MEASURING THE FINANCIAL VALUE OF BRAND EQUITY: THE PERPETUITY PERSPECTIVE

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Abstract
This paper introduces the perspective of a brand as a perpetual firm asset. From this perpetuity perspective, brand equity is defined as the financial value that a firm derives from customer response to the marketing of a brand. Rooted in this perpetuity perspective, brand perpetual value is developed as a financial measure of brand equity, where brand perpetual value is calculated as the value of a perpetuity. The relationship to previous perspectives on brand equity and the potential applications of the brand perpetual value measure are discussed.

Introduction
Developing a financial measure of brand equity is crucial for effective brand management. Quantifying the dollar value of a brand would allow firms to report brand asset values in financial statements, and assign an objective value to a brand during sale or acquisition. A standard measure of brand equity that can be tracked longitudinally would also allow marketers to evaluate changes in a brand’s value over time, helping to evaluate the effects of changes in marketing strategies or tactics, competitive factors, or managerial impact. Developing a financial measure of brand equity would address MSI’s top priority of increasing accountability and measuring ROI of marketing expenditures (MSI 2008).

Although the idea of a standard brand equity measure has great appeal, there is much disagreement about what brand equity means, and how it should be measured. There exist three main perspectives on brand equity. These include the notions of brand equity as: a set of cognitive associations (Aaker 1991, Keller 1993, 2002), a price or revenue premium compared to a benchmark competitor (Aaker 1991, Ailawadi et al 2003), and a stock price premium (Simon and Sullivan 1993). These three perspectives on the meaning of brand equity have given rise to a multitude of proposed brand equity measures in the academic arena. Amid academia’s definitional and measurement variability, professionals have developed their own measures of brand equity. These measures depend on various assumptions, which differ between measures. As a result, brand equity estimates vary widely. For instance, the brand equity for Google in 2007 ranged from $17 billion to $66 billion – more than three times as much! – depending on the measurement scheme employed (Knowles 2008). Clearly, academia needs to develop a financial measure for brand equity that can gain credibility and acceptance by the professional community.

The purpose of this article is to propose a definition and measure of brand equity that can accommodate the contributions of the various perspectives already proposed by academic researchers, and attain acceptance by the professional community. Doing so will require adopting the perspective that a brand is a perpetual firm asset – that is, one with potentially infinite life. Based on this perpetuity perspective, brand equity is defined as the financial value that a firm derives from customer response to the marketing of a brand. Brand perpetual value is
developed as a financial measure of brand equity, which adopts the formula of a perpetuity as a measure of brand equity.

This paper is intended to benefit both the study and management of brands. Academic researchers can benefit from the introduction of the perpetuity perspective of brand equity, which allows for the definition and measurement of a brand’s value. This objective financial measure can aid scholars in studying other aspects of brand management, such as exploring the perceptual and managerial antecedents that impact brand equity, the effects of brand extensions on family brand equity, or the effects of brand equity on firm performance. Marketers should also benefit from this paper, by acquiring a measure that allows them to assign a dollar value to their brands for the purposes of financial reporting, evaluating the effectiveness of brand management policies, or determining the effectiveness of managerial performance.

The 4Ps of Brand Equity
There exist three main perspectives on brand equity. The conceptual definitions of each will be explained. The contributions and limitations of each will also be examined. Finally, a fourth perspective – the perpetuity perspective – will be introduced.

The Perception Perspective
The first perspective on brand equity is the cognitive psychology view, which will be referred to as the “perception perspective.” The underlying premise of the perception perspective is two-fold. First, it asserts that brand equity is a mental representation in consumers’ minds (Aaker 1991, Feldwick 1996, Keller 1993). Second, it views brand equity as an added value (Aaker 1991, Biel 1992, Keller 1993). These are apparent in the words used in the perception perspective’s definitions of brand equity: awareness, associations, attachment, beliefs, knowledge, and perceived quality all refer to cognitive representations, while added value, additional cash flow, and differential effect refer to value that a brand name adds to a good. In short, this perspective views brand equity as the cognitive perceptions that consumers hold about a brand, which yield value separable from the functional utility of the good.

