Rather, the law grants a district court the same broad latitude when it decides how to determine reliability as it enjoys in respect to its ultimate reliability determination. See *General Electric Co. v. Joiner*, 522 U. S. 136, 143 (1997) (courts of appeals are to apply "abuse of discretion" standard when reviewing district court's reliability determination).

Applying these standards, we determine that the District Court's decision in this case--not to admit certain expert testimony--was within its discretion and therefore lawful.

Comments:

Kumho's extension of Daubert from a contemplation of scientific knowledge to the wider categories of technical and other specialised knowledge extends the more liberal US Federal Rules of Evidence standards into the realm of intangible asset valuation. The evidence of specialist valuers and appraisers can be admitted, and the legal testing and validation of more adequate intangible asset valuation approaches, including those consistent with the new set of international accounting standards, can proceed upon a firm legal basis.

This, in turn, provides vital legal support for the use, by enterprises, of new valuation approaches, based on this same single set of international accounting standards, that were at least partly developed to address historical, and well recognised, problems with the treatment, recognition and valuation of intangible assets.

This is key to the next stages of this legal research project as the business valuation criteria (Chapter 6) and the wider TEV (Total Enterprise Value) approach that these are designed to support (Chapter 7), if adopted by enterprise owners to support management representations as to the fair value of their intangible assets, could find themselves subject to useful legal testing and review if introduced into evidence via expert witness testimony. If future valuations based on the TEV approach, or any others seeking to improve the

adequacy of intangible asset valuation, were to be challenged, this is now, thanks to Daubert and Kumho, a possible scenario.

VII. Conclusion

A compatible legal framework in which the new international accounting standards, and more adequate intangible asset valuation approaches that they support, can be admitted, legally reviewed, and endorsed, is vital if they are to be judged reliable, and truly ready for adoption and use by enterprises.

The developing US case law that we have examined, while limited, provides us with useful authorities that can and will be cited in jurisdictions that are adopting the same set of international accounting standards as the US as a basis for developing and sustaining a more adequate approach to intangible asset valuation.

Carracci, in establishing that all stakeholders (including national tax authorities) must adopt the same fair value-premised approach to valuation outlined in SFAS 157 and its IFRS and IAS equivalents (such as IAS 38), is key to ensuring enterprises can confidently assert management representations as to the fair value of their previously inadequately recognised intangible assets.

Daubert and Kumho, taken together, ensure that the expert witness testimony of specialist valuers and appraisers can, if and as required, be admitted into

evidence to in support of fair value-asserting management representations of intangible asset value.

Authoritative in the US ²²², these decisions are also useful global precedents and part of a developing intangible asset valuation case law that can be called on everywhere. And these will be valid precedents in virtually all national jurisdictions, given that the same single set of enabling international accounting standards are currently being actively implemented globally. These positive, and enabling, authorities are, then, elements of an evolving legal framework that can, and does, support a more adequate approach to enterprise intangible asset valuation.

Accounting standards alone, however well developed and implemented, are insufficient. A supportive legal framework, and more particularly the effective testing and validation of these standards, by courts, are key to producing an environment in which enterprise owners will confidently assert, and defend, adequate and fair valuations for their key enterprise intangible assets.

²²² While there is not yet a recognised body of non-US *Daubert* case law to examine, it is possible to demonstrate widespread support for, and adoption of, the *Daubert* test, at the legislative and statutory level, across many non-US jurisdictions. This is well illustrated in the UK, where, in 2005, the UK House of Commons Science and Technology Committee, in recommending the “creation of a Forensic Science Advisory Council to regulate forensic evidence in the UK...recommend[ed] that one of the first tasks of the Forensic Science Advisory Council be to develop a “gate-keeping” test for expert evidence. This should be done in partnership with judges, scientists and other key players in the criminal justice system, and should build on the US *Daubert* test”.

House of Commons Science and Technology Committee (2005) *Forensic Science on Trial*, London: The Stationery Office Limited, HC96-I, para.173

Chapter 6 A Set of Enterprise Intangible Asset Valuation Criteria

I. Introduction

In the last chapter, the legal and regulatory framework emerging in support of a fair value approach to intangible asset valuation was examined. Accompanying the implementation of a new single set of international accounting standards, this wider system of regulation, tests and authorities creates a platform for realising the more adequate approach to intangible asset valuation that the standards themselves hold out as a core objective.

This helps create and sustain a mutually supporting legal-accounting fair value approach to the treatment of enterprise intangible assets. Perhaps best demonstrated in the ongoing alignment of national legal and accounting systems to the new international accounting standards, and a useful body of US case law, this process appears both global and irreversible.

It is the coincidence of a single set of new international accounting standards and the development and sustaining of a supportive legal framework that, together, creates an opportunity to dramatically improve the adequacy of intangible asset valuation.

In this chapter, a set of valuation criteria that can be used to support enterprise-level management representations of intangible asset valuations will be outlined.

Aggregating, and expanding, existing discreet tests for recognising, treating, and extracting value from, intangible assets, this set of criteria is designed to assist

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enterprise owners build a case for asserting and defending a fair value approach to assessing the recognisable, applied, value of these key assets.

A comprehensive set of valuation criteria, supporting the TEV (Total Enterprise Value) approach that I will then proceed to outline in Chapter 7, are essential. Taken together, they will, I contend, deliver a reliable enterprise capability to develop, and exploit, the more adequate intangible asset valuation outcomes contemplated under the supportive legal and accounting systems and standards examined in Chapters 4 and 5.

II. Existing Core Tests and Criteria

Many of the current tests for recognising, and assessing the value of, intangible assets tend to operate as isolated tests of individual characteristics. The historical core of these criteria, as previously asserted in Chapter 4, are legal, and particularly contractual, in nature.

Taking as read the wider outline, and critique, of the prevailing, and inadequate, approaches (namely cost, income and market-based) to intangible asset valuation provided in Chapter 2, it is appropriate to revisit the core criteria that determine the initial recognition of intangible assets themselves.

The initial recognition of assets is premised on two key tests. These are the legal-contractual and separability tests.

These are well described in SFAS 141, where, at paragraph 39 (Intangible Assets) it is stated that “an intangible asset shall be recognised as an asset apart from goodwill if it arises from contractual or other legal rights (regardless of whether those rights are transferable or separable from the acquired entity or from other rights and obligations). If an intangible asset does not arise from contractual or other legal rights, it shall be recognised as an asset apart from goodwill only if it is separable, that is it is capable of being separated or divided from the acquired entity and sold, transferred, licensed, rented or exchanged”²²³

Historically (and certainly before these two core criteria were so clearly applied to intangible assets) the operation of asset valuation criteria, as discussed in Chapter 2, heavily favoured the recognition and treatment of real, or tangible, property. This is perhaps no surprise given that legal title to land, chattels and other physical means of production were relatively well developed, and important, in the centuries before intangible assets achieved their current economic significance.

This situation certainly contributed to the problem of inadequacy with which we are concerned. Suffice to say, at this point, that the legal-contractual and separability tests, on their own, have not resolved this problem. While the firm application of these tests to intangible asset recognition is useful, mere recognition of intangibles does not translate into their adequate treatment or valuation.

²²³ See SFAS No. 141 (2001); p.12

III. Developing a Wider Set of Business Criteria

Where the objective is to value, rather than just recognise, intangible assets, a far more extensive set of tests and criteria is required.

While, as observed, it is a practice open to corporate abuse, MNE international transfer pricing activity, examined at length in Chapter 3, nonetheless provides scope to observe intangible asset characteristics; characteristics that, in turn, can be subject to identification and measurement criteria.

The various methods that are employed to comply with the Arms Length Standard (ALS) for valuing a transfer pricing transaction, such as the CUT, CUP, CPM, and TNMM methods (see Chapter 3 and Glossary) are cases in point. Through the application of such methods, in the context of seeking to establish the basis for an exchange, as would independent parties involved in a similar transaction, the objective is to establish the commercially fair value for the subject asset.

The search for internal and external comparables in support of this constitutes a value benchmarking exercise that, broken down to its elements, involves an attempt to establish a defensible value for the intangible asset. While the prevailing valuation techniques then applied (the income, cost and market-based approaches) inevitably tend, as discussed at length in Chapter 2, to invariably deliver inadequate valuation outcomes, the comparability enquiry that the transfer pricing exercise involves offers much more promise.

I'd suggest that a set of valuation criteria representative of the more detailed transaction, or value point, comparability enquiry engaged in as part of the Arms Length Standard-compliant transfer pricing value establishing exercise should be compiled. This would provide enterprises with a detailed, and reliable, means for establishing the fair value of an enterprise intangible asset.

The same Arms Length Standard approach that is applied to establish a fair transfer price could, and should, be applied to identify and assert the value of an intangible assets total value, through pinpointing and asserting valuable components and attributes, evidenced by separate tests and criteria associated with the subject asset. For example, a particular intangible asset (such as a patent-protected nitrogen powered aerosol device) might have bundles of rights associated with them (such as uses and supported, and licensing ready, applications in the spray paint, automotive and general manufacturing industries) that can be identified. These can have associated revenues and monetary value estimated and:

- 1) initially recognised;
- 2) asserted on an application-by-application basis (such as spray painting, automotive and general manufacturing); and then further divided into
- 3) territories (such as Europe, North America, and Asia Pacific)

These bundles of value, supported by size-of-market analysis and projections, could be reported and included in enterprise financial projections as management representations of expected future economic benefits to flow from the asset.

Consistent with the notion of a set of valuation criteria that can be used to support such management representations, particular characteristics of the underlying technology/intangible asset (such as reliability, certainty, revenue, extendability and replicability) could be tested and asserted as well.

Evidence of such attributes, taken together, could be used to build more confidence around the likelihood that the economic benefits expected in the future will actually be achieved. Brand assets, business processes, designs and staff knowledge that support the subject technology/intangible asset can also be recognised and valued as part of this criteria-supported process²²⁴

A template for such a valuation approach to intangible assets exists in the manner through which enterprises, and their future prospects, are valued on the stock market.

Like the elements of a stocks performance, the value of the bundles of rights, and applications, associable with an intangible asset can and should be measurable, ultimately in monetary terms. Potential licensees or users, like the prospective buyers of shares in a company, should be provided with reliable information against which to accept, or reach their own, value propositions. I see the judgement of an intangible asset against expectations of the future economic benefits it will generate as akin to the performance of an enterprise's shares against expected targets and revenues.

Like the performance of a stock against a company business plan, and nominated business and revenue targets, the value of an intangible assets applications, and the

²²⁴ See Boos (2003); p.17.

strength of the associated characteristics or attributes that an intangible asset has, can, and should, be measured and assessed against a set of specific tests and criteria.

An intangible assets value is, after all, tied to “the amount of economic benefit that will result from its ownership”²²⁵; a core characteristic that is eminently measurable, and amenable to the application of further specific criteria.

In considering what any set of guiding valuation criteria should be, it is clear, again in terms reminiscent of the Arms Length Standard applied in relation to closely scrutinised international transfer pricing transactions, that these need to be objective and easily tested. Based on well-established and reliable inputs, the criteria must be well accepted and understood by potential users of the information they will convey.

The intense rigour applied by international accounting bodies to the task of developing and testing the wording of the emerging single set of international accounting standards that we examined in Chapter 4 is a good example of the effort that must be applied to defining a set of enterprise-level criteria that can be used by businesses to guide their intangible asset valuations.

In commenting on the *Exposure Draft of Amendments to IAS 1 – Presentation of Financial Statement: A Revised Presentation*, the ASCG (Accounting Standards Committee of Germany) or DRSC²²⁶ stressed the need for objective, and generally accepted, criteria, consistently worded, and carefully harmonised with enterprise financial reporting standards.

²²⁵ See Smith (1997); p.81.

²²⁶ the previously referred to DRSC or Deutsches Rechnungslegungs Standards Committee.

The ASCG's support for the mandatory application of the two-statement approach²²⁷ reflects its concern that all necessary information be included in financial statements. Rather than risk a new single statement approach that might create uncertainty and confusion with respect to the absence of previously reported detail, the ASCG would rather see an extra reporting burden placed on enterprises.

Compiling a set of valuation criteria is assisted by the fact that several useful tests and criteria are either established, or suggested, in the emerging international accounting standards I examined in Chapter 4.

SFAS 141 – *Business Combinations* – usefully highlights key activities, relevant to the acquisition (rather than internal generation) of enterprise intangible assets, for which a whole raft of relevant valuation criteria might be suggested. Such things as the initial recognition and valuation of acquired intangible assets; the allocation of costs for these; and the ongoing accounting for intangible assets (include the periodic testing for impairment – or changes in value) would all benefit from the operation of a well-established set of tests or criteria serving to guide the conduct of these activities.

SFAS 141 ultimately lists four core criteria, which I have also incorporated into the set of valuation criteria that I will outline later in this chapter, that can be applied to these, and most other, intangible asset valuation activities. Labelled as the 4 fundamental recognition criteria “that apply to all recognition decisions”²²⁸ these are:

²²⁷ See ASCG. Comments on Exposure Draft of Amendments to IAS 1 – Presentation of Financial Statements: A Revised Presentation (2006); p.3.

²²⁸ See SFAS No. 141 (2001); p.66.

1. Definition – is able to be included as an element in a financial statement
2. Measurability – includes a relevant attribute able to be measures reliably
3. Relevance – information about it can make a difference to user decisions
4. Reliability – information is faithful, verifiable and neutral

Relevant to this research, and to the specific task I took on, in Chapter 6, of compiling and expanding what are discreet, and often abbreviated, criteria into a set that enterprises might use to guide their production of management representations of intangible asset value, is the lack of detail SFAS 141 provides for these very important criteria and accompanying definitions.

In the FASB's 1999 Exposure Draft - *Proposed Statement of Financial Accounting Standards: Business Combinations and Intangible Assets* – the same brief outline of the 4 criteria outlined above is included, with the additional short recommendation that any item meeting these criteria should “ be recognised in the financial statements, subject to a cost-benefit constraint and a materiality threshold”²²⁹.

I found further indications of other useful criteria in SFAS 157 – *Fair Value Measurements*. Given its focus on encouraging and guiding a fair value approach to intangible asset recognition and treatment, this is, perhaps, no great surprise.

Before it provides guidance from which particular intangible asset valuation criteria can be identified, supported or expanded, SFAS 157 seeks to establish a firm, though

²²⁹ See FASB. *Exposure Draft Proposed Statement of Financial Accounting Standards: Business Combinations and Intangible Assets*. (1999); p.98.

general, platform for a fair value approach to intangible asset valuation itself. After noting the historical, and prevailing, valuation techniques (the, in my view, inadequate income, cost and market-based approaches) SFAS 157 immediately provides two valuation technique rules that, expanded, could support a number of useful tests and criteria.

Firstly, it stipulates that ‘Valuation techniques that are appropriate in the circumstances and for which sufficient data are available shall be used to measure fair value’²³⁰. Not limiting itself to the three prevailing cost, income and market-based valuation approaches, this pronouncement might be interpreted as expanding the scope of valuation techniques beyond the range of these three, inadequate, approaches alone. This creates at least notional scope for introducing any fair value asserting valuation criteria.

Supporting as it does the use of multiple valuation techniques and, by extension, tests, if these are judged necessary to measure fair value, SFAS 157 introduces a reasonableness criteria. In declaring that, in situations where multiple valuation techniques are employed, the results are to “evaluated and weighted, as appropriate, considering the reasonableness of the range indicated by the results”²³¹ SFAS 157 creates latitude for enterprise managers to define and assert their own fair value outcome.

The next paragraph in SFAS 157 establishes a consistency criteria. While allowing intangible asset owners to change the valuation techniques employed and to amend the

²³⁰ See SFAS No. 157 (2006); p.8.

²³¹ See SFAS No. 157 (2006); p.8.

valuation outcomes achieved according to ensuring these are representative, in their view, of the fair value of these assets, SFAS 157 stipulates that any “Valuation techniques used to measure fair value shall be consistently applied”²³². In other words, any change in valuation results must be accounted for; and the basis for these changes must be disclosed. The scope for asserting a fair value usefully representative of the enterprise owners reasonable view is not unlimited, and must be able to be reflected and explained in the financial statements.

Perhaps the most useful contribution of SFAS 157 to a fair value approach to intangible asset valuation is its outlining of the allowable inputs to valuation exercises. As SFAS 157 outlines, inputs “may be observable or unobservable” or:

- a. Observable inputs are inputs that reflect the assumptions market participants would use in pricing the asset or liability developed based on independent market data
- b. Unobservable inputs are inputs that reflect the reporting entity’s own assumptions based on the best information available in the circumstances²³³

While urged to “maximise the use of observable inputs and minimise the use of unobservable inputs”²³⁴ the fair value hierarchy that SFAS 157 supports, in even allowing scope for management representations, in the absence of market data, to stand as indicators of fair value, is a key advance to allowing enterprise intangible asset owners to assert and defend their own reasonable valuation positions.

²³² See SFAS No. 157 (2006); p.8.

²³³ See SFAS No. 157 (2006); p.9.

²³⁴ See SFAS No. 157 (2006); p.9.

This reasonable and fair value-premised approach to intangible asset valuation can be seen reflected in other international standards as well. In Australia, APRA (the Australian Prudential Regulation Authority) provided, in its *Prudential Treatment of Capitalised Software Costs* memorandum, issued on March 6, 2006, its position on how to treat enterprise capitalised software development costs; a significant area of investment in the modern enterprise.

In agreeing that these capitalised software development costs, even if not “integral to hardware”²³⁵ could be treated as intangible assets, APRA extended scope for enterprises to cover off on a key area of internal investment and cost; a move that would “be consistent with emerging international practice in this area”²³⁶. This is therefore further evidence of the consistency criteria being applied in an intangible asset valuation context.

In describing the mechanics of the convergence it observes in relation to international accounting standards, the ASCG, in the foreword to its *2005 Annual Report* puts a real emphasis on the “basic principles for financial reporting, the so-called “Framework”²³⁷. With enterprises obliged to follow an internationally balanced set of standards for assessing and asserting intangible asset valuations in its financial statements, the ASCG indicates that the core standards, and accompanying IFRS guidelines, have helped clarify reporting requirements; dictating clearer practices that enterprises must

²³⁵ See APRA (2006); p.1.

²³⁶ See APRA (2006); p.1.

²³⁷ See ASCG. Adoption of IFRIC 10: Interim Financial Reporting and Impairment (2006); p.4.

adopt. This is suggestive of a reportability criteria that operates in relation to the recording of acceptable intangible asset valuations.

A reportability criteria would also operate sensitive to the outcomes of some other high profile convergence projects. IFRS (International Financial Reporting Standard) 8 – *Operating Segments* arose “from the IASB’s comparison of IAS 14 – *Segment Reporting* with the US standard SFAS 131 – *Disclosures about Segments of an Enterprise and Related Information*”²³⁸.

In aligning these key standards, IFRS 8 aims to oblige entities to “adopt the ‘management approach’ to reporting on the financial performance of its operating segments. Generally, the information to be reported would be what management uses internally for evaluating performance and deciding how to allocate resources”²³⁹. As a reporting template this is consistent with the scope for enterprises to make, and defend, management representations of value for key intangible assets, given that access to, and use of, the internal information that management can use to support such positions is a key consideration in both situations.

A reportability criteria or test could easily operate in this instance environment. From the situation described by the Chairman of the IASB, Sir David Tweedie in launching IFRS 8, a kind of reportability test effectively applies to a situation that “gives users of financial statements the opportunity to query how the entity is controlled by its senior decision makers”. Failure to comply with this high standard of information reporting

²³⁸ See IASB. Press Release: IASB Publishes Discussion Paper on fair value measurements (2006); p.1.

²³⁹ See IASB. Press Release: IASB Publishes Discussion Paper on fair value measurements (2006); p.8.

would be to fall foul of IFRS 8, and any associated reportability criteria, or test, that might be put in place.

The consistency criteria suggested earlier also finds support from the outcomes of another IASB-FASB convergence project. The US SFAS 157 – *Fair Value Measurement*, has been frequently cited in this research as a fair value standard. I justify this on the basis that, while a US standard, it represents international best practice in the area of fair value treatment of intangible assets. The fact that the IASB has “decided to use the US standard as the starting point for its own deliberations”²⁴⁰ is compelling evidence of this. The need for a consistent approach to establishing the all important fair value of an intangible asset was emphasised by the IASB in its decision to use US SFAS 157 as a model for an international standard.

A clear consistency criteria for intangible asset valuations is useful for many reasons. Not only, from the IASB’s viewpoint, would “establishing a concise definition of fair value and a single source of guidance for all fair value measurements required by IFRSs both simplify IFRSs and improve the quality of fair value information included in financial reports”²⁴¹; it would also provide enterprises with a clear benchmark against which to assert and defend any fair value asserting management representations they might make as to the value of their enterprise intangible assets.

The consistency of an enterprise’s compliance with intangible asset valuation best practice standards would, through an application of such things as a consistency (with best practice) criteria, be testable and improve the acceptability of fair value-premised

²⁴⁰ See IASB. Press Release: IASB Publishes Discussion Paper on fair value measurements (2006); p.9.

²⁴¹ See IASB. Press Release: IASB Publishes Discussion Paper on fair value measurements (2006); p.5.

claims made by the reporting entity in the context of its intangible assets and the valuations for these included in their financial statements.

The 10 November 2006 response from the ASCG to the IASB as feedback to the IASB discussion paper *“Preliminary Views on an Improved Conceptual Framework for Financial Reporting: The Objective of Financial Reporting and Qualitative Characteristics of Decision-useful Financial Reporting Information*, strongly supports the IASB-FASB fair value measurement standard convergence project and the role such projects have in “developing a consistent set of high quality accounting standards²⁴².

The ASCG response also contains within it references to another general valuation criteria that could, and should, like the reportability and consistency criteria we have already discussed, be reflected in any single set of valuation criteria that might be compiled for the use of enterprises.

The reliance by users of financial statements on the accuracy of the information contained within them means that that it might be appropriate and useful to develop and apply a reliability criteria. Resisting the IASB proposal to replace reliability with representational faithfulness, an altogether lesser standard of information accountability, the ASCG correctly, in my view, argues that “the term reliability is better understood than representational faithfulness and better conveys the intended meaning”²⁴³ which in the context of the any reliability valuation criteria would indicate the quality of the information supporting management representations made

²⁴² See IASB. *Press Release: IASB Publishes Discussion Paper on fair value measurements (2006)*; p.5.

²⁴³ See ASCG. *Discussion Paper: Preliminary Views on an Improved Conceptual Framework for Financial Reporting (2006)*; p.3.

in asserting or defending intangible asset valuations and the proper scope for users to rely on both.

The general reportability, consistency and reliability valuation criteria suggested above would, themselves, be supported by other, more specific, tests and criteria that, in their collective application, improve the quality and acceptability of intangible asset valuations tested against them.

Suzanne Harrison and Patrick H Sullivan Sr, in their book *Einstein in the Boardroom*, address the issue of intangible asset valuation-related measurement criteria and usefully identify a potentially rich source of enterprise-level valuation criteria. The intersection of the three relationships, or theories, they identify as central to shaping the identity of an enterprise²⁴⁴ provides an opportunity to identify “criteria that would be applied to assess a specific instance of a measure or measurement approach”²⁴⁵. Generally applying ‘evaluation criteria’ are ideal models for a set of effective valuation criteria.

Overall, identifying a comprehensive set of valuation criteria, or even an agreed underlying set of principles applying to these, is a worthy but difficult task. While I have decided to compile my own set of valuation criteria and outline these later in this chapter, as an enterprise-level guide to be used in support of an application of the TEV model I will outline in Chapter 7, it is easy to understand why the undertaking has been neglected for so long.

²⁴⁴ See Harrison and Sullivan (2006); p.198. Here the authors outline the Information, Measurement and Accounting enterprise theories.

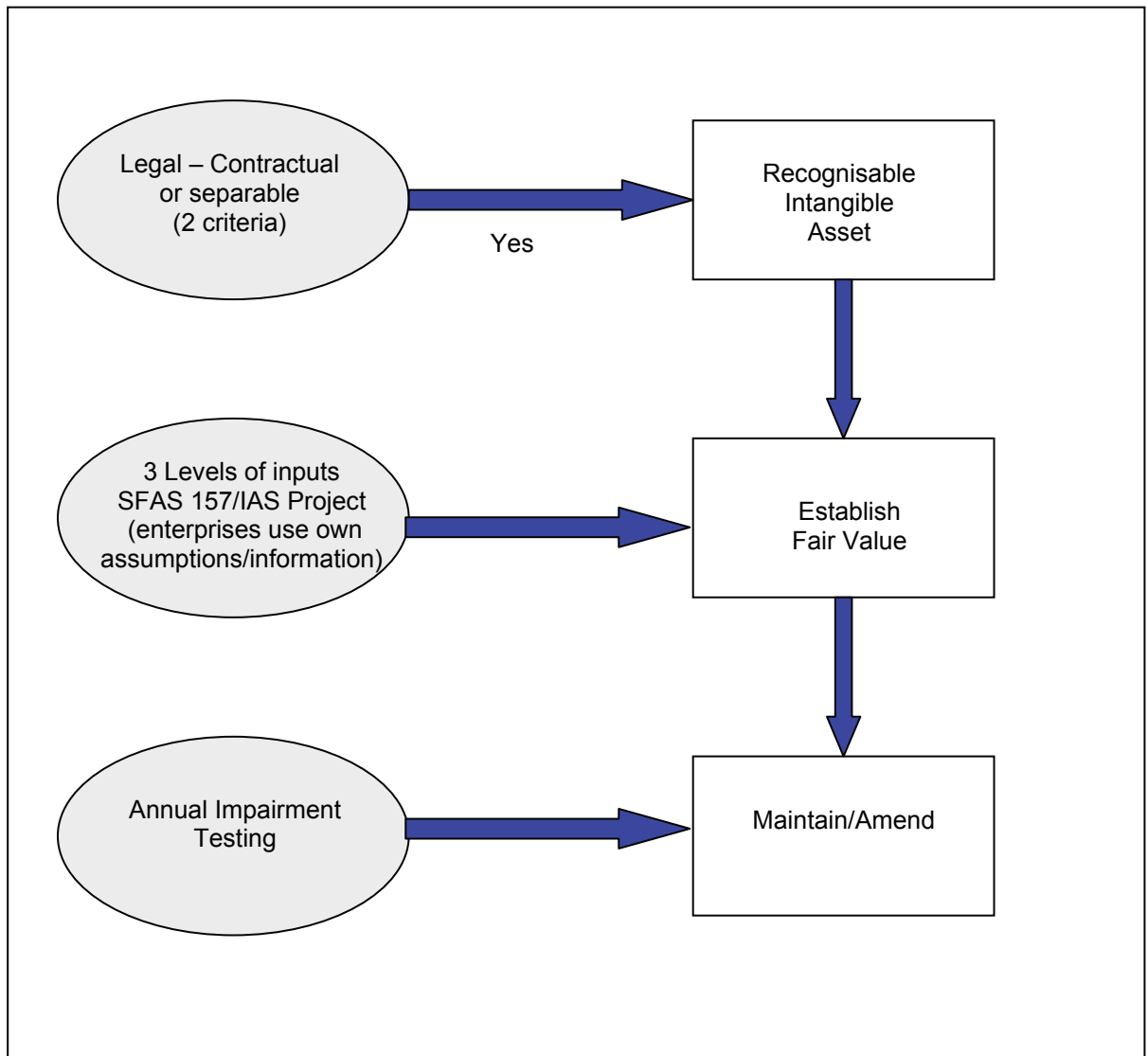
²⁴⁵ See Harrison and Sullivan (2006); p.199.

