INTANGIBLE ASSETS: VALUATION AND FINANCIAL REPORTING

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ABSTRACT

During the last fifty years the source of value creation has rapidly shifted from tangible assets to intangible assets. The intangible assets are now of greater importance than those already in place in terms of a company's value creation. In present day precarious scenario the synergy between Intangible assets and tangible assets dramatically boosts the enterprise value for its stakeholders. But unfortunately the correct measurement of Intangible Assets has never been an easy task. Due to enormous difficulty in valuation and big risk of inaccurate measurement, there is still a big gap in the financial reporting of intangible assets. In this reference this paper provides the discussion of various methods of valuing intangible assets. The paper also discusses methodologies used for valuing some prominent intangible assets like brand valuation, human resource valuation and valuation for patent and copyrights.

Key Words: Brand Valuation, Financial Reporting, Human Resource Valuation, Intangible Assets, Valuation of Patents.

Introduction

'Intangible Asset' is an identifiable non-monetary asset, without physical substance, held for use in the production or supply of goods or services, for rental to others, or for administrative purposes (Accounting Standard 26). Intangible Assets include rights (employment contracts, lending-borrowing contracts, leases; distribution agreements, covenants; supply contracts; licenses; franchises), relationships (customer relationships, human resource relationship) and intellectual property (patents, trademarks, copyrights, technology).

International Financial Reporting Standard (IFRS) 3 has classified Intangible Assets into the following:

- Marketing-related: Trademarks, brands, trade names, trade dress, internet domain names, and non-competition agreements. In Indian context Companies like Reliance, Hutch, Bharti, Tata and Godrej have strong marketing brands.
- Customer-related: Customer lists, order of production backlog, customer contracts and related relationships, non-contractual customer relationships. Companies like WIPRO have created huge customer relationships.
- Artistic-related: Plays, operas, ballets, books, magazines, newspapers, musical works, pictures, photographs, videos, films, television programs e.g. Bollywood.
- Contract-based: Licensing, royalty and standstill agreements, advertising contracts, construction, service or supply, lease agreements, permits, franchise agreements, operating and broadcasting rights, employment contracts. Companies like Mittal Steel have massive contracts for their stock requirements.
- Technology-based: Patented technology, computer software, unpatented technology, databases, trade secrets. Companies like Ranbaxy have already created huge value in the area of patents and know-how.

Historically, intangible assets have not been reflected in corporate accounts at its entire value. However, with recent guidelines of accounting standards this is now beginning to change, at least in respect of acquired intangibles, forcing companies to go through a much more rigorous process of identifying and valuing intangible assets. The Indian Chartered Accountants of India (ICAI) has issued an accounting standard for intangible assets which will be mandatory for listed companies and for companies planning to issue an initial public offer. As per the guideline, companies are required to disclose various intangible assets in their financial statements on expenses incurred on research and development, intellectual property rights, customer relations. India is amongst those economies which are having huge value of intangible assets in terms of percentage of the total enterprise value. It may be due to the fact that the country's intellectual capital is poised for a big leap particularly in the field of software, healthcare, personal care, pharmacy and biotechnology.

There are number of methodologies intended to provide sufficient credible and consistent manner for valuing these assets. But unfortunately the correct measurement of Intangible Assets has never been an easy task. Due to enormous difficulty in valuation and big risk of inaccurate measurement, there is still a big gap in the financial reporting of intangible assets. Intangible Asset valuation has grown into a truly international discipline over recent years, but is still little understood and seen as a "black art" by some (Chris Thorne, Chairman of the

Standards Board). The description of intangible assets used in company reports vary considerably. In this reference, the present paper aims at analyzing the prevailing methodologies for valuing intangible assets.