The perception perspective offers several valuable insights about brand equity. Foremost, it identifies customers’ perceptions of a brand as paramount in creating brand equity. Because consumers retrieve their mental imagery for a brand when making a brand evaluation, it is vital that a perspective on brand equity acknowledge the importance of brand image. Additionally, the perspective asserts that consumers’ brand perceptions impact cash flow, in the sense that customers are willing to pay higher prices for brands with more favorable brand imagery. Finally, the perspective contributes the notion that brand perceptions (and behaviors) result from the firm’s marketing efforts. This is especially noted in the consumer-based brand equity model, which states that brand equity results from “customer response to the marketing of the brand” (Keller 1993, p. 2).

Unfortunately, the perception perspective has several limitations. First, it offers a myriad of measures for brand equity, failing to specify a single standard. Second, most of these measures are non-financial, failing to offer an objective dollar value for a brand. Third, the perspective believes that brand perceptions are wholly separable from a good’s functional utility. The perception perspective assumes that a brand name can be removed from a product without
changing the evaluation of the product’s performance attributes. However, this assumption is
disproved by research demonstrating that brand names have an interactive effect with product
features (Rangaswamy et al 1993). Removing a brand’s name or replacing it with another would
not only change customers’ evaluations of the good directly, but also change their evaluations of
the good’s non-brand attributes. Therefore, the brand name is not separable from the rest of the
good. Rather, the name is merely one part of a holistic mental representation of the good, which
interacts with other perceptions to generate an overall brand image in consumers’ minds.

The Premium Perspective
A second perspective on brand equity will be referred to as the “premium perspective.”
Following from the perception perspective’s notion of “added value,” this view suggests that a
brand name’s added value is reflected in a price (Aaker 1991) or revenue premium (Ailawadi et
al 2003). The concept is that brand equity can be observed in the difference in unit price or total
revenue between the branded good and a benchmark good. The benchmark comparison is
sometimes taken to be a generic or store brand, and other times thought of as a “white box,” or
unbranded good.

The premium perspective provides a valuable contribution to brand equity. Without
contradicting the perception perspective’s concept that brand equity is rooted in consumers’
cognitive associations of brand image, the premium perspective proposes that these associations
affect consumer behavior, which is reflected in the price paid and volume purchased in the
marketplace. As a result, the premium perspective hints at a process by which brands capture
financial value stemming from favorable brand imagery.

However, the premium perspective’s proposed benchmarks for determining price and revenue
premiums are problematic. Store brands differ by retailer and geographic location. Therefore, a
premium between a brand and store label calculated in a New York grocery store may yield a
vastly different brand equity value than the premium calculated in a California convenience
store. Comparing a brand against an unnamed good is impractical, as well. There are very few
examples of truly unnamed goods in the marketplace, but perhaps a produce commodity would
be the best example. However, even an unbranded banana in a grocery store holds certain
cognitive associations that transfer from the retailer’s brand image. Because premiums
calculated against store brands are inconsistent and those computed against unnamed brands are
impossible, the premium perspective fails to provide practical guidance.

The Portfolio Perspective
A third perspective on brand equity is the financial markets view, which will be referred to as the
“portfolio perspective.” This perspective views brand equity as a stock price premium that
investors grant to a firm, based on its portfolio of brand assets. That is, after subtracting the
tangible asset value from the firm’s market capitalization, the excess equity is the value of
intangible brand portfolio assets (Simon and Sullivan 1993).

The portfolio perspective introduces several notions about brand equity. First, it is a dollar value
that is reflected in a firm’s stock prices. After all, investors should pay more for a firm that owns
brands with favorable brand imagery associations and strong loyalty than a similar firm with less
appealing brands (Madden et al 2006). Second, the portfolio perspective acknowledges that
MEASURING THE FINANCIAL VALUE OF BRAND EQUITY:

brands have a future value. Brand equity is not simply a present-period value based on current cognitive associations. Rather, it is a net present value of future cash flows resulting from brand sales. The forward-looking nature of the portfolio perspective is vital to the proper calculation of brand equity.