The excessive impact of risk considerations, for example, on the all important calculation of reasonable future economic benefits that enterprises might expect to derive from their intangible assets, must be considered. It is the seemingly unrestrained application of risk considerations to expected future economic benefits under the prevailing cost, income and market-based valuation approaches that has, more than anything else I would suggest, resulted in consistently inadequate intangible asset valuation outcomes.

Providing a set of valuation criteria with which to test, and hopefully better support, enterprise intangible asset valuations should, in theory, help improve the situation. These would at least provide the users of financial statements who would often be relying, after all, on management representations as to the value of intangible assets with greater confidence and comfort.

A set of criteria would therefore overlay, and usefully expand, the (1) basic core legal-contractual and separability criteria that apply to the simple recognition of intangible assets. These more extensive tests and criteria could, and would, be applied to assess (2) the characteristics, and fair value, of the subject intangible assets. Once asserted, the value of these intangible assets would be regularly reviewed, and tested for impairment, under the financial reporting process supported by such standards as the US SFAS 141 and 142, outlined earlier. This basic 3 step intangible asset (1) recognition and (2) fair value establishing and (3) maintenance approach is reflected in the table (below)

Basic Three Step Intangible Asset Recognition, Fair Value Establishment and Maintenance approach



Refining the Approach

The basic three step approach outlined above is only a starting point. It summarises the simplest illustration of the process by which intangible assets can be recognised, and have their fair value established and reviewed (in the context of acquired intangibles subject to periodic impairment testing).

Without further steps, and supporting criteria, the model leaves too great a burden on the enterprises called on to make the fair-value supporting management representations. These representations, based on enterprise-provided information and assumptions, are accommodated under SFAS 157's fair value hierarchy. SFAS 157 has, in turn, as outlined earlier, been adopted by the IASB as the base for an international standard fair value measurement standard.

The capacity, and willingness, of the enterprise to assert and defend management representations as to the fair value of its intangible assets is key to ensuring that more adequate valuations are asserted. The SFAS 141 and 142 outlined processes for recognising the value of acquired intangible assets, and testing these annually for impairment, can be used as a trigger, I believe, for a wider practice of consistently and appropriately recognising and reflecting the value of enterprise intangible assets in financial statements.

Supported by the set of valuation criteria I will outline in this chapter, enterprise managers can develop a process for reflecting the applied value of their performing intangible assets. With the Level 1 (quoted prices in active markets for identical assets) and Level 2 (information other than quoted prices observable for the quoted asset) observable inputs referred to in SFAS 157 often difficult to provide for intangible assets, Level 3 (unobservable inputs) information, based on assumptions and positions ventured by the enterprises themselves, can become the basis for adequate and useful valuations.

As I noted in the context of the Singapore Enterprise Survey that I conducted in support of the IP Academy (Singapore) research project delivered in April, 2008²⁴⁶, there is a great deal of uncertainty and trepidation on the part of enterprise managers presented with this opportunity. I believe that the Level 3 input-related scope for enterprise managers to make useful representations as to the fair value of their intangible assets will not be taken up without the guidance and support that a comprehensive set of easy-to-follow valuation criteria would provide.

A strict internal due diligence could, and should, be conducted to ensure that the unobservable inputs (including assumptions) on the basis of which the Level 3-type representations are made are as reliable and accurate as possible. A well maintained intangible asset portfolio, with adequate legal protection, that contributes directly to measurable business performance, lends itself to the development and assertion of more defensible assumptions. Those relying on the assumption-based valuations of intangible assets will be comforted by any degree of measurability these have in relation to the overall performance of the enterprise with which they are associated.

The scope for enterprises to engage in the recycling²⁴⁷ of their financial results, is a good example of this. EFRAG (the European Financial Reporting Advisory Group) examined this practice of using two different sets of recognition criteria to report items of income and expense, and reflect these in whole or in part in the financial statements as the criteria were met.

²⁴⁶ See Sanders and Smith (2008).

²⁴⁷ See EFRAG (2006); p.7 and Glossary

In exploring what kind of criteria might operate in such a situation, EFRAG divided income and expense item attributes, or characteristics, into their 'more reliable' and 'less reliable' forms.

The subsequent balanced criteria included:

- Disaggregation (or dividing up the income and expense items) by function
- Disaggregation by nature
- Fixed v variable
- Recurring v non-recurring
- Certain v uncertain
- Realised v unrealised
- Core v non-core
- Operating v non-operating
- Sustainable v non-sustainable
- Controllable v uncontrollable
- Based on actual transactions v other
- Cash flow v accruals
- Remeasurement v before remeasurement²⁴⁸

By assessing, more broadly, recognised intangible assets against similarly balanced criteria a real opportunity to assess the certainty or reliability of their valuations might be created.

²⁴⁸ See EFRAG (2006); p.8.

Monica Boos in *International Transfer Pricing: The Valuation of Intangible Assets* suggests another range of intangible asset issues that also lend themselves to the identification of criteria that might be employed to judge their performance, reliability and value.

These include:

- The quality of their documentation
- Cost allocations made for particular intangible assets
- Development costs recorded against particular intangible assets
- Expected benefits
- Divergence of projected and actual benefits
- Form of consideration for the intangible asset ²⁴⁹;

All of which support, or suggest, criteria that might be applied to an intangible asset valuation scenario.

The IFRIC (International Financial Reporting Interpretations Committee) draft *Service Concession Arrangements* focussed on the form of consideration criteria. In seeking to oblige owners “to disclose the amount of revenue or profits or losses recognised in the period on exchanging services for a financial asset or an intangible asset” ²⁵⁰ IFRIC acknowledges the possible value-supporting role these monetary indicators and results could play.

²⁴⁹ See Boos (2003); pp.151-155.

²⁵⁰ See IFRIC (2006); p.14.

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How readily available the information necessary to assess and defend the revenue and profit and loss estimates that an enterprise may provide in relation to a particular intangible asset should also be a criteria for judging the reliability of any subsequent valuations.

Brand-Finance, a consultancy that focuses on the management and valuation of enterprise brand assets, in explaining its own approach to valuing brands, stated that it favours the ‘relief from royalty’ approach ²⁵¹ because it “calculates brand values by reference to documented, third-party transactions; and secondly, because it can be performed on the basis of mostly publicly available financial information” ²⁵². How readily available and reliable such information will determine how readily the resulting valuation position will be accepted.

All the criteria-suggesting elements outlined above are worth considering. Any test or criteria that assists in supporting the accuracy of the information or inputs used to assess an intangible asset, or the overall reliability of an intangible asset valuation, is potentially very useful.

Given that there are some many issues and considerations to accommodate when asserting a fair value for intangible assets, it would make sense to collect the various tests and criteria for recognising and valuing these and consolidate these into a set of valuation criteria. Enterprise managers would benefit enormously from being able to refer to a set of valuation criteria that, like the emerging set if international accounting

²⁵¹ See Brand-Finance (2006); p.26.

²⁵² See Brand-Finance (2006); p.26.

standards, can be used to support management representations of intangible asset value.

Given that enterprises are able, and are in fact in some circumstances (such as in relation to the treatment of acquired intangible assets) required ²⁵³ to include such management representations in their financial statements, a set of valuation criteria that can help guide enterprise managers through this process would be both timely and welcome.

IV. Proposing a Set of Valuation Criteria

My proposed set of valuation criteria consists of 30 criteria, or tests, in 5 clusters (Recognisability, Reliability, Reportability, Extendability, and Revenue). Some criteria (such as legal-contractual) appear in different iterations in more than one cluster and address particular characteristics or elements of an intangible asset's value proposition.

It is envisaged that these criteria would be applied to Level 3 input-related management representations as to the fair applied value of enterprise intangible assets, generally. Information relating to performance, or intangible asset status vis-à-vis these criteria, could be used to support valuations made as included as part of the financial reporting process. Criteria scorecards, information and outcomes could even be included as items in enterprise financial statements, again as allowable management representations.

²⁵³ Under such positive standards as SFAS No.141, 142 and 157 as examined.

The operation of my proposed set of valuation criteria is, in turn, key to the TEV (Total Enterprise Value) approach to intangible asset valuation that I have developed and will outline in Chapter 7.

With the recognition and valuation of acquired intangible assets at acquisition, and the annual impairment testing of these now firmly required of enterprise owners²⁵⁴.

Well supported assumptions and, more particularly, reliable management representations of intangible asset valuation, are key. Auditors, appraisers and all manner of independent valuation experts and consultants all insist on fielding management estimates and projections as part of their valuation or audit engagements.

A comprehensive set of valuation criteria, or business criteria, that management could use almost as a checklist, to identify and support elements of intangible asset-related value would help support the enterprise owners of intangible assets in their recognition and financial reporting activity. This will also help facilitate the identification and assertion of 'new' or 'applied' value that may have crystallised in the context of performing enterprise intangible assets.

Support for layers of new, or applied, intangible asset value²⁵⁵ is, in my opinion, provided for under the new international accounting standards. With the management representation-allowing annual impairment testing, or revaluation, of intangible assets

²⁵⁴ As outlined in SFAS No. 142 and now required for all IFRS compliant financial statements.

²⁵⁵ Examples would be when residual value attaches to an intangible; or there is a legal-contractual 'extension' in the economic life, use and/or income stream of the intangible asset.

outlined in SFAS 142, and required under IFRS, serving as a key ‘trigger event’, enterprise managers can use this positive obligation as an opportunity to regularly review their portfolio of intangible assets and reflect newly recognised intangible asset value in their financial statements.

The Set of Valuation Criteria

The actual set of valuation criteria I recommend would be:

Cluster 1: RECOGNISABILITY

As established earlier, recognisability is a central test, and criteria, applied to intangible asset valuation-related information, inputs and representations. As previously outlined in the case of acquisitions (the most developed context for this standard), an intangible asset shall be recognised as an asset apart from goodwill “if it arises from contractual or other legal rights (regardless of whether those rights are transferable or separable from the acquired entity or from other rights and obligations”

²⁵⁶

This cluster ‘criteria’ is supported by the following component criteria:

1.1 Financially Recognisable

²⁵⁶ See SFAS No. 141 (2001); p.12.

The well-established general 'cluster' standard for recognisability is supported by other tests and criteria. Significant among these is the standard for recognising an intangible asset as an item that can be incorporated in a balance sheet or income statement. To be incorporated as an item such intangible assets, or elements, must satisfy the following criteria:

- (a) it is probable that any future economic benefit associated with the item will flow to or from the entity; and
- (b) the item has a cost or value that can be measured reliably²⁵⁷

1.2 Legal-Contractual

The first test of the classic two-step test for recognising an intangible asset is the legal-contractual one. Intangible assets are recognisable as assets apart from goodwill where contractual or other legal rights establish or allow for them, as bundles of rights, to be bought, sold, transferred, licensed, rented or exchanged.

1.3 Separable

The default test, after the primary legal-contractual one, for recognising an intangible asset. Where an intangible asset doesn't arise from contractual or other legal rights it can be recognised as separate from goodwill only where it is capable of being separated or divided from the enterprise and bought, sold, transferred, licensed, rented or exchanged. It must therefore be able to be insulated from the other assets of the

²⁵⁷ See IASB. *Exposure Draft of a Proposed IFRS for Small and Medium-sized Entities* (2007); p.21.

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enterprise, even if there is no strict contractual or legal basis for this separation to be recognised.

All intangible asset valuation-relevant standards (including SFAS 141,142 and 157 and associated IASB/IFRS standards) address recognisability with the core tests of legal-contractual and separability as a starting point. These key tests still form the basis for initially recognising an intangible asset as an asset distinct from the goodwill of an enterprise.

1.4 Identifiable

Related to the above situation, the new international accounting standards reinforce the requirement that an intangible asset should be clearly, and separately, identifiable. It must be distinguishable from the ‘general goodwill of a business;’ the current, and inadequate, default repository of enterprise intangible asset value, to be identifiable.

1.5 Certain

An intangible asset is certain where it is capable of a life of its own. This criteria may be satisfied in situations where an intangible assets future economic benefits are capable of being sold, licensed, assigned, and used to achieve a monetary or other return for the enterprise.

1.6 Material

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Intangible asset information in financial statements is material if leaving it out or misrepresentation could influence the economic decisions that the users of the financial statements might make relying on it. Particular consideration of the item judged against the particular circumstances of its use, or the decision it may be used to support, is necessary to assess if it is material or not.

1.7 Complete

Intangible asset information in financial statements is complete when it is as comprehensive and reliable as possible, based on reasonable cost and effort, and sufficient to the extent that it is not false or misleading, and thus unreliable.

Cluster 2: RELIABILITY

As outlined in Paragraph 63 of Concepts Statement 5, reliability is one of the four “fundamental recognition criteria that apply to all recognition decisions”²⁵⁸

According to Concepts Statement 2, intangible asset information, to be reliable, “must be representationally faithful, verifiable and neutral. It must be sufficiently faithful in its representation of the intangible asset’s underlying value and sufficiently free from error and bias such that it can be used, and relied on, by other users of the information (such as investors) in making decisions”²⁵⁹.

²⁵⁸ See SFAS No. 141 (2001); p.66.

²⁵⁹ See SFAS No. 141 (2001); p.68.

This cluster 'criteria' is supported by the following component criteria:

2.1 Reliable

Financial statement information about intangible assets is reliable when it is free from material error and bias, and represents the situation or position that it purports to represent, or what a user of the information would reasonably expect the information to represent. Financial statement information is biased, and not reliable, if it is intended by the provider of the information to guide the user to reach a position, or make a decision, that has been predetermined by the provider.

2.2 Neutral

A standard or test applied to information used in financial statements generally. It holds that, to be useful in decision-making, information must be neutral. As information that favours one side, must disfavour the other neutral information must be demonstrably free from bias. Neutrality would be demonstrated in the extent to which there is correspondence between a measure or description and the phenomenon or characteristic of an intangible asset that it purports to represent; in this case the fair value of the intangible asset.

2.3 Comparable

The information contained in financial statements should be able to support comparisons between enterprises, completed and contemplated transactions and, to the

extent possible, different intangible assets. The accounting standards, positions, measurements, and general information relied on in providing the information must be fully disclosed, consistent and reasonable.

2.4 Control

Where the enterprise has the ability or power to obtain the future economic benefits that can be reasonably expected to flow from a particular intangible asset and the related ability to restrict other parties from obtaining those benefits. This is not simply a question of having the legal rights to achieve such outcomes; this criteria tests the general ability of an enterprise to guarantee these outcomes for itself and to the exclusion of others.

2.5 Prudent

Prudence is exercised in the preparation of financial statements when full disclosure of all uncertainties identified by and known to the provider is shared with the users.

Caution in the making of judgements, and the use of assumptions, around representations of intangible asset fair value would be a case in point. Prudent information is bias-free. Prudence would ensure that material risks are shared and not understated, and that expected revenue, and the assets themselves are not inflated.

2.6 Recoverable

Relates to the security an enterprise can demonstrate around the carrying amounts associated with an intangible asset. This can be established during impairment testing. Paragraph 8 of FASB Statement No. 144 lists examples of events or changes in circumstances that may indicate that the carrying amounts of long-lived assets (asset group) may not be recoverable. Those are:

- A significant decrease in the market price of a long-lived asset (asset group).
- A significant adverse change in the extent or manner in which a long-lived asset (asset group) is being used.
- A significant adverse change in legal factors or in the business climate that could affect the value of a long-lived asset (asset group), including an adverse action or assessment by a regulator.
- An accumulation of costs significantly in excess of the amount originally expected for the acquisition or construction of a long-lived asset (asset group)
- A current-period operating or cash flow loss combined with a history of operating or cash flow losses or a projection or forecast that demonstrates continuing losses associated with the use of a long-lived asset (asset group).
- A current expectation that it is more likely than not (that is, that the level of likelihood is greater than 50 percent) that a long-lived asset (asset group) will be sold or otherwise disposed of significantly before the end of its previously estimated useful life²⁶⁰.

²⁶⁰ See AICPA (2002); p.93.

Cluster 3: REPORTABILITY

The extent to which information asserting and defending a fair value for intangible assets can be reported and held out to be accurate is vital to achieving adequate valuation outcomes. Given that the scope for fair value-premised management representations is being secured under evolving fair value measurement standards (as mentioned previously, the IASB has indicated it will use SFAS 157 as a model for its own future international standard effort) rules around what can be incorporated into such unobservable Level 3 inputs are extremely significant.

This cluster 'criteria' is supported by the following component criteria:

3.1 Reportable

Information about intangible assets is reportable in financial statements when it satisfies the fair value hierarchy outlined in SFAS 157 – *Fair Value Measurement* and the associated international standards that the IASB will be developing, based on this, as a declared convergence project. While observable inputs (such as those containing market data and relating to demonstrably comparable transactions) are preferred, unobservable management assumptions may be included, and reported, in the absence of other these other (Level 1 and 2) inputs, but must be necessary to achieve fair value-premised outcomes.

3.2 Relevant

The financial statement information relating to intangible assets must be relevant to the decision-making needs and processes of the users. Such information is relevant when it influences the economic decisions made by its users by facilitating their evaluation of past, present, and future events. It might also, in fulfilling this function support the confirmation, or correction, of past evaluations.

3.3 Codifiable

Information about intangible assets, included in a financial statement, is codifiable if it can be documented, or formally expressed, in a way that means it can be communicated to, and understood, accurately, by third parties. This documentable information must be sufficiently publicly available to be accessed and used by those relying on that information to make decisions.

3.4 Tacit

Tacit information about an intangible asset is information that is embedded in, or central to, an enterprise and its operation and fair value. Tacit information can be hard to extract, prepare or validate, much less report in the context of a financial statement. Nonetheless, while the degree of tacitness should be also be noted, preparers of financial statements, while complying with such criteria as reliability and prudence, should make as full and detailed a disclosure as possible in relation to the performance

and value of any tacit assets, in order to give as accurate a statement as possible and to depict the true fair value of the reporting entity and its recognisable assets.

3.5 Understandable

The financial statement information relating to intangible assets should be comprehensible to users with a reasonable knowledge of accounting, and business and economic activity and/or a willingness to study the information and apply reasonable due diligence to this activity. This standard does not excuse leaving out relevant information on the basis that it may be too difficult for some users to understand, however, merely that every reasonable effort should be taken to ensure that the information provided in financial statements is presented as clearly, and understandably, as possible.

3.6 Timely

The information about intangible assets in a financial statement is timely if it allows users to make economic decisions within an appropriate decision timeframe. Delays in reporting that make the information provided useless or irrelevant are unacceptable. Timeliness should be balanced against reliability, with the achievement of the first not to be at the expense of the other. The reasonable expectations and requirements of the users, and the timeframe within which relevant economic decisions need to be made, should be the guide.

Cluster 4: EXTENDABILITY

Intangible assets can have extended, even infinite, useful lives. Intangible assets can be released from useful life limits and presumptions, and have these useful lives extended, even infinitely, when certain conditions are satisfied ²⁶¹.

This cluster 'criteria' is supported by the following component criteria:

4.1 Useful Life (Finite v Indefinite)

An enterprise must assess whether the useful life of an asset is finite or indefinite and, if finite, the length of that useful life. An entity may regard an intangible asset as having an indefinite useful life when there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows for the enterprise.

The useful life of an intangible asset that arises from contractual or other legal rights shall not exceed the period of the contractual or legal rights. If these rights can be renewed, the useful life of the intangible asset shall include the renewal periods if there is evidence to support renewal by the entity without significant cost ²⁶².

4.2 Extendable

²⁶¹ See FASB. *Exposure Draft Proposed Statement of Financial Accounting Standards* (1999); p.35. The 20 year lifespan presumption can be overcome if there are clearly identifiable cash flows that are expected to continue for more than 20 years.

²⁶² See IASB. *Exposure Draft of a Proposed IFRS for Small and Medium-sized Entities* (2007); p.115.

The useful economic life of an intangible asset is effectively extendable for as long as the asset is able, or expected, to generate future economic benefits.

Where there are legal, regulatory or contractual provisions that may enable renewal or extension of a specified limit on the intangible asset's legal or contractual life, and this renewal or extension can be achieved without substantial cost.

4.3 Replicable

Where an intangible asset, or elements of one, can be copied, reproduced, duplicated, or its value-determining features or effects repeated.

4.4 Legal-Contractual

In this context the legal-contractual criteria relates to the situation outlined in 4.2 (above). The renewability extended by the legal provisions and legal-contractual rights relating to the intangible asset must be supportable for extendability of the useful life of that asset to be contemplated.

4.5 Renewable

An intangible asset may be, in whole or in part, renewable when elements of it, or bases for assessing its fair value, are inexhaustible, or replaceable, by reason of new applied value that may be generated from the use of the asset.

Cluster 5: REVENUE

The fair value of an intangible asset directly relates to the economic benefits it can be expected to generate for the enterprise in the future.

This cluster 'criteria' is supported by the following component criteria:

5.1 Revenue

An entity shall measure revenue at the fair value of the consideration received or receivable. The fair value of the consideration received or receivable excludes the amount of any trade discounts and volume rebates allowed by the entity. An entity shall include in revenue only the gross inflows of economic benefits received and receivable by the entity on its own account. An entity shall exclude from revenue all amounts collected on behalf of third parties such as sales taxes, goods and services taxes and value added taxes. In an agency relationship, an entity shall include in revenue only the amount of commission. The amounts collected on behalf of the principal are not revenue of the entity²⁶³.

5.2 Measurable

²⁶³ See IASB. Exposure Draft of a Proposed IFRS for Small and Medium-sized Entities (2007); p.147.

Financial statement information is measurable when it contains a relevant attribute, or value, that is able to be measured with sufficient reliability to satisfy a reasonable user

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5.3 Exchangeable

Where an intangible asset may be acquired in exchange for a non-monetary asset or assets, or a combination of monetary and non-monetary assets. An entity shall measure the cost of an intangible asset at fair value unless (a) the exchange transaction lacks commercial substance or (b) the fair value of neither the asset received nor the asset given up is reliably measurable.²⁶⁵

5.4 Legal-Contractual

The legal-contractual element of the revenue criteria relates to the provisions, and the overall security of the legal basis, on which the revenue (as a kind of future benefit) expectations relating to the subject intangible asset rest.

5.5 Transferable

The ability for rights associated with an intangible asset to be separately identified and bought and sold. Unlike goodwill which is inseparable from a business and can only be transferred as an inseparable intangible asset of the whole enterprise.

²⁶⁴ See SFAS No. 141 (2001); p.66.

²⁶⁵ See IASB. *Exposure Draft of a Proposed IFRS for Small and Medium-sized Entities* (2007); p.113.

5.6 Residual Value

The residual value of an intangible asset with a finite life is zero unless:

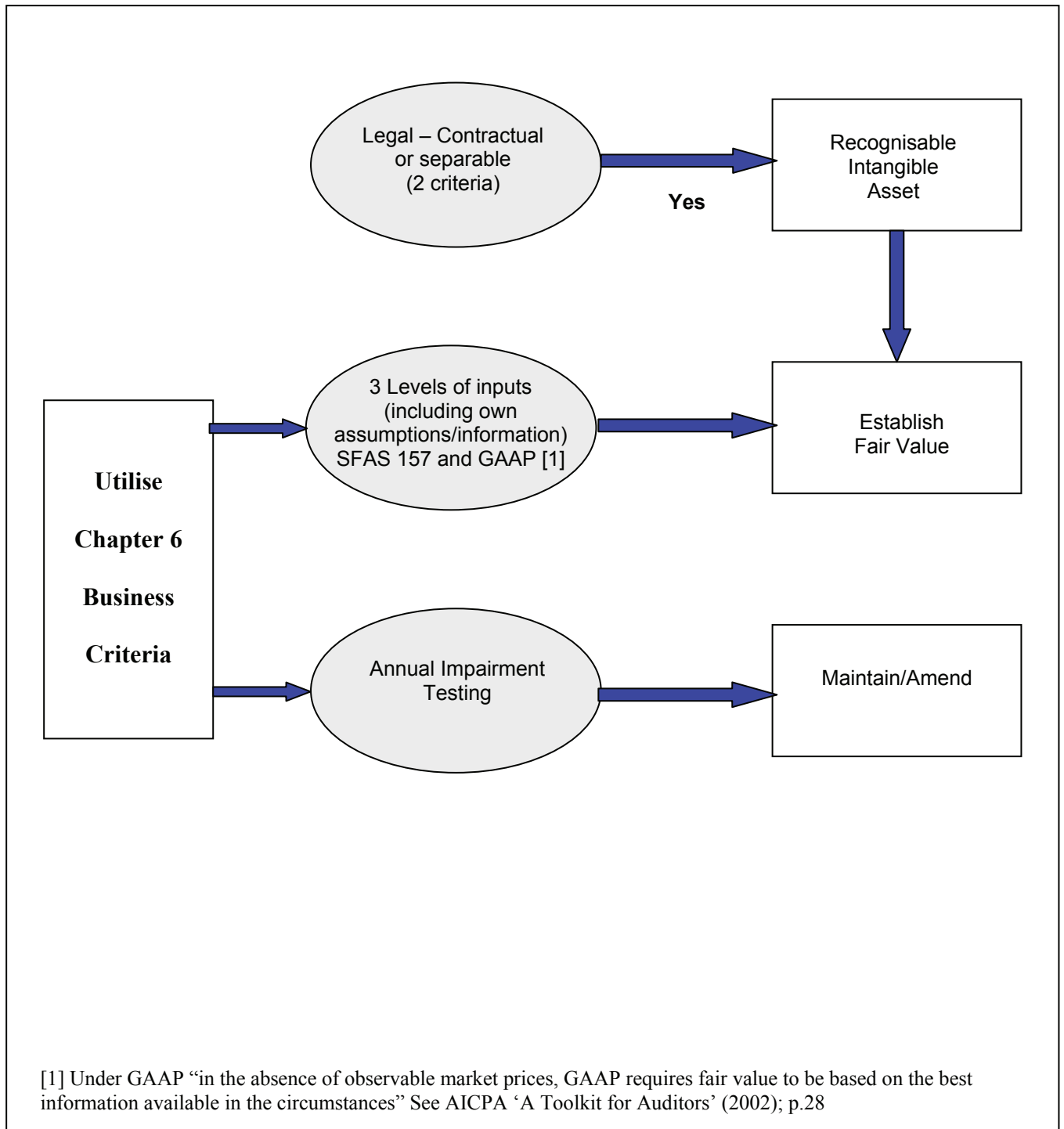
- (a) there is a commitment by a third party to purchase the asset at the end of its useful life; or
- (b) there is an active market for the asset and:
 - (i) residual value can be determined by reference to that market; and
 - (ii) it is probable that such a market will exist at the end of the asset's useful life²⁶⁶.

Applying the Set of Valuation Criteria

Enriched with the addition of this set of valuation criteria, our initial simple three step model for establishing, and maintaining fair value for enterprise intangible assets, is greatly improved. It is now a process through which management representations of fair value can be introduced, and defended, and more detailed and adequate intangible asset valuations facilitated.

²⁶⁶ See IASB. *Exposure Draft of a Proposed IFRS for Small and Medium-sized Entities* (2007); p.116.

Improved model (incorporating the operation of the Chapter 6 suggested set of valuation criteria) for Recognising, Establishing, and Maintaining the Fair Value of Enterprise Intangible Assets



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Enterprises would use the information relating to their performance against any or all of the valuation criteria to support management representations of fair value for their intangible assets.

