MASB

WHITE PAPER

# Brand Investment and Valuation

## a new, empirically-based approach


Frank Findley

MSW•ARS Research



presented at ARF Re!think Conference

March 2016

## About MASB

The **Marketing Accountability Standards Board** began as a visionary initiative by industry professionals and academics who saw an opportunity to increase the contribution of the marketing function through the development of standards for marketing performance measurement and processes that link marketing activities to financial performance.

After comprehensive review of current practices, needs and accountability initiatives sponsored by industry organizations, it was determined that while marketing was not ignoring the issues surrounding metrics and accountability, the practices and initiatives underway were narrow in focus, lacking integration and generally not tied to financial performance in predictable ways.

*"As it was for product quality in manufacturing (with ANSI & ISO) and financial accounting and reporting (FASB & IASB), marketers taking the lead in this will gain sustained competitive advantage."* – Dr. Joseph Plummer, MASB Founding Director

**MASB is THE independent, cross-industry forum that sets the measurement and accountability standards that visionary leaders in Finance and Marketing rely on to guide investment decisions for enterprise value.**

## MASB Members

Establishing MASB in 2007 was viewed as the seminal opportunity to approach the measurement foundation of accountability and continuous improvement at the highest level.  Membership crosses all industries and includes marketer companies, business schools, industry associations, media providers, media & advertising agencies, measurement providers and independent consultants that believe in linking marketing actions to financial performance.

*"There is one group exclusively devoted to marketing measurement…predictive of financial return…and all marketers who are serious about meeting the accountability mandate should get involved."* – Bob Liodice, CEO, Association of National Advertisers

MASB members belong to an elite, forward-thinking community of marketer companies, measurement providers, industry associations and business academics committed to linking marketing actions to financial return.

## MASB Summits

Each February and August, MASB gathers top Finance and Marketing thought leaders for its **Marketing Accountability Summit** with project updates from members and guest speakers addressing the latest topics. For more info, visit **themasb.org/masb-summits**.

*MASB is a 501(c)(3) nonprofit organization dedicated to establishing marketing measurement and accountability standards across industry and domain for continuous improvement in financial performance and for the guidance and education of business decision-makers and users of performance and financial information.*

## Summary


The "brand" is one of the largest assets that a company owns. But unlike tangible assets like factories which are quantified on the balance sheet, a brand's financial value often goes unrecognized. This puts marketing and finance teams at a disadvantage for assessing investments in the brand such as media.

To bridge this gap MASB sponsored an ambitious project that brought together leading academics, marketing and finance practitioners from six blue-chip corporations, and specialists from several research companies.

An 18-month tracking study of over one hundred twenty brands was used to:

- identify a cornerstone brand strength metric - one with the strongest proven relationship to share-of-market and, ultimately, cash flows
- link this metric to other marketing metrics
- validate a practical model for brand valuation that finance teams can easily implement

As demonstrated in case studies, this provides a roadmap for monitoring marketing investment return and bringing financial rigor to the budgeting and project authorization process.


## Introduction

Brand building is among the most common objectives of marketing. By improving the place the brand holds in the hearts and minds of customers, brand teams strive to impact both short and long term financial return. But how does a company know that these have been good investments? Unlike tangible assets like a factory where the cost and return are easily quantified and tracked, the intangible nature of a brand results in its financial value being unrecognized and unmonitored. This difficulty in quantifying a brands contribution to the bottom line can even put marketing teams at a disadvantage versus other corporate functions in acquiring needed resources.

To rectify this situation, the Marketing Accountability Standards Board (MASB) determined that conceptual and mathematical linkages needed to be made between marketing and financial metrics. Specifically, if changes in brand strength were accurately measured and translated into cash flows, marketing investments could be treated by finance teams in the same way as other corporate investments. Furthermore, like is done with tangible assets, finance teams could place a value on the brand itself by applying a present value calculation to the expected stream of brand-driven cash flows.

But this approach requires a proven 'cornerstone' measure of brand strength that captures the full extent of the brand-consumer relationship. In managing brands, marketing teams have turned to numerous measures of brand strength. Often called 'health' or 'equity' metrics, some of these concentrate on specific aspects of the consumer-brand relationship. Examples are awareness of the brand, intent to purchase or use the brand, and willingness to recommend the brand.