Review of related literature:

Intangible assets have always been under the periphery of attention. Its scope has been explained by different scholars in different manners like Sveiby, 1997 described internal (patents, concepts, licenses, administrative system, organizational structure etc.), external organization structures (brands, trademarks, relations with customers and suppliers etc.) and also the competence of its personnel as a core component of Intangible Assets. According to Edvinsson, 1997; Roos et al., 1997, Petty, Guthrie, 2000, Intangible Assets of a company include organizational and human capital (internal and external). Ahonen, 2000 has submitted a narrower approach of Intangible Assets constituted namely by human capital. On the contrary, a considerably broader approach was rendered by Andrissen, Tissen, 2000 explaining Intangible Assets as 1) assets and endowments, 2) skills & tacit knowledge, 3) collective values and norms, 4) technology and explicit knowledge, 5) primary and management processes.

Intangible assets are very crucial for an organisation. Hares & Royle (1994) indicated that intangible assets provide number of benefits relating to internal improvement, customer related, future oriented etc. Edvinsson (1997) found that these assets have been identified as key assets to properly identify, estimate, and manage in order to create value. The Brand Finance 'Global Intangible Tracker' (GIT™) 2006 covering intangible asset of over 5,000 companies in 25 countries also demonstrates the importance of intangibles and highlights the significant rise in their value over a five-year period.

Intangible Assets such as Intellectual Assets have become the pre-eminent resource for creating economic wealth. National Science Foundation, 1998 suggests that an adjustment for R & D alone would raise US GDP roughly 1.5%. Further appropriate valuation of intangible assets is very much essential from taxation point of view also. This becomes more important when there is a need to determine the disposal proceeds from the transfer of intangible assets or mergers and acquisition, calculation of taxable gains etc. Corrado et al. (2005) find that when intangible assets were not taken into account, the GDP growth of USA was underestimated by about 0.25% point per year during a similar period. Belhocine (2009) observed deflated value of intangible spending from 1998 to 2004 and obtained new growth

rate of GDP. This rate is then compared to that obtained without intangibles. He found that real GDP growth in Canada is, on average, understated by 0.1% point per year for the period considered with a standard deviation of 0.23% points.

Lusch & Harvey (1994) observed the importance of intangible worth of marketing activities in the global marketplace. They pointed out the inability to provide due consideration to these activities to estimate shareholder value may cause reduction in the role of marketing in corporate strategy. Chen, Cheng and Hwang (2005) work on the stock exchange shows that the way companies create value effects their market value.

The discussion on the need to capitalize intangibles demonstrates the necessity to have proper valuation and reporting of such expenditures as investments. In this context the present paper attempts to analyse the different methodologies used for valuing intangible assets.

Valuation of Intangible Assets:

The applicability of some of the International Standards pertaining to the Intangible Assets may be summarized as follows:

IAS 36: 'Impairment of Assets': Applicable internationally w.e.f. 01-07-99

IAS 38: 'Intangible Assets': Applicable internationally w.e.f. 01-07-99

FAS 141: 'Business combinations': Applicable in US w.e.f. 30-06-01

FAS 142: 'Goodwill & Other Intangible Assets: Applicable in US w.e.f. 15-12-01

IFRS 3: 'Business combinations': Applicable internationally w.e.f. 01-01-05

International Financial Reporting Standard (IFRS): The introduction of IFRS-3 on Business Combinations in 2004 led to an increased demand for intangible asset valuation particularly with the issue of Discussion Paper Determination of Fair Value of Intangible Assets for IFRS Reporting Purposes in 2007, by the International Valuation Standards Council.

Generally Accepted Accounting Policy (GAAP): Like IFRS, GAAP also aims at correct valuation of Corporate Assets but still there are some differences between both like

determination of Date of Acquisition, Capitalisation and Amortsation of Research and Development Expenses and Stages involved in Impairment Test.