Reports could be compiled that, in themselves, would offer consistent and well documented indications of intangible asset reliability and value. Performance against such a comprehensive set of valuation criteria would build a business case for asserting, or representing, the applied value of the subject intangible assets.

Communicated in a consistent manner, in a scorecard type format for example, as part of the enterprise financial reporting and statement process, the criteria-related information could be included as an item in enterprise financial statements, to support the assumptions behind, and estimates of, intangible asset fair value.

In such a way can what I term the Total Enterprise Value (TEV) of an intangible asset can be asserted and reflected. The TEV approach to be outlined in Chapter 7 will rely, in part, on the demonstrations of intangible asset applied value that the performance against valuation criteria will help support. With a firm platform in such standards as SFAS 157 and IAS 1, the fair value-premised treatment of intangible assets will be greatly assisted by such an approach.

Much like an invention disclosure form that acts as a vital step and input in the patent process, a criteria disclosure form, or report, that aggregates the criteria-by-criteria performance of a particular intangible asset could be produced. This might even, in future iterations of the constantly, and usefully, evolving new set of international

accounting standards so well disposed towards defending a fair value approach to intangible asset valuation, be developed as a standard, even mandatory, item in, or appendix to, enterprise financial statements.

Criteria-based information of the type that I recommend be included in financial statements as information supporting management fair value representations would also sit comfortably within the existing and emerging standards that govern the incorporation and treatment of enterprise inputs and estimates.

Within the Exposure Draft of a proposed *IFRS for Small and Medium Enterprises* provided for comment in February, 2007, under Changes in Accounting Estimates (at 10.13 and 10.14) any such changes that “result from new information or new developments are not corrections of errors”²⁶⁷ and can support adjustments for the carrying, recorded, amount for an asset or liability, can be reflected in the profit and loss section of a financial statement. This would suggest that a process for accepting, and treating, the criteria-based information exists.

The criteria-based information, and the scope these have to support the fair value representations of enterprise management, is also likely to be accepted in keeping with the determination of bodies like the IASB to accommodate the information readiness, and reporting deficiencies, of first time adopters of IFRSs and the new international accounting standards as much as possible. In a press release dated 25 January, 2007, the IASB indicated its willingness to accept ‘deemed’ cost estimates from entities obliged to indicate the cost, and fair value, of assets, under IFRS, for the first time.

²⁶⁷ See IASB. *Exposure Draft of a Proposed IFRS for Small and Medium-sized Entities* (2007); p.60.

Acknowledging that “in some circumstances a parent [entity] is unable to determine cost in accordance with IFRSs but is deterred from using fair value to account for the investment by the subsequent need to measure the investment at each reporting date”²⁶⁸ the IASB expresses its willingness to reduce the burden on first-time adopters of IFRSs so long as useful information can still be provided to the users of financial statements.

The sort of criteria-based information that enterprises would generate when reporting against the set of valuation criteria I outlined above would serve such a purpose. It would not only represent an excellent source of information for the users of financial statements; but would also provide enterprises with vital support for their own representations of fair value for their intangible assets.

A Valuation Criteria Scorecard

As suggested above, a valuation criteria scorecard, documenting the criteria-by-criteria performance of intangible assets against the set of valuation criteria outlined above could be produced to support management fair value representations, and the assumptions behind these. With such, albeit unobservable, Level 3 inputs recognised as valid under SFAS 157, itself a model for the IASB ‘s developing approach to fair value measurement, a powerful business case, and defence, could be provided for the more adequate intangible asset valuations enterprises would be able to assert.

²⁶⁸ See IASB. *IASB Publishes Proposals to Help First-time Adopters of IFRSs* (2007); p.1.

With individual criteria performances aggregated into cluster reports against each of the five super criteria (Recognisability, Reliability, Reportability, Extendability and Revenue) I recommended, the reports would develop a consistent structure and ‘look and feel’ that would be amenable to incorporation into standards and financial statement templates.

The reports would address a key historical gap and enterprise requirement, too, in that they would offer evidence, direct criteria-based evidence, to support and defend the expectations of future economic benefits enterprises need to premise fair value calculations on.

Such an evidence-based approach would not only be useful to demonstrate in the context of any future legal challenge to, or defence of, related valuations, it might also be a first step towards achieving the “coherence” that Richard Razgaitis, in his work *Valuation and Pricing of Technology Based Intellectual Property*, asserts is necessary to support an effective intangible asset valuation approach. When asked to nominate the best intangible asset valuation technique or tool, Razgaitis declared that the answer lay in a “search for coherence. For any given valuation situation, there are varying degrees of information available. One generally gains an understanding when performing such valuation that the available data...creates greater confidence in the values obtained”²⁶⁹. Razgaitis’ sentiments, and search for coherence, may find expression in an evidence-based approach that the use of performance reports against a comprehensive set of valuation criteria helps support.

²⁶⁹ See Razgaitis (2003); p.319.

Utilising The Financial Statement ‘Trigger’ for Deploying The Valuation Criteria Process

The annual intangible asset revaluation opportunity presented by the requirement, under SFAS 142, to test for impairment any acquired intangible assets, provides an ideal trigger for enterprises to establish a valuation criteria-based reporting approach.

With a positive obligation to annually review and reflect changes in the value of acquired intangible assets this effort could be expanded into a general intangible asset fair value review, with the valuation criteria outlined above used as a basis for making management fair value representations for all, or at least the most significant, enterprise intangible assets.

Criteria-based valuation information, produced as part of an annual intangible asset valuation review process, and reflected in the financial statements produced during the associated financial reporting cycle would support a more enterprise-level, and adequate, intangible asset valuation approach.

Given that fact that the valuation criteria-related information is generated from the enterprise (as unobservable Level 3 inputs) based on its own assumptions, and for the enterprise (to advance its own fair value representations), the process, overall, would satisfy the “coarse valuation of opportunity” standard advocated by Davis and

Harrison as an ideal platform for an effective enterprise innovation management and decision-making process²⁷⁰.

The type of in-house preliminary 'valuation' of the intangible assets produced out of an enterprise's innovation activity that Davis and Harrison recommend would be greatly facilitated by the valuation criteria-based reporting on them that would be undertaken under the annual valuation review of intangible assets I am suggesting enterprises should undertake.

The valuation criteria would act as platform for dealing with existing, and emerging, intangible asset valuation issues at an enterprise reporting level. Reflecting those things settled at a fundamental standards level (such as the concepts of fair value; the useful life of an intangible asset, and the scope for this to be finite or infinite) the valuation criteria would provide enterprises with a standard-consistent framework for asserting, and defending, their own specific valuation assumptions and positions in a consistent framework acceptable to the users of the information that they will be providing in their financial statements.

A comprehensive set of valuation criteria for asserting and defending the 'applied value' of an intangible asset, reasonable in a standards environment where an insistence on recognising the useful life and real value and economic contribution of intangible assets to, and within, an enterprise is increasingly accepted, would seem an appropriate tool for enterprises to utilise.

²⁷⁰ See Davis and Harrison (2001); p.16.

VI. Conclusion

The adoption by enterprises of the set of valuation criteria I have outlined in support of the assertion of management representations of fair value for their intangible assets could have a dramatic, and positive, impact. The most significant improvement might be in relation to the extent, and quality, of valuation information available to support the enterprise assumptions behind their fair value positions, in a manner consistent enough to comply with the developing international standards and legal framework governing fair value measurement.

Amenable to a scorecard type approach and incorporation into the standard enterprise financial reporting cycle, reports of an intangible asset's performance against the valuation criteria would provide critical fair value information for the users of enterprise financial statements.

The direct benefits for enterprise managers will be many and varied. Beyond assisting, generally, in the assertion and defence of fair value-premised representations of intangible asset value, providing the users of financial statements with the extra information based on the valuation criteria that I suggested will ensure greater transparency and disclosure. And should such valuation criteria-based performance reports be imbedded as best practice in the financial reporting process and annual impairment testing cycle, as I recommend, the benefits for enterprises and the users of their financial statements²⁷¹ will be secured.

²⁷¹ See Brand-Finance (2006); p.22. It is usefully noted that in the case of brand and other intangible asset valuation, where a high degree of subjectivity can exist, it will be important to demonstrate that best practice techniques are being applied.

Firmly linked to supporting standards ²⁷² and the aligned legal and regulatory framework within which these operate in particular jurisdictions such as Singapore, Australia and the US, these valuation criteria will operate in an enterprise-supporting but consistent and regulated manner.

The currently inadequate approach to intangible asset valuation, based on relatively risk-laden and narrow applications of the prevailing income, cost and market-based approaches, would be transformed by the availability and use of more extensive and better-quality information. Introduced by enterprises as reports against the valuation criteria outlined above, this information would support fairer valuation positions. If it is indeed true that, in relation to the prevailing valuation approaches, historical “concern about measurement reliability led in this case to rigid uniformity” ²⁷³ the use of enterprise assumption-defending information based on their individual application of the valuation criteria will improve the current situation. ²⁷⁴

At a fundamental level, the consistent operation of an accepted set of valuation criteria that, nonetheless, allow unique enterprise-specific assumptions and management valuation representations to be provided as information to the users of their financial statements must represent an improvement on the present situation. Currently, it must be said, enterprises lack a platform for introducing such customised, but reliable, valuation positions to take advantage of international standards in which such fair value-asserting behaviour is ostensibly encouraged.

²⁷² Such as SFAS No. 157 and supporting IFRSs and IASs to be developed out of the current FASB-IASB convergence project - as a starting point for which the IASB has declared SFAS 157 to represent best practice in its approach to fair value measurement.

²⁷³ See Roberts, Weetman, and Gordon (2002); p.518.

²⁷⁴ See EFRAG (2006); p.14. A consistently-applied set of valuation criteria could reduce some of the uncertainty and subjectivity that affects intangible asset valuation.

The operation of the set of valuation criteria that I propose, in providing more, consistent, fair value information in support of the standard enterprise financial reporting process, will balance both the enterprise desire for a more expanded accommodation of their valuation assumptions and the rights of financial information users to field these in a supported, consistent and reliable manner.

As a critical element in the operation of the TEV (Total Enterprise Value) approach to be outlined in Chapter 7 the valuation criteria I have consolidated and outlined, imbedded in the enterprise financial reporting process and supported by a compatible set of international standards, will inevitably help support a more adequate approach to enterprise-based intangible asset valuation.

Chapter 7 The TEV (Total Enterprise Value) Approach

I. Introduction

In the last chapter I outlined a set of valuation criteria that could be used by enterprises to support management representations as to the fair value of their intangible assets. Consistent with the new set of international accounting standards, and the legal framework and case law being developed and expanded in support of these, the valuation criteria will, in turn, support the operation of the TEV (Total Enterprise Value) approach that I will outline in this chapter.

The valuation criteria, and TEV model, are designed to be utilised, by enterprises, to produce and defend the fair value-premised representations allowable (and in fact often required) in support of intangible asset valuations reflected in financial statements. These improved fair value positions, maintained through the annual revaluation and impairment testing of acquired intangible assets (well outlined in SFAS 142 and corresponding standards in other jurisdictions), and now obligatory in order to provide IFRS-compliant financial statements, establish a firm platform for an improved intangible asset valuation approach.

This chapter will focus on describing how this improved situation might, and should, be seen as providing a window of opportunity to go even further, and correct the core problem of inadequacy that affects the prevailing approaches to enterprise-level intangible asset valuation. My TEV (Total Enterprise Value) model, supported by the set of business valuation criteria outlined in Chapter 6, is offered as a solution.

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For standards, even the useful single set of international accounting standards outlined in Chapter 4, are, in themselves, not enough to resolve the problem of inadequacy that affects enterprise intangible asset valuation.

To be effective, these standards need to be supported by a compatible legal framework, and more particularly, require the energetic alignment of national legal and accounting systems with those standards. A supportive case law, and again I have provided evidence of this emerging in the US, is also required to demonstrate that a legal process, and court system, amenable to this approach exists.

While we have seen encouraging evidence of the existence all these legal and standards preconditions in the Australian, Singaporean and US subject jurisdictions I examined in Chapter 5, even this is not sufficient. All this merely creates a platform that can be used by enterprises to improve the situation.

For the problem of inadequacy with which we are concerned must ultimately be resolved at the level of the enterprise itself. Even the most enabling standards (such as the fair value standard asserting SFAS 157 in the US) really only create the scope for improving intangible asset valuation up to the level that enterprises are willing to assert themselves. Enterprises must be willing to make management representations, and defend these, to achieve the valuation outcomes contemplated, even encouraged, by the emerging new legal-accounting valuation order.

A model, or approach that maximises the benefits of, the new and enabling international accounting standards, and is consistent with the legal framework within which these

operate, is required. A model or approach that enterprises can use to apply the outcomes, and extract the benefits, extended to them by the more adequate approach to enterprise intangible asset valuation that these support.

The TEV approach I will outline in this Chapter is offered as such an enterprise-level solution and approach.

II. Raising the Enterprise Intangible Asset Valuation Ceiling

A primary criticism of the three main prevailing intangible asset valuation techniques (that is, the cost, income and market-based approaches) is that the harsh application of risk considerations overly limits the scope for enterprises to assert expectations of future economic benefits relating to their key intangible assets. This lies at the heart of the problem of inadequacy with which this research is centrally concerned.

The list of risk factors that are applied to reduce expectations of future benefits is extensive. As Gordon Smith outlines in his work *Trademark Valuation*, these include:

- Market risks
- Risks associated with the success or failure of research and development
- Financial risks
- Credit and collection risks
- Product liability risks
- General business risks related to the ownership of property²⁷⁵.

²⁷⁵ See Smith (1997); p.97.

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Particular risks also impact on different types of intangible assets. Intangible assets developed around core technologies are susceptible to redundancy or compression; considerations of which can greatly limit the expectations of future benefits that will flow from them.

Most of these categories of risk manifest themselves legally. Their application, or the consequences of said application, may take the form of legal action, for instance, or legal proceedings and decisions may be the vehicle for calculating the monetary value of outcomes (such as damages) that relate to their management and exercise. The legal termination of licensing agreements upon which an enterprise's future, revenue, expectations are based, for example, will dramatically affect the basis for valuing the related intangible assets.

Managing, or rather failing to manage, the application of such a wide array of risk considerations has a direct and, all too often restrictive, impact on intangible asset valuation. As noted earlier in this chapter, I contend that the overly harsh operation of a too extensive range of risk considerations, under prevailing valuation approaches, tends to undermine a fair value approach to intangible asset valuation, and result in inadequate valuation outcomes.

Part of the problem is that there is no single valuation approach against which a concise, and theoretically manageable, set of risk considerations might be defined. The habit of combining multiple valuation techniques and "methodologies to reflect

multiple benefits or to reflect one type of benefit becoming another over time”²⁷⁶ in search of a customised valuation outcome can make the risk identification and management task all the more difficult and complex.

Improving the situation will require a genuine commitment, and the implementation of a more consistent, basic, valuation approach which balances the interests of enterprises and the users of the valuation information they include in their financial statements.

To manage risk, and to help ensure that enterprise-based intangible asset fair value projections survive the application of risk considerations, a new approach is required.

I believe that the developing set of international accounting standards, and the legal framework and case law that are now in place to support their effective implementation, represent the necessary commitment to improving the overall situation and establishing a new, effective, and adequate, approach to intangible asset valuation. It is as an implementable alternative to prevailing approaches that the valuation criteria-supported TEV approach I will outline in this chapter is offered.

I suggest that to do this it is necessary to revisit the concepts that lie at the foundation of intangible asset valuation and establish a clear understanding of what fair value, or fair market value, actually is.

²⁷⁶ See Smith (1997); p.102.

Defining Fair Value

“Value” as an economic concept has been applied in a variety of ways. In a legal sense, testing the consideration paid in a transaction between parties can be assisted by a sense of what the property or rights being exchanged is worth, and this can go to the heart of the value proposition upon which the goods, services – or rights – might be based. When we speak of fair value, or market value, the elements involved need to be well established in order to be understood and consistently applied.

When I use the term fair value, I refer to its fair “market value”. The terms “fair value” and “fair market value” are therefore interchangeable. This will help ground the consistent use of the term ‘fair value’ in the context of international accounting standards with the market perspective, and basis, from which this is usually, and appropriately, regarded.

This clarified, the standard definition of market value (and therefore fair market value) can be regarded, in legal and accounting standard-relevant terms as:

1. Market value is the amount at which a property would exchange ...
The usually monetary amount agreed to between the parties as it is usual to exchange property (or bundles of legal rights in the context of intangible assets) for money or consideration that can be expressed in monetary terms.
2. ... between a willing buyer and a willing seller ...
The two parties who want to make the exchange.
3. ... neither being under compulsion ...

Both of the parties being willing to contemplate and/or make the transaction.

4. ... each having full knowledge of all relevant facts ...

Both parties have all the information they need to undertake the transaction, something that the information provided through the application and operation of the valuation criteria outlined in Chapter 6 would help ensure.

5. ... and with equity to both.

*The exchange will be fair to both parties.*²⁷⁷

A definition more focussed on an economic appreciation of the transaction or exchange asserts that:

“Market value is equal to the present value of the future economic benefits of ownership”²⁷⁸

The FASB Board, in its *Exposure Draft: Proposed Statement of Financial Accounting Standards – Business Combinations and Intangible Assets*, asserted that “the essence of an asset is its future economic benefit rather than whether or not it was acquired at a cost”²⁷⁹. This is a positive recognition of the significance of expected future economic benefits to an intangible asset’s valuation but is also a standard that, if it is to be upheld, must be allowed to operate with reasonable insulation from an overly restrictive application of risk considerations.

²⁷⁷ See Sanders and Smith (2008); p.2.

²⁷⁸ See Sanders and Smith (2008); p.2.

²⁷⁹ See FASB. *Exposure Draft Proposed Statement of Financial Accounting Standards* (1999); p.97.

Suffice to say, at this point, that, at least at the level of the standards that formally apply, the enterprise's right to assert, and defend, appropriate, and fair, values for their intangible assets is firmly established.

And the future benefits reasonably expected to flow from these important enterprise assets are the determinants of their value. This is important. Accepting that "the essence of an asset is its future economic benefit rather than whether or not it was acquired at a cost"²⁸⁰ opens up enormous scope for a model or approach dedicated to supporting defensible enterprise management representations as to the value of enterprise intangible assets.

There is extensive standards support for such an approach. SFAS 157 - *Fair Value Measurements*, the de facto international fair value standard following the IASB's adoption of it as a platform for its own standards development activity in that area, firmly establishes fair value as the basis for asserting enterprise intangible asset valuations.

The already-discussed support, for this, of the fair value hierarchy is more directly relevant to enterprises wanting to exploit this situation. The ability, in the absence of (albeit preferred) observable Level 1 and 2 inputs, to rely on Level 3 management representations and assumptions to support valuations is a key trigger for bringing the Chapter 6 valuation criteria into play. Needing to support the information items introduced as Level 3 inputs, enterprises can use the valuation criteria-related results

²⁸⁰ See FASB. *Exposure Draft Proposed Statement of Financial Accounting Standards* (1999); p.97.

to this end. The collective performance against the 30 designated tests and criteria becomes an enterprise-level business case for the valuation positions being asserted.

The valuation criteria-supported TEV (Total Enterprise Value) approach I will now outline must, necessarily, accommodate this useful situation and extend even further support to enterprises hoping to exploit it.

In supporting the enterprise objective, and right, to assert and defend fair value for their intangible assets, the TEV approach is designed to go some way to addressing the problem of inadequacy outlined in Chapter 2.

III. Valuation Criteria: Background to The TEV (Total Enterprise Value) Approach

The valuation criteria outlined in Chapter 6 provide a comprehensive platform of tests and elements against which enterprises can produce information. This information, in turn, can be used to assert and defend fair value positions.

The great and growing significance of intangible assets to the modern enterprise has already been acknowledged. IP Bewertungs AG (IPB), a German firm specialising in patent valuations, recognises that patent assets are not just legal rights that help restrict the activities of competitors but also represent business, or more specifically revenue, opportunities when these are licensed for use to other parties. Including the expected future economic benefits that will flow from such opportunities into fair value-based intangible asset valuations is essential if enterprises are to appropriately maximise the overall value of their businesses. IPB, like many other similar service providers, seeks

to assist enterprises who wish to develop licensing revenue streams around their patent portfolios.

Mirroring what IPB, and others, look to do at the level of particular patent assets, I have contemplated a TEV approach that allows enterprises, at the whole-of-business level, to take account of the value of their own intangible assets; using the fair value-asserting standards and legal framework to assert and defend more adequate valuations for these key enterprise assets.

Supported, on an asset-by-asset level, by the valuation criteria outlined in the last chapter, I see the combined approach as delivering a defensible intangible asset repository valuation, compiled and defensible at the individual intangible asset, taking full advantage of fair value standards.

With the valuation criteria-based inputs, taken together, providing detailed information for the whole range of users who will want to use it to make decisions (such as whether or not to invest in the enterprise) the reliability of the financial statements containing this information is improved. As well as providing better tested and supported information for the users of financial statements, the valuation criteria, and the TEV approach they support, can also help resolve a key tension affecting the relationship between enterprise managers and owners/shareholders.

With this source of reliable enterprise-level information, provided against the thirty valuation criteria provided, able to be called on to support objective decision-making,

it is possible to address the conflict that agency theory holds exists where management and ownership are different²⁸¹.

With enterprises owners and managers able to access, use, and rely on, the same criteria-validated information that they make available to the users of their financial statements, for their own internal decision-making, the scope for conflict and disagreement is reduced while the standard of “stewardship and accountability” and corporate governance is improved²⁸².

The increased accountability that the better testing of financial statement information will support, and here the application of an extensive set of valuation criteria can only assist, is of general usefulness. With respect to intangible asset valuation, it helps support, with extra criteria-validated information, key management value representations. These in turn improve the recognition, reliability and presentation of the actual valuations of the intangible assets themselves.

The response of the German Accounting Standards Board (GASB) to the IASB 2007 discussion paper *Fair Value Measurements*, illustrates the usefulness of an expanded, valuation criteria-supported, approach to intangible asset valuation.

Noting that the SFAS 157 fair value definition includes a market perspective (that is, it defines fair value as a market-based exit price)²⁸³ the GASB appropriately questions how fair value can then be asserted in the absence of an active market. A fair value

²⁸¹ See ASCG. *Stewardship/Accountability as an Objective of Financial Reporting* (2007); p.9. for a fuller description of agency theory.

²⁸² See ASCG. *Stewardship/Accountability as an Objective of Financial Reporting* (2007); p.9.

²⁸³ See ASCG. *Comments on IASB Discussion Paper 'Fair Value Measurements'* (2007); p.1.

definition relying, too narrowly, on an active market situation would, the GASB suggests, fail to accommodate intangible assets for which no such active market exists.

I would suggest that the previously discussed embracing by SFAS 157 of the fair value hierarchy represents a solution to this problem. The absence of an observable active market would indeed be a constraint if the SFAS 157-relevant fair value hierarchy was limited to the, observable, Level 1 and 2 inputs it outlines²⁸⁴. Given that unobservable (that, there is no active market) Level 3 inputs (based on management assumptions and estimates that can be offered in the absence of Level 1 and 2 information) are acceptable, under SFAS 157, there is no exclusive, and overly narrow, reliance on the market situation such as the one that the GASB suggests with regards to the operation of SFAS 157 or, by extension, the international accounting standards that embrace it as the embodiment of fair value measurement best practice. With the valuation criteria I outlined in Chapter 6 operating to support these management assumptions and representations, I contend that the evidence this process provides in support of fair value hierarchy Level 3 inputs, generally, helps ensure that SFAS 157 can operate, as a standard, without any overly constrained, and narrow, focus on observable active market conditions.

As Level 1 and 2 (observable market) inputs, and true comparables generally, can be difficult (and even impossible) to identify in the context of intangible asset transactions, the fair value hierarchy, and the scope for Level 3 inputs that my valuation criteria can support, are useful. In directly enabling enterprises to assert and defend enterprise-based valuations, in the absence of supporting observable active

²⁸⁴ See SFAS No. 157 (2006).

market-derived data when these Level 1 and 2 inputs cannot be derived, a whole range of, otherwise impossible to support, enterprise fair value-premised intangible asset valuations can be provided.

To this extent, SFAS 157 – *Fair Value Measurements* does operate, effectively, as the umbrella fair value standard that all other supporting fair value standards (including the international IFRSs and IASs developed around SFAS 157 as the IASB-declared best practice model) should be referenced against. The IASB-FASB convergence project that, statedly, adopts SFAS 157 as the current de facto fair value standard will firmly establish this fact.

The extensive set of valuation criteria I outlined in Chapter 6 addresses the requirement that, while allowable in the context of the fair value hierarchy, Level 3 inputs are as supportable as possible, especially in the absence of validating, observable, active market inputs. Evidence gained through the testing of individually recognisable intangible assets against the 5 clusters, and 30 individual valuation criteria and tests I compiled can be used to support and defend the valuation representations made by enterprises.

IV. The TEV Approach

On the firm and useful basis of the validated Level 3 input-based information provided to enterprises through the operation of the valuation criteria outlined in Chapter 6, a TEV (Total Enterprise Value) approach can be established.

The TEV approach is put forward as a means for incorporating enterprise-level information from as broad, but reliable, a base as possible. This information will then be used to support assumptions whose utilisation will deliver a fair value-based approach to valuing enterprise intangible assets. The TEV approach will utilise the scope for making, and defending, management representations of fair value under SFAS 157, and the fair value hierarchy that allows such unobservable, but acceptable, Level 3 inputs. Consistent with an expanding set of international accounting, financial and legal standards (including compatible IFRSs and IASs) the TEV approach looks to appropriately exploit the right, perhaps even the positive obligation, of enterprises to assert, and defend, more adequate and fair valuations of their vital intangible assets.

The TEV approach is designed to recognise and quantify the applied value of the intangible assets; that is the supportable layer, or layers, of value over and above their initial recognised value. This applied value is, itself, based on a full appreciation of their useful and extendable lives as performing enterprise assets.

An expanded, but disciplined and well-supported (rather than loose and speculative), approach, it will rely on an intangible asset's performance against the valuation criteria outlined in Chapter 6 to build a value proposition, element by element. By aggregating the 'pockets' of value that all recognised instances of applied value (and the associated future expected economic benefits that will flow to the enterprise from these) represent, the TEV approach is designed to be a tool for enterprises; to be deployed and managed at the level of the enterprise financial reporting process.

Compliant with the emerging set of international accounting standards, and looking to leverage off the positive case law and legal framework developing to support the fair value approach, the TEV approach's ultimate objective is to support a more adequate approach to enterprise intangible asset valuation.

While attended by, and amenable to, the continuing operation of all existing intangible asset valuation standards, practices and concepts, such as useful life, and fair value, as guiding principles, and Net Present Value (NPV) as the approach for calculating the current value of any future economic benefits expected to flow from the intangible assets being valued²⁸⁵, the TEV approach does have particular advantages that I shall outline. The TEV approach is offered as an approach that is most compatible with the umbrella fair value standard, and the approach most likely to support adequate, enterprise-level, valuation outcomes.

The TEV Equation

The TEV approach is supported by the following equation:

$$\mathbf{TEV = IRV + AV}$$

TEV being the **Total Enterprise Value** of a subject intangible asset; **IRV** being its **Initially Recognised Value**, and **AV** being its **Applied Value**.