While each of these provides valuable information in understanding part of brand strength, none alone captures the full extent of the brand relationship and therefore none provide a sufficiently strong relationship to financial metrics for the purpose at hand. However, an academic review of the research literature uncovered a different type of measure with a strong track record of predicting financial outcomes; brand preference.

Instead of focusing on a particular aspect of the brand-consumer relationship, brand preference strives to capture the total effect. It does this through a behavioral exercise in which consumers are incentivized to choose the brand they truly want from the set of competitive peers. In this way it captures the result on choice from both affective and cognitive motivations.

Drawing upon this knowledge base, MASB sponsored a multi-year longitudinal study to establish the needed linkages.

## Study Design

Six blue chip corporations participated in the study by providing unit sales, pricing, and distribution data for their own and competing brands for two categories of their choosing. The twelve chosen categories represented a wide variety of product types and market conditions. Individual unit prices ranged from less than one dollar to over thirty thousand dollars. Some of the categories were highly fragmented while others had only a few competing brands. Average purchase cycles varied from a week to up to a decade. Even the consumer decision process varied dramatically, with some categories being of a more spontaneous nature while others were much more deliberative and often included multiple decision makers.

For six of the categories, corporations also provided “equity” and “health” measures from their proprietary brand-tracking systems. While each included category specific measures, seven common classes were found across at least four of the categories: unaided awareness, aided awareness, advocacy, loyalty, purchase intent, relevance and value.

The above financial and brand tracking information was compared to brand preference data provided by MSW.ARS Research. This patented implementation of brand preference was chosen for a variety of reasons. It has undergone the rigorous MASB Marketing Metric Audit Protocol (MMAP) as part of the APM Facts/CCPersuasion copy-test measure[1]. As such it has a long-established record of meeting the ten characteristics of an ideal metric including being simple, objective, calibrated across categories and geographies, reliable, predictive of business results, and sensitive enough to detect even small changes driven by marketing activities. As deployed in this study it also has the advantage of isolating brand strength from product factors such as price and distribution. The data was collected monthly from a United States demographically representative sample of 400 online panelists. Each of these individuals was given the opportunity to choose the product they truly wanted within each category from among a competitive product set as part of a prize drawing. Brand preference was calculated as the percent ofindividuals choosing a product from that particular brand.

The analysis presented here is drawn from eighteen months of data collection for a total sample size of 7,200 respondents making choices on products representing 120 brands across the 12 categories.

## The Author

Frank Findley is Executive Vice President of Research for MSW•ARS Research and co-leader of the MASB Brand Investment & Valuation Project team. He holds a Bachelor of Science in Physics from Purdue University and a Master of Science degree from the Krannert Graduate School of Management.

