Valuing Brands and Brand Equity: Methods and Processes

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Executive Summary

While there has been much research on Branding and Brand Equity in recent years, relatively little has been published on Brand Valuation, despite it being a key managerial issue. This paper reviews the Brand Valuation literature. It highlights Brand Valuation research, the obstacles to Brand Valuation and valuation approaches. The various approaches available for Brand valuation are discussed. Important but neglected issues such as the discount rate, growth rate and useful life are highlighted in the context of valuing brands. Guidelines are provided for managers and a process for valuing brands is suggested.

Introduction

Branding as a concept has been around for many years now. Brands help identify and differentiate the goods and services of one organization from those of another. From a customer`s point of view, brands simplify shopping, aid in the processing of information about products, and makes them feel confident of their purchase decision. Managers have also become aware of the fact that the brand has become an important company asset, and focus is needed on the creation of brand equity.

Brand equity as a concept has been developed over the last decade (Aaker 1991; Keller 1998). One of the main issues still to be resolved is how to value brands. Summarizing the primary thrust of articles published in the Journal of Marketing Research during 1987-1997, Malhotra et al concluded that in the area of brand evaluation and choice, future research should focus on further measurements of the brand equity construct (Malhotra, et al 1999). They proposed that a generally accepted measure could further the overall understanding of the strategic role of brand equity in extending the brand and in financially benefiting the firm. While there are a number of approaches available to managers, it is still uncertain which approach is best, and the issues around the discount rate, growth rate and useful life have to be resolved (Kapferer, 1994).

As capital becomes less of a constraint on businesses there will be far greater emphasis on how this capital is used to creatively differentiate the organisation. The abundance of capital means that physical assets can be replicated with ease (Drucker, 1998). The point of differentiation (and the source of shareholder value) will flow from intangible assets. Two main trends are driving the need for a greater understanding of the techniques used to measure brand equity. The first is the growing need to evaluate the "productivity" of marketing spend (Sheth and Sisoda, 2000); and the second is the accounting requirement that purchased brands are capitalized and amortized.

The benefit of ascertaining the correct brand value will ensure that resources are appropriately channeled to where they will deliver the greatest value to the organization, particularly in optimizing a brand portfolio. Decisions regarding the correct level of marketing spend, the evaluation of brand manager performance, and the initial decision whether to build a strong brand will be simplified. Another potential use is ensuring that the correct value is determined for mergers and acquisition purposes. It is time for marketing as a profession to adopt common standards much like the accounting profession has adopted standards of practice in their field. Furthermore, an accurate brand equity valuation ensures that brand-licensing fees correctly reflect the benefits received (Keller, 1998).The objectives of this article are : to identify and review the various approaches and methods used to value brands and to discuss the issues managers need to consider when evaluating valuation methods. The major contribution of this article is that it provides managers with guidelines on what to look for when going through a brand valuation process.

Brand Valuation

Initial research into the valuation of brands originated from two areas : marketing measurement of brand equity, and the financial treatment of brands. The first was popularized by Keller (1993), and included subsequent studies by Lassar et al (1995) on the measure of brand strength, by Park and Srinivasan (1994) on evaluating the equity of brand extension, Kamakura and Russell (1993) on single-source scanner panel data to estimate brand equity, and Aaker (1996) and Montameni and Shahrokhi (1998) on the issue of valuing brand equity across local and global markets.

The financial treatment of brands has traditionally stemmed from the recognition of brands on the balance sheet (Barwise et.al., 1989, Oldroyd, 1994, 1998), which presents problems to the accounting profession due to the uncertainty of dealing with the future nature of the benefits associated with brands, and hence the reliability of the information presented. Tollington (1989) has debated the distinction between goodwill and intangible brand assets. Further studies investigated the impact on the stock price of customer perceptions of perceived quality, a component of brand equity (Aaker and Jacobson, 1994), and on the linkage between shareholder value and the financial value of a company's brands (Kerin and Sethuraman, 1998).

Simon and Sullivan (1993) developed a technique for measuring brand equity, based on the financial market estimates of profits attributable to brands. The co-dependency of the marketing and accounting professions in providing joint assessments of the valuation of brands has been recognized by Calderon et al (1997) and Cravens and Guilding (1999). They provide useful alternatives to the traditional marketing perspectives of brands (Aaker, 1991; Kapferer, 1997; Keller, 1998; Aaker & Joachimsthaler, 2000).

The debate over the appropriate method of valuation continues in the literature (Perrier, 1997) and in the commercial world. The commercial valuation of brands has been led by Interbrand, a UK-based firm specializing in valuing brands, Financial World, a magazine which has provided annual estimates of brand equity since 1992, and Brand Finance Limited, a British consulting organization. These organizations utilize formulae approaches, and highlight the importance of brand valuation in the business environment.

Obstacles to Brand Valuation

In a study conducted by Robbin (1991), the number one concern was "the wide range of alternative valuation methods which will yield significantly different results" (Robbin 1991, p 56). A second concern was the difficulty in assessing the brand's useful life. There are several other obstacles to brand valuation. There is a lack of an active market for brands. This means that estimates of model accuracy cannot be tested empirically nor can one gain some sort of assurance of testing the value by putting the brand on the market. Many practitioners are unwilling to publish their models and open them up to academic debate. In addition, the large number of models cause confusion amongst marketers and they are difficult to conceptualise. Another important obstacle is that it is difficult to separate brand equity from other intangibles like goodwill. Barwise, Higson, Likierman and Marsh (1989 p7) suggest that "at present, there is no general agreement on valuation methods. Nor can existing methods be regarded as either totally theoretically valid nor empirically verifiable."

It is important to recognize that only after careful consideration of all the enterprise's intangible assets will the valuer be able to determine the importance of the brand in the organization's current market position. Reilly and Schweihs (1999) list many possible intangible assets. These include marketing related assets such as trademarks, logos and brand names, and corporate identity. Customer related intangible assets include customer lists and customer relationships. A further problem arises in the process of valuing an intangible asset such as a brand which, often requires estimation and subjectivity.

Brands on the Balance Sheet

Robbin (1991) highlighted reasons why an organization should recognise brands as an asset. These include the fact that it decreases the firm's gearing ratio as a result of the larger asset base. It is also an internally generated asset and thus increases shareholder equity. In addition, a large premium for mergers and acquisitions can be justified.

However, Robbin (1991) also highlights reasons for keeping brands off the balance sheet. It decreases the return on assets as the firm now has a larger capital base. Companies that have adopted Economic Value Added (EVA) would have to raise a capital charge against the asset. The issue of brand value or measurement also is a negative until acceptable methods can be found.

Valuation Approaches

The concept of value is one of the most difficult concepts to grasp. Value has different meanings to different people and thus is not an objective concept. The valuation approach used is effectively the objective of the valuation. The objective of the valuation is determined by its use. Some of the more common valuation approaches can be classified into five categories:

1. Cost-based approaches
2. Market-based approaches
3. Economic use or income-based approaches
4. Formulary approaches
5. Special situation approaches

Cost-based approaches consider the costs associated with creating the brand or replacing the brand, including research and development of the product concept, market testing, promotion, and product improvement. The accumulated cost approach will determine the value of the brand as the sum of accumulated costs expended on the brand to date. This method is the easiest to perform, as all the data should be readily available. Unfortunately, this historic valuation does not bear any resemblance to the economic value (Aaker, 1991; Keller, 1998).

The replacement cost approach determines the cost that would be incurred to replace the asset if it is destroyed (Aaker, 1991; Keller, 1998). An advantage of this method is that it provides a better reflection of the true value of the brand. A disadvantage of this approach is that the value does not bear a relation to the open market value. One could over-capitalise, by over investing in that asset which may not be recouped if the asset was sold.

Market-based approaches are based on the amount for which a brand can be sold. The open market valuation is the highest value that a "willing buyer and willing seller" is prepared to pay for the asset. This would exclude a strategic buyer who may have other objectives (Reilly and Schweihs, 1999). This valuation basis should be used when one wishes to sell the brand. Barwise et al. (1989) suggest that the market value of an asset should reflect the possible alternative uses; the value of future options as well as its value in existing activities; and realism rather than conservatism. Modern financial theory states that one should sell off assets if the value that a buyer is willing to pay exceeds the discounted benefits of the brand (Brealey and Meyers, 1991).

Economic use approaches, also referred to as "in-use" or income-based approaches, consider the valuation of future net earnings directly attributable to the brand to determine the value of the brand in its current use (Keller, 1998; Reilly and Schweihs, 1999; Cravens and Guilding, 1999). This basis is often appropriate when valuing an asset that is unlikely to be sold as a flanking brand that is being used for strategic reasons. This method reflects the future potential of a brand that the owner currently enjoys. This value is useful when compared to the open market valuation as the owner can determine the benefit foregone by pursuing the current course of action.

Formulary approaches consider multiple criteria to determine the value of a brand. While similar in certain respects to income-based or economic use approaches, they are included as a separate category due to their extensive commercial usage by consulting and other organizations.

Special situation approaches recognize that brand valuation can be related to particular circumstances that are not necessarily consistent with external or internal valuations. A strategic buyer is often willing to pay a premium above the market value (Bradley and Viswanathan, 2000). This may be a result of synergies that they are able to develop which other buyers may not be able to achieve. When an asset is valued, in the absence of a written offer from the strategic buyer, it cannot be assumed that a buyer will appear and be prepared to pay a premium price. Each case has to be evaluated on individual merit, based on how much value the strategic buyer can extract from the market as a result of this purchase, and how much of this value the seller will be able to obtain from this strategic buyer.

The liquidation value is the value that the asset would fetch in a distress sale. The value under a liquidation sale is normally substantially lower than in a willing buyer and seller arrangement. The costs of liquidating the asset should normally be deducted in determining the value of the asset.

When valuing an asset for special purposes, for example, income tax, the method that the assessing authority requires should be used. The advantage of this approach is that one is assured that all requirements are met. The drawback of the above approach is that the value may bear little relevance to economic reality or serve another useful purpose.

Available Approaches for Brand Valuation

Reilly and Schweihs (1999) identified the attributes that affect the value of brands, but there are five main aspects that need to be considered when calculating a brand's value. These are: what additional price premium the product can command over a generic; how much additional market share can be gained; what cost savings can result from an ability to exercise increased control over the channel; what additional revenue can be gained through licensing and brand extensions; and the additional marketing costs that need to be incurred in providing the point of differentiation as a competitive strategy.

The approaches available for brand valuation can be grouped into the four major categories, cost based; market-based; economic use; and formulary approaches.

Some of the more common valuation models will now be discussed.

Cost-based Approaches

Brand Equity Based on Accumulated Costs

The basis of this approach is that it aggregates all the historical marketing costs as the value (Keller 1998). The real difficulty here is determining the correct classification as to what constitutes a marketing cost and what does not. By way of an example, if an accountant spends two days a month preparing reports for the marketing department, is that a cost that can be capitalized to the brand? Even if the classification difficulty were overcome the next problem would be how to amortize the marketing cost, as a percentage of sales over the brand's expected life?

The only advantage of the approach is that the brand manager knows the actual amount that has been spent. Alternate models have been proposed, but they all suffer from the same problems. An alternative approach that has been suggested is to adjust the actual cost of launching the brand by inflation every year. This inflation adjusted launch cost would be the brand's value. (Reilly and Schweihs, 1999).

Replacement Cost Based on Launching a New Brand

This is one of the most difficult valuation bases to calculate. Aaker (1991) proposes that the cost of launching a new brand is divided by its probability of success. The advantage of this approach is that it is easy to calculate. One problem with this approach is that it neglects to take into account the success of established brands. A brand may be worth a $100 million. However the cost of launching a brand may be $5 million with a 10% success rate and it therefore has a value of $50 million.

A company in this situation is in a very weak strategic position if a competitor would enter this market. This approach also does not take the benefit of first entry into account. The first brand in the category has a natural advantage over other brands as they do not have to overcome the clutter. With each new attempt the probability of success diminishes.

Using Conversion Models

A possible alternative approach to replacement cost would be to estimate the amount of awareness that needs to be generated in order to achieve the current level of sales. This approach would be based on conversion models, i.e., taking the level of awareness, that induces trial, that induces regular repurchase (Aaker, 1991). The output may be used for two purposes: one is to determine the cost of acquiring new customers and the other would be the replacement cost of brand equity.

From this an estimate for the value of existing awareness can be made. This can be done if an estimate of the rate that the awareness decreases is taken and one values the additional margin from the brand at each interval is valued. The sum of the profit will equal the value of the existing awareness. An assumption needs to be made that no new investment in marketing will take place, and an estimate of the useful life of the current awareness needs to be made.

A major shortcoming of this approach is that the differential in the purchase patterns of a generic and a branded product is needed. Another problem is that the conversion ratio between awareness and purchase is higher for an unbranded generic than the branded product. This may indicate that awareness is not a key driver of sales and that the marketing mix is incorrect.

Although customers may be aware of a product this does not mean that they understand what the brand stands for. In the Young & Rubicam Brand Asset Valuator (Aaker, 1991) a distinction is made between vitality, a factor of differentiation and relevance, and stature, based on esteem and knowledge. One needs to be strong on all four aspects in order to have a strong brand. Awareness is only one of many factors.

Brand Based on Customer Preference

Aaker (1991) proposed that the value of the brand can be calculated by observing the increase in awareness and comparing it to the corresponding increase in the market share. Aaker (1991) identified the problem as being how much of the increased market share is attributable to the brand's awareness increase and how much to other factors. A further issue is that one would not expect a linear function between awareness and market share.

Market-based Approaches

Comparable Approach

This approach takes the premium (or some other measure) that has been paid for similar brands and applies this to brands that the company owns, e.g., a company pays two times sales for a similar brand. This multiple is then applied to brands that the company owns (Reilly and Schweihs, 1999).

The advantage of this approach is that it is based on what third parties are actually willing to pay and it is easy to calculate. The shortcomings are that there is a lack of detailed information on the purchase price of brands and that two brands are seldom alike.

Brand Equity based on Equity Evaluation

Simon and Sullivan (1993) presented a paper on using the financial market value to estimate the value of brand equity. This approach has numerous advantages in that it recognizes that it is based on empirical evidence. The shortcomings are that it assumes a very strong state of the efficient market hypothesis (EMH), and that all information is included in the share price. It is well documented that this is not the case (Bodie, Kane and Marcus, 1999). Depending on the stock market, it is merely a debate on the level of efficiency.

The approach works as follows:

1. The value of the intangibles are calculated by subtracting the replacement cost of the tangible assets from the market value (market capitalization plus the market value of debt and other securities) of the firm.
2. The value of the intangible assets are broken down into three components, namely brand equity, value of non brand factors that reduce the firm costs such as R&D and patents, and finally industry wide factors that permit super normal profits (eg regulations).
3. The brand equity component is further broken down into two components, namely a demand-enhancing component and a component that caters for diminished marketing spend due to the brand being established.

4. The demand-enhancing component is calculated using increased market share. Market share is broken down into two components, one for the brand and the other for non-brand factors. The non-brand market share is the factor of company's share of patents and research and development (R&D) share. The market share attributable to the brand is a function of the order of entry and the relative advertising share.
5. The reduced marketing costs are a factor of order of market entry and the brand's advertising expenditure relative to that of its competitors.

The Use of Real Options in Brand Valuation

The use of real options has been proposed for the valuation of brand assets (Damodaran, 1996). In order to value an option the following variables need to be calculated: the risk free interest rate; the implied volatility (variance) of the underlying asset; the current exercise price; the value of the underlying asset; and the time to expiration of the option. The value of the brand is the value of the underlying asset, and the cost of developing the brand is the exercise price.

This method may be useful in calculating the potential value of line extensions. However the assumptions inherent in this approach make any practical application very difficult.

The Residual Method

Keller (1998) has proposed that the residual value, when the market capitalization is subtracted from the net asset value, is equal to the value of the "intangibles" one of which is the brand. Furthermore this is the upper limit that certain procedures will value a brand at (e.g., Interbrand). There are two assumptions inherent in this approach. The first is that the market is efficient in the strong state (ie that ALL information is included into the share price) and the second, is that the assets are being used to their full potential.

It is widely recognized that market efficiency is a myth and the only debate that rages on now is the degree of inefficiency. Shares often trade at below their net asset value. Shares of companies who trade at below their net asset value (NAV) by implication have a negative brand equity. If the brand had been capitalised into the balance sheet, a worthless balance sheet would have been produced.

Economic-use approaches

Royalty Relief Method

The Royalty Relief method is the most popular in practice. It is premised on the royalty that a company would have to pay for the use of the trademark if they had to license it (Aaker 1991). The methodology is as follows:

1. Determine the underlining base for the calculation (percentage of turnover, net sales or another base, or number of units)
2. Determine the appropriate royalty rate

3. Determine a growth rate, expected life and discount rate for the brand

This appears to be very easy. However the real skill is determining what the appropriate royalty rate is. Two rules of thumb have emerged, the "25% rule" and the "5% rule". The "25% rule" proposes that the royalty should be 25% of the net profit. The "5% rule" proposes that the royalty should be 5% of turnover. Both these "rules" have their base in the pharmaceutical industry.

Professional valuers spend a considerable amount of time and effort determining the appropriate royalty rate. They rely on databases that publish international royalty rates for the specific industry and the product. This investigation will provide a range of appropriate royalty rates. The final royalty rate is decided upon after looking at the qualitative aspects around the brand, such as the strength of the brand team and management as well as many other factors.

The advantages of this approach are that the valuation is industry specific and has been accepted by many tax authorities as an acceptable model. The disadvantage of this approach is that very few brands are truly comparable and usually the royalty rate encompasses more than just the brand. Licenses are normally for a limited time period and cover some sort of technical know-how payments (Barwise, et al. 1989).

Price Premium

The premise of the price premium approach is that a branded product should sell for a premium over a generic product (Aaker, 1991). The value of the brand is therefore the discounted future sales premium. The major advantage of this approach is that it is transparent and easy to understand. The relationship between brand equity and price is easily explained. The disadvantages are where a branded product does not command a price premium, the benefit arises on the cost and market share dimensions.

Conjoint Analysis

Conjoint analysis is very similar to the premium price model. It is possible to determine the market share for a given product at a given price level (Aaker, 1996a). Conjoint analysis asks respondents to make trade off judgments about product attributes. In order to determine the brand value, an analysis would be commissioned of the purchase behaviour of a sample of customers. The brand value would be calculated as the discounted future revenue potential.

Apart from the problems that the premium price normally suffers from, as one begins to alter price levels the perceived value of the brand may diminish. By means of an example, conjoint analysis might indicate that the manner to maximize sales is to drop the price as the volume gain would more than offset the discount price, however once this has been achieved the positioning of the brand may be compromised which could result in an element of brand switching. If the brand premium changes on a regular basis, confusion may be created in customers' minds, as the positioning of the brand changes.

Brand equity based on differences in Return on Investment, Return on Assets and Economic Value Added

There are three approaches that fall into this category. They are models based on differences between return on investment, return on assets or economic value added. These models are based on the premise that branded products deliver superior returns, therefore if we value the "excess" returns into the future we would derive a value for the brand (Aaker, 1991).

The main shortcoming of these approaches are that they do not make the distinction between brands and other intangible assets that give rise to the superior performance. As these are also accounting based models, one has to ensure that all the amounts are treated and classified in a similar manner in order to ensure that the comparison is meaningful. Another shortcoming is the difficulty of finding a company that is in the same industry that has a similar asset base or capital structure. A further criticism is that these returns are not risk adjusted, i.e., the variability of earnings in the two companies could be quite different. The only place that one can make adjustment for this is in the discount rate (the discount rate affects the implied multiplier). The advantages of this model are that it is easy to explain, the information is readily available, and the calculation is easy to do.

The Use of Price to Sales Ratios

Increasingly investors are beginning to use the price to sales multiple (in conjunction with the price earnings and the price to book ratio) in order to evaluate investment decisions (Damodaran, 1996). The value of the brand name is the difference between the price to sales ratio of a branded firm to that of a generic firm.

The advantages of this approach are that the information is readily available and it is easy to conceptualize. The drawbacks are that few firms are truly comparable and it makes no distinction between the brand and other intangible assets such as good customer relationships.

Brand Value based on Future Earnings

In this approach the valuer attempts to determine the earnings that arise from the brand. They would attempt to forecast the brand profit and discount it back at an appropriate discount rate (Reilly and Schweihs, 1999). At the end of the forecast period, if it has been determined that the brand's useful life will exceed the period of the forecast, a perpetuity value will be calculated. The main drawback is trying to determine what part of the profits are attributable to brand equity and not other intangible factors. It also fails to take any balance sheet implications into consideration such as increased working capital.

Brand Equity based on Discounted Cash Flow

This method suffers from the same problems that are faced when trying to determine the cash flows (profit) attributable to the brand. From a pure finance perspective it is better to use Free

Cash Flows as this is not affected by accounting anomalies; cash flow is ultimately the key variable in determining the value of any asset (Reilly and Schweihs, 1999). Furthermore Discounted Cash Flow do not adequately consider assets that do not produce cash flows currently (an option pricing approach will need to be followed) (Damodaran, 1996). The advantage of this model is that it takes increased working capital and fixed asset investments into account.

Formulary Approaches

Interbrand Approach

The Interbrand approach is a variation on the Brand Earnings approach. Interbrand determines the earnings from the brand and capitalizes them after making suitable adjustments (Keller, 1998).

Interbrand takes the forecast profit and deducts a capital charge in order to determine the economic profit (EVA). Interbrand then attempts to determine the brand's earnings by using the "brand index". The "brand index" is based on seven factors. The factors as well as their weights are:

1. Market (10%) – Whether the market is stable, growing and has strong barriers to entry
2. Stability (15%) – Brands that have been established for a long time that constantly command customer loyalty
3. Leadership (25%) – A brand that leads the sector that it competes in
4. Trend (10%) – Gives an indication where the brand is moving
5. Support (10%) – The support that the brand has received
6. Internationalization/Geography (25%) – The strength of the brand in the international arena
7. Protection (5%) – The ability of the company to protect the brand

The advantages of this approach is that it is widely accepted and it takes all aspects of branding into account; by using the economic profit figure all additional costs and all marketing spend have been accounted for. The major shortcoming is that it compares "apples with oranges". The international component should not be applied over the local brand earnings. If a company wants to bring the international aspect into play it must include potential international profits. Here two valuation bases are muddled. On the one hand there is an "in use" basis and on the other hand, there is an "open market" valuation.

The appropriate discount rate is very difficult to determine as parts of the risks usually included in the discount rate have been factored into the Brand Index score. Even the appropriate rate for the capital charge is difficult to ascertain.

Aaker (1996a pg 314) reveals that "…the Interbrand system does not consider the potential of the brand to support extensions into other product classes. Brand support may be ineffective; spending money on advertising does not necessarily indicate effective brand building. Trademark protection, although necessary, does not of itself create brand value."

Financial World Method

The *Financial World* magazine method utilizes the Interbrand Brand Strength multiplier or "brand index", comprising the same seven factors and weightings. The premium profit attributable to the brand is calculated differently, however; this premium is determined by estimating the operating profit attributable to a brand, and then deducting from this the earnings of a comparable unbranded product. This latter value could be determined, for example, by assuming that a generic version of the product would generate a 5% net return on capital employed (Keller, 1998). The resulting premium profit is adjusted for taxes, and multiplied by the brand strength multiplier.

Brand Equity Ten

Aaker's "Brand Equity Ten" utilizes five categories of measures to assess brand equity (Aaker, 1996a):

- Loyalty Measures
  1. Price premium
  2. Customer satisfaction or loyalty
- Perceived Quality or Leadership Measures
  3. Perceived quality
  4. Leadership or popularity
- Other customer-oriented associations or differentiation measures
  5. Perceived value
  6. Brand personality
  7. Organizational associations
- Awareness measures
  8. Brand awareness
- Market behavior measures
  9. Market share
  10. Market price and distribution coverage

These measures represent the customer loyalty dimension of brand equity. They can be utilized to develop a brand equity measurement instrument, depending on the type of product or market, and the purpose of the instrument.

Brand Finance Method

Another commercial approach to brand valuation has been developed by Brand Finance Limited, a UK consulting organization. This method comprises four elements (David Haigh in Jones, 1999):

- Total market modeling : to identify the position of the brand in the context of a competitive marketplace
- Specific branded business forecasting : to identify total business earnings from the brand

- Business drivers research: to determine the added value of total earnings attributed specifically to the brand
- Brand risk review: to assess the earnings or "Beta" risk factor associated with the earnings

Brand valuation is determined by assessing the brand added value after tax, and discounting this at a rate that reflects the risk profile of the brand.

Discount Rate, Growth Rate and Useful Life

The discount rate, growth rate and the useful life of the brand are often the most neglected issues in brand valuation, yet they play an important role in the eventual valuation of the brand. Managers need to ask brand valuers pertinent questions regarding the assumptions made in determining these key variables. Most approaches make use of the discount rate and the growth rate in order to determine an appropriate multiplier that needs to be applied to the estimated annual value of brand earnings.

The perpetuity formula that is the basis for all these calculations is stated as: Implied Multiplier = (1+ growth rate)/(Discount rate – growth rate)

The discount rate is one of the most difficult variables to determine. In most Discounted Cash Flow analysis (DCF) the discount rate used is the firm's weighted average cost of capital (WACC) (Breally and Meyers, 1996). This is shown as:

WACC = After tax cost of debt x target debt to total assets ratio + cost of equity x target equity to total assets ratio

Using a firm specific WACC raises certain issues. The first issue is that WACC is a factor of the firm's gearing ratio. It therefore seems illogical that an asset's value can change based on the leverage of the firm. It would be far more appropriate if the WACC represented the gearing that a financial institution would extend to this firm or the standard industry wide gearing ratio.

The second issue is how does a firm determine the correct cost of equity. The most commonly used method is the Capital Asset Pricing Model (CAPM). This model determines the risk of the company relative to the market by regressing the share price movements against the market movements (Damodaran, 1996). The problems with CAPM are well documented (Bodie, Kane and Marcus, 1999).

These problems include the appropriate rate for a non listed company. Proxy beta's can be used, but assumptions need to be made with regard to the capital structure and operating similarities of different firms.

The last issue is whether using a firm specific WACC in the first place is the correct measure. One of the major benefits of branding is that the earnings are less volatile. By using the firm's WACC one may be undervaluing the brand. Less volatile earnings result in a lower Beta and consequently a lower cost of equity.

This is a classic case of double counting. Some alternatives to using a firm specific WACC include an industry WACC; using a debt: equity ratio based on what a financial institution would extend to the company in order to purchase this asset; and determining the discount rate from economic principles.

The growth rate is another area where there is considerable debate. According to Damodaran (1996) there are a number of measures used to determine the growth rate. These include historical trends; forecast growth; an estimate of future real growth in the economy; and the inflation rate plus a real growth adjustment. Numerous factors should be considered when determining the appropriate growth rate. These factors include the industry size and prospects as well as the company's ability to satisfy the market demands in terms of the growth rate (Damodaran, 1996).

Determining the useful life of a brand is another area that requires a considerable amount of thought. Many of the world's leading brands have been around for over 50 years. Most brand managers hold the belief that their brands will have a similar life. However manager's need to be realistic and consider a brand in terms of its lifecycle and what plans are being made to keep their brand contemporary.

Managerial Issues

There are a number of issues that need to be discussed when considering the approaches managers want to use to value their brands.

The first is the portfolio effect. Some companies have developed a portfolio of brands for strategic reasons. The value of the brands individually do not equal the value of the brands as a whole. A method of valuing a portfolio of brands would be to value the brand in its current use as well as add on the effect of that brand not entering into the single brand optimum space.

Secondly, umbrella brands or co-brands infer benefits due to the associations with the company (Aaker, 1996a). The difficulty here is to determine how much of the benefits are due to the product's brand name and how much is due to the umbrella or corporate brand.

Thirdly, media inflation plays a role. It makes it more difficult for companies to recreate the brand, and the cost of maintaining the brand increases. Some strength of a brand is related to awareness levels, due partly at least to the media inflation. A generic competitor does not have this pressure on their costs.

Fourthly, when a competitor enters the market, a decline in market share could result. In most models, this would be seen as a reduction in brand equity. However, it can be argued that the customers that remain loyal are now worth more, resulting in an increase in brand equity.

Fifthly, Aaker (1991) goes into detail about the effect of sales promotions on brand equity and the temptation to milk the brand. Most of the models use current sales. Mathematically the temptation is to raise brand equity by discounting the brand and thereby raising revenue. However, there is a possibility that this could destroy brand equity.

Sixthly, approaches that rely on marketing research need to ensure that the methodology used in the research conform to the scientific standards. Inappropriate sample sizes, bias, and other errors could occur, thus influencing the calculations.

Lastly, there are a number of practical issues that need to be considered with respect to brand valuation. These include the legal, accounting and tax implications. While these factors differ from country to country, managers must understand that no brand valuation will be complete without dealing with these requirements in their country.

Conclusion and Implications

It is relatively easy to manipulate the results of measuring brand equity in order to deliver any value that management wishes. The only way to prevent this abuse is to understand the objective of the valuation and to use the appropriate assumptions in order to derive a fair value.

No single approach will give all the answers to a correct valuation. The starting point is to understand the purpose of the valuation and what benefits the brand delivers. Due to a lack of transparency of the workings and the underlying assumptions, some managers are not prepared to accept brand equity valuations. Provided that information on the assumptions are made available to managers, they can make their own judgements on what the correct value should be. "Valuation is neither the science that some of its proponents make it out to be nor the objective search for true value that idealists would like it to become. The models that we use in valuation may be quantitative, but there is a great reliance on subjective inputs and judgements. "Thus the final value that we obtain from these models is coloured by the bias that we bring into the process" (Damodaran 1996, p2).

When management is embarking on an exercise to value their organization's brands, it is recommended that they do the following:

Management must firstly understand the nature of their firm's intangible assets. If one of the organization's intangible assets is marketing related, they must determine on what attribute the brand derives its benefit. The purpose of the valuation must then be determined. A method must then be chosen that meets management's needs in terms of the attribute it measures, the information requirements and the model's shortcomings. Management must also ensure that an appropriate discount rate, growth rate and useful life are used. They must ensure that the model used is robust enough to deal with the peculiarities of the organisation. A key issue is to check and question the underlying assumptions.

Lastly, management should ensure that the mathematical calculations have been done correctly.

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