²⁸⁵ Net Present Value (NPV) is a method applied to calculate what a future stream of benefits and costs is worth by converting it into equivalent values today. This is done by assigning monetary values to benefits and costs, discounting future benefits and costs using an appropriate discount rate, and subtracting the sum total of discounted costs from the sum total of discounted benefits.

Terms

TEV (Total Enterprise Value)

The total enterprise value of an intangible asset is the maximum supportable representation of fair value that can be asserted, by an enterprise, for that intangible asset. This fullest possible expression of fair value includes any applied value, over and above the initially recognised value for any acquired or 'other' (that is, otherwise recognised) intangible asset, that can be justified against the valuation criteria operating to screen and validate such representations of value.

The concept of TEV is consistent with the spirit and elements of SFAS 157 – *Fair Value Measurements*. It embraces the fair value hierarchy in allowing for management representations of value, based on unobservable (Level 3) inputs. The fact that the TEV approach operates on the basis of a comprehensive set of valuation criteria, results against which provides some at least some information to draw on in defence of the management representations of value, means these Level 3 inputs and assumptions can be supported.

While SFAS 157 does give appropriate priority to observable markets inputs (Level 1 and 2) in establishing fair value, by allowing for unobservable inputs it both protects the right of enterprises to assert and defend much broader valuation positions than would otherwise be possible. These broader valuation positions, encompassing a more adequate appreciation of the value of performing intangible assets to the enterprise, are manifestations of TEV (Total Enterprise Value).

IRV (Initially Recognised Value)

The Initially Recognised Value of an intangible asset would be the original valuation reflected for it in an enterprises financial statements. In relation to acquired intangible assets, as required under SFAS No. 141 – *Business Combinations*, these are then tested, annually, for impairment. Any changes in value resulting from this impairment testing would, in turn, represent movement away from the initially recognised value. This shift away from the initially recognised value, in terms of the TEV approach, creates scope for calculating the applied, or performing, value of a particular intangible asset.

IRV does not only cover the initially recognised values ascribed to acquired intangible assets. It would also apply, in the context of the expanded TEV approach I contemplate, to any initial valuation position for any recognised intangible asset reported in the asset register, income statement, or financial statements generally.

On this point, SFAS No.141 – *Business Combinations* provides useful guidance. While it is, as a standard, focussed on intangible assets acquired as the result of a combination of business enterprises, it also asserts useful general standards for recognising and valuing intangible assets. In allowing for the recognition, and measurement, of intangible asset value wherever the “relevant attributes”²⁸⁶ can be measured with sufficient reliability, SFAS No. 141 is compatible with the TEV approach. Both allow, indeed invite, a much broader approach to intangible asset

²⁸⁶ See SFAS No. 141 (2001); p.66.

valuation, and allow enterprises significant latitude in formulating and defending valuations.

Under the TEV approach, the Initially Recognised Value of all recognised and reported intangible assets provides a valuation starting point for these important assets; a starting point against which the performing, or applied, value of enterprise intangible assets can then be monitored and managed.

AV (Applied Value)

Under the TEV approach, the Applied Value of an intangible asset is the value that can be asserted for the performing enterprise intangible asset. The set of valuation criteria outlined in Chapter 6 would provide a comprehensive and useful basis for assessing this and identifying extra layers of value, such as those represented by new applications for the asset.

As well as a negative value to reflect impairment or other depreciation of the subject intangible asset, AV can also have a positive value (that is, it can reflect added, OR greater than initially recognised, value) where appropriate, such as where the useful life, and expected future economic benefits, relating to the subject intangible asset are extended. This is the key, positive, contribution of the TEV approach. The fact that the equation, and the TEV approach itself, can accommodate (through a positive AV) the extendability, and increased value, that enterprise intangible assets can justify, addresses a key inadequacy of the prevailing valuation approaches, and allows the full, positive, effect of fair value, and fair value standards, to operate. Simply representing

the old depreciation of intangible assets in a new way would not make the TEV approach particularly novel or useful. Allowing for positive, added or new, value to be represented – on top of an intangible assets initially recognised, or reported, value - is both useful and necessary. This allows the TEV approach to accommodate supportable Level 3 management representations, based on fair value standards, to be reflected in valuation. This is a particular contribution of the TEV approach.

Uniquely useful in its scope for positive application, AV would also, as mentioned, accommodate situations in which intangible assets are annually tested for impairment and are found, in situations of straight line depreciation, and with no new applications or extensions to the intangible asset's useful life, to have a reduced value. This is because AV itself can have a negative value, as demonstrated in Case Study 1 (below).

The role of the valuation criteria outlined in Chapter 6 in the operation of the TEV approach is critical. Inputs and information gathered against the 5 cluster, and 30 individual, criteria become the basis for management representations of intangible asset value. These could represent AV for the purposes of the TEV equation and approach. The performance of the intangible asset against the valuation criteria can establish, layer by layer, extra value for the intangible asset; all the time supporting a more broadly based, and adequate, approach to intangible asset valuation. The TEV approach, in this sense, allows for the ongoing, and effective, recognition of intangible asset 'extra value' as part of an annual review process. Further, this extra value is defended; validated against the comprehensive valuation criteria operating in support of the TEV approach.

The TEV approach is best illustrated through case studies. These include:

Case Study 1 (Acquisition Scenario)

Company A acquires Company B. Included in the intangible assets acquired are licensable (for a fixed term of 10 years) rights to use a particular technology. These rights, based on expected future economic benefits that will flow, in the form of licensing revenue, to the enterprise owner of these. For our purposes, the NPV (Net Present Value) of the licensing streams, and the fair value of the intangible assets these represent, are recognised as \$100 million dollars, and recorded as such in the financial statements.

On the occasion of the first annual impairment testing of the acquired asset, called for under SFAS No.141, and equivalent local and international standards, and based on a straight line depreciation of the value of the 10 year licensing arrangements, the value of the intangible asset these represent was reduced by \$10 million.

This is compatible with the operation of the TEV approach, as the AV (Applied Value) of an intangible asset can have a negative or positive value.

In this case the TEV of the intangible asset would be \$90 million, given that $TEV (\$90 \text{ million}) = IRV (\$100 \text{ million}) + AV (-\$10 \text{ million})$.

Case Study 2 (Recognition of Additional Intangible Asset Value)

Company A owns Asset A, which it licenses for use to Company C. The licensing agreement is a fixed term (5 year) agreement. For our purposes, the licensing revenue generated from the agreement has a net present value of \$50 million.

As part of an expanded annual intangible asset review exercise, undertaken against the set of valuation criteria, the enterprise identifies a new application for Asset A, outside the scope of the existing use and licensing arrangements in place between Company A and Company C. The new application for Asset A will extend its useful life by 5 years (up to 10 years). The expected, additional, licensing revenue from this new application has a net present value of \$20 million. This is greater than the straight line depreciation-based loss of \$10 million in intangible asset value, which is effectively offset, with a net value gain of \$10 million.

In this case the TEV of the intangible asset would be \$60 million, given that TEV (\$60 million) = IRV (\$50 million) + AV (the new applied value of \$20 million - \$10 million impairment testing loss = \$10 million).

TEV Process

The TEV approach is designed to support a more adequate approach to intangible asset valuation. It would achieve this objective through facilitating the more process-driven and effective recognition of applied intangible asset value. As illustrated in Case Study 2 (above) this might be represented by the identification of a new use for

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the asset, discovered during the annual general intangible asset revaluation opportunity developed around the impairment testing of acquired intangible assets that enterprises are required to undertake.

The TEV process would build on the annual revaluation opportunity represented by the requirement to test acquired intangible assets for impairment, which can and should be expanded into a general intangible asset review. It would facilitate a more disciplined and effective capture of intangible asset applied value and support the maximum possible assertion of overall intangible asset value. Management representations of value included in financial statements would therefore better reflect the best possible value proposition, or propositions, for all enterprise intangible assets.

The TEV approach is compatible with the key concepts and rules that underpin the single set of international accounting standards being developed to support an improved and more consistent approach to intangible asset valuation. It is, above all else, engineered to deliver the type of fair value-based valuation outcomes that these standards are being developed and implemented to help guarantee.

The TEV approach is also compatible with the wider framework of legal standards and concepts that determine the status and characteristics of enterprise intangible assets.

From an appreciation of the initial legal-contractual and separability tests that determine whether or not an intangible asset can be recognised as existing apart from the goodwill of an entity at all, the TEV approach accommodates the legal parameters

and tests for managing enterprise intangible assets. Key among these are the legal rules that apply because of the status of intangible assets as property, albeit without physical substance, that can be the subject of transactions between parties and therefore need to be valued fairly. While accounting standards stipulate many of the principles that apply in this situation, the underlying basis upon which this whole activity proceeds is essentially a legal one.

So while the TEV approach, and this legal research, maintains a key focus on the set of emerging international accounting standards, these standards must be seen as operating within, and ultimately subject to, the overall legal framework that – as we saw in Daubert and Kumho in Chapter 5 – determine the parameters for their application. Similarly the process of aligning national accounting standards with the international set of accounting standards, which I discussed in Chapter 4, is essentially a legislative and legal activity, being energetically pursued in the US, Australian and Singaporean jurisdictions we examined.

This is appropriate, and the reason that the TEV approach was developed out of a process of legal research. The process for managing, and determining the value of, intangible assets is, from its property law foundations to the legal review and scrutiny these can and will be subjected to, a legal one.

The TEV approach is consistent with this overriding legal framework. Its concept of Applied Value, and the scope this allows to identify and assert new value for an intangible asset value whenever, and wherever, the useful life and applications of that intangible asset are extended, is a case in point. This is consistent with the necessary

legal fiction that, for fair value calculation purposes, the legal life of many key performing enterprise intangible assets, such as trade marks, are assumed to be perpetual²⁸⁷. The TEV approach accommodates fully the concept of extendable useful lives for enterprise intangible assets and the expanded valuations that this supports, when new applications, and associated reasonable future economic benefit expectations, are identified. The TEV process, through the annual, general, intangible asset valuation reviews it recommends, facilitates such a flexible fair value-premised approach.

This is important from a legal perspective for while the providing of weak and unsupported valuations could obviously mislead potential investors, for example, as to the value of the asset or the overall enterprise of which they are apart, there is also a reverse risk in not providing the best possible valuations. The legal requirement to provide accurate valuations must extend to providing adequate ones as well. Not providing as current and expanded a valuation of an intangible asset as is reasonably possible to the users of financial statement information is just as likely, as an unsupported one, to support an inaccurate, and misleading, assessment of an enterprise's fair value. The TEV approach provides a formula, and process, for ensuring that as expanded as possible a fair value is reported against an enterprise's intangible asset repository.

The TEV approach would allow the users of financial statements (that would, henceforth, contain constantly refreshed intangible asset valuations, reviewed annually) to make appropriate decisions with a full appreciation of the fair value of the

²⁸⁷ See Smith and Parr. *New Developments in Accounting for Intangible Assets , Valuation of Intellectual Property and Intangible Assets* (2004); p.12.

intangible assets that constitute the greatest, and growing, share of enterprise asset value.

The significance of this cannot be underestimated. The already-discussed annual impairment testing of acquired intangible assets, stipulated under SFAS 141, will have a devastating impact on company profitability if it operates only as a negative test; that is, if it doesn't allow for the simultaneous identification and factoring in of the new, applied value contemplated under my TEV approach. Verlinden, Smits and Lieben, authors of a 2004 PriceWaterhouseCoopers (PWC) report *Intellectual Property Rights: from a transfer pricing perspective*, shared internal PWC data that suggested that some \$235 billion worth of profitability was lost to the US Top 500 companies due to the operation of impairment testing in 2001 and the survival of 'merger accounting' which does not yet fully embrace the extendable useful life concept that international accounting standards and my TEV approach and supporting set of valuation criteria acknowledges²⁸⁸.

If the value-reducing tendency of the impairment testing of intangible assets, operating in isolation, is not offset by the expanded, but reliable, recognition of new pockets of value flowing from the extendable useful lives of intangible assets the effect on enterprise profitability, as evidenced in the PWC report referred to above, could be devastating. The scope, under my TEV approach, for identifying any new, applied, value attributable to performing enterprise intangible assets, and using this to offset the negative effects of the obligatory annual testing of acquired intangible assets, addresses this (as illustrated in Case Study 2 above).

²⁸⁸ See Verlinden, Smits, and Lieben (2004); p.151.

The FASB, in issuing a request for comment on a proposal for a project on disclosure about intangibles in August, 2001, seems to be moving in the right direction. In language suggestive of the view that limiting the improved recognition and treatment of intangible assets to assets acquired in business combinations was insufficient, the FASB noted that intangible assets that are generated internally are not reflected in financial statements “and that little quantitative or qualitative information about them is reported”²⁸⁹.

The scope I include under the TEV approach to identify and assert emerging, applied, value for enterprise intangible assets would help resolve this situation. The opportunity that I suggest enterprises should make of the annual obligation (under SFAS 141) to test for impairment, or revalue, acquired intangible assets, is key. Expanding the impairment testing event so that it becomes the trigger for a general revaluation of all enterprise intangible assets would be an ideal platform upon which to improve the recognition of a fair, and adequate, value for all enterprise intangible assets. This could, in turn, become the first step toward what the FASB hoped “might become an evolution toward recognition in an entity’s financial statements of internally generated intangible assets”²⁹⁰; an ultimate objective of the expanded TEV approach that would apply, generally, to all enterprise intangible assets.

²⁸⁹ See Smith and Parr. *New Developments in Accounting for Intangible Assets , Valuation of Intellectual Property and Intangible Assets* (2004); p.15.

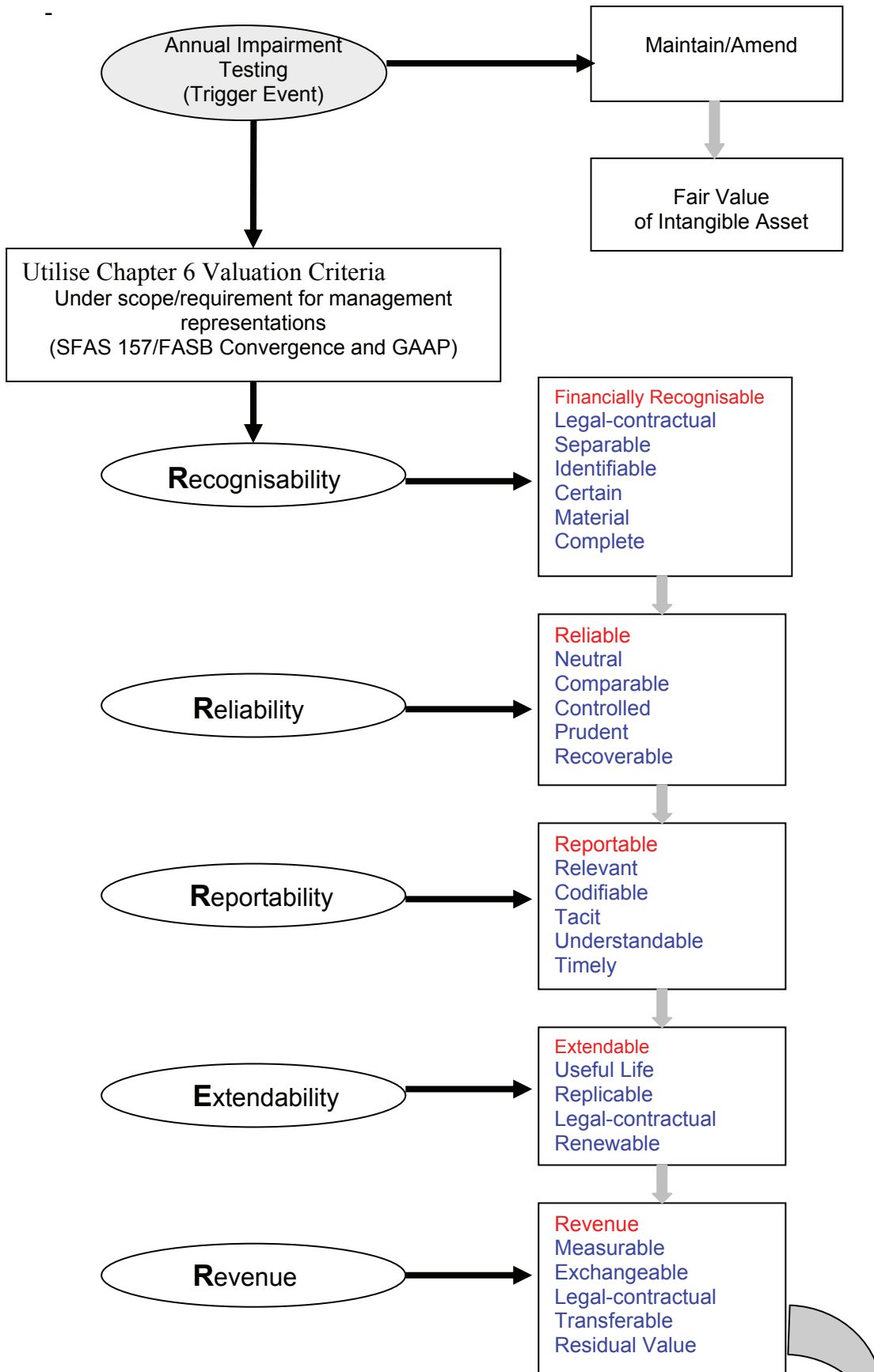
²⁹⁰ See Smith and Parr. *New Developments in Accounting for Intangible Assets , Valuation of Intellectual Property and Intangible Assets* (2004); p.16.

Improving Enterprise Intangible Asset Valuation

The addition of the elements of the expanded TEV approach to the flowcharts I provided in Chapter 6 as a guide for improving the level and quality of enterprise level intangible asset recognition and valuation makes them a much effective, and detailed, guide for enterprises to follow. This more effective guide is represented in the flowchart below.

Using, as a process trigger, the annual revaluation of acquired intangible assets required under SFAS 141, this activity could be expanded into a general review and revaluation for all enterprise intangible assets, with scope to recognise and assert new, applied value, for performing intangible assets for which new applications, and new fair value-determining future economic benefits, can be found.

It consolidates, and expands, the enterprise-level intangible asset recognition and valuation of intangible assets, and, usefully, incorporates the operation of the valuation criteria I outlined in Chapter 6 into the TEV approach as well.



TEV = Total Enterprise Value
 IRV = Initially Recognised Value

TEV = IRV + AV
 (Applied Value)

AV can be negative (Impairment) or positive (New Value)

Validating the TEV approach

The operation of the TEV approach would satisfy many of the requirements of a genuine fair value-based approach to intangible asset valuation, and the standards and practices that have been developed and implemented with the objective of sustaining one.

Consistent with the fair value guidance in SFAS 157 and supporting IASs and IFRSs, the TEV approach facilitates the assertion and defence of enterprise-level valuation positions. These valuations, based on enterprise information validated against the set of valuation criteria outlined in Chapter 6, take full advantage of the scope for enterprises to make management representations, based – in the absence of direct and observable market information – on Level 3 inputs and assumptions. The direct application of such management representations to achieve fair value outcomes is a feature of the TEV approach.

In incorporating a concept of Applied Value, the elements of which would be derived from the criteria-supported representations that enterprise managers can make as valid Level 3 inputs under such standards as SFAS 157, the TEV approach creates scope for identifying and recognising the actual, performing, value of an intangible asset, over and above its initially recognised acquisition or reported value.

In operating with the objective of supporting a unique and specific valuation for the subject intangible asset, the TEV approach certainly fulfils the GASB recommended

standard that any fair value “measurement basis needs to meet the appropriate measurement objective for the relevant asset or liability”²⁹¹.

Not restricted to a narrow exit price notion in defining fair value, the TEV approach, and the concept of Applied Value it embraces, allows for much more broadly based, and customised, enterprise intangible asset valuations.

The IRV Initially Recognised Value component of the TEV equation, and approach, usefully serves the need to provide fair value guidance. The criticism that such standards as IAS 16 and IAS 38²⁹² have faced, that is that they are too focussed on narrow market indicators such as market entry and exit prices in establishing fair value, does not apply to the TEV approach. The TEV approach, and its use of the broad set of valuation criteria outlined in Chapter 6 to support fair value representations, offers an information, and criteria, rich method for enterprises to use.

Demonstrably consistent with such concepts as the extendable useful life as an intangible asset, and, overall, the fair value standard for measuring such an asset’s real value, the TEV approach accommodates the enterprise-specific information built on performance against the valuation criteria selected by the enterprise to measure and defend their valuation representations. Free to apply the TEV approach in conjunction with such considerations as the (value maximising) ‘most advantageous market’ for the intangible asset, and management assumptions in the absence of Level 1 or 2 fair value hierarchy inputs, enterprises have real scope to assert and defend valuations that more adequately reflect the significance and inherent value of these key assets.

²⁹¹ See ASCG. *Comments on IASB Discussion Paper ‘Fair Value Measurements’* (2007); p.3.

²⁹² See ASCG. *Comments on IASB Discussion Paper ‘Fair Value Measurements’* (2007); p.5.

The TEV approach therefore addresses an identified root cause of the problem of inadequacy that limits the usefulness of the prevailing (cost, income and market-based) valuation approaches. The absence of the type, and volume, of valuation criteria-supported information that the TEV approach allows for, means that there is little to limit the overly harsh application of risk considerations in the context of the prevailing cost, income and market-based approaches. In the absence of information to the contrary, risk considerations operate to harshly reduce the NPV (Net Present Value) of otherwise reasonable expectations of future economic benefits, the determinants of fair value.

Supported by quality information derived from enterprise-level application of the valuation criteria outlined in Chapter 6, the TEV approach provides greater reliability and certainty. It therefore operates with greater scope to limit the harsh impact of unrestrained risk considerations on its fair value positions²⁹³. This is underscored by the rules for using the findings of specialist valuers, outlined in the US *Statement on Auditing Standards (SAS) 73: Using the Work of A Specialist*, which sees a direct link between the reliability of valuation findings and the “appropriateness and reasonableness of methods and assumptions used and their application”²⁹⁴. Supported by information validated against a comprehensive set of valuation criteria, the TEV approach can better assert and defend expanded, and more adequate, intangible asset valuations.

²⁹³ See AICPA (2002); p.5. (at .17)

²⁹⁴ See the US *Statement on Auditing Standards (SAS) 73: Using the Work of A Specialist*; p.3.

Comparing the TEV Approach to Other Applied Value Approaches

The TEV approach uses the information gathered at the enterprise level to compensate for the inadequacies and deficiencies of other, prevailing approaches. The TEV approach essentially uses enterprise-derived information, based on valuation criteria, to support improved fair value representations. The TEV approach is greatly assisted in this regard by its in-built scope for identifying and recognising the applied value of performing intangible assets.

There are other fair value measurement approaches that, like the TEV approach, look to identify and recognise the greater, applied, value of intangible assets. The FASB, in the 1999 Exposure Draft, or *Proposed Statement of Financial Accounting Standards: Business Combinations and Intangible Assets*, considered the “growing use of ‘economic value added (“EVA”) and similar measures, which increasingly are being employed as means of assessing performance”²⁹⁵.

I don’t believe, though, that these EVA approaches operate as effectively as the TEV approach I propose. Rarely supported by valuation criteria that operate, as in the case of the TEV approach, to validate the information they present, supposedly in defence of claims of applied value, the EVA approaches suffer from a key flaw. This flaw is the typical inclusion within them, as the FASB observed, of a consideration, and measurement, of goodwill²⁹⁶.

²⁹⁵ See FASB. Exposure Draft Proposed Statement of Financial Accounting Standards (1999); p.100.

²⁹⁶ See FASB. *Exposure Draft Proposed Statement of Financial Accounting Standards* (1999); p.100. (at 197).

Given that one of the key problems with enterprise intangible asset recognition and valuation, historically, has been the inadequacy of goodwill as a repository for intangible asset value, any applied value approach in any way premised on goodwill is immediately rendered less credible for the association.

To summarise, I believe that the TEV approach is superior to the prevailing cost, income and market-based prevailing approaches. This is, in no small part, due to the valuation criteria-based information the TEV approach can draw on to defend expanded fair value representations from the harsh operation of risk considerations that affect the expected future benefit, and therefore fair value, outcomes delivered for subject intangible assets under the prevailing approaches.

The TEV approach is also more useful and reliable than the alternative applied value, or EVA (Economic Value Added) approaches, that still incorporate, to some extent, some consideration of goodwill, the historically inadequate indicator of enterprise intangible asset value. Another weakness of the EVA approach is that, as opposed to the TEV approach that encourages and reflects the results of annual intangible asset revaluations based on clear valuation criteria, the EVA approaches typically require the estimation of terminal growth rate or calculation of “how a company’s revenues will grow in a completely unforeseeable environment”²⁹⁷.

Demonstrably superior to the prevailing valuation approaches in relation to the valuation outcomes it supports, the TEV approach is also able to accommodate the use

²⁹⁷ See Resch (2000); p.45. The author feels that the EVA approaches common reliance on an estimation of terminal growth rate makes them unreliable and unacceptable for valuation purposes.

of NPV (Net Present Value) and particular valuation techniques such as DCF (Discount Cash Flow) to calculate and assert valuation outcomes.

As shall be explored in the next section, the TEV approach is also compatible with the legal standards (such as those outlining the rules for admissibility of valuation evidence and expert witness testimony) now emerging and the small, but consolidating and authoritative, body of US case law developing around these.

V. Legal Proofing The TEV Approach

The TEV approach is consistent with the legal framework of standards (Chapter 4) and case law (Chapter 5) that support an improving international climate for intangible asset treatment and valuation.

The TEV process, as described, would use as a trigger the annual impairment testing and revaluation of acquired intangible assets, first made mandatory under SFAS 141. As part of the TEV approach, I've recommended that enterprises extend this revaluation exercise to encompass the review of all enterprise intangible assets, including self-generated assets for which a fair value is sought. Reviewing all intangible assets for new, applied, layers of value, and using the valuation criteria outlined in Chapter 6 to validate information about these, enterprises will be able to assert, as part of their financial reporting process, more adequate and reliable intangible asset valuations.

Overall, I believe that the TEV approach, supporting valuation criteria, and associated annual revaluation process, all comply with fair value standards and would allow enterprise managers to support more adequate and effective valuation, well-supported with reliable inputs based on comprehensive valuation criteria. The TEV approach would consolidate these fair value standards by establishing a disciplined, reliable and enterprise-level platform for applying them to key business intangible assets.

The case law examined in Chapter 5 indicates the type of legal standards that would apply to any legal review and testing of the TEV approach. Daubert and Kumho, as I indicated earlier in Chapter 5, represented key improvements to the admissibility rules for expert witness testimony. In the context of intangible asset valuation, the shift away from the narrow scientific ‘general acceptance’ standard to a more liberal one of essentially admitting any evidence that is relevant to the legal review that the court is undertaking is important.

Should any valuations produced under the TEV approach, and supporting valuation criteria, be legally challenged, the courts, under Daubert and Kumho, are empowered to admit, review, and test expert witness testimony in assessing the reliability of any intangible asset valuations at issue. Expert valuers and professional appraisers can assert, and must defend, any valuation techniques and approaches introduced to the court as effective means for recognising intangible asset value.

Given it’s firm basis in a comprehensive set of valuation criteria which will ensure that reliable information can be produced in support of valuations produced through its

applications, the TEV approach would be especially amenable to this type of legal review and testing.

In such a fashion is it possible to imagine that, consistent as it is with fair value standards and related concepts, the TEV approach might be adopted by enterprises as a valuation approach and, ultimately, legally tested and, with the sanction of a court of review, endorsed as an acceptable valuation approach.