The portfolio perspective suffers from several limitations, however. By using the firm as the level of analysis, the portfolio perspective is not parsimonious. It is unable to compute the value of individual product-level brands or brand exemplars. While this may not be a problem for a “branded house” like Dell, it would be a fatal flaw for a “house of brands” such as Procter and Gamble. Additionally, the portfolio perspective is unable to differentiate brand assets from other intangible assets. By subtracting tangible asset value from market value, the remaining balance lumps intangible assets value (e.g., from human knowledge capital) into the brand equity value. Finally, this perspective places brand equity at the mercy of macroeconomic influences. Rather than changing with consumers’ attitudes and competitive forces, brand equity would also fluctuate due to oil shocks, military conflicts, interest rates, and other factors that influence stock prices – but have no effect on brand image associations.

The Perpetuity Perspective

Drawing on the contributions of the previous perspectives, a fourth perspective on brand equity will now be introduced, and will be referred to as the “perpetuity perspective.” The perpetuity perspective defines brand equity as the financial value that a firm derives from customer response to the marketing of a brand. This definition includes several important concepts, which must be explained in detail.

The perpetuity perspective defines brand equity as a financial value. Like the premium and portfolio perspectives, this view proposes that brand equity is a single, objective, financial value. Creating a financial value of brand equity is necessary for valuing a brand for sale or inclusion on a balance sheet (Feldwick 1996). Furthermore, this value can be computed at any level of a brand, from an exemplar, or a brand family, overcoming one limitation of the portfolio perspective. It also perceives brand equity as an absolute or objective measure, rather than a relative measure computed in comparison to a benchmark, as in the premium perspective.

The perpetuity perspective defines brand equity as value derived by the firm that owns the brand. This acknowledges the perception perspective’s view that the brand image associations that create brand equity reside in consumers’ minds, but also specifies that the financial value generated by those favorable associations is earned as revenue to the firm. The firm owns the brand and collects the economic rent derived by the brand, thus benefitting from the favorable associations created by the firm’s marketing policies for the brand.

The perpetuity perspective defines brand equity as being derived from customer response. This refers to the market behaviors of the brand’s consumers, including trial, repeat purchases, (behavioral) brand loyalty, willingness to pay a price premium, willingness to search or delay purchase of a competitor if the brand is out of stock, willingness to recommend to others, etc. These behaviors all impact the revenue generated by the firm as the result of the favorable associations consumers hold for the brand.
Finally, the perpetuity perspective defines brand equity as *response to marketing* activity. This accounts for the firm’s investments and expenditures for the brand. Such expenses include customer research conducted to elicit consumer needs or brand associations, product research conducted to develop the good, warehousing and transportation costs incurred to bring the product to market, and advertising and other costs to promote the brand and its image to customers. While other perspectives on brand equity focus on cash inflows, it is important to account for these marketing expenditures, which are play a crucial role in achieving long-term profitability for the brand (Motameni and Shahrokhi 1998).

The perpetuity perspective’s definition of brand equity as the financial value that a firm derives from customer response to the marketing of a brand incorporates the valuable contributions of the other three perspectives. Like the perception perspective, it acknowledges that brand equity is rooted in the brand imagery associations that reside in consumers’ minds. These associations influence consumers’ behavioral responses to the brand’s marketing mix activities, which impacts the brand’s cash flows to the firm. Like the premium perspective, it recognizes that brands with more favorable brand associations generate more positive customer response and greater financial rewards to the firm. And, like the portfolio perspective, it suggests that brands earn economic rents that can be measured and reported on a balance sheet, which investors can use to place stock price premiums above strictly tangible asset values. Thus, the perpetuity perspective incorporates the main contributions of other perspectives, while also overcoming their limitations.