# Brand Investment and Valuation

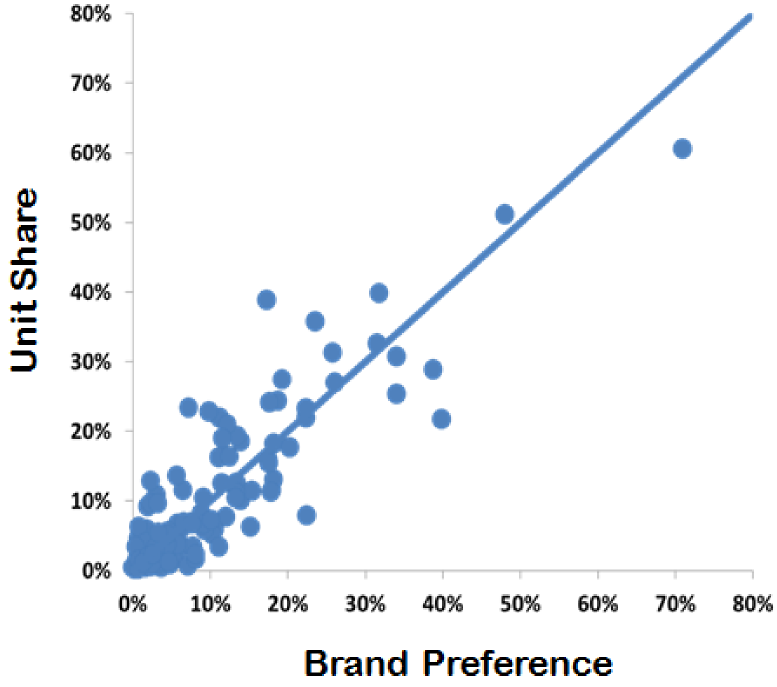
## a new, empirically-based approach

### Results and Insights

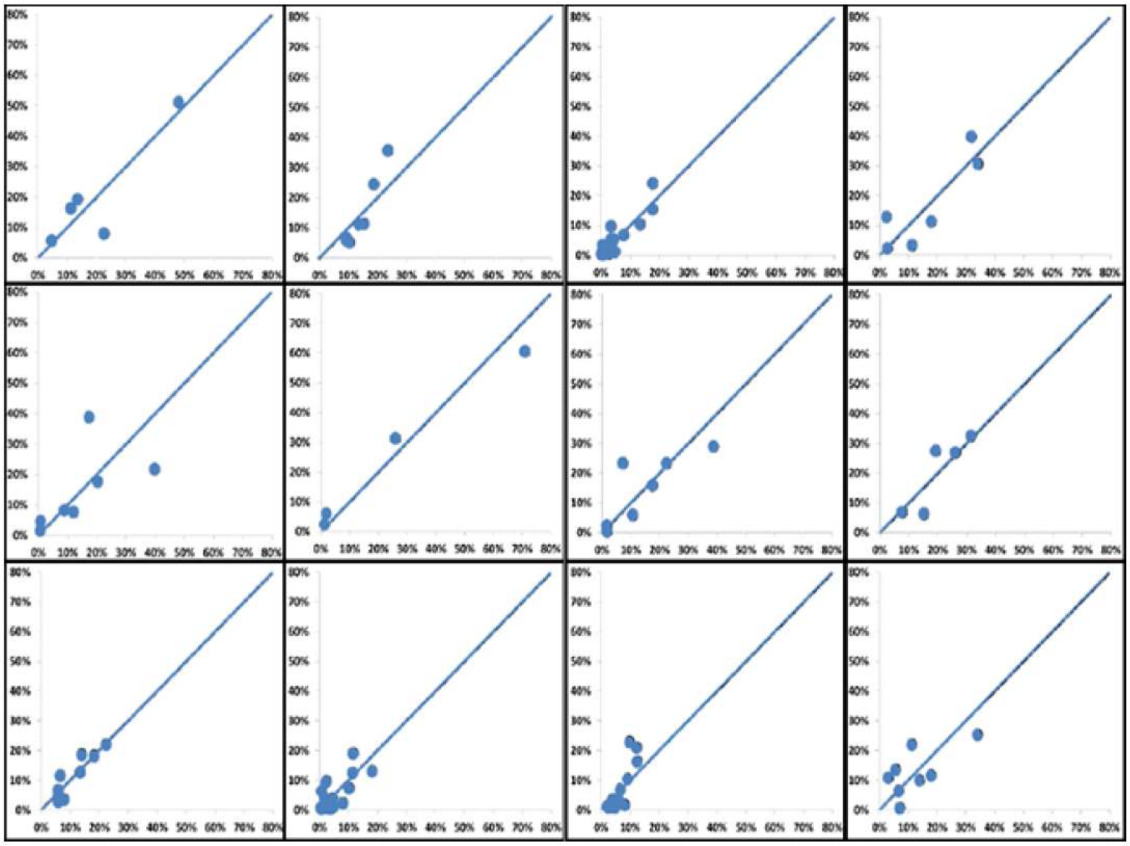
The first question to be answered was to what extent does brand strength (as measured by brand preference) determine a brand's share of consumer purchases? This is important as explaining unit share is fundamental to brand valuation. By combining an estimate of a brand's unit share of market at a given price point and cost of production with assumptions of future category size based on population and category penetration trends, a projection of cash flow can be made. A discounted cash flow (present value) calculation can then be used to create a brand valuation.

Across the trial categories, brand preferences alone explained 77 percent of the differences in unit shares among the 120 brands.

**Link between Brand Preference and Unit Market Share2 Point-In-Time: Brands across All Twelve Categories**



**Link between Brand Preference and Unit Market Share[2] Point-In-Time: Brands within Each of 12 Categories**



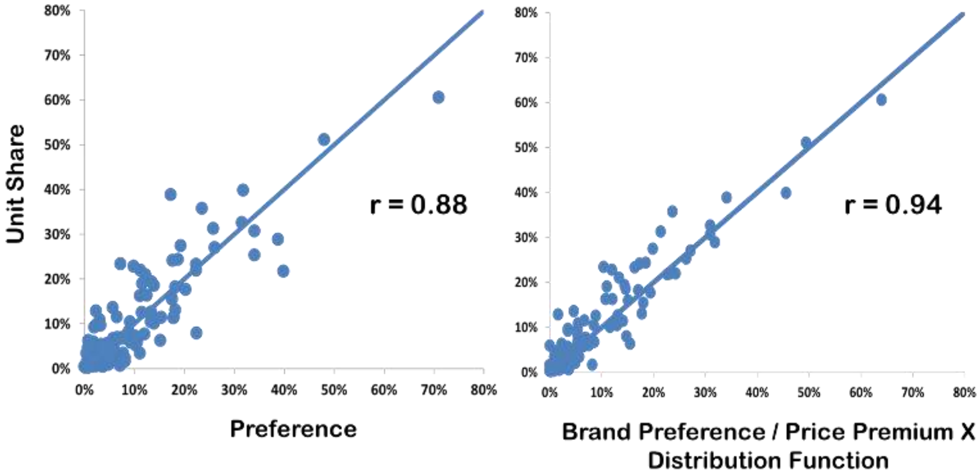
But what explains the remaining 25 percent of the variance in unit shares? And how do these factors interact with brand preferences?

Previous studies[3] have shown an interaction between brand preferences, product price and product distribution. Therefore, residual analyses were deployed to examine this interaction with price and distribution. Brand preference for each case was divided by its corresponding unit share to create an index. A clear relationship was seen.

Brands with relatively high prices on average have unit shares which under-perform their corresponding brand preference level. Contrarily, brands with relatively low prices on average have unit shares which over-perform their corresponding brand preference level. Similarly, brands with relatively high distribution on average have unit shares which over-perform their corresponding brand preference level. While brands with relatively low distribution on average have unit shares which underperform their corresponding brand preference level.

When brand preferences are combined with relative price and distribution the variance explained in unit shares increases to 89 percent  across the trial categories. This level of explanatory power leaves little room for improvement suggesting that brand preference by itself is a sufficient measure of total brand strength. Consequently, this suggests that it must capture the majority of the predictive power of brand awareness and other partial brand strength measures.

**Link between Brand Preference, Price, Distribution and Unit Market Share[2] Point-In-Time: Brands across All 12 Categories**




A correlation analysis was conducted using the participant supplied tracking data to confirm this directly. Unlike the behavioral brand preference technique which efficiently provides data for all brands in a category, the realities of "verbally" gathered survey measures restricted coverage to only the largest brands within each category. Across the six categories 33 brands were represented. To align with this, the brand preference and unit share were recalculated. Regarding the types of measures gathered, seven broad concepts emerged which were each present in at least four of the six categories:

- Awareness Unaided - report of brand name when prompted with category (no brand list given)
- Awareness Aided - brand name recognized from a list of brands
- Brand Loyalty - brand is one that they plan to consistently purchase/use when need arises
- Value - brand provides good value for the money
- Purchase Intent - likelihood to purchase brand in future
- Brand Relevance - brand fits lifestyle and/or needs
- Advocacy - brand is one that they would recommend to others

For each of these seven concepts and brand preference, the correlation and variance explained in unit share was calculated. Since the question wording and scale of these concepts varied by category, it was not possible to directly combine cases across categories. Instead, the variance explained was calculated for each category with the mean and median taken across them. Also, to provide perspective on the consistency of relationships across categories, the number of categories meeting the common rule-of-thumb correlation of 0.30 was determined.

**Link between Brand Strength Measures and Unit Market Share2 (Reduced Set of Brands)**

| | Average Unit Share Variance Explained | Median Unit Share Variance Explained | Number of Categories with Correlation > 0.30* |
|---|---|---|---|
| Brand Preference | 68% | 80% | 6 / 6 |
| | | | |
| Awareness – Unaided | 48% | 44% | 4 / 4 |
| Brand Loyalty | 45% | 43% | 5 / 6 |
| Value | 32% | 44% | 3 / 4 |
| Purchase Intent | 27% | 26% | 4 / 6 |
| Brand Relevance | 19% | 18% | 2 / 4 |
| Awareness – Aided | 18% | 26% | 4 / 6 |
| Advocacy | 15% | 13% | 2 / 4 |

Unsurprisingly given their widespread use in managing brands, all of these common concepts show mean and median correlations to unit share above 0.30 and correspondingly variances explained above nine percent. But as expected, none of these partial measures of brand strength demonstrate an explanatory power greater than brand preference. In fact, the strongest of these, unaided awareness, explains 21 percent less variance in unit share on average and 34 percent less on median. Also, brand preference and unaided awareness are the only two consistently meeting the 0.30 correlation level within each category for which it is available. So while the explanatory power of brand preference and unaided awareness transcend categories, the relevance of these other concepts tends to be less universal.

The correlation analysis also supports the contention that brand preference acts as a measure of total brand strength capturing the dynamics of these other measures. Contrasting their average variance explained in unit share to that of brand preference illustrates this. In each case the variance explained in brand preference is greater than that explained in unit share.

Therefore, these other metrics are unlikely to add to the explanatory power of brand preference to unit share.

**Link between Other Measures of Brand Strength and Preference & Unit Market Share2 (Reduced Set of Brands)**

| | Average Variance Explained in | |
|---|---|---|
| | Brand Preference (w/Price & Dist.) | Unit Share |
| Awareness – Unaided | 52% | 48% |
| Brand Loyalty | 50% | 45% |
| Value | 41% | 32% |
| Purchase Intent | 33% | 27% |
| Brand Relevance | 28% | 19% |
| Awareness – Aided | 28% | 18% |
| Advocacy | 23% | 15% |

## Application

The opportunity for using this learning to enhance corporate financial stewardship is dramatic. As noted by James Gregory, CEO of CoreBrand, "the percentage of a company's market value represented by intangible assets has grown from 17 percent in 1975 to 81 percent in 2009."[4] Yet, despite the increasing shift in enterprise value from tangible to intangible assets, the use of brand valuations has not become commonplace across organizations. This leaves boards and management teams with little guidance as to the long-term financial impact from allocation of resources to brand marketing activities.

Through MASB, several organizations have worked together to create a 'Brand Valuation Model' with corresponding guidelines and recommendations for calculation of brand valuation from brand cash flows. In February 2015, they presented a set of premises for doing this:

**Foundational Premises of the Brand Valuation Model[5]**

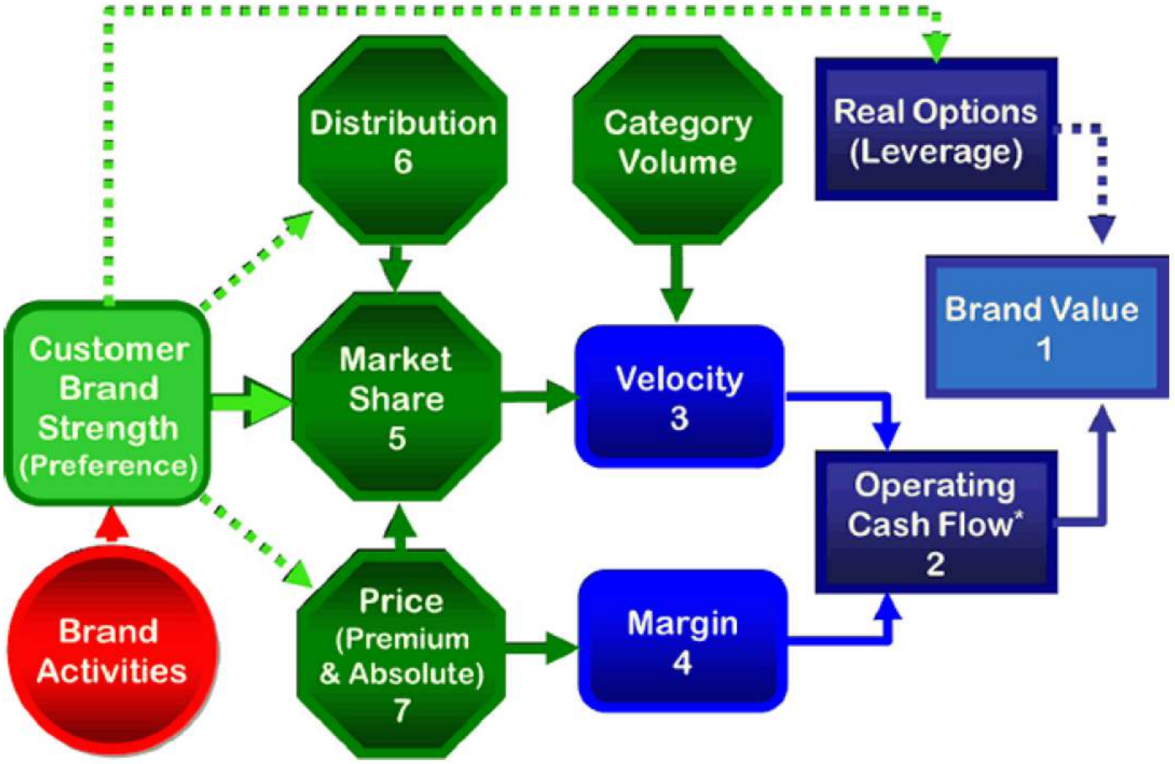
- A discounted cash flow approach is preferable over any other method, such as the "relief from royalty" method.
- "Brand strength" is an important "risk" indicator of the likelihood that future cash flows will be earned and over what period of time.
- "Brand strength" is predominantly driven by marketing effectiveness, competitive factors, and external environmental conditions, and it therefore can be reasonably inferred and factored into the model.
- Brand valuations are not intended to establish amounts to be recorded on the balance sheet (or to specifically test for impairment), nor are they intended to establish or represent a transactional valuation.
- As important as reasonable accuracy at a point in time is the consistency of approach and assumptions overtime which will allow management to see relevant valuation movement to aid in decision-making.
- The model should also enable sensitivity analysis and "what-if" modeling.

Within this foundation brand strength not only serves as a bellwether of future cash flows but also provides a means of highlighting marketing's unique contribution to the financial success of the firm. Jim Meier, MillerCoors Senior Director of Marketing Finance, explained it this way:

*The manufacturing side of the business can purchase and maintain an asset. Marketers can create and grow one... Brands could 'earn' a higher valuation based on improved brand preference which would remove uncertainty relating to future financial assumptions and the longevity of the brand.*[5]

In August 2015, these foundation premises were applied to the results from the longitudinal study. The end result was a robust, practical model for brand investment and valuation. The model which is housed by MASB provides not only provides the conceptual linkages but also the underlying mathematics.

**Brand Investment/Valuation Model - Conceptual Linkages[2]**

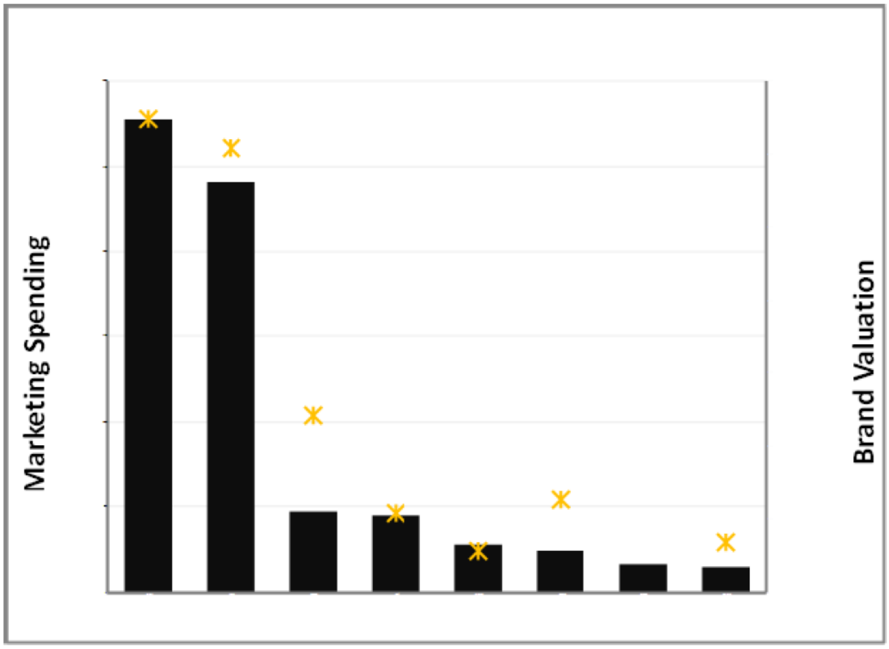



*Current and Future Cash Flows including volatility & risk

By applying this model, finance teams can easily tie changes in brand strength to changes in financial metrics. Furthermore, the resulting cash flows can be used to project a brand valuation which can be tracked over time. As an example, this model has been used within one company to demonstrate the relationship between long-term marketing spending for their brands and their corresponding brand valuations.

**Marketing Spending vs Brand Valuation[2]**

In short, there is now a proven roadmap available for monitoring marketing investment return and bringing financial rigor to the budgeting and project authorization process.



## Brand Investment/Valuation Model—Predictive Equations & Terminology

The trials have refined our understanding of how brand strength (measured by preference) translates into present value calculations, financial ratios, and the *DuPont Return on Equity* model**.**

**PV Calculation and Financial Ratios:**

(1) Present Value = ∑ {Net Period Cash Flows / (1 + R) $^{T}$} + Terminal Value
(2) Net Period Cash Flows = Brand Sales - Brand Costs   (Margin: Profit/Sales)
(3) Brand Sales = Category Size * Average Brand Unit Price * Unit Share  (Velocity: Sales/Assets)
(4) Brand Costs = Costs associated with producing sales for the brand
(5) Unit Share ~ Brand Preference * Distribution Factor / Relative Price Factor
(6) Distribution Factor = ƒ (B0 + B1 * ln (Distribution))
(7) Price Ratio = ƒ (B2 * Average Brand Unit Price / Average Category Unit Price)

Real Options include option to generate future revenues after sale of brand (related to terminal value), potential brand extensions, potential in new markets, etc.   (Leverage: Assets/Equity)

**DuPont Model:**

Profit/Sales x Sales/Assets x Assets/Equity = Profit/Equity = Return on Equity

## Estimating the Value of a Brand Using Brand Preference

### DEFINITIONS

- R = discount rate which represents the “weighted cost of capital”
- T = time of the cash flow
- Terminal Value = net present value beyond measured times (∑ T)
- Brand Costs = cost to produce, delivery, promote and service continued brand sales
- Category Size = number of units sold for the category as a whole per period
- Brand Preference = the percent of consumers who choose brand among competitive offerings of the category regardless of other market factors
- Distribution = a measure of the presence of the brand across possible outlets
- B0 & B1 = Beta Weights which calibrate category’s elasticity to distribution (empirically derived)
- Average Brand Unit Price = average price across all units sold
- B2 = Beta Weight which calibrates the category’s elasticity to price (empirically derived)

### References

1. themasb.org/mmap-metric-profiles/

2. MASB Standards Project. *Brand Investment & Valuation (BIV) Project Review & Status,* August 2015.

3. MSW.ARS Research. *Global Validation Summary,* 2008

4. J. Gregory. *Growing Impact of Companies' Corporate Social Responsibility Initiatives on Brand Value;* PRNewswire, May 22, 2012.

5. J. Meier. *Brand Investment & Valuation Project Review & Status of Finance Sub-Team,* 2015.