The current, and effective, alignment of national accounting standards and supporting legislation to the single set of international accounting standards ensures that much of the complexity previously involved in complying with one or more, sometimes competing, national GAAP or legal codes is being progressively removed. This will simplify any effort to establish the TEV approach as one consistent with international fair value standards and valuation best practice.

VI. Conclusion

The TEV approach, well supported by a comprehensive set of valuation criteria and the information that these provide in support of management representations of intangible asset fair value, is designed to deliver a more reliable, and adequate, valuation capability to enterprises.

Compliant with the improved set of international accounting standards now being developed and implemented, the TEV approach will use the annual revaluation, or impairment testing, of acquired intangible assets now legally required of enterprises

(under SFAS 157 and international best practice it represents) to support a general intangible asset valuation process.

The TEV approach will operate as an enterprise-based approach delivering fair value-related outcomes for enterprises. The more adequate, and reliable, valuations it will support will appropriately maximise the value of the intangible assets that form the most significant, and growing, component of the modern enterprise's asset base.

With the benefit of Daubert and Kumho, enterprises can be reasonably certain as to how a legal challenge to any valuations delivered under the TEV approach would proceed. In any legal test or review scenario, expert witness testimony supporting its usefulness could be introduced. The TEV's demonstrated compliance with fair value standards, and well-established valuation criteria, would form compelling evidence in favour of its general usefulness and reliability. Any subsequent endorsement by a court would greatly encourage enterprises to adopt the TEV approach.

Especially if the TEV approach secured such legal endorsement, enterprises could confidently apply it as an effective enterprise-based valuation method, and an important step towards resolving the historical problem of inadequacy that affects enterprise intangible asset valuation. I contend that the TEV approach, as outlined, meets the legal and accounting requirements necessary to establish it as an effective intangible asset valuation approach.

Chapter 8 Future Trends and Applications of the TEV Approach

I. Introduction

In the last chapter I focussed on describing how my TEV (Total Enterprise Value) approach, supported by the set of intangible asset valuation criteria that I defined in Chapter 6, might provide an opportunity to resolve the problem of inadequacy that afflicts enterprise-level intangible asset valuation. Such an applied value approach, in providing scope for the assertion and defence of fair value-premised management representations, was shown to be consistent with the international accounting standards, and the broader legal framework that these operate within.

This chapter will examine some possible applications of the TEV approach, and a number of future trends and opportunities relevant to its wider adoption. I will aim to ensure that the specific usefulness of the TEV approach in improving the quality and reliability of enterprise-level intangible asset valuation can be fully exploited and firmly established.

II. Relevant Future Trends

Assisting Enterprises: Positive Trends and Scope For Improving Intangible Asset Valuation

In support of the IP Academy (Singapore) research project, *A Study of Intangible Asset Valuation in Singapore: Issues and Opportunities for Singaporean Businesses*, that I co-authored with Gordon V Smith, and delivered in April, 2008, we had occasion to

examine certain trends, in financial reporting, and valuation in particular, that were, or would be, having a material impact on the way enterprises were treating their intangible assets.

A number of these trends were noted in the research project final report and for the purposes of this undertaking I would like to provide extracts of these with supporting commentary to put these in an appropriate context for this research undertaking.

Extract One from IP Academy (Singapore) Research Project, A Study of Intangible Asset Valuation in Singapore: Issues and Opportunities for Singapore's Businesses²⁹⁸

THE TREND IS TOWARD UNIVERSAL ACCOUNTING AND FINANCIAL REPORTING STANDARDS

This report began with a quotation from a current edition of the Wall Street Journal calling for the adoption of IFRS financial reporting standards worldwide. That opinion is echoed by the FASB and IASB:

The FASB and the IASB recognise that their contribution to achieving the objective regarding reconciliation requirements is continued and measurable progress on the FASB-IASB convergence programme. Both boards have affirmed their commitment to making such progress. Recent discussions by the FASB and the IASB regarding

²⁹⁸ See Sanders and Smith (2008); pp.34-35.

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their approach to the convergence programme indicated agreement on the following guidelines:

- Convergence of accounting standards can best be achieved through the development of high quality, common standards over time.
- Trying to eliminate differences between two standards that are in need of significant improvement is not the best use of the FASB's and the IASB's resources—instead, a new common standard should be developed that improves the financial information reported to investors.
- Serving the needs of investors means that the boards should seek to converge by replacing weaker standards with stronger standards.

Consistently with those guidelines, and after discussions with representatives of the European Commission and the SEC staff, the FASB and the IASB have agreed to work towards the following goals for the IASB-FASB convergence programme by 2008:

Short-term convergence

The goal by 2008 is to reach a conclusion about whether major differences in the following few focused areas should be eliminated through one or more short-term

standard-setting projects and, if so, complete or substantially complete work in those areas²⁹⁹.

Comments:

Towards A Global Set of International Accounting Standards

As outlined in detail in Chapter 4 and discussed in the context of the valuation criteria and TEV approach I have proposed, the rapid development and implementation of a single set of international accounting standards has had as one of its main drivers the desire to establish and assert a fair value approach to enterprise intangible asset valuation.

The collaboration of such bodies as the IASB and FASB, in relation to the extensive and effective global effort to secure the convergence of national accounting standards, and legal frameworks, with emerging fair value-asserting international standards, has been extensive and decisive.

Individual convergence projects are implemented to achieve specific targeted incomes, and regular discussion papers, and requests for feedback from stakeholders (including national standard-setting bodies), are used – very effectively – to gain endorsement, and buy-in. This helps to ensure the, up to now, virtually unanimous, and prompt, approval and implementation of particular new international standards; quite an impressive result given that the IASB has no power to enforce them, and requires

²⁹⁹ See Sanders and Smith (2008); p.35 quoting the Memorandum of Understanding between the FASB and the IASB, “*A Roadmap for Convergence between IFRSs and US GAAP*”, 27 February 2006.

national standard-setters and governments to endorse these for them to have effect at a national level.

Specific convergence projects are undertaken right across the accounting standards spectrum, but perhaps the most significant, from the perspective of this research undertaking, was the IASB-FASB effort to develop an internationally consistent approach to fair value measurement. Launched by the IASB which commenced by adopting as best practice, and the starting point for its own standard development, the US FASB's SFAS 157 – *Fair Value Measurement*, this particular project firmly entrenched a fair value standard.

In relation to the TEV approach this is invaluable, as it encourages approaches (such as the TEV approach) that embrace the fair value standard and seek to assist enterprises in the assertion and defence of fair value positions. Utilising the fair value hierarchy outlined in SFAS 157, the TEV approach seeks to support unobservable Level 3 inputs (such as management representations and assumptions upon which fair values might now feasibly be based) and the value propositions these attempt to sustain.

Extract Two from IP Academy (Singapore) Research Project, A Study of Intangible Asset Valuation in Singapore: Issues and Opportunities for Singapore's Businesses³⁰⁰

³⁰⁰ See Sanders and Smith (2008); pp.35-36.

THE TREND IS TOWARD INCREASED DISCLOSURE

One of the more interesting portions of SFAS 141 and 142 is the disclosure requirements. They are of interest because they provide a hint of “coming attractions”. If the companies that are subject to these requirements closely follow the disclosure specifications, much useful information will become available following their acquisitions. Obviously the intent of the Board was to cause this information to become available to the companies’ stakeholders-investors and lenders. This is in accordance with the original impetus for these new requirements.

SEC Accounting Staff members have made additional suggestions relative to disclosures about intangible assets. Some of these are rather extreme, but indicate the direction of their thinking:

“Registrants should consider the need for more extensive narrative and quantitative information about the intangibles that are important to their business. These disclosures often are appropriate in Description of Business or Management’s Discussion & Analysis. Some disclosures required by GAAP or Commission rules provide useful information to investors about intangibles, such as amounts annually expended for advertising and research & development. More insight could be provided if management elected to disaggregate those disclosed amounts by project or purpose. Statistics about workforce composition and turnover could highlight the condition of that human resource intangible. Disclosure of annual expenditures relating to training and new technologies could help investors distinguish one company’s intangibles from another. More specific information about patents,

copyrights and licenses, including their duration, royalties, and competitive risks can be important to investors. Insight into the intangible value of management talent could be provided by supplementing financial information with performance measures used to assess management's effectiveness.”³⁰¹ (emphasis added)

In June of 2007, the FASB issued a statement supporting the SEC Advisory Committee on Improvements to Financial Reporting. FASB Chairman, Robert Herz commented:

“The SEC, PCAOB [Public Company Accounting Oversight Board], and FASB have been discussing the need for an advisory panel to explore issues and opportunities to improve financial reporting for some time. Therefore, I am very pleased with the formation of this committee and applaud Chairman Cox [SEC] for bringing it together. The advisory committee represents an important step toward addressing the institutional, structural, cultural, and behavioral issues that create complexity, reduce transparency, and impede usefulness of reported information to investors.”³⁰²

The FASB has a long history of support for enhancing the information presented in financial statements. In a 2001 proposal for a project to improve disclosure about intangibles the following points were presented:

“The principle goals of the project would be to make new information available to investors and creditors...vital to well-reasoned investment and credit resource allocation...and to take a first step in what might become an evolution toward

³⁰¹ See Sanders and Smith (2008); p.35 quoting SEC Division of Corporation Finance, “Current Accounting and Disclosure Issues”, prepared by member of the staff, August 31, 2001. See www.sec.gov/divisions/corpfin/acctdisc.htm

³⁰² See Sanders and Smith (2008); p.36 quoting a FASB news release 6/27/2007.

recognition in an entity's financial statements of internally generated intangible assets.

(emphasis added)

...Others suggest that the importance of intangibles is the distinguishing feature of the new economy, that intangible assets are recognized in financial statements only when acquired from others, and that accounting standard setters should require information about internally generated intangible assets.

...Without the leadership of the FASB, the IASB...it is unlikely that companies will consistently provide financial statement users with... information about intangible assets. Users of [financials] will continue to find relatively little information...about key value drivers, and to have little confidence in what information they do receive.”

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This proposal contained even more inclusive possibilities:

“ Other project scopes have been suggested...[including] disclosure of nonfinancial indicators about intangible factors, such as market size and share, customer satisfaction levels, new product success rates and employee retention rates...research and development and other project-related intangible assets...separate recognition and measurement of intangible assets or liabilities embedded in tangible or financial assets...” (Ibid emphasis added)

³⁰³ See Sanders and Smith (2008); p.36 quoting FASB, “Proposal for a New Agenda Project, “*Disclosure of Information About Intangible Assets Not Recognized in Financial Statements*, August 17, 2001.

In our view, there will be substantial resistance by companies to this level of disclosure. But it is clear that this ball has been set rolling and seems to be gaining momentum.

Comments:

The TEV Approach and Improved Disclosure

SFAS 141 and 142 definitely provided clear guidance for the treatment of intangible assets acquired as the result of a business combination. These standards also provided rules for the immediate and ongoing valuation, and impairment testing, of these important assets.

To assist in this task, SFAS 141 and 142 establish specific guidelines for disclosure. With the justifiable aim of assisting the users of this vital information to make appropriate economic decisions on the basis of what they are presented with in financial statements, these standards specify what supporting information and detail entities must provide in support of intangible asset valuations.

In requiring, at B.195, B.196 and B.197, that enterprise management provide additional information regarding:

- a) the allocation of the purchase price to individual assets acquired and liabilities assumed
- b) the specific nature and amount of intangible assets acquired
- c) the amount of goodwill recognised

- d) the tabular disclosure of the fair values allocated to each of the major balance sheet captions; and
- e) the related carrying amounts as recognised in the statement of financial position of the acquired entity immediately before acquisition ³⁰⁴.

SFAS 141 requires a much greater degree of disclosure than was previously the case under such standards as APB Opinion 16 *Business Combinations*.

In relation to my TEV approach, these disclosure standards are useful and enabling. Given that the TEV approach relies on valuation criteria-validated inputs to support what are, after all, enterprise-provided, and unobservable, inputs, the high degree of disclosure and transparency standards imposed under SFAS 141 gives some comfort to would-be users of the information provided through the TEV approach that it sufficiently reliable to use.

Extract Three from IP Academy (Singapore) Research Project, A Study of Intangible Asset Valuation in Singapore: Issues and Opportunities for Singapore's Businesses ³⁰⁵

THE TREND IS TOWARD MORE REGULATED PROFESSIONAL VALUATION SERVICES

³⁰⁴ See SFAS No. 141 (2001); pp.90-91.

³⁰⁵ See Sanders and Smith (2008); pp.37-38.

Another issue emerged that had some influence on recent accounting pronouncements. The SEC was responding to concerns about auditor independence. Many auditing firms, with the then Big Five in the van, had developed extensive consulting practices which offered a wide range of service to clients in addition to the audit function. One of the policy goals of the SEC is to protect "...the millions of people who invest their savings in our securities markets in reliance on financial statements that are prepared by public companies and other issuers and that, as required by Congress, are audited by independent auditors."³⁰⁶ In the pursuit of this goal, the SEC's concern about auditor independence stemmed from the possibility that an auditor might be influenced by the fact that significant non-audit services were being provided to the client and that this might impair the auditor's independence.

In an agreement between the SEC and the American Institute of Certified Public Accountants ("AICPA"), an Independence Standards Board ("ISB") was formed in 1997 to initiate research and develop standards and solicit public views relative to auditor independence issues. The ISB was disbanded in 2001, but many of its findings were incorporated into the final SEC auditor independence requirements.

In September 1999, the ISB issued a Discussion Memorandum concerning appraisal and valuation services. This was prompted in part by some specific valuation concerns:

"Recently, the SEC Staff has expressed independence concerns regarding auditor valuations of "in-process research and development costs," as part of an auditor-

³⁰⁶ See Sanders and Smith (2008); p.37 quoting Securities and Exchange Commission, Final Rule: Revision of the Commission's Auditor Independence Requirements, Executive Summary, p. 2.

assisted allocation of the purchase price of an acquired business to its individual assets and liabilities. This allocation assistance has historically been permitted, but the significance of the in-process R&D valuations to the financial statements of some companies has caused the Staff to question whether auditors should perform them for audit clients.”³⁰⁷.

To illuminate this statement, assume a business acquisition in which the target company is a early stage business or an early stage division or product line of a mature company. One would expect that such an entity would probably have made a significant investment in the development of technology or software, for example, which was intended to form the basis for some new product or service in the future. At the time of acquisition the economic outcome of that investment in research and development is largely unknown. It is also reasonable to assume that the acquiring company would agree to a purchase price of the entity which would compensate the existing owners in whole, or in part, for that investment in research and development. In fact, in a high technology or e-commerce business, it would not be at all surprising to discover that a high percentage of the total purchase price was so identified.

Accounting rules specified that the amount of purchase price allocated to the in-process R&D were to be immediately expensed by the acquiring company. The result was that this portion of the purchase price did not appear on the balance of the acquiring company and there was no ongoing amortization of that amount as a result.

³⁰⁸. If the research and development turned out to be successful, the acquiring

³⁰⁷ See Sanders and Smith (2008); p.37 quoting Independence Standards Board, Discussion Memorandum (DM 99-3) – Appraisal and Valuation Services, paragraph 5.

³⁰⁸ See Sanders and Smith (2008); p.38 quoting Under previous accounting rules, the amount of purchase price allocated to unidentified intangible assets was lumped together with goodwill and amortized over a period not exceed 40 years. This amortization reduced

company would have purchased a valuable business with very little investment shown on its own balance sheet.³⁰⁹

The valuation of in-process research and development can have a very significant impact on the future financial results of operation of the acquiring company. The concern of the SEC was that when the acquiring company's auditors were performing this valuation, they were, in effect, auditing their own work in a situation where there was considerable impact on future financial statements:

“For example, where a company acquires another company with large, on-going in-process research and development projects, the acquiring company will need to decide how much of the purchase price to allocate to those projects. This may affect in turn the amount charge against earnings in the current year as in-process research and development expense, and the amount to be classified as goodwill and amortized against future years' earnings. Any such allocations later will be reviewed in the course of the audit, leading the firm to audit its own work.”³¹⁰

As a result of all this, while auditors can continue to perform valuations for their clients under certain circumstances, the SEC now restricts auditor valuations “where it is reasonably likely that the results of any valuation or appraisal, individually or in the aggregate, would be material to the financial statements, or where the results will be

reported earnings. Therefore business managers were considerably motivated to maximize the amount of purchase price allocated to in-process R&D.

³⁰⁹ See Sanders and Smith (2008); p.38 quoting “Statement of Financial Accounting Standards No. 142,” Financial Accounting Standards Board, footnote 8 on page 4, “Statement 2 and Interpretation 4 require amounts assigned to acquired intangible assets that are to be used in a particular research and development project and that *have no alternative future use* to be charged to expense at the acquisition date.”

³¹⁰ See Sanders and Smith (2008); p.38 quoting Ibid. SEC Final Rule, page 26.

audited by the accountant.”³¹¹. This prohibition specifically includes valuations that serve as the basis for allocations of purchase price that are the focus of SFAS 141 and SFAS 142.

We have already noted the existence of the Appraisal Foundation in the U.S. We also note the emergence of the International Valuation Standards Committee that has published the seventh edition of its Standards, as of 2005. Those Standards include general valuation principles, international valuation standards, and Guidance Notes on the valuation of intangible assets. The Singapore Institute of Surveyors and Valuers is a member organization of the IVSC. Nearly 50 other national organizations are also members or participants. The IVSC clearly recognizes that its efforts go hand in glove with the efforts of the IASB in developing IFRSs.

Comments:

The TEV Approach and Improved Valuation Standards

The TEV approach I’ve outlined would benefit from the trend towards insistence on a more broad-based, and professional, level of conduct by intangible asset valuers and appraisers. As new standards introduce greater flexibility and scope for recognising increasingly diverse and complex valuations, there is immediate market pressure on valuers and appraisers to do the same.

³¹¹ See Sanders and Smith (2008); p.38 quoting Securities and Exchange Commission, Current Accounting and Disclosure Issues, Division of Corporation Finance, August 31, 2001, page 3.

While a focus on more than the prevailing cost, income and market-based approaches will represent, in the short term, a challenge for many valuers and appraisers, the insistence on standards will drive weaker service providers out of the market, while accreditation against these higher standards for those continuing to practice will ensure a more consistent and recognised standard of intangible asset valuation can be accessed by clients. The accreditation and more professional training and development of an increasingly specialist class of intangible asset valuers and appraisers was one of the main recommendations of the research project final report that Gordon Smith and I put forward.

The TEV approach and process, as outlined, will assist valuers. If valuers are obliged to evaluate management representations of intangible asset value, in the absence of observable market information, a consistent and rich source of information, validated against a comprehensive valuation criteria would be invaluable.

Extract Four from IP Academy (Singapore) Research Project, A Study of Intangible Asset Valuation in Singapore: Issues and Opportunities for Singapore's Businesses³¹²

THE TREND IS TOWARD MORE VALUATION COMPLEXITY

As more types of assets and liabilities become subject to valuation, the professional skills of appraisers worldwide will have to be upgraded. Similarly, the professional skill of the auditors who sign off on value opinions. This is already evident in the U.S.

³¹² See Sanders and Smith (2008); pp.39-40.

The appraisal profession is becoming fragmented into specialized practices in order to address the complexities that exist even now. Accounting firms now have specialized groups that support the audit function by vetting appraisals of others.

The new shape of these relationships has been described as follows:

“Measuring assets after a business combination to state their fair values on the balance sheet is a complex process. Consequently, the acquiring entity often retains valuation specialists to assist management with the estimate of the fair value of each asset, particularly intangible assets, for the allocation of purchase price....”

The changes brought by these new standards [141 & 142] have affected the relationships between company’s management, the company’s auditors, and outside valuation specialists. Even with an outside valuation specialist, management is still responsible for the fair value measurements in its financial statements³¹³. These responsibilities even extend to the data used in the valuation, the assumptions used by the specialist, and the valuation methods used to determine fair value.

³¹³ The concept of ‘fair value’ is well supported by, and consistent with, the long-established ‘true and fair view’ standard, which obliges auditors to form an opinion as to whether the accounts they audit show a ‘true and fair view’ of the subject enterprise’s affairs. This ‘true and fair’ value standard is well illustrated in *Tarling vs Public Prosecutor [1981] Part 4 Case 6 [CA, S’pore]*, at 22. when the Singapore Court of Appeal upheld the six month sentence imposed on Tarling who, as a director of Haw Par Brothers International Ltd, failed, in a profit and loss account produced for the financial year 1972, to “give a true and fair view of the profit of the group as shown in the accounting and other records of the group because of the non-disclosure in the profit and loss account of the realised profits made by Grey prior to its sale to Legis, the trustee of MUT and of particulars of that sale”.

Previously, auditors relied on the work product of the valuation specialist based upon the specialist's qualifications and experience. While these are obviously still important, auditors and valuation specialists are now held to a higher standard to test the reasonableness of management's assumptions behind the valuation. One such test is to perform sensitivity analysis on management's assumptions that underly the valuation. Additionally, auditors should understand the methods and assumptions used by valuation specialists and not just rely upon their conclusions.

Auditing fair value measurements requires a new level of cooperation between auditors, management, and valuation specialists. Although a valuation specialist is retained by management, the auditor should be comfortable with the valuation specialist selected before the engagement begins.³¹⁴

SFAS 141 is already being revised as SFAS 141-R, and is a joint project of IASB and FASB as they follow their strategy to converge. Valuation / accounting issues now include:

- Balance sheet *Liabilities* in addition to *Assets*
- Research & development assets
- Reacquired rights
- Assets held for sale
- Operating leases

³¹⁴ See Sanders and Smith (2008); p.39 quoting Mark L. Zyla, "Auditing Fair Value Measures", The Practicing CPA, October 2003.

Considerable discussion is now going on relative to the proper definition of “fair value” and the means used to measure it (SFAS 157).

As the valuation of intangible assets becomes a more complex and demanding endeavour, so does the measurement of “impairment” that has become a keystone in the rendering of financial statements.

Comments:

The TEV Approach and Accommodating Valuation Complexity

A key advantage of the TEV approach is its ability to be applied to any intangible asset valuation. In fielding, and filtering, diverse inputs against a comprehensive set of valuation criteria, the TEV approach treats management representations, estimates and assumptions in a consistent and reliable manner. Indeed the more complex and notional the valuation proposition, the more useful the TEV approach, in its neutral and validating role, would be.

In relation to convergence projects (such as SFAS 141-R) the TEV approach would prove especially useful. Objectives, such as improved disclosure, would be well-served by an approach that obliges enterprises to filter value representations through a comprehensive set of valuation criteria that not only encourages wide disclosure but validates the disclosed information as well.

Embracing fully the fair value standard, measurement guidance and fair value hierarchy outlined in SFAS 157, the TEV approach is deployed to validate, rather than restrict or preclude, enterprise fair value positions.

The TEV approach would also simplify, or at least standardise, the task of auditors required to sign off on unobservable, and assumption-based Level 3 management representations of what they regard as 'fair' intangible asset value.

Issued by the AICPA (American Institute of Certified Public Accountants) Auditing Standards Board, SAS 73 – *Using the Work of a Specialist*, seeks to provide guidance to auditors reviewing the work of specialists engaged by client enterprises to perform audits on their behalf.

These audits would be much more reliable, and consistent, and by extension easier for auditors to sign off on, if they were based on a well-established set of valuation criteria, and fair value standards, such as is the case with the TEV approach I have proposed.

The valuation criteria-supported TEV approach, and process, is very amenable to the three situations in which SAS 73 applies; namely when:

- a) Management engages or employs a specialist and the auditor uses that specialist's work as evidential matter in performing substantive tests to evaluate material financial statement assertions.

- b) Management engages a specialist employed by the auditor's firm to provide advisory services and the auditor uses that specialist's work as evidential matter in performing substantive tests to evaluate material financial statement assertions
- c) The auditor engages engages a specialist and uses that specialist's work as evidential matter in performing substantive tests to evaluate material financial statement assertions ³¹⁵.

The TEV approach, as outlined, would have a useful application in each of these three specified instances. It would act as a filter for validating, against the supporting set of valuation criteria, material information. Auditors could derive some comfort from the number and range of criteria applied, and the support that the performance of management representations of intangible asset fair value against such a comprehensive and consistent set of criteria would provide in relation to the information, and positions, that they are called on to assess.

The AICPA-produced *Auditing for Fair Value Measurements and Disclosures: A Toolkit for Auditors*, outlines, in its introduction, some of the key responsibilities that auditor's have to comply with when auditing a financial statement. Chief among these is the one that compels an auditor to “ obtain sufficient competent audit evidence to provide reasonable assurance that the fair value measurements relating to the assets acquired in the business combination and the related disclosures in the financial statements are in conformity with generally accepted accounting principles (GAAP)

³¹⁶.

³¹⁵ See the US Statement on Auditing Standards (SAS) 73: Using the Work of A Specialist; p.1.

³¹⁶ See AICPA (2002); p.1.

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As I've noted, and outlined in detail in Chapter 4, the treatment of acquired intangible assets is relatively well-developed area of intangible asset recognition and valuation, thanks to such standards as SFAS 141. Given that I have recommended that the annual revaluation of acquired intangible assets obligations be used as a trigger for a general review and revaluation of all reportable intangible assets it is worthwhile observing what sort of standards apply to this 'best practice' area of intangible asset treatment. This will enable me to determine how well the TEV approach meets the requirements for acquired intangible assets, and by extension, the whole spectrum of enterprise intangible assets that I'm suggesting should be availed of the same process-defined revaluation treatment.

One useful rule attending the fair valuation of SFAS 141-related intangible assets acquired as part of a business combination is the already discussed guidance that in the absence of "observable market prices, GAAP requires fair value be based on the best information available in the circumstances"³¹⁷ even if this is to be drawn from unobservable management assumptions and estimates of what that fair value is. This fair value hierarchy-derived standard, and its creation of theoretical scope for incorporating management representation and assumptions into valuations, is an essential basis upon which such management input-validating approaches as my TEV approach can operate.

And a capacity for management to test and validate their fair value measurements is important when, as outlined in SAS No.101, "management is responsible for making

³¹⁷ See AICPA (2002); p.2.

the fair value and disclosures included in the financial statements”³¹⁸; a serious obligation that the TEV approach is designed to meet at the enterprise-management level.

III. A Roadmap for Change

Many of the findings and recommendations included in the Final Report of the IP Academy (Singapore) research project *A Study of Intangible Asset Valuation in Singapore: Issues and Opportunities for Singapore’s Businesses* were directly relevant to my TEV approach and the overall objective of establishing a genuinely fair value-based approach to recognising enterprise intangible asset value in particular.

Extract Five from IP Academy (Singapore) Research Project, A Study of Intangible Asset Valuation in Singapore: Issues and Opportunities for Singapore’s Businesses³¹⁹

SUMMARY of FINDINGS

Background

- It is clear that the desire for financial statements with extensive disclosure about intangible assets has been building for some time.
- Worldwide interest, if not strong concern, about the valuation of intangibles has been growing as the character of international business changes.

³¹⁸ See AICPA (2002); p.2.

³¹⁹ See Sanders and Smith (2008); pp.41-42.

The Current View

- Current-day financial reporting standards, as they relate to the need to appraise intangibles, are high.
- The survival of Singapore's businesses depends on free and economical access to world financial markets. Internationally acceptable financial statements are the passport to those markets.

The Future

- The trend is toward universal accounting and financial reporting standards. Singapore's business and professional communities must participate in this evolution.
- The trend is toward more disclosure. Singapore's business community must keep abreast of this and have a voice in how far it is willing to go in this direction.
- The trend is toward more regulated professional services.
- The trend is toward more valuation specialization and complexity.