The perpetuity perspective also adds one unique dimension to brand equity that has not been addressed previously: brands are perpetuities. That is, unlike tangible and intangible human assets, brands assets have the potential for infinite lives. Other scholars have pointed out the potentially long life of brands. For instance, several researchers have pointed out the goal of brand managers to “build brands that last for decades” (Esch et al 2006, p.98). This is evident in measures of brand equity that utilize net present value analysis to calculate brand equity (Kapferer 2004, Shankar et al 2008). However, none of these perspectives or measures has yet taken the leap to consider brands as having the potential for infinite life. By adopting this view, the current proposal acquires its name, and its unique contribution, as the perpetuity perspective.

**Measuring Brand Equity: Brand Perpetual Value**

The three existing perspectives on brand equity have generated a myriad of measures for the concept. Some yield a dollar value, but most are scales to reflect the brand imagery in consumers’ minds. The perception perspective suggests that brand equity can be measured by cognitive measures, such as: customer satisfaction and loyalty (Aaker 1996, Feldwick 1996), perceived quality (Aaker 1996, Erdem and Swait 1998, Feldwick 1996, Keller 1993, Mizik and Jacobson 2008), brand personality (Aaker 1996, Feldwick 1996, Keller 1993), organizational associations (Aaker 1996, Feldwick 1996, Keller 1993), brand awareness (Aaker 1996, Feldwick 1996, Keller 1993), differentiation (Mizik and Jacobson 2008), personal relevance (Mizik and Jacobson 2008), and innovativeness (Aaker 1996, Mizik and Jacobson 2008). However, these measures do not generate a financial value for a brand. Furthermore, these are measures of cognitive associations that are the precursors to brand equity – not brand equity, per se.
MEASURING THE FINANCIAL VALUE OF BRAND EQUITY:

Drawing on the perception perspective’s notion of “added value,” the premium perspective has tried to place a dollar value on the amount contributed by the brand name. These attempts yield the measures of price premium (Aaker 1996) and revenue premium (Ailawadi et al 2003). Although these measures succeed in assigning a dollar value to brand equity, they suffer from the flaws in their conceptual definitions of brand equity. Namely, they view the brand name as a separable brand attribute, an idea which has been disproved (Rangaswamy et al 1993). Also, they require comparison to a benchmark, creating an unstable relative measure, instead of an objective, robust metric.

Finally, the portfolio perspective has suggested that brand equity can be measured by subtracting the value of a firm’s tangible assets from its total market capitalization (Simon and Sullivan 1993). While this measure successfully generates a dollar value for brand equity, it is unfortunately a flawed estimate, and a highly volatile one. This method of calculating brand equity assigns all of the firm’s intangible asset value to the firm’s brands, failing to account for other intangible assets, such as knowledge capital. It also lacks parsimony, assigning only one dollar value for a firm’s brand equity, regardless of how many individual brands the firm owns. Finally, the measure reflects not only brand assets, but also changes in macroeconomic conditions, making a brand’s equity value susceptible to changes in investor opinions, interest rates, and oil prices – none of which should directly impact brand equity.

While all of these measures are useful indicators of concepts that reflect brand equity, none adequately measures brand equity as conceived by the perpetuity perspective. Instead, that perspective requires a measure that yields a dollar value, based on the notion of a brand as an infinitely-lived asset. While this is a new insight into the measurement of brand equity, it is not entirely inconsistent with previous perspectives. Other perspectives discuss the appeal of financial measures (Kapferer 2004), stating that “the best measure of brand equity would be the discounted present value of future earnings attributable to brand-equity assets” (Aaker 1991, p. 26). Even the infinite lifetime of the brand has been described previously (Esch et al 2006, Knowles 2008, Motameni and Shahrokhi 1998, Shankar et al 2008). However, the actual measures proposed for brand equity either fail to assign a dollar value by focusing on consumers’ cognitions, or assign a dollar value but weight this by a subjective brand performance multiplier. No previous measure utilizes the financial formulae already adopted by finance experts, the value of a perpetuity.