The differences in IFRS and GAAP could be explained respectively as follows:

- Date of Acquisition: Physical Transfer of Control Vs. Date of Announcement
- Capitalisation and Amortsation of R & D: Meeting of certain Criteria Vs. Immediate
- Stages involved in Impairment Test: One Vs. Two

Need of Valuation Methods and Financial Reporting of Intangibles:

The Company's performance in capital market is also largely influenced by intangibles. The worldwide stock market crash has decimated the value investors attribute to Intangible Assets (including patents, know-how, software, intellectual property rights, copyrights, design rights, brands, human capital and goodwill). The reporting of intangible assets provide many valuable information for managerial actions e.g. proper valuation of Human Resource leads to the disclosure of cost per employee, human capital investment ratio, profit per employee, ratio of salary to the total revenue, Employee absenteeism and Turnover Ratio etc.

According to King & Henry (1999) intangible assets are relevant to the understanding of a business firm's earning prospects and future cash flows. Further to access the fair market value of the company, the sum of the tangible assets of the same is required to be adjusted by the value of intangible assets. Debate is set to intensify the issue of best practice in the reconciliation of different methodologies for valuation of key intangible assets. As per Kaplan (1986), discounted cash flow and other analytical techniques are consistently misused when applied to strategic IT investments.

Barth et al. (2000) also viewed that intangible value is rarely accounted at its true value. Usually financial reports reveal comparatively lesser value to their correct estimate. Lev & Zarowin (1999) argue that costs associated with restructuring and R & D investment is expensed immediately but the benefits could be realized later. Easton (1998) presented a similar argument for large and small companies in Australia, stating that correlations between market measures and balance sheet information are spurious.

Saaty (1998) called on quantitative researchers to make a fundamental paradigm shift. According to him, 'measuring intangibles is the most significant concern facing anyone who

wants to grapple successfully with the mathematics of (problems that involve people and business)'. But quantifying the linkage between product and service quality and economic measures is a challenging job. Athanassopoulos (1997) measured the quality of provided services to measure the efficacy of bank however the level of satisfaction could not be associated with financial performance. Ryan & Harrison (2000) IT investments elude traditional valuation methods because of hidden costs and benefits. In respect of IFRS also researches show that IFRS 3 is failing to work. The principal shortcomings are non-compliance of IFRS, excess and unexplained valuation of Goodwill, under-reporting of rest intangible assets and lesser emphasis on valuation of self generated intangible assets. Besides it there are some intangible assets which are valued at historic cost while there are some others needed to be with due consideration of charges for amortization and impairment. As per some researchers IFRS lead to volatility in reported earnings as it does not permit the amortization of goodwill but instead requires an annual impairment review.

Methodologies for Valuation and Financial Reporting of Intangibles:

The different methodologies suggested by different researchers for valuing and reporting intangible assets are as follows:

I) Hares & Royle Method:

Hares & Royle (1994) measured intangible benefit into cash flow for cost–benefit analysis. They advocated following steps for valuation:

- Identification and measurement of benefits,
- Prediction of the results in physical terms and
- Evaluation of the cash flow resulting from this intangible benefit.

Anandarajan & Wen (1999) have recommended a similar technique for accomplishing the financial quantification of intangible benefits.

II) Reilly Method:

Reilly (1998) presented three methods to value proprietary technology (the market approach, the cost approach and the income approach. The appropriateness of each of these valuation

methodologies varies according to the type of asset, available data and the specific circumstances of different industries. These methods could be explained as follows:

- **Market method –**

  The market approach involves investigating the valuation of intangible assets on the basis of benefits and costs of comparable projects in other organizations in similar markets, or benchmarks of comparable assets. This methodology can provide the best evidence of fair values because it relies on evidence from actual market transactions.

- **Cost method –**

  The cost method attempts to estimate the benefits and costs of achieving the same functionality using distinct technologies, processes or human resources i.e. through assessment of replacement cost of the asset or benchmarking. This approach can be implemented in the ERP project.

- **Income method –**

  The income method attempts to value intangible assets on the basis of the future economic benefits derived from ownership of the asset. This approach is primarily used for valuation of brands, customer relationships, patented technology and unpatented technology (know-how).

  The main income methods are Relief from Royalty, and Excess Earnings. These could be briefly outlined as follows:

  A. Relief from Royalty:

  This method is based on the estimation of the price that a business would be requiring to pay for the use of an intangible asset if it did not own the asset, or the cost savings of not having to pay a royalty. The NPV of all forecast royalties represents the value of the brand to the business. This method is popular one because it could be easily used through the available financial information. According to Brand Finance the steps involved in calculation of brand value through this method are as follows: Obtaining brand specific financial and revenue data.

  - Determination of market related revenue forecasts.
  - Establishment of the notional royalty rate for each brand portfolio.

- Calculation of the notional future royalty income stream for each brand portfolio.
- Calculation of discount rate specific to each brand portfolio.
- Discounting future royalty stream to a net present value (NPV).

B. Excess Earnings methodology:

In this method, one must calculate estimated costs and benefits. The value of an intangible asset is the present value of the earnings it generates, net of a reasonable return on other assets also contributing to that stream of earnings. This method is often used for valuing customer relationships, and can also be appropriate for the valuation of strong consumer brands and strong pharmaceutical product patents.

III) Stewart's Calculated Intangible Value Method:

According to calculated intangible value method (1995) the valuation of intangible assets is based on residual operating income model as a variant fundamental value of equity model.

The steps to be followed under this method are as follows:

1) Determination of book value of the company's assets and discounted flow of residual operating income to ascertain company's value,

2) Determination of book value of tangible assets and discounted flow of residual earnings using the average industrial rate of return,

3) Calculation of difference between total book value of company and value of tangible assets of company to determine the value of Intangible Assets.

Valuation of Major Intangible Assets:

These are some general techniques that are used to value intangible assets. These techniques change from company to company in accordance to importance of respective asset (specifically for Valuation of Human Resource and Brand). The brief description of various techniques currently used for valuing intangible assets is as follows:

A) Brand valuation:

- The techniques that are usually applied by the Indian companies for Brand Valuation are: The market value of the company's share
- The difference between the market value and book value
- The difference between the market value and book value of the company's shares minus the managerial expertise (intellectual capital)
- The brand replacement value
- Present value of the historic investment in marketing and promotions
- Estimation of an advertising investment required to achieve the present level of brand recognition
- The difference between the value of the branded company and value of company selling generic products
- The present value of the company's free cash flow minus the assets employed multiplied by required return.

B) Human Resource Valuation:

The methods frequently used for valuing human resources mainly include balanced scorecard, competency models, benchmarking, business worth and calculated intangible value.

C) Valuation of Research and development costs:

As per IFRS-3 (2005), amount incurred on research and development activities should be expensed during the same year in which it has actually been spent. As per the guidelines issued by Institute of Chartered Accountant of India the intangible assets (in case of research and development expenses) during the development phase is cognizable in assessment. But in such a case the organisation is supposed to demonstrate the technical feasibility of the assets for use or should prove its ability to be sold in the market.

D) Valuation of Patents and copyrights:

If Company has acquired Patents and copyrights, the purchase consideration including related expenses i.e. Full acquisition costs are required to be capitalized. If these assets have

been developed by the corporate body itself, all costs in developing these are expensed in conformity with the treatment of R&D costs.

Similarly different other intangible assets could be valued in the organisations so as to reflect its proper value.

Conclusion:

Conventional accounting performs poorly with internally generated intangibles such as R&D, brands, and employee talent i.e. the very items considered as the engines of modern economic growth. Presently Changes in accounting rules is a fiery issue and cannot be ignored. As per a survey, two third of global market value is now intangible, yet many companies are failure in tracking the true value of intangibles. Further the main stumbling point is that only acquired intangible assets (and not self generated ones) are currently required to be recorded in accounting books. But intangibles carry a lot of worth to the business and therefore such an unfair treatment to intangible assets could lead to serious distortion in the magnitude of reported earnings. In this reference the present paper discussed different methodologies for valuation and reporting the valuation of intangible assets in financial books. The paper also highlighted the techniques for valuing and reporting major intangible assets like brand, human resource, patent and copyrights. The use of these methodologies will surely help organisation to depict their correct estimate to its stakeholders.

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