Recommendations

- Promote the development of professional expertise in the valuation of intangible assets and intellectual property as well as business enterprises and other business assets
- Promote the formation of a professional organization to provide training, certification and enforce professional competency and ethics. Promote this Singapore-based organization as the standard-setter for the region. Professional valuation and accounting standards bodies and potentially valuation-relevant associations (such as

quantity surveyors) should be involved in the planning and establishment of such a general valuation organisation.

- Recognise, and enforce, an SEC-like split between ‘audit’ and ‘appraisal/valuation’ services in Singapore. This should be reflected in regulatory and professional body standards. There should be a “healthy scepticism” between the auditing and valuation function.
- Develop a supporting independent professional service capability to specifically support the intangible asset valuation and management needs of Singaporean enterprise managers identified as lying, currently unsupported, ‘in between’ their audit and erstwhile valuation and appraisal activities

Comments:

The TEV Approach and Recommendations for Change

In relation to the vision of the future, and suggested future requirements, provided in the summary and recommendations section of the IP Academy (Singapore) *A Study of Intangible Asset Valuation in Singapore: Issues and Threats for Singapore’s Businesses* Final Report, I believe that the TEV approach could be applied to useful effect, in that it would support:

- a) a universal approach to financial reporting, and a fair value-based approach to intangible asset valuation in particular. Supported by a single set of valuation criteria,

reflective of key fair value standards such as those embodied in SFAS 157, the TEV approach is compatible with the single set of international accounting standards now being developed and implemented.

- b) increasing disclosure. Based on a comprehensive set of valuation criteria, the TEV approach not only requires an extensive disclosure of related information, but also validates this as part of its information treatment process.
- c) A more professional and consistent valuation and appraisal approach. Specialists adopting a TEV approach would have the information necessary to support more complex and diverse valuation scenarios.

IV. TEV Related Applications and Opportunities

I have already designed, and provide to clients, primarily in Singapore and Australia, a suite of Intangible Asset Services that would be very compatible with their deployment of the TEV approach.

Intangible Asset Services Suite

The Intangible Asset Services Suite consists of:

- a) An intangible asset diagnostic process
- b) An intangible asset review and commercialisation review offering
- c) An intangible asset valuation service

These three services essentially represent a complete intangible asset management process, taking enterprises from the identification of intangible assets through to their commercialisation and valuation. Of greater relevance to this research is the third, valuation, service.

With access to specialist databases of intangible asset comparable transaction information and royalty rates data, and specific valuation tools (such as the BrandValue trade mark valuation tool evaluated later in this chapter at V. below), I am able to assist enterprise clients to assert and defend supported fair value positions. A Singaporean client was able to achieve auditor sign off on the basis of an IP Audit I conducted in which I calculated a value, based on the commercial replacement cost, for a collection of audio visual rights to use; rights that had sat, unvalued and unrecognised, in the enterprise's intangible asset repository.

TEV Approach Software Solution

I believe that the TEV approach, and the set of valuation criteria that support it, together constitute the business rules and elements necessary to develop an enterprise-targeted intangible asset management and valuation software solution.

An automated, TEV approach-compliant, software tool, the product would guide enterprises the recognition, and fair value treatment, of their reportable intangible assets. Deployed in harmony with the enterprise financial reporting timeframe and process, the TEV software would validate intangible asset inputs and information against the valuation criteria I outlined in Chapter 6.

Incorporating checklists, process guides and standards information in standalone modules, the TEV software could operate as a stand alone enterprise applications or as a module for an existing asset or knowledge management system.

Targeted vendors will be approached, as a future follow up to this research activity, in the next six to twelve months to support the adoption of the TEV approach.

Intangible Asset Value Fund

A future application, consistent with my IP Services suite, and maximising the enterprise valuation-validating capability of the TEV approach, would be an Intangible Asset Value Fund.

Essentially my Intangible Asset Service suite diagnostic, review and valuation elements would be applied to candidate enterprises, with a view to identifying those with significant under-representation, or undervaluation, of existing or emerging intangible assets in their financial statements.

The IP Fund would purchase these enterprises, or strategic stakes in them, with a view to deriving a specific return on the unlocked intangible asset value they represent.

Intense intangible asset management, and valuation, activity would be undertaken, post acquisition, to identify, and assert, fair value for the undervalued intangible assets identified at the initial diagnostic stage.

With the TEV approach applied to validate these fair value positions, the ‘treated’ enterprises, or stakes, with greatly enhanced intangible asset valuations, would be sold back into a market that would accept a higher price for these; a price that would reflect a premium for the intangible asset enhancement undertaken.

With 80% or more of an enterprise’s value being related to its intangible assets, there is obviously enormous scope to engage in this type of intangible asset value enhancement. The TEV-related Intangible Asset Value fund could represent an excellent intangible asset exploitation, and diversified investment, option.

V. Other Emerging Tools and Applications

IP-Valuation GmbH Trade Mark Valuation: A Case Study

BrandValue, a trade mark valuation solution that is already available to enterprise clients, was selected for case study purposes. By analysing the business inputs that enterprises are required to provide to use the BrandValue trade mark valuation tool and process, I aim to examine how useful an information-validating role the TEV-supporting valuation criteria I have outlined can play.

I have attached, as Appendix 5, an outline of IP-Valuation GmbH profile, and a description of the BrandValue solution.

IP-Valuation’s BrandValue Application: Analysis Against Chapter 6 Valuation Criteria

To demonstrate the consistency of the TEV Approach with market-ready applications such as IP-Valuation's BrandValue solution, I will now assess the BrandValue solution against the TEV Approach-supporting valuation criteria I outlined in Chapter 6, and demonstrate their compatibility.

I believe that the business information inputs that the BrandValue application requires to establish the level of trade mark-related sales, and, ultimately, trade mark value, run against the valuation criteria, will provide a useful illustration of the general information validation function that these criteria can serve.

CLUSTER 1: RECOGNISABILITY

Financially Recognisable:

The extent to which the intangible trade mark assets subject to BrandValue evaluation satisfy the financial recognition criteria:

- (a) it is probable that any future economic benefit associated with the item will flow to or from the entity; and
- (b) the item has a cost or value that can be measured reliably (see footnote 256)

will provide vital support for any valuation positions reached in relation to them.

Legal-Contractual:

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This is the primary basis upon which an intangible asset can be recognised as an asset recognisable apart from the goodwill of an enterprise. Any enterprise claiming ownership or rights to use the intangible trade mark assets to be subjected to BrandValue evaluation, should also have a firm legal-contractual basis for claiming such rights.

Separable:

Failing the identification of a firm legal-contractual basis for recognising the intangible trade mark assets that are to be subjected to BrandValue evaluation, the default separability test can be applied. If the subject trade mark assets are capable of being separated or divided from the enterprise and bought, sold, transferred, licensed, rented or exchanged, they can be separated from the other assets of the enterprise, and recognised, even if there is no strict contractual or legal basis for this separation to be recognised.

Certain:

The certainty criteria can be satisfied by the intangible trade mark assets to be subjected to BrandValue evaluation when these assets have a life, or existence, of their own. This criteria may be satisfied in situations where an intangible assets future economic benefits are capable of being sold, licensed, assigned, and used to achieve a monetary or other return for the enterprise.

CLUSTER 2: RELIABILITY

Reliable:

Information about the intangible trade mark assets is reliable when it is free from material error and bias, and represents the situation or position that it purports to represent, or what a user of the information would reasonably expect the information to represent. Information, including but not limited to financial information provided about the subject intangible trade mark assets is biased, and not reliable, if it is intended by the enterprise providing the information, in the context of a BrandValue exercise for example, to reach a position (such as a predetermined valuation position, for example) determined by the provider.

Neutral:

Neutrality would be demonstrated in relation to the intangible trade mark assets to be subject to BrandValue evaluation by the extent to which there is correspondence between a measure or description and the phenomenon or characteristic of an intangible asset that it purports to represent; in this case the fair value of the intangible asset.

Comparable:

Information about the intangible trade mark assets would be comparable if it was the same as might apply to similar contemplated transactions and, to the extent possible, different, though comparable, intangible trade mark assets. The accounting standards,

positions, measurements, and general information relied on in providing the information must be fully disclosed, consistent and reasonable.

Controlled:

An enterprise can be said to control the trade mark assets being subject to a BrandValue evaluation if it has the ability or power to obtain the future economic benefits that can be reasonably expected to flow from a particular intangible asset and the related ability to restrict other parties from obtaining those benefits.

CLUSTER 3: REPORTABILITY

Reportable:

Inputs provided about the intangible trade mark assets during a BrandValue evaluation is reportable, in financial statements, if it satisfies the fair value hierarchy outlined in SFAS 157 – *Fair Value Measurement* and the associated international standards that the IASB will be developing, based on this, as a declared convergence project. While observable inputs (such as those containing market data and relating to demonstrably comparable transactions) are preferred, unobservable management assumptions may be included, and reported, in the absence of other these other (Level 1 and 2) inputs, but must be necessary to achieve fair value-premised outcomes

Relevant:

Inputs provided by an enterprise are relevant when they influences the economic decisions made by its users by facilitating their evaluation of past, present, and future events. It might also, in fulfilling this function, support the confirmation, or correction, of past evaluations.

Codifiable:

Information provided in support of a BrandValue evaluation would be codifiable if it can be documented, or formally expressed, in a way that means it can be communicated to, and understood, accurately, by third parties. This documentable information must be sufficiently publicly available to be accessed and used by those relying on that information to make decisions

Understandable:

Any information relating to intangible trade mark assets should be comprehensible to users with a reasonable knowledge of accounting, and business and economic activity and/or a willingness to study the information and apply reasonable due diligence to this activity

CLUSTER 4: EXTENDABILITY

Extendable:

The useful economic life of an intangible asset is effectively extendable for as long as the asset is able, or expected, to generate future economic benefits. This would be important in the context of a BrandValue evaluation as the trade mark-related sales component would have to consider the span over which relevant future economic benefits would be derived.

Useful Life:

An enterprise may regard an intangible trade mark asset as having an indefinite useful life when there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows for the enterprise. The useful life of an intangible asset that arises from contractual or other legal rights shall not exceed the period of the contractual or legal rights. This would be important to reflect accurately in the context of a BrandValue evaluation.

Legal-Contractual:

The renewability extended by the legal provisions and legal-contractual rights relating to the intangible trade mark asset must be supportable for extendability of the useful life of that asset to be contemplated in the context of a BrandValue evaluation.

Replicable:

Where an intangible asset, or elements of one, can be copied, reproduced, duplicated, or its value-determining features or effects repeated it can be regarded as replicable.

CLUSTER 5: REVENUE

Revenue:

This is a criteria that is extremely relevant to a BrandValue evaluation. Revenue, for the subject trade mark asset, should be measured at the fair value of the consideration received or receivable. The fair value of the consideration received or receivable excludes the amount of any trade discounts and volume rebates allowed by the entity. An entity shall include in revenue only the gross inflows of economic benefits received and receivable by the entity on its own account. An entity shall exclude from revenue all amounts collected on behalf of third parties such as sales taxes, goods and services taxes and value added taxes. In an agency relationship, an entity shall include in revenue only the amount of commission received. These are all relevant considerations for calculating revenue received from a owned, or controlled, trade mark.

Measurable:

Information is measurable when it contains a relevant attribute, or value, that is able to be measured with sufficient reliability to satisfy a reasonable user. In the context of a BrandValue evaluation, the measurability of financial inputs used to calculate trade mark-related sales would need to satisfy this criteria.

Exchangeable:

Where an intangible asset may be acquired in exchange for a non-monetary asset or assets, or a combination of monetary and non-monetary assets. An entity shall measure the cost of an intangible trade mark asset subjected to BrandValue evaluation at fair value unless (a) the exchange transaction lacks commercial substance or (b) the fair value of neither the asset received nor the asset given up is reliably measurable

Residual Value:

The residual value of an intangible asset with a finite life is zero unless:

- (a) there is a commitment by a third party to purchase the asset at the end of its useful life; or
- (b) there is an active market for the asset and:
 - (i) residual value can be determined by reference to that market; and
 - (iii) it is probable that such a market will exist at the end of the asset's useful life

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In such a way can the valuation criteria be seen to operate compatibly with the BrandValue application; the specific financial and sales inputs sought to apply BrandValue could be validated against the TEV-supporting criteria, as I have demonstrated above.

The trade mark-related sales that BrandValue seeks to identify in its trade mark valuation process is exactly the sort of revenue input that the TEV approach would look to validate in support of an assessment of the reportable fair value of that particular intangible asset.

VI. Future Activity: Developing Enterprise Capability and Tools

Up to this point we have examined some particular possible applications of the new TEV ‘applied value’ approach, and explored a number of future trends and opportunities relevant to these.

Given that the TEV approach is an enterprise-level method for asserting intangible asset fair value, any effort to encourage enterprises to adopt it would require a commitment to ensure that adequate implementation support, in the form of training and development and process support (such as checklists) is provided.

The field research I conducted in support of the already-mentioned IP Academy (Singapore) research project I co-authored with Gordon Smith, underlines the need for such assistance, awareness raising and process support. Enterprise managers unanimously expressed concern about their ability to assert and defend fair value positions, based on their own assumptions and representations.

As indications of the kind of simple checklists that might be provided to enterprises to support the adoption of a fair value (such as TEV) approach, I developed two examples. I include these here for reference:

Examples of Illustrative Checklists

CHECKLIST 1: CHECKLIST FOR ENTERPRISE MANAGERS

- 1) Include intangible assets, and reflect their value, in financial statements (on the basis of separability and legal contractual tests)
- 2) Identify Level 1 inputs
- 3) Identify Level 2 inputs
- 4) Utilise Level 3 inputs (own assumptions) where these are the best information available and necessary to estimate future benefits
- 5) Utilise available valuation criteria to support assumptions and make valid management representations
- 6) Annually revalue acquired intangible assets as required for IFRS compliance
- 7) Annually test acquired intangible assets for impairment
- 8) Make appropriate allocations, for example for acquired intangible assets, such as licenses
- 9) Ensure regular IP Audit and Analysis activity is undertaken to support enterprise IP Management and, specifically, the proper financial reporting and treatment of enterprise intangible assets in financial statements
- 10) Repeat cycle and imbed as part of financial reporting and statement activity. Expand steps 4) through 8) to encompass all reportable intangible assets

CHECKLIST 2: TARGETTED TRAINING REQUIREMENTS

This outlines the types of enterprise-targeted training that would be useful for enterprise managers seeking to adopt a fair value approach to recognising and valuing their intangible assets.

- 1) Introduction to Intangible Asset Management and the Enterprise
- 2) Identifying and Reporting Enterprise Intangible Asset Value
- 3) Valuation and Appraisal of Enterprise Intangible Assets
- 4) Auditing Enterprise Intangible Assets: Successful Compliance Strategies
- 5) Enterprise Intangible Assets and Financial Statements: Making Defendable Management Representations
- 6) Making Allocations for Acquired Intangible Assets
- 7) Testing Enterprise Intangible Assets for Impairment
- 8) Annual Revaluation of Enterprise Intangible Assets: Obligations and Opportunities
- 9) Intangible Asset ROI: Commercialising Enterprise Intangible Assets
- 10) Leveraging Enterprise Intangible Assets: Securitisation and Financial Products

VII. Conclusion

Answering The Enterprise Call

There is a clear requirement to improve the scope for enterprises to assert and defend fair value positions for their expensive to develop and maintain intangible assets. A genuine fair value approach is not supported by the prevailing cost, income and market-based approaches which tend to deliver inadequate valuation outcomes, based

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on a risk-reduced appreciation of future economic benefits that might reasonably be expected to flow from them.

The single set of international accounting standards, and the legal framework within which they operate, have developed to the point where enterprises can apply the TEV approach I have developed. This approach, premised on these positive standards, a supportive legal framework, and the fair value hierarchy asserted in SFAS 157, the global fair value best practice standard, allows enterprises to validate fair value representations against a comprehensive set of valuation criteria, and assert this information in their financial statements.

The applications and tools outlined in this chapter are offered against certain discernable trends that will shape the future of intangible asset treatment and valuation. The TEV model, consistent with these, is designed to be applied to assert and defend more adequate and reliable intangible asset valuations, and deliver on a key objective of the modern enterprise.

Chapter 9 Conclusion

I. Introduction

In the last chapter I outlined some possible applications of the TEV approach, in relation to current, and future, intangible asset valuation trends. I also undertook to examine the compatibility of the TEV approach with some existing valuation applications, such as the IP-Valuation GmbH trade mark valuation software solution, with a view to asserting its relevance, and readiness for use by enterprises. Identifying and exploiting the extent to which the TEV approach can meet, in a compliant and reliable fashion, the widest range of enterprise intangible asset valuation requirements will help establish it as a suitable method for asserting and defending the fair value of these key enterprise assets.

In this, final, chapter I will restate the objectives of this research undertaking, and summarise the structure and elements of my dissertation.

II. Summary

After an introduction to the concepts of intangible assets and their great, and growing, significance to the modern enterprise in Chapter 1, the problem of inadequacy that limits the usefulness of the prevailing cost, income and market-based valuation approaches to enterprise intangible asset valuation was outlined and examined in Chapter 2.

An inadequate recognition of the intangible assets that constitute the majority of the assets held by a business is unacceptable. Given the enormous investments required to develop, and maintain, an enterprise intangible asset portfolio, the inability to adequately recognise and practically assert a fair value for these is a burden that enterprises cannot sustain. Central to the problem of inadequacy that this represents is the unsatisfactory operation of goodwill, the traditional default repository for enterprise intangible asset value, as a means for recognising and asserting the reportable value of what is now, for almost all enterprises, the most significant, and growing, component of their asset base.

The outlining of my TEV approach, and the offering of it as an acceptable alternative valuation approach (consistent with international accounting standards and the legal framework within which these operate) that will deliver fair-value outcomes for enterprise users were primary objectives of this research. Overcoming, essentially, the problem of inadequacy that restricts the usefulness of the prevailing valuation approaches, the TEV approach (demonstrably consistent with developing, and positive, supporting legal and accounting standards and national systems increasingly aligned with them) was put forward to solve the core problem of inadequate intangible asset valuation. As well as representing a reliable valuation solution, the TEV approach also had to assist enterprises in meeting the financial reporting obligations enterprises they have under international accounting standards.

To illustrate the problem, and consequences, of intangible asset valuation inadequacy outlined in Chapter 2, Chapter 3 was concerned with examining a case study of a type of enterprise behaviour (specifically MNE international transfer pricing) that could

reasonably be linked to it. The advantages derived from international transfer pricing are, at least, a theoretical substitute for the business benefits that should, but are not, extracted from the same intangible assets via a genuinely fair value-based, and adequate, valuation approach.

When enterprises are unable to recognise a reasonable level of expected future economic benefits against their intangible assets in the context of adequate valuations for these in their financial statements they will, inevitably, look to derive returns for these in other ways. While illegal conduct is not justified by this, it is easy enough to see how the fundamental need for enterprises to demonstrate a return on all investments, including those in intangible assets, will cause them to consider such strategies as the international transfer pricing of intangible assets.

That enterprises will persist with such behaviour (even in the face of legal, regulatory, and particularly tax authority, efforts to discourage, and even punish, certain types of intangible asset transfer pricing) demonstrates both the fundamental need for enterprises to demonstrate profitable returns on investment, and the inadequacy of the current prevailing valuation approaches that consistently fail to deliver such returns in relation to enterprise investment in their key intangible asset portfolios.

To resolve the problem of inadequacy and allow enterprises to reflect adequate intangible asset valuations in their asset registers, income statements and financial statements, an enterprise level perspective, and approach, is required.

To support the later study into the extent to which my set of valuation criteria (Chapter 6) and TEV approach (Chapter 7) would be able to resolve the problem of inadequacy, I undertook, in Chapter 4, to examine the set of international accounting standards now being developed and implemented to improve the situation. I undertook to both establish the valuation problem, or problems, that the standards were being developed to address, and identify the extent to which this new and improved base of standards could be applied to resolve them.

I found that the emerging single set of international accounting standards, in their focus on encouraging a fair value approach to intangible asset valuation, were being developed on a the basis of a recognition, and desire to address, the same problem of inadequacy that I had identified.

In no small part thanks to the efforts of such bodies as the IASB and FASB (best illustrated in several joint, convergence, projects in such key areas as fair value measurement)³²⁰ I found that the international accounting standards establish useful principles and concepts for intangible asset treatment and valuation. These concepts, such as fair value, intangible asset useful lives, and the scope to incorporate management representations of value in the absence of observable market inputs, are consistent with the TEV approach outlined in this research.

A key enterprise-enabling improvement was allowing the use of management representations and assumptions in the place of observable market inputs when the latter were not available, as is often the case in relation to intangible asset transactions.

³²⁰ SFAS No. 157 FASB has been adopted by IASB as reflecting international fair value measurement best practice.

SFAS No. 157 – *Fair Value Measurement*, while still prioritising observable market inputs, seemed to acknowledge that for many unique intangible asset transactions such information is often difficult, if not impossible, to produce, making enterprise-produced assumptions important to include. This fair value hierarchy, as much as any other single improvement, protected scope for enterprises to assert and defend their own estimates of fair value for their key intangible assets.

However positive the emerging set of international accounting standards may be, though, standards, on their own, are not enough. Standards need a supportive legal framework within which to operate. Chapter 5 looked to investigate, and establish the existence of, a legal framework sufficient to support the international accounting standards in their stated objective of improving intangible asset recognition and valuation.

Specific instances of the effective alignment of national laws, and standards, to the set of useful international accounting standards (in Australian and Singapore), and supporting authorities that can be derived from a small, but useful, body of US case law, were identified and examined.

The freeing of expert witness testimony from the restrictive “general acceptance” standard, and improvements to the general admissibility of evidence that Daubert and Kumho achieved, are of key significance. On balance, these improvements ensure that sufficient scope exists for enterprises to introduce any relevant evidence they can in defending, from legal challenge, the fair value assumptions, and positions, they wish to assert. The shift from the Frye Test ‘general acceptance’ standard to a situation in

which courts could admit and review any relevant valuation information, is key to the introduction of new methods and techniques, such as my TEV approach, that are designed to address the problem of inadequacy.

Daubert and Kumho guaranteed, after all, that methods, other than the ‘generally accepted’ but inadequate prevailing cost, income and market-based approaches, could be considered by courts in assessing valuations. In such a way, in the context of this research, could a new approach (such as the TEV approach) that demonstrably complied with the developing set of international accounting standards, and the legal framework in which they operate, be found to be capable of supporting genuinely fair value-premised valuation approaches and endorsed.

To exploit this, enterprises require clear, reliable and testable criteria against which they could support valuation positions; especially those based on assumptions and associated unobservable inputs. The set of thirty valuation criteria, in five clusters, outlined in Chapter 6 were designed to meet this requirement. Allowing enterprises to compile, and provide, valuation supporting information against an aggregated set of intangible asset performance tests, these valuation criteria would act as an essential platform for the TEV approach.

The TEV approach itself, outlined in Chapter 7, treats the total, reportable, enterprise value of intangible asset as consisting of its initially recognised value (IRV) plus its applied, performing, value (AV). This AV can be expressed as a positive value (to accommodate new applications, useful life, revenue and, hence, fair value) or as a negative value (to accommodate the results of impairment testing).

The valuation criteria-supported TEV approach, imbedded in an expanded valuation process developed around the annual impairment testing of acquired intangible assets required under SFAS 141, is designed to support a general revaluation of all enterprise intangible assets in a process-based manner far more likely to deliver adequate, and defensible, fair value outcomes.

In Chapter 8, with a view to future trends, and opportunities, in the area of enterprise intangible asset valuation, I undertook to identify how the TEV approach might be expanded, and what further applications of it might be possible in the developing intangible asset environment.

III. Conclusion

Overall, I contend that the valuation criteria-supported TEV approach that I have outlined is sufficiently consistent with the developing set of international accounting standards, and the legal framework within which these operate, to recommend it for enterprise adoption. The wider legal framework, like the basic legal tests (legal-contractual and separability) that apply to the initial recognition of an intangible asset, ultimately determines how reliable and adequate an intangible asset valuation system will be. Hence, while accounting standards are important, the problem to be resolved is a legal one.

From the core legal-contractual and separability tests for recognising intangible assets that can be identified as distinct from goodwill in an entity, to the role of courts as the

ultimate arbiters of valuations that are challenged, the issue of how reliable valuations can, and need to, be suggests a legal perspective that must be addressed. It is for that reason that this has been approached, despite the high volume and significance of accounting standards, as a legal research activity.

While the TEV approach, and this legal research, then, maintains a useful focus on the set of emerging international accounting standards, these standards must be seen as operating within, and subject to, the overall legal framework that – as we saw in Daubert and Kumho in Chapter 5 – will ultimately determine the parameters of their application in an enterprise intangible asset recognition and valuation context.

The ongoing process of aligning national systems with the international set of accounting standards, which I discussed in Chapter 4, is essentially a legislative, regulatory and legal activity being energetically pursued in the US, Australian and Singaporean jurisdictions we examined. In relation to this wider legal framework, what is occurring is a useful, and necessary consolidation. Just as the five cluster, 30 individual set of valuation criteria outlined in Chapter 6 represented a useful aggregation of many discreet tests, enterprises need a legal framework built around useful accounting standards that can act as an effective platform for more adequate enterprise-level intangible asset valuation.

I suggest that the TEV approach, imbedded in an expanded process for annually reviewing the value of all enterprise intangible assets (and not just acquired intangibles as required under standards such as US SFAS No. 141) will inevitably deliver more adequate valuation outcomes for the owners of these key assets.

Embodying the fair value standard increasingly asserted in relation to enterprise intangible asset treatment and valuation, I contend that the TEV approach is an enterprise-based solution to the problem of inadequacy identified in relation to the prevailing (cost, income and market-based) approaches currently being applied.

Usefully imbedded in the core enterprise financial reporting process, and reflected in financial statements for the benefit of those who will use this information, the TEV approach will therefore deliver to enterprises a vital capability; namely an ability to calculate and exploit the 'Total Enterprise Value' of their enterprise intangible assets. In such a fashion might enterprises themselves resolve the problem of inadequacy that has historically restricted the fair valuation of their most vital, intangible, assets.

As another saw it:

A brand with a future is always regarded as the company's most valuable asset. Most of us recognise this, but we seem to ignore it. The reason is that the official system we live in has not been able to adjust to the change. Other much less important assets have historically received much greater attention, things like property, machinery and technology, assets that are annually audited. So-called human capital is an asset not yet officially valued, but much discussed, and still the value of all assets usually depends more on the strength of the brand as an asset than on anything else. Of course, this will change over time. Auditors will not forever accept auditing a small and less important part of the company, and the legal system will not accept having the dominant part of the company value outside the system, so to speak.

Thomas Gad, author 4-D Branding (2001) ³²¹

³²¹ See Verlinden, Smits, and Lieben (2004); p.3.

GLOSSARY AND INDEX OF TERMS

Arms Length Standard (ALS) – Standard for determining the true taxable income of an MNE. As outlined in Section 1.482-1 (b) (1) US Regulations “in determining the true taxable income of a controlled taxpayer, the standard to be applied in every case is that of the taxpayer dealing at arm’s length with an uncontrolled taxpayer”.

AV (Applied Value) – That component of an intangible assets value, expressed as a negative (impairment or depreciation) or positive (new or additional) value, relative to the initially recognised, or reported, value of the asset.

Discounted Cash Flow (DCF) Analysis – The procedure in which a discount rate is applied to a set of projected income streams and a reversion. The analyst specifies the quantity, variability, timing and duration of the income streams as well as the quantity and timing of the reversion and discounts each to its present value at a specified yield rate. Typically applied to an intangible asset valuation under the income method.

Enterprise – A business firm or venture. An enterprise (or "business") is comprised of all the establishments that operate under the ownership or control of a single organisation. Usually deploying its assets (tangible/monetary, and intangible) in expectation of profit.

Fair Value - The amount for which an asset could be exchanged, or a liability settled, between knowledgeable, willing parties in an arm’s length transaction. Intangible asset fair value should reflect reasonable future economic benefits expected to flow from the asset.

FASB – Financial Accounting Standards Board (US).

IAS – International Accounting Standards.

IASB – International Accounting Standards Board.

IFRS - International Financial Reporting Standards.

Intangible Assets – The non-physical assets of an enterprise. These include all the elements of a business enterprise, lacking physical substance, that exist in addition to its monetary and tangible assets.

International Transfer Pricing – The practice of shifting reportable and taxable income from higher tax jurisdictions to lower tax ones, and exploiting the different tax rates that exist in different jurisdictions. In relation to intangible assets, this can be engaged in by transferring these assets to international subsidiaries, or related entities, in a manner designed to deliver specific advantage to the owner, or controller, of these assets. Such activity is improper if regarded as failing to meet the arms length standard (ALS) defined above.

IRV (Initially Recognised Value) – The initially recognised, or reported, value for an intangible asset.

MNE – Multinational Enterprise.

Pooling-Of-Interests Method – A method of accounting for business combinations that was required to be used in certain circumstances by APB Opinion No. 16, *Business Combinations*. Under the pooling-of-interests method, the carrying amounts of assets and liabilities recognised in the statements of financial position of each combining entity are carried forward to the statement of the financial position of the combined entity. No other assets or liabilities are recognised as a result of the combination, and thus the excess of the purchase price over the book value of the net assets acquired (the purchase premium) is not recognised. The income statement of the combined entity for the year of the combination is presented as if the entities had been combined for the full year; all comparative financial statements are presented as if the entities had previously been combined.

Purchase Method – A method of accounting for a business combination that is now the only method allowed under SFAS 141, *Business Combinations*. Under the purchase method, the acquiring corporation records the net assets acquired at the fair market value of the consideration given. Any excess of the purchase price over the fair market value of the net identifiable assets is recorded as goodwill. The acquiring corporation then records periodic charges to income for the depreciation of the excess price over book value of net identifiable assets. Goodwill is subject to an annual impairment test. Note that goodwill already on the books of the acquired company is not brought forth. Net income of the acquired company is brought forth from the acquisition date to year-end. Direct costs of the purchase reduce the fair value of securities issued. Indirect costs are expensed.

Recycling – a way of presenting results of certain events that is a consequence of using two different sets of recognition criteria to report items of income and expense. When two sets of recognition criteria are used, the effect is that items of income and expense are reported initially in one statement of income and expense (or part thereof) and then, in a subsequent period when the second set of criteria is met, in another statement of income and expense (or part thereof). For example, increases and decreases in the values of available-for-sale securities are recognised outside the income statement initially and then, when the instruments are sold (or in certain other limited circumstances) they are recycled to (and recognised in) the income statement.

SFAS – Statement of Financial Accounting Standards (US).

TEV (Total Enterprise Value) – The total value of an enterprise intangible asset, expressed as a combination of its initially recognised, or reported, value and its applied value (which may be negative or positive, allowing for a TEV that can be greater, or less than, the initially recognised value).

US – United States (of America).

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APPENDIX 1

The following table lists accounting standards made by the Australian Accounting Standards Board (AASB) and details the extent to which the Australian standards have been harmonised with international accounting standards (IAS). The Australian standards listed in the table have the force of law for the purposes of the Corporations Law and must be used by entities that are required to prepare financial statements in accordance with the requirements of the Corporations Law.

Disclosure standard: Private sector compliance with independently established and high quality national accounting standards.				
AASB No.	Title	Purpose	Operative date	Harmonised with IAS?
1001	Accounting Policies	To prescribe the concepts that guide the selection, application and disclosure of accounting policies and to require specific disclosures to be made in relation to the accounting policies adopted in the preparation and presentation of the financial report.	In force; revised for years ending on or after 31 December 1999.	Compliance with AASB 1001 ensures compliance with IAS 1 (Presentation of Financial Statements) to the extent that IAS 1 deals with accounting policies.
1002	Events Occurring After Reporting Date	To prescribe the events occurring after reporting date for which the effects must be reflected in the financial report; to prescribe the events occurring after reporting date for which the effects must not be recognised in the financial report; and to require specific disclosures in respect of events occurring after reporting date.	In force	AASB 1002 covers the scope of IAS 10 (Contingencies and Events Occurring After Balance Sheet Date) to the extent that IAS 10 deals with events occurring after reporting date. Compliance with AASB 1002 ensures compliance with IAS 10 to the extent that IAS 10 deals with events occurring after reporting date, with one exception (details of which are set out in note (a)).
1003	Withdrawn ³ / ₄ replaced by AASB 1012			
1004	Revenue	To prescribe the accounting treatment of revenues arising from various types of transactions or other events; and to require certain disclosures to be made in relation to revenues.	In force; revised for years ending on or after 30 June 1999.	Compliance with AASB 1004 ensures compliance with IAS 18 (Revenue). However, AASB 1004's treatment of contributions as revenues is not in conformity with IAS 20 (Accounting for Government Grants and Disclosure of Government Assistance), which requires grants to be treated as income over the periods necessary to match them

Disclosure standard: Private sector compliance with independently established and high quality national accounting standards.

AASB No.	Title	Purpose	Operative date	Harmonised with IAS?
				with the related costs which they are intended to compensate, on a systematic basis, and specifically requires grants related to assets to be treated as deferred income or as deductions from the carrying amounts of the assets.
1005	Financial Reporting by Segments	To require disclosure of information about the material industry segments and material geographical segments in which a company operates.	In force	ED 90 (Segment Reporting), which proposes amendments to AASB 1005 for the purpose of harmonising it with IAS 14 (Segment Reporting), was issued for comment in March 1998.
1006	Interests in Joint Ventures	To prescribe the accounting treatment for a venturer's interests in joint ventures; and to require a venturer to make specific disclosures about its interests in joint ventures.	In force; revised for years ending on or after 31 December 1999.	Compliance with AASB 1006 ensures compliance with IAS 31 (Financial Reporting of Interests in Joint Ventures).
1007	Withdrawn $\frac{3}{4}$ replaced by AASB 1026			
1008	Leases	To prescribe the accounting treatment for leasing transaction; and to require specific disclosures about leasing transactions.	In force; revised for years ending on or after 31 December 1999.	Compliance with AASB 1008 ensures compliance with IAS 17 (Leases).
1009	Construction Contracts	To prescribe the accounting treatment of construction contracts by contractors; and to require specific disclosures to be made about construction contracts by contractors.	In force	Compliance with AASB 1009 ensures compliance with IAS 11 (Construction Contracts).
1010	Accounting for the Revaluation of Non-Current Assets	To prescribe the circumstances in which non-current assets may be revalued and the treatment of such revaluations in the accounting records.	In force	ED 92 (Revaluation of Non-Current Assets), which proposes amendments to AASB 1010 for the purpose of harmonising it with IAS 16 (Property, Plant and Equipment) to the extent that IAS 16 deals with revaluations of, and disclosures relating to, non-current assets, was issued for comment in June 1998.
1011	Accounting for Research and	Requires the application of a method of accounting under	In force	Work on harmonisation of this topic delayed pending

Disclosure standard: Private sector compliance with independently established and high quality national accounting standards.

AASB No.	Title	Purpose	Operative date	Harmonised with IAS?
	Development Costs	which research and development costs are matched against related benefits when such benefits are expected beyond any reasonable doubt.		completion of IASC project on intangible assets (issued as IAS 38 in September 1998).
1012	Foreign Currency Translation	Ensures that the results of a company's exposure to foreign exchange currency movements are reflected in financial statements.	In force	ED 86 Foreign Currency Translation), which proposes amendments to AASB 1012 for the purpose of harmonising it with IAS 21 (The Effects of Changes in Foreign Exchange Rates), was issued for comment in December 1997.
1013	Accounting for Goodwill	To specify the manner of accounting for goodwill and discount on acquisition on the acquisition of an entity; and to require disclosure of information relating to goodwill.	In force	Work on harmonisation of this topic delayed pending completion of IASC project on intangible asset and the consequential changes needed to IAS 22. The new intangible assets standard (IAS 38) was issued in September 1998.
1014	Set-off and Extinguishment of Debt	To specify when a debt is to be accounted for as having been extinguished; and to prescribe the method of accounting for the extinguishment of debt.	In force	Compliance with AASB 1014 ensures compliance with the set-off criteria contained in IAS 32 (Financial Instruments: Disclosure and Presentation), except as outlined in note (b).
1015	Accounting for the Acquisition of Assets	To specify the accounting treatment to be applied in respect of all acquisitions of assets by reflecting the economic substance of the exchange transaction that led to the acquisition, so that such acquisitions are accounted for on a consistent basis in the accounts and group accounts.	In force	ED 84 (Acquisition of Assets), which proposes amendments to AASB 1015 for the purpose of harmonising it with IAS 22 (Business Combinations), was issued for comment in October 1997.
1016	Accounting for Investments in Associates	To prescribe the circumstances in which investors must use the equity method of accounting for investments in associates; to prescribe how the equity method is to be applied; and to require certain disclosures in respect of investments in associates.	In force; revised for years ending on or after 30 June 1999.	Compliance with AASB 1016 ensures compliance with IAS 28 (Accounting for Investments in Associates), with the exceptions set out in note (c).

Disclosure standard: Private sector compliance with independently established and high quality national accounting standards.

AASB No.	Title	Purpose	Operative date	Harmonised with IAS?
1017	Related Party Disclosures	To require disclosure in the financial report of information relating to relationships, transactions and balances with related parties of the reporting entity, including the remuneration and retirement benefits of directors, loans received by directors and other director-related transactions.	In force	An exposure draft which is expected to propose amendments to AASB 1017 for the purpose of harmonising it with the requirements of IAS 24 (Related Party Disclosures) is still being developed.
1018	Profit and Loss Accounts	To require the inclusion in the determination of the profit or loss of all items of revenue and expense (including adjustments relating to prior financial years); and to require disclosure in the profit and loss account of information about the profit or loss.	In force	ED 93 (Statement of Financial Performance and Ancillary Amendments), which proposes amendments to AASB 1018 for the purpose of harmonising it with IAS 8 (Net Profit or Loss for the Period, Fundamental Errors and Changes in Accounting Policies) to the extent that IAS 8 deals with the matters covered by AASB 1018, was issued for comment in July 1998.
1019	Inventories	To specify the method of measuring inventories, including the manner in which costs are to be assigned to inventories; to specify the recognition of expenses relating to inventories; and to require specific disclosures to be made in respect of inventories.	In force; revised for years ending on or after 30 June 1999.	Compliance with AASB 1019 ensures compliance with IAS 2 (Inventories), with the exception noted in note (d).
1020	Accounting for Income Tax (Tax-effect Accounting)	To specify the method for determining income tax expense, provision for income tax, provision for deferred income tax and future income tax benefit; and to require appropriate disclosure in the accounts and group accounts.	In force	ED 87 (Income Taxes), which proposes amendments to AASB 1020 for the purpose of harmonising it with IAS 12 (Income Taxes), was issued for comment in December 1997.
1021	Depreciation	To require the recognition of assets with physical substance that are expected to be used during more than one financial year and which meet specified criteria; to require the consumption or loss of future economic benefits embodied in non-	In force	Compliance with AASB 1021 ensures compliance with: IAS 4 (Depreciation Accounting); and IAS 16 (Property, Plant and Equipment) to the extent that IAS 16 deals with the recognition and

Disclosure standard: Private sector compliance with independently established and high quality national accounting standards.

AASB No.	Title	Purpose	Operative date	Harmonised with IAS?
		current assets with limited useful lives to be recognised; and to require disclosure in the financial report of information in relation to depreciable non-current assets and the allocation of the depreciable amount.		depreciation of physical non-current assets which are expected to be used during more than one financial year.
1022	Accounting for the Extractive Industries	To specify the accounting treatments for particular transactions and events relating to extractive industry operations; and to require disclosure of information relating to extractive industry operations.	In force	No equivalent IAS standard.
1023	Financial Reporting of General Insurance Activities	To specify the manner of accounting for the general insurance activities of an entity and for the investment activities of the entity integral to those general insurance activities; and to require disclosure of information relating to general insurance activities.	In force	No equivalent IAS standard.
1024	Consolidated Accounts	To identify for financial reporting purposes parent entities and subsidiaries; and to prescribe the circumstances in which consolidated accounts are to be prepared and the financial information to be included in those accounts.	In force	An exposure draft which is expected to propose amendments to AASB 1024 for the purpose of harmonising it with the requirements of IAS 27 (Consolidations) is still being developed.
1025	Application of the Reporting Entity Concept and Other Amendments	To amend the citation, interpretation provisions, application provisions and definitions in certain approved accounting standards.	In force	No equivalent IAS standard.
1026	Statement of Cash Flows	To require a statement of cash flows to be included in financial reports; and to specify the manner in which a statement of cash flows is to be prepared.	In force	Compliance with AASB 1026 ensures compliance with IAS 7 (Cash Flow Statements).
1027	Earnings per Share	To prescribe the method of calculation of basic earnings per share and diluted earnings per share; and to require disclosure of basic earnings per share and	In force	ED 85 (Earnings per Share), which proposes amendments to AASB 1027 for the purpose of harmonising it with the requirements of IAS 33

Disclosure standard: Private sector compliance with independently established and high quality national accounting standards.

AASB No.	Title	Purpose	Operative date	Harmonised with IAS?
		diluted earnings per share and other related information.		(Earnings per Share), was issued for comment in October 1997.
1028	Accounting for Employee Entitlements	To prescribe the methods to be used when accounting for employee entitlements in the preparation of the accounts and consolidated accounts; and to establish requirements for the disclosure of information about employee entitlements in the accounts and consolidated accounts.	In force	ED 97 (Employee Benefits), which proposes amendments to AASB 1028 for the purpose of harmonising it with the requirements of IAS 19 (Employee Benefits) other than the recognition and measurement of superannuation and post-employment medical benefits, was issued for comment in October 1998.
1029	Half-year Accounts and Consolidated Accounts	To prescribe reporting requirements for half-yearly accounts or consolidated accounts of disclosing entities.	In force	ED 96 (Interim Financial Reporting), which proposes amendments to AASB 1029 for the purpose of harmonising it with IAS 34 (Interim Financial Reporting) was issued for comment in October 1998.
1030	Application of Accounting Standards to Financial Year Accounts and Consolidated Accounts of Disclosing Entities other than Companies	To prescribe requirements for the preparation and presentation of financial year accounts or consolidated accounts required by the Corporations Law of disclosing entities which are not companies.	In force	No equivalent IAS standard.
1031	Materiality	To define materiality; to explain the role of materiality in making judgements in the preparation and presentation of the financial reports; and to require the standards specified in other accounting standards to be applied where information resulting from their application is material.	In force	No equivalent IAS standard.
1032	Specific Disclosures by Financial Institutions	To require specified disclosures in the financial report of a financial institution.	In force	Compliance with AASB 1032 ensures compliance with IAS 30 (Disclosures in the Financial Statements of Banks and Similar Financial Institutions), with the exceptions detailed in note (e).

Disclosure standard: Private sector compliance with independently established and high quality national accounting standards.

AASB No.	Title	Purpose	Operative date	Harmonised with IAS?
1033	Presentation and Disclosure of Financial Instruments	To prescribe certain financial report presentation requirements for financial instruments and to require disclosure in the financial report of information concerning financial instruments.	In force	Compliance with AASB 1033 ensures compliance with IAS 32 (Financial Instruments: Disclosure and Presentation), with the exceptions detailed in note (f).
1034 1035	Information to be Disclosed in Financial Reports	To prescribe the information to be included in profit and loss accounts and balance sheets prepared in accordance with the requirements of the Corporations Law. (Note: 1035 makes a technical amendment to 1034.)	In force	No IAS standard that is directly equivalent.
1036	Borrowing Costs	To prescribe the accounting treatment of borrowing costs; to prescribe the methods to be used to allocate borrowing costs to individual qualifying assets; and to require certain disclosures to be made about borrowing costs.	In force	Compliance with AASB 1036 ensures compliance with IAS 23 (Borrowing Costs).
1037	Self-Generating and Regenerating Assets	To prescribe rules for the valuation of SGARAs; to specify the manner in which changes in valuation are to be treated in the accounts; and to specify the disclosures to be made in respect of SGARAs.	Applies to years ending on or after 30 June 2000.	No equivalent IAS standard.
1038	Life Insurance Business	To prescribe the methods to be used for reporting on life insurance business in the financial report; and to require disclosures about life insurance business in the financial report.	Applies to years ending on or after 31 December 1999.	No equivalent IAS standard.
1039	Concise Financial Reports	To specify the minimum content of a concise financial report.	In force	No equivalent IAS standard.

International accounting standards for which there are no equivalent Australian standards
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No.	Title	Issues not covered in an Australian standard	Comments
IAS 15	Information Reflecting the Effects of Changing Prices	Whole topic.	Not listed for harmonisation.
IAS 19	Employment Benefits	The recognition and measurement of superannuation and post-employment medical benefits.	Equivalent requirements to be included in an Australian standard.
IAS 26	Accounting and Reporting by Retirement Benefit Plans	Whole topic.	Falls outside the scope of the Corporations Law and, accordingly, is not currently listed for harmonisation. However, there is an accounting profession standard (AAS 25 $\frac{3}{4}$ Financial Reporting by Superannuation Plans) which is consistent with IAS 26.
IAS 29	Financial Reporting in Hyperinflationary Economies	All issues except those addressed in ED 86 (Foreign Currency Translations), which proposes amendments to AASB 1012.	Except to the extent that the topic will be covered by AASB 1012, this matter is not listed for harmonisation.
IAS 35	Discontinuing Operations	Whole topic.	ED 95 (Discontinuing Operations) was issued for comment in October 1998.
IAS 36	Impairment of Assets	Whole topic.	An exposure draft proposing harmonisation to be prepared.
IAS 37	Provisions, Contingent Liabilities and Contingent Assets	Whole topic.	ED 88 (Provisions and Contingencies) was issued for comment in December 1997.
IAS 38	Intangible Assets	Whole topic (except to the extent that it is covered by AASB 1011).	Scheduled for harmonisation.
IAS 39	Financial Instruments: Recognition and Measurement	Whole topic.	The AASB has not set a timetable for the harmonisation of this topic.

Notes:

(a) The exception relates to an event occurring after reporting date that provides evidence that the going concern basis is not appropriate after the reporting date. IAS 10 requires the financial effect of the event to be recognised in the financial report, whereas AASB 1002 requires the financial effect of the event to be disclosed. (The different approach in AASB 1002 is to ensure that the requirements of the standard do not conflict with the provisions of the Corporations Law, which require a financial report to provide a true and fair view of the financial position of an entity as at the reporting date and of the results of the entity for the period ending on that date.)

(b) IAS 32 does not allow set-off when financial assets are set aside in a trust by a debtor for the purpose of discharging an obligation if the assets have not been accepted by the creditor in settlement of the obligation. AASB 1014 treats in-substance defeasances as extinguishing the liability when the prescribed conditions are satisfied.

(c) There are two areas of difference between AASB 1016 and IAS 28:

- (i) IAS 28 requires the equity method to be applied in the investor's own financial report where the equity method is applied in the consolidated financial report. AASB 1016 requires the cost method to be applied in the investor's own financial report except where a consolidated financial report is not required to be prepared.
- (ii) IAS 28 requires the carrying amount of an investment to be written down to its recoverable amount which is determined as the higher of its value in use and net selling value. AASB 1016 provides that the carrying amount of the investment must not exceed its recoverable amount but does not specify how the recoverable amount is to be determined.

(d) IAS 2 requires the disclosure of the cost of inventories recognised as an expense during the reporting period; or the operating costs applicable to revenues, recognised as an expense during the reporting period, classified by their nature. This disclosure requirement will be included in a forthcoming AASB standard that harmonises with the requirements of IAS 1 (Presentation of Financial Statements).

(e) There are two areas of difference between AASB 1032 and IAS 30:

- (i) Where there are differences between the requirements of IAS 30 and IAS 32, AASB 1032 and other standards conform with the requirements of IAS 32, rather than with the requirements of IAS 30.
- (ii) A parent entity need comply with only the basic profit and loss account and balance sheet disclosure requirements of AASB 1032 when the parent entity's financial report is presented with the economic entity's financial report, and the economic entity applies AASB 1032. In contrast, IAS 30 does not require the preparation of parent entity financial reports or contain any exemption for parent entity reports when they are prepared. There is no difference in the scope of AASB 1032 and IAS 30 in application to economic entity financial reports, which are the focus of the AASB's harmonisation policy.

(f) There are two areas of difference between AASB 1033 and IAS 32:

- (i) The requirement to classify component parts of compound instruments separately does not apply to instruments issued prior to 1 January 1998. IAS require retrospective application of component part accounting only when initial adjustments are reasonably determinable. The AASB considers that in many cases it would be difficult to determine the initial adjustments required for retrospective application. Accordingly, AASB 1033 does not require (but does allow) retrospective application. The significance of this exception will diminish over time.
- (ii) A parent entity need not comply with the disclosure requirements of AASB 1033 when the parent entity's financial report is presented with the economic entity's financial report, and the economic entity applies AASB 1033. In contrast, IAS 32 does not require the preparation of parent entity financial reports or contain any exemption for parent entity reports when they are prepared. There is no difference in the scope of AASB 1033 and IAS 32 in application to economic entity financial reports, which are the focus of the AASB's harmonisation policy.

Acknowledgement

This table has been compiled by Treasury staff using information contained in:

(a) AASB-series accounting standards made by the Australian Accounting Standards Board (AASB);

(b) draft accounting standards (referred to as exposure drafts or EDs) prepared by the AASB and the Public Sector Accounting Standards Board;

(c) information on the web site of the Australian Accounting Research Foundation; and

(d) information on the web site of the International Accounting Standards Committee.

APPENDIX 2

IASB Work Plan

The Work Plan below has been updated following the decisions made at the IASB June Meeting and reflects the objectives of the Memorandum of Understanding with the FASB which sets out a Roadmap for Convergence between IFRSs and US GAAP between 2006 and 2008.

For more information on the projects on the Work Plan, click on the project links embedded in the table below. For a printable version of the work plan [click here](#).

IASB Work Plan - projected timetable as at 30 June 2006										
<i>The timetable shows the current best estimate of document publication dates. The effective date of amendments and new standards is usually 6-18 months after publication date. However, except for the items listed in the section "Amendments to standards", the effective date of IFRSs resulting from the current work plan will be no earlier than financial periods beginning 1 January 2009. In appropriate circumstances, early adoption of new standards will be allowed.</i>										
	MoU milestone by 2008	2006			2007		2008	Timing yet to be determined		
		Q2	Q3	Q4	H1	H2				
ACTIVE AGENDA										
Projects in Memorandum of Understanding (MoU) with the FASB [Note 1]										
Short-term Convergence projects										
Borrowing costs	(IASB)		ED			IFRS				
Government grants [Note 2]	(IASB)						ED	IFRS		
Joint ventures	(IASB)			ED			IFRS			
Segment reporting	(IASB)			IFRS						
Impairment	(Joint)									Staff WIP
Income tax	(Joint)		ED				IFRS			
Fair value option	(FASB)									
Investment properties	(FASB)									
Research and development	(FASB)									
Subsequent events	(FASB)									
Other Convergence projects										
Business combinations	Converged standards						IFRS			
Consolidations	Work towards converged standards					ED		IFRS		
Fair value measurement guidance	Converged guidance			DP			ED	IFRS		
Financial Statement Presentation [Note 3] Phase A	MoU					IFRS				Timing yet

	milestone by 2008	2006			2007		2008	to be determined
		Q2	Q3	Q4	H1	H2		
Phase B	<i>One or more due process documents</i>				DP		ED	IFRS
Revenue recognition	<i>One or more due process documents</i>					DP	ED	IFRS
Post-retirement Benefits (including Pensions)	<i>One or more due process documents</i>							TBD
Leases	<i>One or more due process documents</i>							DP
Conceptual Framework Phase A: Objectives and Qualitative Characteristics Phase B: Elements, Recognition and Measurement Phase C: Measurement Phase D: Reporting Entity Phase E: Presentation and Disclosure Phase F: Purpose and Status Phase G: Application to Not-for-Profit Entities Phase H: Finalisation [Note 4]			DP		DP RT DP			TBD DP DP DP TBD
Small and Medium-sized Entities				ED		IFRS		
Insurance contracts				DP			ED	IFRS
Liabilities [Note 5]				RT		IFRS		
Emission trading schemes [Note 2]								
Amendments to standards Financial instruments: puttable instruments (IAS 32) Earnings per share: treasury stock method (IAS 33) First-time adoption: cost of investment in subsidiary (IFRS 1) Share-based payment: vesting conditions and cancellations (IFRS 2) Related party disclosures (IAS 24)		ED	ED ED		IFRS IFRS IFRS			
				IFRS				
			ED					
Projects yet to be added to the ACTIVE AGENDA but included in the MoU with the FASB (except as shown)								
RESEARCH AGENDA		MOU milestone by 2008						
Derecognition		<i>Publish staff research as due process document</i>						
Financial instruments (replacement of existing standards)		<i>One or more due process documents</i>						
Intangible assets		<i>Consider research and make agenda decision</i>						
Liabilities and Equity [Note 6]		<i>One or more due process documents</i>						
Extractive activities		<i>- - - - - Not in MoU</i>						

Abbreviations used in the IASB Work Plan:

DP	Discussion Paper (containing the Board's preliminary views)
ED	Exposure Draft
RT	Round-table Discussion
IFRS	International Financial Reporting Standard
TBD	The type of initial document (DP or ED) is yet to be determined

Notes:

- 1 The Memorandum of Understanding (MoU) sets out the milestones that the FASB and the IASB have agreed to achieve in order to demonstrate standard-setting convergence, which is one part of the process towards removal of the requirement imposed on foreign registrants with the SEC to reconcile their financial statements to US GAAP
- 2 Work on government grants and emission rights has been deferred pending conclusion of work on other relevant projects.
- 3 The Financial Statement Presentation project was formerly known as the Performance Reporting project.
- 4 The IASB and the FASB are considering how they will finalise the Conceptual Framework project, once the initial documents on each phase have been subject to public consultation and redeliberation by the boards.
- 5 The Liabilities project is the amendments to IAS 37. It was formerly known as the Non-financial Liabilities project.
- 6 Project is being conducted as a "modified joint" project. That is, the IASB expects to make a formal agenda decision and begin work when the FASB has completed work on an initial discussion document.

APPENDIX 3

AASB 138 'Intangible Assets' Summary

OVERVIEW

The Accounting Standard AASB 138 will replace the existing requirements that apply to intangible assets in AAS 4/AASB 1021 'Depreciation', AAS 10/AASB 1010 'Recoverable Amount of Non-Current Assets', AAS 13/AASB 1011 'Accounting for Research and Development', AAS 18/AASB 1013 'Accounting for Goodwill', AAS 21/AASB 1015 'Acquisition of Assets' and AASB 1041 'Revaluation of Non-Current Assets'.

An intangible asset is defined as an 'identifiable non-monetary asset without physical substance'. There is currently no specific Australian Accounting Standard on accounting for intangibles.

The key differences from the existing requirements are:

- To be recognised, an intangible asset be separable (capable of being separated from the entity and able to be sold, transferred, licensed, rented or exchanged) or arise from contractual or other legal rights.
- All research expenditure must be expensed.
- Specific criteria must be met before development expenditure can be capitalised.
- Internally generated brands, mastheads, publishing titles, customer lists and items similar in substance must not be recognised.
- Revaluation is only permitted where there is an active market to determine fair value
- The useful life of an intangible asset is either finite or indefinite.
- An intangible asset with an indefinite life must not be amortised.
- Computer software that is not integral to the operation of related hardware is an intangible asset.

Although less significant than the impact on the private sector, AASB 138 will impact on public sector agencies with intangible assets. Some intangibles previously recognised, for example capitalised research and development expenditure, may not meet the new recognition criteria. These assets would need to be derecognised at transition. The Standard's definition of active market is restrictive and it is unlikely that intangibles can be revalued. Consequently, at transition date, any existing revaluations will need to be derecognised. Adjustments are made against the asset revaluation reserve. Agencies that currently classify computer software as property, plant and equipment will be required to reclassify software that is not integral to the

operation of related hardware to intangible assets and compliance with AASB 138 recognition and measurement criteria will be required.

INTRODUCTION

Accounting Standard AASB 138 will replace the existing requirements that apply to intangible assets in AAS 4/AASB 1021 'Depreciation', AAS 10/AASB 1010 'Recoverable Amount of Non-Current Assets', AAS 13/AASB 1011 'Accounting for Research and Development', AAS 18/AASB 1013 'Accounting for Goodwill', AAS 21/AASB 1015 'Acquisition of Assets' and AASB 1041 'Revaluation of Non-Current Assets'. AASB 138 adopts the proposals in the IASB Exposure Draft of Proposed Amendments to IAS 38 'Intangible Assets'. There is currently no specific Australian Accounting Standard on accounting for intangibles.

The Standard prescribes the identification, recognition, measurement and disclosure requirements for intangible assets.

An intangible asset is defined as an 'identifiable non-monetary asset without physical substance'. Expenditures on the acquisition, development and enhancement of intangible resources (such as new systems, processes, intellectual property and market knowledge) cannot be recognised as intangible assets unless an asset is separately identifiable and the entity has control over the future economic benefits to be generated by the asset (paragraphs 9 to 23). In addition, the Standard does not permit the recognition of internally generated brands, mastheads, publishing titles, customer lists and items similar in substance.

Computer software, licences, patents, copyrights, customer lists and marketing rights are examples of intangibles.

Scope

The Standard applies to all intangible assets except intangibles that are covered by another Standard, financial assets, and mineral rights and expenditure on the exploration, development and extraction of mineral resources. The key intangibles covered by other Standards are:

- intangibles held for sale in the ordinary course of business (AASB 102 and AASB 111);
- deferred tax assets (AASB 112);
- leases within the scope of (AASB 117);
- goodwill acquired in a business combination (AASB 3); and
- intangibles classified as held for sale (AASB 5).

Identification criteria

To meet the definition of an intangible asset, an asset must be identifiable to distinguish it from goodwill. To be identifiable, the asset be separable or arise from contractual or other legal rights. Separable means that the asset must be capable of being separated from the entity and able to be sold, transferred, licensed, rented or exchanged.

Recognition criteria

An intangible asset shall be recognised if, and only if, it is probable that the future economic benefits attributable to the asset will flow to the entity and its cost can be measured reliably. Probability shall be assessed using reasonable and supportable assumptions that represent management's best estimate of the economic conditions that will exist over the useful life of the asset (paragraph 22).

The probability recognition criteria is always considered to be satisfied for separately acquired intangible assets (paragraph 25) and intangible assets acquired as part of a business combination (paragraph 33).

Specific rules apply in respect of internally generated intangibles (paragraphs 51 to 67). Internally generated goodwill (paragraph 48), internally generated brands, mastheads, publishing titles, customer lists and items similar in substance (paragraph 63) and research expenditure (paragraph 54) must not be recognised. Specific recognition criteria apply to development expenditure (paragraph 57).

Where the research phase of an internal project cannot be distinguished from the development phase, the expenditure on the project is classified as research and it must be expensed (paragraph 53).

Measurement

Intangible assets are initially measured at cost. Where a not-for-profit entity acquires an intangible asset for no cost, or for a nominal cost, the cost is the fair value of the asset as at the date of acquisition.

The cost of separately acquired intangible assets includes the purchase price and any directly attributable cost of preparing the asset for use (paragraph 26 to 32).

The cost of intangible assets acquired as part of a business combination is its fair value at acquisition date (paragraphs 35 to 41). Paragraphs 65 to 67 set out the costs that can be capitalised for internally generated intangible assets (direct costs) and those costs that must be expensed (these include training, selling, administrative and general overheads). Note AASB 123 'Borrowing Costs' specify the criteria for the recognition of borrowing costs in internally generated intangible assets.

Past expenses cannot be capitalised at a later date (paragraph 71).

Subsequent expenditures on intangibles will rarely be recognised. Most subsequent expenditures are likely to be only maintaining the existing future economic benefits or are difficult to attribute to a particular intangible (paragraph 20).

Subsequent to initial recognition, assets are measured at cost or fair value (paragraph 72). The fair value option is only permitted where valuation is by reference to an active market (paragraph 75). An active market is defined as a market where the items traded are homogenous, where willing buyers and sellers can be found at any time and prices are available to the public (paragraph 8). The frequency of revaluations and accounting for revaluation increments and decrements is consistent with the existing requirements for property, plant and equipment.

Where an intangible asset in a class of revalued intangible assets cannot be revalued because there is no active market, the asset is carried at cost less accumulated amortisation and impairment losses (paragraph 81).

If the fair value of a revalued intangible asset can no longer be determined by reference to an active market, the asset is carried at its revalued amount as at the date of the last revaluation determined by reference to an active market less subsequent accumulated amortisation and impairment losses (paragraph 82).

Useful life

Entities must assess whether the useful life of an intangible asset is finite or indefinite (paragraphs 88 to 96).

Intangible assets with a finite useful life are amortised over the useful life of the asset (paragraphs 97 to 106). The depreciable amount is allocated systematically over its useful life in a manner that reflects the expected consumption of the asset's future economic benefits. If the pattern of consumption cannot be reliably determined, the straight-line method shall be used. The residual value of an intangible asset with a finite useful life is assumed to be zero unless there is an active market for the asset or there is a commitment by a third party to purchase the asset. The amortisation period and method must be reviewed at least at the end of each annual reporting period.

An indefinite useful life means there is no foreseeable limit to the period over which the asset is expected to generate net cash inflows. Intangible assets with an indefinite useful life are not to be amortised (paragraphs 107 to 108).

AASB 136 'Impairment of Assets' requires intangible assets to be assessed for an indication of impairment at each reporting date. Irrespective of whether there is any indication of impairment, an entity must estimate the recoverable amount during the reporting period (at the same time each year) for intangible assets with an indefinite useful life and those not yet available for use.

Retirements and disposals

A intangible asset must be derecognised on disposal or when no future economic benefits are expected from its use or disposal (paragraph 112). The gain or loss shall be recognised in the income statement (paragraph 113).

Disclosures

For each class of intangible assets, distinguishing between internally generated and other intangibles, entities must disclose:

- whether useful lives are finite or indefinite;
- amortisation rates and methods;
- the gross carrying amount and any accumulated amortisation aggregated with accumulated impairment losses at the beginning and end of the reporting period;
- line items of income statement in which amortisation is included; and
- a reconciliation of the carrying amount at the beginning and end of the reporting period.

There are specific disclosures required in respect of intangibles with indefinite useful lives, revaluations of intangibles and research and development expenditure recognised as expense.

Paragraphs 118 to 128 specify the disclosure requirements.

APPLICATION DATE

The Standard will be applicable from the first reporting period beginning on or after 1 January 2005.

TRANSITIONAL PROVISIONS

The Transitional Provisions contained in the Standard do not apply as they are to be overridden by AASB 1 'First-time Adoption of Australian Equivalents to International Financial Reporting Standards. The provisions of AASB 1 must be followed by **all** first-time adopters.

Under AASB 1, agencies with a 30 June year end must produce an opening balance sheet at 1 July 2004 (the date of transition) that is compliant with Australian Equivalents of International Financial Reporting Standards (IFRS). AASB 1 requires IFRS to be applied retrospectively. Any adjustments as a result of applying IFRS to the opening balance sheet are taken directly to equity.

AASB 1 makes some mandatory exemptions and allows some voluntary exemptions to the retrospective application of IFRS. The deemed cost option for property, plant and equipment under and equipment under paragraphs 16 and 17 (AASB 1) is available for intangibles assets where fair value has been determined by reference to an active market (paragraph 18).

On transition to IFRS agencies with intangible assets will need to ensure that they meet IFRS recognition and measurement criteria.

The following intangible assets will need to be derecognised:

- internally generated brands, mastheads, publishing titles, customer lists and items similar in substance must not be recognised;
- capitalised research expenditure;
- capitalised development expenditure that does not meet the criteria specified in AASB 138 (paragraph 57); and
- any other capitalised expenditure that AASB 138 does not allow to be included in the cost of an internally generated intangible asset (paragraphs 65 to 67).

Any revaluations of intangible assets not made by reference to an active market (defined in paragraph 8) will need to be derecognised.

All computer software that is not integral to the operation of hardware, must be classified as intangible assets. It is likely that some agencies will need to reclassify some software from property, plant and equipment as intangible assets. Assets reclassified will need to comply with the measurement and recognition requirements under AAS 138.

Agencies must also ensure that all intangibles that meet the AASB 138 recognition criteria at the date of transition are included in the opening balance sheet. AASB 1 provides an exception to this in respect of certain intangibles acquired in a business combination (refer to Appendix B of AASB 1).

Note that if an internally generated intangible asset qualifies for recognition at the date of transition, agencies must recognise the intangible asset in the opening balance sheet even if the expenditure was previously expensed.

KEY DIFFERENCES FROM THE EXISTING AUSTRALIAN STANDARDS

Classification of computer software

AASB 138 prescribes that computer software that is an integral part of the related

hardware is treated as property, plant and equipment (paragraph 4). Other software is treated as an intangible asset. The current standards provide no such guidance and as a consequence, varying practices have developed. For some agencies, there may be an initial reclassification of some computer software from property, plant and equipment to intangible assets on transition and ongoing change on how software is classified, recognised and measured.

All research expenditure must be expensed.

Under existing requirements basic research is expensed and applied research would normally be expensed. AAS 13 permits applied research expenditure to be capitalised where it can be linked to future benefits that are beyond any reasonable doubt. Circumstances where applied research expenditure could be capitalised under the existing requirements are considered rare, therefore the requirement to expense all research expenditure under AASB 138 will have very limited impact generally.

Specific criteria must be met before development expenditure can be capitalised.

Under AAS 13 requirements, development expenditure may be capitalised where it can be linked to future benefits that are beyond any reasonable doubt. It is more likely to be capitalised than applied research. AASB 138 requires the following to be demonstrated before development expenditure is capitalised as an intangible asset:

- it is technically feasible to complete the asset for use or sale;
- the entity intends to complete the asset;
- the entity is able to sell or use the asset;
- the intangible asset will generate probable future economic benefits;
- adequate technical, financial and other resources available to complete the development and to use or sell the asset; and
- the expenditure attributable to the intangible asset during the development phase can be measured reliably.

As AASB 138 HAS more specific recognition criteria, there may be circumstances where expenditure that would be capitalised under AAS 13, will be expensed under the AASB 138.

Internally generated brands, mastheads, publishing titles, customer lists and items similar in substance must not be recognised.

These changes are not expected to have a material impact on public sector agencies.

Revaluation only permitted where there is an active market to determine fair value.

This represents a significant difference from the existing requirements under AASB 1041 and will effectively prevent revaluation of intangible assets in the public sector.

Inconsistent measurement within an asset class.

The application of the revaluation requirements in AASB 138 may result in a class of assets being carried at a mix of cost and fair value. This is not expected to be an issue for the public sector as all intangibles are likely to be carried at cost.

The useful life of an intangible asset is finite or indefinite.

Unlikely to have an effect on public sector agencies.

An intangible asset with an indefinite life must not be amortised.

Unlikely to have an effect on public sector agencies.

IMPACT OF DIFFERENCES

Effect on general reporting in the public sector

Where an agency has intangible assets, impacts will result from the requirement to account for computer software as intangibles, the restrictions on revaluation and the potential impact from the application of the specific recognition rules for development expenditure.

FREQUENTLY ASKED QUESTIONS

Question: What is an intangible asset?

Answer: An intangible asset is an identifiable asset without physical substance. Common examples are software, technology, patents, copyright, customer lists, franchises and marketing rights.

Question: Is goodwill an intangible asset?

Answer: Goodwill is not classed as an intangible asset as it is not identifiable. Acquired goodwill represents a payment by the acquirer in expectation of future economic benefits from assets that are not capable of being separately identified and recognised. Internally generated goodwill cannot be recognised. Purchased goodwill is recognised under AASB 3 'Business Combinations'.

Question: When should I recognise an internally generated intangible asset?

Answer: Any intangible asset can be recognised only when it meets the identification

and recognition criteria. However, AASB 138 imposes additional recognition requirements in respect of internally generated intangible assets. Internally generated brands, mastheads, publishing titles, customer lists and items similar in substance and research expenditure must not be recognised. Development expenditure is recognised when the entity can demonstrate that six specified criteria have been met.

APPENDIX 4

The following 30 year chronology of IASB/IASC highlights is taken from an article, 'IASB - 25 Years of Evolution, Teamwork and Improvement', by David Cairns, former secretary-general of IASC, published in *IASB Insight*, in June 1998, with supplements for events between June 1998 and December 2005. It usefully outlines the priorities and key activities of the IASB.

2005

The Trustees publish an amended Constitution for the IASC Foundation.

- The Trustees appoint a chairman and members of reconstituted SAC.
- European Commissioner supports 'roadmap' developed by staff of US SEC towards the removal by 2008 of the requirement for companies to reconcile from IFRS to US GAAP when listing in the US.
- The first IFRIC Co-ordinator appointed.
- The IFRIC begins publishing 'tentative agenda decisions'.
- The IASB publishes two discussion papers written by the staff of partner standard-setters.

2004

- By issuing four IFRSs, two revised IASs and an amendment to the financial instruments standard by the end of March the IASB brings to completion its 'stable platform' of standards for use by companies adopting its standards from January 2005.
- Later in the year the IASB issues another IFRS and amendments to its standard on employee benefits.
- The IASB issues the IFRIC's first five Interpretations.
- The IASB concludes a convergence agreement with the Accounting Standards Board of Japan.
- The IASB and the FASB agree to launch a joint conceptual framework project
- SAC draw up a draft charter of terms of reference and operating procedures
- The Trustees publish consultation paper inviting public comment on their conclusions on the review of the IASC Foundation's Constitution.
- The IASB publishes its first discussion paper (on SMEs)

2003

- The Trustees launch review of the IASC Foundation's Constitution.
- The IASB issues IFRS 1 on first-time adoption of IFRSs
- The IASB completes its general Improvements project by issuing 13 revised IASs, and revised versions of the two standards on financial instruments.
- The IASB publishes exposure drafts of two new standards.
- The Trustees appoint a Director of Education to head the Foundation's education initiative.
- The IASB begins broadcasting its meetings over the Internet.
- The IFRIC publishes its first draft Interpretations.

2002

- The IFRIC meets for the first time.
- The IASB issues Preface to International Financial Reporting Standards and its first technical pronouncement—an urgent Amendment to IAS 19 Employee Benefits—The Asset Ceiling
- After extensive consultation with the SAC, national accounting standard-setters, regulators and other interested parties, the IASB announces new programme of technical projects.
- The IASB publishes exposure drafts of three new standards and amendments to 16 existing standards
- The IASB meets the US Financial Accounting Standards Board (FASB). They conclude the Norwalk Agreement, a memorandum of understanding that commits the boards to work together to remove differences between IFRSs and US GAAP and to co-ordinate their future work programmes.
- The IASB hosts the first annual meeting of world standard-setters.

2001

- Trustees announce members of the International Accounting Standards Board.
- Trustees appoint members of the Standards Advisory Council (SAC), which meets for first time.
- European Commission presents legislation to require use of IASC Standards for all listed companies no later than 2005.
- Trustees bring new structure into effect—1 April 2001—the IASB assumes responsibility for setting accounting standards, designated International Financial Reporting Standards (IFRSs).
- IASC Foundation acquires lease of offices at 30 Cannon Street, and the IASB moves into the new premises.
- After consultation with the SAC the IASB announces initial programme of nine technical projects, including Improvements project for twelve IASs and the two IASs on financial instruments.
- IASB reopens comment period on G4 1 discussion paper on share-based payment, and publishes exposure draft of Preface to IFRSs.
- Trustees appoint members of the International Financial Reporting Interpretations Committee (IFRIC) to succeed the SIC.
- Trustees announce members of the International Accounting Standards Board
- Trustees announce search for IAS Advisory Council members
- European Commission presents legislation to require use of IASC Standards for all listed companies no later than 2005
- Trustees bring new structure into effect - 1 April 2001 - IASB assumes responsibility for setting accounting standards, designated International Financial Reporting Standards

2000

- SIC meetings opened to public observation
- Basel Committee expresses support for IASs and for efforts to harmonise accounting internationally

- SEC concept release regarding the use of international accounting standards in the US
- As part of restructuring programme, IASC Board approves a new Constitution
- IOSCO recommends that its members allow multinational issuers to use 30 IASC standards in cross-border offerings and listings
- Nominating Committee announces initial Trustees of the restructured IASC
- IASC member bodies approve IASC's restructuring and the new IASC Constitution
- European Commission announces plans to require IASC standards for all EU listed companies from no later than 2005
- Sir David Tweedie named as first Chairman of the restructured IASC Board
- Trustees announce search for new Board members - over 200 applications are received
- IASC Board approves limited changes to IAS 12, IAS 19 and IAS 39 (and related Standards)
- IASC staff publish Implementation Guidance on IAS 39
- IAS 41 *Agriculture* approved at the last meeting of the IASC Board

1999

- IOSCO review of IASC core standards begins
- IASC Board meetings opened to public observation
- G7 Finance Ministers and IMF urge support for IASs to 'strengthen the international financial architecture'
- New IFAC International Forum on Accountancy Development (IFAD) assumes commitment to 'support the use of International Accounting Standards as the minimum benchmark' worldwide
- EC single market plan for financial services includes use of IASs
- FEE urges allowing European companies to use IASs without EC Directives and to phase out US GAAP
- Eurasian Federation of Accountants and Auditors plans adoption of IASs in CIS countries
- IASC Board unanimously approves restructuring into 14-member board (12 full-time) under independent trustees
- Board appoints Nominating Committee to select first Trustees under new IASC structure

1998

- New laws in Belgium, France, Germany and Italy allow large companies to use IASs domestically
- First official translation of IASs (German)
- IFAC Public Sector Committee publishes draft guideline for Governmental Financial Reporting as a platform for a set of International Public Sector Accounting Standards, to be based on IASs
- Number of countries with IASC members passes 100
- Strategy Working Party proposes structural changes, closer ties to national standard-setters
- IASs published on CD ROM

- Core standards completed with approval of IAS 39 in December

1997

- Standing Interpretations Committee formed
- IASC and FASB issue similar standards on earnings per share
- IASC, FASB and CICA issue new Segments standards with relatively minor differences
- Discussion paper proposes fair value for all financial assets and financial liabilities - IASC holds 45 consultation meetings in 16 countries
- Joint Working Group on financial instruments formed with national standard-setters
- People's Republic of China becomes a member of IASC and IFAC and joins IASC Board as observer
- FEE calls on Europe to use IASC's *Framework*
- Strategy Working Party formed
- IASC sets up its Internet Website

1996

- Core standards programme accelerated, target 1998
- Financial executives join Board and IOSCO joins Board as observer
- Board starts joint project on provisions with UK Accounting Standards Board
- EU Contact Committee finds IASs compatible with EU directives, with minor exceptions
- US Congress calls for 'a high-quality comprehensive set of generally accepted international accounting standards'
- Australian Stock Exchange supports programme to harmonise Australian standards with IASs
- ministers at World Trade Organisation encourage successful completion of international standards

1995

- Agreement with IOSCO to complete core standards by 1999 - on successful completion IOSCO will consider endorsing IASs for cross-border offerings
- First German companies report under IASs
- Swiss holding companies join Board
- Malaysia and Mexico replace Italy and Jordan on Board - India and South Africa agree to share Board seats with Sri Lanka and Zimbabwe
- European Commission supports IASC/IOSCO agreement and use of IASs by EU multinationals

1994

- SEC accepts three IAS treatments plus IAS 7
- Board meets standard-setters to discuss E48 *Financial Instruments*
- World Bank agrees to fund Agriculture project
- Establishment of Advisory Council approved

1991

- First IASC conference of standard-setters (organised in conjunction with FEE and FASB)
- *IASC Insight*, *IASC Update* and publications subscription scheme launched
- FASB plan supports international standards

1990

- Statement of Intent on Comparability of Financial Statements
- European Commission joins Consultative Group and joins Board as observer
- External funding launched
- Bishop committee confirms relationship between IASC and IFAC

1989

- FEE president Hermann Nordemann argues that Europe's best interests are served by international harmonisation and greater involvement in IASC
- *Framework for the Preparation and Presentation of Financial Statements* approved
- IFAC public sector guideline requires government business enterprise to follow IASs

1988

- Jordan, Korea and Nordic Federation replace Mexico, Nigeria and Taiwan on the Board
- Financial instruments project started in conjunction with Canadian Accounting Standards Board
- IASC publishes survey on the use of IASs
- FASB joins Consultative Group and joins Board as observer
- *E32 Comparability of Financial Statements*

1987

- Comparability project started
- IOSCO joins Consultative Group and supports Comparability project
- First IASC Bound Volume of International Accounting Standards

1986

- Financial analysts join Board
- Joint conference with New York Stock Exchange and International Bar Association on the globalisation of financial markets

1985

- OECD forum on accounting harmonisation

- IASC responds to SEC multinational prospectus proposals

1984

- Taiwan joins Board
- Formal meeting with US SEC

1983

- Italy joins Board

1982

- IASC/IFAC mutual commitments - Board expanded to 13 countries plus four 'other organisations with an interest in financial reporting'

1981

- Consultative Group formed
- IASC starts visits to national standard-setters
- Working party on deferred taxes set up with standard-setters in the Netherlands, UK and US

1980

- Discussion papers on bank disclosures published
- United Nations Intergovernmental Working Group on Accounting and Reporting meets for first time - IASC presents position paper on co-operation

1979

- IASC meets OECD working group on accounting standards [**134 IASB WEBSITE**]

APPENDIX 5

I have extracted, from the IP-Valuation website, information about IP-Valuation; the BrandValue solution; and the process for its use and application, against which I apply the TEV approach, with a view to testing the compatibility of the TEV approach, and valuation criteria-supported aspects in particular, to a well-regarded valuation solution already deployed in the marketplace.

Extracted from the IP-Valuation GmbH website on 12 May, 2008:

About Us

IP-Valuation GmbH is a business consulting firm specializing in the fields of trademark valuation and trademark accounting in accordance with national and international accounting standards (IAS/IFRS and US-GAAP). The company has its headquarters in Munich and was founded in September 2005.

The uniqueness of the consulting services of IP-Valuation lies in the combination of expertise in the field of trademark valuation and trademark accounting with IT know-how at the highest level. By developing **BrandValue** IP-Valuation GmbH has produced the first computer-aided financial trademark valuation method worldwide.

In addition to conducting individual trademark valuations we can install our trademark valuation software **BrandValue** in a client's internal system.

With the trademark valuation software **BrandValue**, the customer is able to calculate the trademark value with a newly developed trademark valuation method based on the most modern scientific valuation methods, and at the same time he can benefit from the advantages of an independent software program.

BrandValue: Product and Licensing

The software is installed at the customer's workstation or the customer gets an individual online login; this provides flexibility and the independent calculation of the financial value of trademarks. Within the software, for example, the customer's own trademark portfolios can be created.

The following figure gives you an overview of our valuation service and the licence packages that can be purchased for the trademark valuation software BrandValue.

Table extracted from IP-Valuation website

Features	Single valuation *	Online-login		Software in-house			
		L. 5	L. 10	P. 15	P. 25	P. 50	P. X
Maximum number of trademark valuations	-	5	10	15	25	50	unlimited
Run-time	-	1 Year	1 Year	1 Year	1 Year	1 Year	1 Year
Updates of databases	✓	✓	✓	✓	✓	✓	✓
Valuation report - printout	✓	✓	✓	✓	✓	✓	✓
Valuation report - file	✓	✓	✓	✓	✓	✓	✓
Help desk	✗	✓	✓	✓	✓	✓	✓
Stand-alone version (CD-ROM)	✗	✗	✗	✓	✓	✓	✓

L. = Login, P. = Package of the maximum number of possible trademark valuations

* Referring to a single valuation we carry out an individual trademark valuation and provide a valuation report.

Advantages

As the **first software for financial trademark valuation worldwide**, IP-Valuation GmbH's trademark valuation software BrandValue signifies a revolution in the valuation of trademarks.

The uniqueness of the trademark valuation software BrandValue lies in the combination of expertise in the field of trademark valuation and trademark accounting with IT know-how at the highest level. With the trademark valuation software BrandValue, the customer is able to calculate the trademark value with a newly developed trademark valuation method based on the most modern scientific valuation methods, and at the same time he can benefit from the advantages of an independent software program.

The five key advantages of the trademark valuation software BrandValue are:

1. Flexible and independent trademark valuation 24/7
2. High degree of objectivity and standardization
3. Detailed and transparent valuation report
4. Cost-efficiency
5. Accounting standards fully complied with (US-GAAP and IAS/IFRS)

IFRS-Certificate

One very important advantage of the trademark valuation software BrandValue is the compliance with the regulations of international accounting standards (IAS/IFRS).

Prof. Dr. Claus-Peter Weber (WP/StB), a recognized IFRS expert, who is a former member of the German Accounting Standards Board and the Institute of Accountancy at the University of Saarbrücken, has given his expert opinion on the trademark valuation software Brandvalue. He comes to the conclusion that the trademark valuation software offers a very good method of calculation of trademark value which is consistent with the IFRS regulations. Furthermore the trademark valuation method is characterized by a high degree of objectivity and traceability.

Extract from **Prof. Dr. Claus-Peter Weber's (WP/StB)** report:

"The trademark valuation method designed by IP-Valuation GmbH is, as a market-oriented valuation, a suitable and accurate method of carrying out a fair value acquisition-valuation of trademarks in accordance with IAS 38 and IFRS 3."

"For the subsequent valuation the trademark valuation method is, as a market-oriented valuation, a suitable way of calculating the fair value for the prescribed impairment test in accordance with IAS 36."

"As data of external data bases concerning other peer groups are used to a considerable degree in the market-oriented valuation, the aspect of objectivity is fulfilled substantially. The determination of individual peer groups is also characterized by a high degree of objectivity, transparency and traceability and is not based on subjective judgements of the valuating company."