The formula for the value of a perpetuity will be used to measure brand equity, and will be referred to as *brand perpetual value*. The value of a perpetuity is calculated as the periodic cash flow divided by the periodic interest rate (Lee et al 1997). Interpreting this for a brand yields the following calculation for brand equity: brand perpetual value is calculated as the total revenue earned by a brand in a period minus the total marketing costs spent on the brand in the period, with the difference divided by the periodic interest rate, which is the firm’s weighted average cost of capital:

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\text{Brand Perpetual Value} = \frac{\text{Total Revenue} - \text{Total Marketing Costs}}{\text{Weighted Average Cost of Capital}}
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The first key term in this expression is total revenue. This is the total cash inflow that the firm receives from the brand in a given period. This term captures customer response. Specifically, it measures customers’ behavioral response to marketing by purchasing the brand. Purchase requires awareness of the brand and favorable brand associations (compared to competitors), which are both cited as important factors by the perception perspective. If the brand commands a price premium without loss of volume, then total revenue will increase, which fits with the premium perspective.

The second important factor in this measure is total marketing costs. This is the total cash outflow the firm spends to market the brand in the period. Marketing costs include the costs to manufacture the product or provide the service offered by the brand, distribute the brand to channel intermediaries or end consumers, and communicate the brand’s value proposition to customers. These are the marketing efforts to which customers respond, which influence brand image and allow customers to purchase the brand, resulting in revenues flowing into the firm. Accounting for these costs is important to measuring brand equity, because the brand’s value to the firm would be overestimated if brand equity was only calculated as revenue generated by the brand, similar to the revenue-focused measures of the premium perspective. This brand would not generate any positive cash inflows if the firm did not spend anything to market the brand.

The final term in this calculation is the weighted average cost of capital. Although brand image resides in consumers’ minds, brand equity is a value to a firm. It is the profit that a firm makes from owning the brand, and this requires the firm to invest money into marketing the brand, as previously noted. To invest in marketing, the firm must raise capital via debt or equity offerings. The weighted return that the firm pays to its investors is its weighted average cost of capital (WACC). Although this has little direct impact on consumers’ image of the brand, it greatly impacts the firm’s ability to market the brand. Therefore, while WACC is not often a concern of marketing managers, it becomes an important part of the calculation of brand perpetual value.

Brand perpetual value has several very appealing attributes. First, it incorporates the strengths of other perspectives, while overcoming their limitations. It acknowledges that brand image resides in consumers’ minds, like the perception perspective, but it also assigns a dollar value to the brand. It recognizes that brands with favorable associations can command price and/or revenue premiums, but it does not require a benchmark brand to create a relative value. By placing a financial value on an intangible brand asset, it can impact a firm’s stock price, but does not fall victim to constantly-changing investor perceptions or macroeconomic factors, like the portfolio perspective.

Secondly, brand perpetual value reflects measures proposed by other perspectives. Greater brand awareness, more favorable brand associations, stronger loyalty, and other cognitive factors described by the perception perspective would generate greater revenue (for a constant level of marketing costs) and/or allow the firm to spend less on marketing (while earning a constant level of revenue). Therefore, the consumer perceptions that give rise to brand equity are reflected in the revenue that the brand earns and/or the marketing costs that the firm incurs, both included in the numerator of the brand perpetual value formula. Furthermore, brand perpetual value could be reflected in stock price premiums, whereby investors would bid up stock prices for firms with greater cumulative brand perpetual values.
Finally, brand perpetual value is invariant to the time period of analysis. Revenue, costs, and WACC can be assessed at any unit of time (e.g., quarter, month, year), so brand perpetual value can be assessed for the most appropriate time unit of analysis for any given brand. For example, if a laundry detergent brand has no seasonal effects, its brand perpetual value could be calculated for on a monthly basis. A chocolate candy brand would show monthly fluctuations due to holiday sales increases, and might be valued on an annual basis. An automobile brand with a three-year repurchase cycle could be measured triennially. Despite the differences in time period of analysis, the brand perpetual values of these three brands could be directly compared (if desired), because the units of each term in the calculation has been scaled for any time period. Therefore, any brand (with no foreseeable stoppage of revenue) can be valued using the brand perpetual value formula.

The brand perpetual value measured developed herein meets the criteria of a good measure (Aaker 1996, Bahadir et al 2008, MSI 1999). It is grounded in theory, namely that a brand is a perpetual asset with an infinite life. It measures the construct of interest (i.e., brand equity) directly, and separately from antecedent and outcome factors. It is sensitive and reflects changes in brand equity stemming from changes in antecedents (e.g., brand awareness, attitudes, loyalty, etc.). It applies to any brand, regardless of category or time unit of analysis. It captures the brand’s future profit potential. It is objective, so different analysts would attain the same result. It is robust and stable over time and across categories, yet also reflects changes in brand health.

**Discussion**

The perpetuity perspective defines brand equity as the financial value that a firm derives from customer response to the marketing of a brand. This incorporates the valuable contributions of the perception, premium, and portfolio perspectives. It also introduces the notion that brands have potentially infinite lives. The perpetuity perspective proposes brand perpetual value as a financial measure of brand equity, based on the value of a perpetuity. This measure appropriately measures the construct of brand equity, reflects factors antecedent to brand equity, and meets the criteria of a good measure.

A limitation to brand perpetual value as a measure of brand equity is that not all brands have infinite cash flows. Fad and fashion brands may mature rapidly and quickly decline into oblivion. Entertainment brands, such as movies, books, and video games, also tend to earn large revenues early in their lifecycles, only to dwindle to very small revenue streams (if any) after a short period. In these cases, a perpetuity would not be an appropriate measure of brand value. Instead, brand equity for these goods should be measured as the net present value of the cash flows of the brands’ forecasted lifetime. Despite this caveat, brand perpetual value remains an appropriate measure for “going-concern” brands with no end to their lifecycles in sight.

A second limitation to brand perpetual value is that it requires a shift in perspective from viewing a brand merely as a name, symbol, logo, etc., to viewing a brand as the entire value offering included in the good. This includes not only the brand’s name, but its tangible product features, the symbolic associations of the brand, the appeal of its packaging, the retailer at which the brand is being offered, etc. Because brands are holistic goods, these elements are not entirely separable, and must be accounted for jointly in determining brand equity.
Brand perpetual value has many potential uses. First, it can be used to assign a financial value to a brand. As a firm asset, it would be very appealing to place a dollar value on a brand. This dollar value would be useful for financial reporting purposes, and allow the firm to report its brand asset values on financial statements. This financial value could also be used to negotiate a price when licensing the brand, transferring the brand to another firm, or valuing a firm for mergers and acquisitions.

Another useful managerial application for brand perpetual value is to measure brand equity longitudinally. This is a useful metric by itself, so that the firm can monitor changes in its brand performance over time. It is also useful as a dependent metric to examine the impact of various marketing policies on brand equity. A firm could conduct a pre vs. post analysis of brand perpetual value to determine how a change in the marketing mix impacted brand equity. This could help managers understand the effects of a new promotional campaign on brand equity. Or, it could allow marketers to calculate the elasticity of brand equity with respect to price changes. It could allow brand managers to gauge the impact that changes in a brand line (e.g., extension, deletion, repositioning) have on family brand equity. Firms could even use changes in brand perpetual value during an executive’s tenure to measure and/or reward managerial performance.

Finally, scholarly applications of brand equity abound. Researchers might investigate the antecedent effects on brand equity. Studies might explore whether abstract or concrete associations create longer-lasting profitability, the relative importance of attitudinal and behavioral brand loyalty, or whether there is a “pioneer advantage” in terms of attaining greater brand equity. Academics might also explore the outcomes of brand equity. For instance, researchers may examine how brand equity impacts a firm’s overall profitability, or the weight that investors give to intangible brand assets when determining stock price. Any investigation of brand equity could use the brand perpetual value measure as a metric.

References


MEASURING THE FINANCIAL VALUE OF BRAND EQUITY:


MEASURING THE FINANCIAL VALUE OF BRAND EQUITY:
