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BRANDS MATTER:
AN EMPIRICAL INVESTIGATION OF BRAND-BUILDING ACTIVITIES AND THE CREATION OF SHAREHOLDER VALUE

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Abstract

In what appears the Golden Age of branding, it is surprising to hear of managers' difficulties in securing funds for investments in their brands. Yet in today's harsh economic climate, with zero-growth prospects and mounting cost pressures, the first budget cuts most likely come from allocations dedicated to brand building goals. A lingering, unanswered question seems partly to blame: do brand-building investments really pay off? Lacking conclusive evidence concerning branding and the bottom line, brand "investments" remain "expenses," and the promise of the brand remains unfulfilled. This paper attempts to address this significant shortcoming by providing empirical evidence of the value to stockholders of a firm's brand building activities, using time-honored concepts and models from the discipline of finance.

Introduction

"It was the best of times, it was the worst of times." This celebrated phrase seems to capture quite well the current status of the discipline of branding. The high ground began in the mid 1980s when headlines raged with "Brands are King!" messages. Brands were touted as a surefire means of differentiation in the face of increased competitive pressures and rampant product proliferation activities. They were secret weapons of sorts: legally-protectable assets that brought unrivaled powers to the firms that developed them. Belief in this doctrine incited a spate of mergers and acquisitions in which strong branded companies were secured at six and more times their book value (Aaker 1991). Brands that could not be bought outright were licensed, and co-branding agreements soared. The branding craze trickled into traditional "commodity" industries like beef, pharmaceuticals, and utilities (Benady 1999; Blackett and Harrison 2001; Davis 1999; Kilman 1997; Loomis 1998), and soon attracted atypical branding candidates including countries and people as well (Boyle 2001; Byron 2002; Lodge 2002; Van Ham 2001). Managers, it seemed, no longer asked *whether* to brand, but *how much* they could leverage these assets across product, geographic, and marketplace bounds (Khermouch, Holmes, and Ihlwan 2001).

It is quite interesting, then, if not simply ironic, to note the countervailing forces that are mustering within what should be the Golden Age of the brand. Naomi Klein's (2000) *No Logo* and Eric Schlosser's *Fast Food Nation* (2001) have challenged the moral authority of the brand, and this anti-brand message is receiving increased attention and press. Brand loyalty has been exposed as a "mythology" (Ehrenberg, Goodhardt and Barwise 1990); relationship marketing as a scam (Beardi 2001; Fournier, Dobscha and Mick 1997). And so, the turn of the New Millennium finds branding in a crisis state, where funds for brand building are increasingly

questioned, and disproportionately denied (Marketing Leadership Council 2001).[1] Within the context of increasing accountability, scarce resources, and the stresses of an economic recession, the steady brand sales patterns reflective of advertising's lagged effects are destined to be misinterpreted by finance officers, who then scrutinize funding further, exacerbating the spiral of long-term brand decline (Marketing Leadership Council 2001).

We argue that the present crisis is a function not just of economic recession, but a failure to demonstrate convincingly and in proper terms the legitimacy of the business proposition of the brand. Despite a mature discipline of brand management, there remains a poor understanding of the financial implications of brand actions (Herremans and Ryans 1995). When twenty top marketing executives were asked: "What is the burning brand issue that is frustrating you the most, keeping you up at night and potentially not allowing your company to progress as efficiently or effectively as possible," their response was: "branding and the bottom line." (Davis 2001, p. 20). There has yet to be established a clear linkage between branding and the financial prosperity of the firm. In this age of accountability (Sheth and Sisodia 1995), the elusiveness of an answer to the question of whether brand investments truly matter is particularly devastating. Without capacity for a CEO-savvy conversation such as this, brands are destined to remain "expenses" facing downsizing at every economic and cultural ill: "Having exhausted cost-saving opportunities in virtually every other function, CFOs appear to be eyeing marketing as the next source of efficiency gain" (Marketing Leadership Council 2001, p. 27). To escape the destructive spiral that the foregoing discussion implies, it is incumbent upon marketers to

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[1] A full 70% of CFOs surveyed by the Working Council for Chief Financial Officers reported budget cuts in advertising funds for 2002, versus 51% for human resource budgets, 47% for IT, and 44% for general counsel. In this same survey, CFOs rated "Benchmarking SG&A expenses" and "Evaluating Corporate Brand Building Investments" as top research priorities for the coming year, suggesting increased budget pressures in the future (Marketing Leadership Council 2001).

convince the board that their branding strategies contribute significantly to the financial performance of the firm.

A Board-Savvy Argument for the Value of Brands

The challenge posed here is not without significant obstacles. When corporate boards discuss strategies for creating shareholder value, they do not tend to discuss or include marketing at all (Ambler 2000; Bartram 2000; Herremans and Ryans 1995). Simply put, "…marketing does not have a place in most boardrooms, according to research by the Chartered Institute of Marketing and the Institute of Practitioners in Advertising (IPA), because it is not seen as fundamental to the business" (Ambler 1999, p. 5). Image is partly to blame: Doyle (2001) states that marketers are perceived as unsophisticated advocates, not serious professionals able to objectively review the problems and opportunities facing the firm. Marketing language has been charged as inaccessible and disconnected from the financial metrics by which firms are ultimately steered (Brand-Finance PLC 2001; Davis 2001). Acculturation is also implicated: marketers are themselves more often "brand artists" whose interests and training are more likely to include the creative arts of pop culture and advertising than the rigors of economics (Banham 1998; Bartram 2000). Unlike accounting and finance, marketing does not enjoy status as a highly developed business discipline with accepted theories and principles capable of guiding the strategic direction of the firm (Brown 1996; Day and Montgomery 1999; Malhotra 1999; Webster 2002). Consequently a division between marketing and finance results, as DeNovellis, CFO of Ekco Group Inc. explains:

> "Most companies and CFOs will tell you that there is an adversarial relationship between finance and marketing. The CFO is viewed as the person who wants to cut the marketing

> budget, and marketing fails to effectively explain the return on investment for communications. The result is a wall between the two departments, and no connections between." (quoted in Banham 1998, p. 34)

Ironically, many companies have moved to solve this divide by involving finance executives more directly in the tasks of marketing. At many companies, for example, brand management teams include finance representatives, but others like PictureTel have gone so far as to replace the marketing vice president with the CFO (Banham 1998). While there is obvious value in creating empathy for the marketing function through direct involvement in its daily affairs, the transference of marketing responsibility to the function of corporate finance presages another step in the distancing of marketing professionals from the central activities of the organization.

Perhaps the most significant obstacle preventing marketing from taking its place in the boardroom, however, is that the function itself is simply not seen as fundamental to the business, what Doyle (2000) calls the paradox of marketing. It is true that board members and corporate officers appreciate the importance of brands and regard them as a source of strength (Doyle 2001), as a famous quote from John Stuart, ex-chairman of Quaker, attests: "If this company were to split up I would give you the property, plant and equipment and I would take the brands and the trademarks and I would fare better than you." What board members and officers seem less convinced of is exactly how brands are built and sustained. To quote David Bell, Chairman of the *Financial Times*: "The value of brands as shareholder assets has been widely recognized, but the crucial role of marketing and advertising in building this brand equity and so enhancing these assets now on the balance sheet, is still not fully recognized" (Beenstock 1998, p.26).

With branding as marketing's most visible activity, the demonstration of brand value to stockholders would prove most useful in reconceptualizing marketing from expense to investment. More powerful still would be a conceptualization of this argument using resonant language and concepts that CFOs and CEOs find compelling, as is true of the tools of corporate finance. Such are the goals of the present study, background for which is reviewed below.

Linking Brand-Building Activities to the Bottom Line

Measures of Brand Value. To link brand-building activities to the bottom line, an accepted method for determining the financial value of the brand must first be established. Various brand valuation methods exist, each more or less appropriate under different circumstances (e.g., setting license fees versus budget allocation decisions versus mergers and acquisitions due diligence). These include *cost-based valuations* in which historic or replacement costs associated with building the brand are accumulated*; market-based valuations*, which use "comparable" market transactions, competitive bidding scenarios, and publicly available information to value the brand; and *income-based valuations*, which rely on industry royalty rates and licensing fees, or the discounted value of future brand earnings to arrive at the present value of the brand (Parkhurst 2002). While these valuation methods are not without their critics (c.f. Ambler and Barwise 1998), a thriving valuation business has developed nonetheless. This industry is particularly strong in the U.K., France, Spain, Australia, and New Zealand, where accounting law allows the separation of brand assets from goodwill on the balance sheet. A recent survey of 339 U.K.-based analysts and investor relations directors supports a case for increased demand for brand value information, with 73% calling for more reported information on brand values in light of their usefulness to investors, up from 53% in 1997 (Brand Finance

2000). Growth is also forecast stateside, fueled by a recent S.E.C. taskforce recommendation for U.S. firms to provide more information on intangible assets such as the brand, as well as FASB rulings 141 and 142, passed in June 2001, which will guide accounting activities toward this end (Casabona 2001; Norris 2001). Investor anxieties related to the collapse of Enron and others will no doubt fuel the need for independent third party valuations of the brand as well.

Interbrand, perhaps most famous for its published list of the world's most valued brands in the *Financial Times* and more recently, *Business Week*, remains the most well-known and widely-used method for brand valuation (Khermouch et al.2001). Interbrand's income-based valuation methodology, which defines brand value as the net present value of future profits attributable to the brand, is recognized by auditors and tax authorities in many countries around the world; over 2,000 brands have been valued during the service's 12-year history (Tomkins 1999). Empirical validation evidence linking Interbrand's estimates to financial performance measures such as operating margin and market-to-book ratios supports their popularity (Barth et al. 1998; Kerin and Sethuraman 1998). Importantly, a recent accounting study (Barth et al. 1998) found Interbrand's valuation estimates to be relevant and sufficiently reliable for use in financial reporting statements. This finding directly confronts practitioner concerns impeding usage: "Although there is general agreement that the existence of brands can have a beneficial impact on the earnings of a company, there is less agreement on the reliability of methods for valuing brands in the balance sheet" (Oxford University Press', *A Dictionary of Accounting*, as quoted in Tomkins 1999). This same study also found no evidence of bias from simultaneity between Interbrand's brand value estimates and equity market value (a firm's share prices), thus dispelling additional concerns regarding the validity of the measure (cf. Ambler and Barwise

1998).[2] Collectively, these studies support Interbrand's status as the world's leading authority on the financial valuation of the brand, though competent competitors in this space can be noted (e.g., Brand Finance, Corporate Branding, CDB Research, Ernst & Young, FutureBrand, and Trademark & Licensing International) (Haigh 1999).

Several contenders have also emerged with measures not of the financial component of brand equity, but of the brand strength levels considered antecedent drivers of brand value in the marketplace (Feldwick 1996). These include Total Research's *EquiTrend* (which uses 11-point scale ratings of perceived product quality), Young and Rubicam's *Brand Asset Valuator* (which measures strength in terms of perceived differentiation, relevance, knowledge, and esteem), and WPP's *BrandPyramid* (which captures strength in a hierarchy from mere presence to emotional bonding). While useful in the provision of diagnostic guidance regarding how marketing programs create or dilute brand equity, these survey-based perceptual models do not provide a quantification of the financial value of the brand.

Existing Empirical Evidence. The popular business press is laden with references from research suppliers specifying the powerful link between the strength of a company's brand and the performance of its stock. Interbrand reported that a strong corporate brand could add 5% to 7% to a company's stock price in a bull market, and mitigate losses in a down market (Parkhurst 2002). A study conducted by Corporate Branding Partnership LLC, a Connecticut-based consulting firm, corroborated this finding during the two-day October 1997 stockmarket crash, in

[2] To this point, Barth et al. conclude in their abstract: "Simultaneous equations estimation reveals inferences are unaffected by potential bias resulting from simultaneity between brand value estimates and equity market value." The authors elaborate on this point in their discussion of the research design: "It is possible that (Interbrand) bases its brand value estimates, at least in part, on observed share prices. That is, it is possible that brand value estimates and share prices are jointly endogenously determined. This possibility raises concerns about whether any relation we document … is attributable to simultaneity bias. To address this issue, we discussed with (Interbrand) personnel the process that they use to estimate brand values. They emphasized that their focus is on the brand strength and profitability factors which comprise the Interbrand brand valuation model, and that the valuation process does not involve consideration of the market value of equity of the brand owner firms." (p.53).

which companies with strong brands regained their losses by the end of the second day, and companies with weaker brands failed to recover (Banham 1998). An Ernst & Young study claimed that corporate brand reputation accounted for upwards of 30% of a company's stock price (*PR Week* 2001). Academic studies dedicated to illustrating the effects of brand building on the firm's bottom line deserve particular attention, as they lay the ground for promising avenues for follow-up research.

Perhaps most noteworthy is empirical work by Aaker and Jacobson (1994) that addressed this question by exploring whether brand equity measures provided information about a firm's stock prices above and beyond the information contained in return on investment (ROI) figures. Using *EquiTrend*'s 11-point scale indicator of perceived product quality as a proxy for brand equity, and stock price information as a measure of firm value, the authors created a panel data set of 34 publicly-traded firms for the years 1991 and 1993, and regressed annual stock prices on annual ROI surprises and annual brand equity surprises.[3] A statistically significant, positive relationship between changes in brand equity and movement in stock prices was found, leading Aaker and Jacobson to conclude that: "the explanatory power of the product quality (brand equity) measure compares to that of ROI…which should be encouraging to those attempting to justify investments in product quality (brand equity), especially when tough questions are raised about 'the bottom line'" (p. 201).

Other studies essentially corroborate Aaker and Jacobson's basic findings. In a study reported by Davis and Smith (1998), Wall Street analysts reported using brand performance as one of the top three to five attributes considered when evaluating and recommending stock, thus

[3] This approach postulates a relationship between stock prices and ROI and brand equity. It is assumed that since investors are aware of trends in the independent variables, it is only surprises (deviations from an estimated trend) in the independent variables that should affect stock prices. Here, the "surprise" component of realizations of the independent variable is proxied by the errors from a first-order autoregressive model of the independent variables.

echoing Aaker and Jacobson's basic information content claim. Others have gone beyond the realm of brand strength indicators to explore firm performance links with the financial value components of brand equity more directly. Barth et al. (1998), using data from Interbrand's survey for the period 1992 to 1997, concluded that Interbrand's estimated values "capture valuation-relevant information not reflected in book value or net income." Kerin and Sethuraman (1998) studied companies on the 1995 and 1996 Interbrand lists, and reported a positive relationship between market-to-book ratios and brand values.

Overview of the Present Investigation. Collectively, the pioneering studies summarized above demonstrate that brand equity is indeed related to stock prices. However, they do not demonstrate: (1) whether these stock prices provided greater returns to their shareholders than, say, the market as a whole or some other relevant benchmark, and (2) whether the difference in stockholder returns remains after adjusting for risk. The present manuscript addresses these two important issues. First, we compare groups of companies somehow delineated by their brand building activities to see whether companies with strong brands indeed outperform the benchmark. Second, using risk-adjustment techniques that have been well established in finance, we account for the possibility that differences in risk may in fact drive the differential returns of strong-branded companies. In this regard, we clarify the effects of brand building on a company's risk profile -- a topic previously not addressed in the literatures.

Another aspect that needs to be considered in exploring the relationship between brand and shareholder value is the cost of acquiring and developing these brands. Clearly, a brand strategy creates shareholder value only if the acquired brand asset is more valuable than the total cost of the brand-building/maintenance activities. To illustrate this argument, consider the following example involving four brands of bottled water available in a major grocery store:

Majestic Falls, Zephyrhills, Evian, and Dasani. Most consumers would be unaware of the first two brands, and familiar with the last two. The most likely reason for this difference in awareness is the promotional/brand building activities undertaken by the brands: put simply, Dasani and Evian advertise, and the other brands do not. Prices differ significantly between the brands: the price per ounce for the branded waters (Evian and Dasani) is 4.7 and 5.0, respectively; the prices for the other two waters are 1.8 and 2.1 cents per ounce. We might describe the Evian and Dasani products as having established strong brand equities, and the Majestic Falls and Zephyrhills products as having weaker brand equities. But, these data alone do not allow us to gauge whether the strong brands created more shareholder value than did the weaker brands. This judgment requires consideration of financial information that allows calculation of the return to shareholders for the brand building activities of Evian and Dasani. Such an analysis would include the price differential captured by the brands or some other indicator of brand strength, as compared to the cost of advertising and other activities to build that brand strength. Within this expanded valuation framework, Majestic Falls may have less brand strength (i.e., they have lower brand awareness and do not charge a premium for their product), but it may nonetheless possess a higher net present value (return to stockholders) than the strong branded products in light of lower brand building costs.

Our study will indirectly assess the cost of brand building activities by using the ratio of advertising expenditures to sales as a proxy. Certainly there is more to building brands than advertising spend; new product development, product design, and packaging, for example, stand as significant value creation tools. Nonetheless, advertising investments are recognized by FASB as a complementary asset to the brand name, and studies in the accounting literature (Abdel-Khalik 1975; Hirschey and Weygandt 1985) provide evidence of advertising expenditures as

proxies for brand development. Moreover, advertising is typically recognized as the most significant and visible of a firm's brand-building activities (Herremans, Ryans, and Aggarwal 2000; Keller 1998). Accordingly, and in light of the ready availability of such data, we accept advertising expenditure levels as sound indicators of corporate environments that are actively building and maintaining their brands.

In summary, this study thus seeks a clearer demonstration of the link between brand and shareholder value – one that considers the risk-adjusted returns on a firm's brand building activities. Our general approach, detailed below, is to identify a set of companies that indicate brand-building as an important part of the company's business, and to compare the risk-adjusted performance of these companies to the performance of other companies that focus less on brand building. Controls for market share are instituted to explore the robustness of our findings, and financial ratio analyses are brought to bear to corroborate our market performance results. The data and methodology used in the present empirical investigation are now described, followed with a summary of our analyses and conclusions along these lines. Implications of our findings for the broader discipline of marketing are discussed in closing, particularly as these concern avenues for future research.

Data and Methodology

The current empirical investigation addressing whether brand building activities drive the firm's bottom line relies on the yearly published rankings of the top global brands by their dollar value, as provided since 1994 by the consulting company Interbrand, a unit of Omnicom Group

Inc. The methodology by which Interbrand calculates the value of brand assets is described in the company's internal documents as follows:[4]

> "The Interbrand "World's Most Valuable Brands" table identifies the 100 most valuable global brands with a value greater than $1 billion.
>
> Interbrand started the analysis by sending a survey to all global Interbrand employees asking them to list the brands they consider to be the world's most valuable. From the resulting large pool of brands, specific brands were selected for consideration according to two criteria:
>
> First, the brands had to be global, generating significant earnings (>20%) in the main global markets. Second, there had to be sufficient marketing and financial data publicly available for preparing a reasonable valuation. For that reason, valuations for brands such as VISA, BBC, Mars and CNN could not be prepared. The financial forecasts were prepared in co-operation with Citigroup, who supplied Interbrand with annual reports and analyst reports.
>
> The survey includes an additional table of values of leading brand portfolios to recognize the fact that some companies create significant brand value, not from the value of a single brand, but the management of a portfolio of brands. Prominent examples are Procter & Gamble, Unilever, L'Oreal and Nestle.
>
> Brand Values were assessed according to Interbrand's widely recognized Brand Valuation model. The model calculates Brand Value as the net present value of the earnings the brand is expected to generate in the future. The model comprises three key elements: Financial forecasting, Role of Branding, and Brand Strength.
>
> Financial Forecasting comprises projections of the revenues the brands are expected to generate. From the Branded Revenues Interbrand deducts all operating costs, corporation tax and a charge for the capital employed to derive the Intangible Earnings from the branded business.
>
> Through the Role of Branding analysis Interbrand determines the percentage of Intangible Earnings that are attributable solely to the brand. The Role of Branding percentage is multiplied with the Intangible Earnings to derive Brand Earnings.
>
> The Brand Strength analysis assesses the risk profile of the projected Brand Earnings based on the security of the brand franchise. It provides a brand specific discount rate for the Brand Earnings forecast. Brand Value is calculated as the net present value of the projected Brand Earnings."

Figure 1 provides a summary visual of the process by which Interbrand calculates the economic value of a brand's equity.

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[4] This description of the Interbrand methodology for selecting companies was supplied by Stefan Daiberl of the Brand Valuation Practice at Interbrand.

Our basic analytic approach compares the stock market performance of companies included in the Interbrand list of the "Best Global Brands" to companies not appearing on that list. For purposes of this research, those brands making the Interbrand list are labeled as the Best Global Brands Set (BGBS).

The initial sample universe for this investigation consisted of all stocks in the Center for Research in Security Prices (CRSP) database. The CRSP database covers all stocks traded on the major U.S. stock exchanges, namely the New York Stock Exchange, the American Stock Exchange, and NASDAQ. To align with time periods for which Interbrand data were available, the sample was restricted to those stocks that were listed at any time between 31 December 1993 and 31 December 2000. The final sample contained 13,409 company stocks for which monthly return and market capitalization data were obtained. Since the first Interbrand list was available in July 1994, all return analyses generally start in August 1994 and run through December 2000. As a second, parallel task, the names and brand values for brands appearing on Interbrand's annual lists for the years 1994 through 2001 were compiled; as an exception, 1998 data was not included as Interbrand did not publicly publish its list of the most valuable brands in that year.

Since the present investigation constitutes the linking of specific *brand* data to *corporate* stock return information, data transformation was required to align levels of analysis in selected cases. For companies that derived their values from one primary brand, as with Harley-Davidson and Hallmark, for example, brand and company data were equivalent and no transformations were required. For companies comprised of houses of brands, however, aggregate values for the brand portfolios were necessitated. For the years 1999 through 2001, Interbrand explicitly recognized brand portfolio companies and published the aggregated values of these brand portfolios in addition to their decomposed single brand valuations. Accordingly, where

appropriate and available, published aggregate brand values were used. For the period 1994 through 1997, however, Interbrand presented only valuations for single brands in a company's portfolio: no aggregate corporate portfolio brand values were provided. Accordingly, for companies owning several brands on the Interbrand lists in 1994 through 1997, individual reported brand values were summed to obtain the value of the brand portfolio, and these calculated aggregate values were used in the analysis.

Our final sample contained one hundred and eleven companies that owned brands appearing on the Interbrand "Most Valued Brands" list at least once across the seven-year time period. These 111 companies (the BGBS) are listed in Table 1 along with the total number of years that the brand appeared on an Interbrand list. The average Brand/Cap ratio, i.e., the ratio of the Interbrand brand value to the company's market capitalization, is reported here as well for context. It is interesting to note that list membership was fairly stable during the sample period, with each company appearing on average in 3.6 of the 7 lists. On average, the brand values published by Interbrand constituted 37 percent of a company's market capitalization, with a standard deviation of 35 percent.

In terms of further validating our sample, it is important to note that the data support our intentions regarding the use of advertising expenditures as a proxy for the cost of brand building activities. Using Compustat data for the period 1993 to 2000, advertising expenditures, as a ratio to sales, for the companies in the BGBS sample were compared to companies not appearing on the list. If advertising expenditures do in fact proxy for brand building commitment, as argued above, then we would expect to find greater advertising expenditures for the companies identified by Interbrand as having the Best Global Brands (BGBS). To control for market share and total assets, two sets of matching companies were formed. These groups were formed by

pairing, within industry, each of the 111 companies in the BGBS to a company not in the BGBS that evidenced, as close as possible, similar market share and similar total asset profiles. The average advertising-to-sales ratio for the BGBS was 5.4%, which is statistically significantly greater than the ratios for the two control groups (3.1%, respectively). In other words, the companies in the BGBS advertised more than other companies, which we take as a proxy for brand building activities.

Results

Stock Market Performance of Companies with Strong Brands

To assess the stock market performance of the strong brand companies versus the market overall, the 'BGBS' portfolio was compared to a "benchmark portfolio" consisting of all publicly traded U.S. stocks other than the companies in the BGBS.[5] The strong-brand portfolio (BGBS) significantly outperformed the market: the BGBS portfolio yielded an average monthly return of 1.98 percent while, during the same time period, the benchmark portfolio on average returned 1.34 percent per month. For further comparison, the one-month Treasury bill rate, which proxies the risk-free rate, averaged .42 percent per month.

While a comparison of returns between the BGBS and benchmark portfolios provides initial insight into a possible linkage between shareholder value and brands, it is well accepted by finance practitioners and researchers that returns must be adjusted for risk before truly meaningful conclusions can be made. The Fama-French methodology was employed here to adjust portfolio returns for risk. While details on this methodology are provided in Fama and

[5] Portfolios are value-weighted and re-balanced monthly. The weight of each company in a value-weighted portfolio is given by the company's market capitalization (market value of all outstanding common stock) relative to the market capitalization of all the companies in the portfolio. These weights are recalculated at the end of each month.

French (1993), we illustrate the general idea behind the approach using the more commonly known Capital Asset Pricing Model, or CAPM. The CAPM theoretically derives a relationship between a security's expected return $E(R_{it})$ and its risk:

$$E(R_{it}) = R_{f,t} + \beta_{i,M}[R_{M,t} - R_{f,t}] \quad (1)$$

where, $R_{f,t}$ is the riskfree interest rate (e.g. treasury bill rates), $R_{M,t}$ is the return on the overall market (e.g. the S&P 500 index), and $\beta_{i,M}$ (or market beta) is a measure of the security's risk. In essence, equation 1 shows a security's expected return commensurate with its risk. If the security's observed return $R_{i,t}$ is higher than the theoretically-derived expected return shown in equation 1, then the investment performs better than others of similar risk. To test for out-performance, i.e., returns greater than investments with similar risk, it is common practice in finance to regress the difference between observed returns and the risk free rate on the term in brackets in equation (1).[6]

Two parameters from the regression are of particular interest in diagnosing a stock's performance. The first is alpha, the intercept term. If observed returns are equal to expected returns, then the regression should pass through the origin, and the intercept α_i will be zero. Positive alphas indicate that an investment outperforms its risk-adjusted benchmark; negative alphas indicate under-performance. The second regression coefficient of interest is beta, an estimate of the security's risk. Beta values below one indicate less than average market risk; betas above one indicate greater than average market risk. While the full Fama-French regression model was employed in our empirical work to adjust returns for risk, we remain focussed on the more commonly-known alpha and beta coefficients for purposes of reporting (Chan, Lakonishok and Sougiannis 2001). It is accepted in the finance literature that the Fama-

French approach provides a good description of the cross-sectional and time-series variation in stock returns, and thus appears to proxy the economy's underlying risk factors.

The results of the Fama-French regressions for both the BGBS portfolio and the benchmark portfolio are shown in Table 2a. The BGBS portfolio had an alpha of .57 percent per month, which is statistically significant at $p < .01$. The benchmark portfolio had an alpha of -.25 percent per month, which is also significant at $p < .01$. Importantly, the BGBS portfolio also displayed a below-average market risk, with a market beta of .85, which is statistically different from the average value of one. The benchmark portfolio beta (1.07) was not significantly greater than one. Therefore, the portfolio of brands identified as the best in the world by Interbrand (BGBS) out-performed the market with less market risk. The fact that the benchmark portfolio's underperformance is also significant suggests that the companies in the BGBS portfolio represented a considerable share of the overall market capitalization. This was indeed the case, as the 111 BGBS companies accounted, on average, for approximately one quarter of the monthly market capitalization.[7]

To gauge the economic significance of these results, consider the following application. If one had invested $1,000 in August 1994 in the 111 strong-brand companies, this investment would have more than quadrupled into $4,525 by December 2000. The same $1,000 investment in the overall stock market would have turned into $3,195 by end of the year 2000.

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[6] The difference between observed returns and the riskfree rate is referred to as excess return.

[7] One could argue that the outperformance of the BGBS does not constitute evidence of a link between brand-building and shareholder value creation, but rather is due to Interbrand picking stocks which were winners during the sample period, and then simply providing their brand values. While general evidence against this simultaneity bias was reported above in Barth et al. (1998), we addressed this issue empirically as well. Specifically, Fama-French regressions were run (though these are not reported in the text) which used only the companies on the 1994 Interbrand list; stock performance for this 1994 company portfolio was examined over the seven year period. Results show that the 1994 Strong Brand Companies had a statistically significant alpha of .50, which indicates that Interbrand did not simply pick winning stocks each year.

Brand Values Weighting

To provide further evidence of the linkage between brand building investments and shareholder value, we investigated whether the specific brand valuations themselves held additional information beyond the fact that a company was or was not on the Interbrand strong brands list. To illustrate, consider that in 2001, both Coca-Cola and Hilton were on the Interbrand list, yet Coca-Cola was valued at 68.95 billion, while Hilton was valued at 1.24 billion. The current analysis considers this differential information by re-forming the BGBS portfolio using the published brand values as weights. The weighting scheme proceeded as follows. For each annual Interbrand list, all published brand values were summed. Each company's published brand value was then divided by the total brand value to obtain a relative brand value for the given year. The relative brand values were then averaged across the 1994 to 2001 period to obtain each brand's weight in the overall portfolio. Therefore, the greater a company's brand value as a ratio to the sum of all brand values, the greater the percentage it occupied in the portfolio of strong brands.

The results of the Fama-French regression for the brand-value-weighted strong brand portfolio are shown in Table 2b. The average monthly return of the BGBS portfolio increased to 2.49 percent per month, up from 1.98 percent previously reported. More importantly, alpha was again significant at $p<.01$, and increased to 1.32 percent when using brand weights. There was little difference in beta, the measure of portfolio risk, which remained significant. These results are important and indicate that published Interbrand brand equity values contain additional information regarding future performance potential that may be useful to investors.

Robustness of Findings

Robustness of the present findings was assessed in light of Ehrenberg's (1994) postulate that market share provides a perfectly adequate description of the market-based brand equity asset. To appraise whether the return performance of the BGBS companies was due to market share characteristics, an industry-sensitive, size-controlled analysis was performed. First, all companies in the sample were grouped into industries based on two-digit SIC codes. Twenty-eight industries containing at least one strong-branded company were identified. For each of these 28 industries, annual market size was computed by summing up the annual net sales of all companies in the respective industry. For each company in the 28 industries, annual market share was computed by dividing the company's annual net sales by industry annual net sales. The annual market shares were then averaged across the years 1993 through 2000.

As a second step, the BGBS companies were matched with other high market share companies that did not appear on the Interbrand lists. As Table 3 shows, the BGBS companies accounted, on average, for 29 percent of their respective industry's annual net sales. To obtain a matching sample in each industry, companies that did not appear on the Interbrand list were first ranked by market share. The companies with the highest market shares were sequentially selected until the number of matching companies was equal to the number of BGBS companies in that particular industry. Table 3 shows that the matching companies accounted on average for 21 percent of the industry's annual net sales.

To assess the performance of these market-share matched samples, the two brand groups shown in Table 3 were formed into separate value-weighted portfolios labeled, as previously, 'BGBS' for the Interbrand companies, and 'brand-share-match' for the matching non-Interbrand companies. This brand-share-match portfolio had an average monthly return of 1.65 percent

while the BGBS portfolio had average monthly returns of 1.98 percent (refer to results for the BGBS portfolio shown in Table 2a). Importantly, the Fama-French regressions indicated that unlike the BGBS portfolio, the brand-share-matched portfolio did not outperform a risk-adjusted benchmark, as its alpha is not significantly different from zero
(alpha = .12). Thus, we conclude that the performance of the BGBS portfolio is not due solely to market share characteristics. These results lend support to the notion that brand equity is not captured simply in a brand's market share, contrary to Ehrenberg's research.

Financial Ratio Analyses

The previous section documents that the BGBS companies outperform the market at lower risk. In this section we analyze selected financial ratios of the Best Global Branded Companies (BGBS) to assess the degree to which these results corroborate the observed stock market performance differences. As before, to allow relevant comparisons, matched samples were created. One group of matching companies was formed, as above, by paring a BGBS company with a non BGBS company having the highest market share in the industry, as defined by two-digit SIC. The other group was formed by matching a BGBS company with the non BGBS company that had the highest total assets in the industry.[8] Data were obtained from the Compustat database for the period 1993 to 2000; financial ratios were calculated by averaging the data for the seven year period.

Fraser and Ormiston (1998) identify four categories of financial ratios as being valuable for analyzing financial statements:

- Liquidity ratios which measure a firm's ability to meet cash needs as they arise,

[8] Note, since total assets and share are correlated, some companies claim membership in both matching groups.

- Activity ratios which measure the liquidity of specific assets and the efficiency of managing assets,
- Leverage ratios which measure the extent of a firm's financing with debt relative to equity and its ability to cover interest and other fixed charges,
- Profitability ratios which measure the overall performance of a firm and its efficiency in managing assets, liabilities, and equity.

Results from the financial ratio analysis are presented in Table 4. Before discussing these results, we acknowledge the potential limitations of financial ratios as stated by Fraser and Ormiston (1998):

> "They can serve as screening devices, indicate areas of potential strength or weaknesses, and reveal matters that need further investigation. But financial ratios do not provide answers in and of themselves, and they are not predictive. Financial ratios should be used with caution and common sense, and they should be used in combination with other elements of financial analysis." (p. 157)

Using two liquidity ratios (i.e., the current ratio and the quick ratio, with the quick ratio as the more rigorous test), the BGBS group outperformed both of the matched groups in liquidity.

With respect to the activity ratios, there was a marked difference between the BGBS and the matched companies on only one indicator: the average collection period. Compared to the asset-matched companies, the BGBS companies collected funds from their customers in approximately half the time.

The leverage ratios indicated that the BGBS companies were financed more by equity than debt. The debt-to-equity ratio for BCBS companies was 52.63, compared to 151.48 for the asset-matched companies, and 133.56 for the market-share-matched companies. The ratio measuring "times interest earned," which reflects the company's ability to satisfy its interest

payments from operating earnings, also revealed significant differences between the samples. The BGBS companies were significantly greater than the matched companies on this indicator, a finding to be expected in light of the variations in debt-to-equity reported above.

Three ratios indicating the firm's ability to reap profits from sales were also examined. These included gross profit margin (which shows the relationship between sales and cost of products sold), operating profit margin (which measures the efficiency associated with ordinary business activities), and net profit margin (which measures the profitability of all revenue and expenses) (Frasher and Ormiston 1999). Again, the BGBS companies out performed the matched set of companies on all of profitability ratios. Significant differences on one additional profitability ratio were found. The BGBS companies had a greater return on equity (a measure of returns to common shareholders) than the matched sets of companies.

Discussion

While it has long been argued that marketing activities dedicated to building strong brands create shareholder value, and a compelling argument for shareholder-value-based marketing has been raised (Doyle 2000), there is little empirical evidence to support this suggested relationship. Using monthly stockholder returns data for the period 1994 to 2001, we find that the portfolio of brands identified as strong using Interbrand's valuation methodology displays statistically- and economically-significant performance advantages versus the overall market, both before and after adjusting for company size and risk. In this regard, we extend and corroborate Aaker and Jacobson's (1994) conclusion that brand equity affects stock prices by demonstrating: (1) that the result holds for financial valuations of brand equity beyond perceptual indicators of brand strength; (2) that strong brands yield returns to stockholders that

are greater in magnitude than some relevant market benchmark; and (3) that the increased returns from branding are not associated with higher risk.

This central result should be encouraging to marketing managers attempting to justify ongoing, long-term investments in building brand equity, particularly in the face of cost-cutting pressures, heightened managerial scrutiny, and economic strife (Marketing Leadership Council 2001). While these investments are of obvious importance to brands under active development, we show that investing in the brand continues to yield increased returns even after brand strength has been established. Generally speaking, this evidence helps to right a long-standing bias in favor of the short-term that drives both investment decisions and the metrics used to evaluate performance results and, in so doing, helps shift the conception of marketing from that of expense to added-value investment. Moreover, the results support the ongoing call for the inclusion of brand valuation figures among the financial and accounting metrics typically contained in company annual reports and other financial reporting venues. Reporting of this central marketing metric will allow marketers to communicate with audiences from which they have been typically distanced, using language that shareholders, board members, and c-level executives can appreciate and understand (cf. Doyle 2000). Through indicators of brand valuation and strength, a means whereby the performance of various marketing actions can be tracked over time is also provided, such that accountability for marketing is enhanced (cf. Herremans and Ryans 1995). Clearly, on the high ground, our demonstration of a linkage between brand-building and the bottom-line yields the added benefit of supporting and sustaining the marketing function as a whole, for it is within this function that strong brands are created and maintained.

One implication of the present work is that we move toward a deeper understanding of brands within the framework of risk management. Current results support the role of the brand in reducing the volatility and vulnerability of cash flows, though the contributions of branding have not typically been framed in this regard. “Brand” is typically conceptualized as an asset to be valued, or, worse still, an expense to be controlled -- not a risk management tool to be employed within the firm. Anderson (1982) has noted that ignoring the financial implications of marketing decisions (e.g., the effects of brand building on cash flow, liquidity, or collection periods) is a serious form of marketing myopia, one that the reorientation offered here can help to abate.

Using risk/return as a core dependent variable, past research can be reinterpreted, and future research designed. In particular, the ways in which reduced risk manifests itself within strong brand profiles should be investigated, including, for example, the benefits of increased differentiation, higher probability brand extensions, receipt of price premiums and royalty advantages, generation of higher loyalty levels, efficiencies in marketing spend, and increased for co-branding opportunities. A more acute understanding of the ways in which brand extensions affect the company’s risk profile is particularly intriguing, as both enhancement and dilution effects have been noted in the literature (Aaker 1991). A risk-oriented view of brand leverage activity may prove managerially useful in ways that perceptual studies of brand relevance and stretch have not (cf. Hill and Lederer 2001). A more formal risk-oriented view of crisis management holds promise for insight as well, and could serve to elevate this critical business function beyond the tactical status in corporate communication departments it typically receives. The more general notion of insurance protection concerning financial risks resulting from damage to the brand is embodied here (cf. James 2001), offering brand managers a truly novel risk-management tool. In general, it is suggested that we dedicate research attention to

quantifying the ways in which effective brand management practices decrease a firm's risk, and the ways in which mis-management and mis-definition of the brand increase risk, such that corporate resources can more effectively be allocated within the firm. What is supported here is Doyle's (2000, 2001) value-based view of marketing, which broadens the function from brand management to a more comprehensive concern for the core branding processes that create (and destroy) equity for shareholders of the firm.

A risk-framing of the brand, by definition, allows for increased coordination between marketing and finance since CFOs are ultimately responsible for developing the plans that address any and all risks affecting the company's bottom line. A synergistic partnership between marketing and finance should result whereby CFOs back up marketing claims and programs with valuable information, replacing current adversarial relationships. Whether the role of the brand steward is best served within the department of marketing, or whether the protection and steering of this now-proven asset is best accomplished by elevating the level of responsibility for brand guardianship, is a question that remains for debate.

Many promising areas for future research present themselves here. Given evidence of the demonstrated value of brands to the bottom line, a worthy next step concerns discovery of those activities that differentially contribute to the building of a brand's value and strength. In other words, how can we most significantly affect brand strength, knowing that building brand equity matters? Importantly, as we attempt to map templates for building brand equity, we must not only explore the explication of externally-focused brand-building tools (e.g., advertising investments, creativity of the advertising product, content of the advertising message and its alignment with culture), but also move beyond them to consider the value of internal brand building initiatives (cf. Mitchell 2002). In the end, top management must make choices regarding

which activities to invest in toward the goal of increased shareholder equity, and analyses such as these can inform these budget allocation tasks.

The findings presented here also lead us to question *why* companies in the best global brands set exhibited less market risk. Are there particular characteristics of strong brands (e.g., differentiation, relevance, knowledge or esteem, as specified in the Y&R Asset Valuator model) that drive superior risk/return profiles, for example? Or, are risk advantages a function of the associated benefits that strong brands allow (e.g., strong strategic partnerships, customer loyalty)? Insight into the latent firm, brand, and market characteristics that drive the risk/return patterns observed here would do much to advance our theories in this regard.

The present work is not without its limitations, and these limitations themselves suggest promising avenues for future work. While we have controlled for some third variable explanations (namely market share, company size, and risk), there likely exist other factors worthy of study both within and outside the traditional marketing realm (e.g., brand life cycle). As an interesting start on this problem, a case study analysis of the 111 companies identified here in the BGBS could be undertaken to reveal strategic and tactical factors in the organizational and marketing realms characterizing overperforming firms. A more formal treatment of the costs of building strong brands is also warranted in this regard. By more explicitly considering advertising expenditures, brand logo and collateral development, name design, and brand strategy research, for example, future results could actively consider returns on branding investments. Clearly the development of a database of this kind poses an onerous task for brand researchers, one that is fraught with inclarities regarding the accounting of activity-based branding costs. Accounting for costs seems imperative, however, if the brand equity→shareholder value relationship is to be fully mapped.

Lastly, while the Interbrand method for brand valuation served our empirical purposes well, it is not without its own limitations. Interbrand makes no attempt to exhaustively account for all brands in the marketspace when creating its pool of candidates for the list. Accordingly, the analysis here does not and cannot make a claim to have compared "strong" versus "weak" brands in the absolute. Clearly, the Interbrand methodology allows the error of including "strong" but "unmeasured" brands in the comparative set. While this is something that affects the generalizability of our findings, it does not affect their validity. A demonstration of effects for "major," global, publicly-traded brands seems to offer a strong and relevant test of the theory of building brand equity. If anything, noise such as this dampens the ability to observe effects, which strengthens the significance of the findings reported here. In the end, however, concerns for generalizability were not preeminent in this research, which sought to demonstrate linkages between brand value and firm performance (see also Aaker and Jacobson 1994).

In any event, it is important going forward to consider the broader question of developing a valid and reliable measure of brand value – one that can be used for reporting and analysis purposes. This undertaking is significant and complicated, involving, for example, the negotiation of brand specific data and corporate-level performance measures, and the creation of an ASCB-like standards board of some kind. But, given that the value of companies in today's knowledge economy is increasingly derived from intangible assets, primary among these the brand, accounting systems must acknowledge this source of shareholder value. It is our hope that the empirical demonstration of the financial significance of brand valuation provided herein can provide impetus for such action to take place. It is further hoped that through this action, marketing will no longer be marginalized, and can claim its rightful place in the corporation.

Table 1
Descriptive Statistics for Companies in the Best Global Brand Set (BGBS)

Company	List Years	Brand / Cap[9]	Company	List Years	Brand / Cap	Company	List Years	Brand / Cap
3COM	2	5.0%	EXXON MOBIL	2	13.8%	NIKE	7	136.8%
3M	2	15.2%	FEDEX	1	13.8%	NORTHWEST AIRLINES	2	92.1%
ADOBE SYSTEMS	2	10.6%	FORD MOTOR	5	39.2%	NOVELL	3	9.8%
ALCOA	4	4.7%	GAP	3	33.4%	ORACLE	4	3.9%
AMAZON.COM	3	28.1%	GATEWAY	1	27.8%	PEPSICO	7	40.6%
AMB PROPERTY	4	36.2%	GENERAL ELECTRIC	7	7.1%	PFIZER	5	7.8%
AMERICAN EXPRESS	5	18.4%	GENERAL MILLS	4	49.4%	PHILIP MORRIS	7	65.2%
AMERICAN HOME PROD.	4	4.4%	GILLETTE	7	57.4%	PROCTER & GAMBLE	7	14.2%
ANHEUSER-BUSCH	7	54.2%	GOLDMAN SACHS	1	21.4%	QWEST	1	21.6%
AOL TIME WARNER	5	65.6%	GOODYEAR	4	67.2%	REEBOK	3	114.9%
APPLE COMPUTER	5	56.0%	HARLEY-DAVIDSON	1	40.2%	RJ REYNOLDS	4	195.0%
AT&T	4	20.6%	HASBRO	4	21.2%	ROHM & HAAS	4	6.7%
AVON PRODUCTS	5	57.7%	HEINZ	5	30.5%	SARA LEE	4	26.0%
BAUSCH & LOMB	4	65.3%	HERSHEY FOODS	3	68.4%	SBC COMMUNICATIONS	1	14.0%
BELLSOUTH	1	9.1%	HEWLETT-PACKARD	7	23.8%	SCHERING-PLOUGH	4	1.8%
BLACK & DECKER	4	65.4%	HILTON HOTELS	5	34.7%	SOUTHWEST AIRLINES	2	10.7%
BOEING	1	6.6%	HORMEL FOODS	2	13.3%	SPRINT	1	24.9%
BRISTOL MYERS SQUIBB	4	1.8%	IBM	7	28.1%	STARBUCKS	2	15.5%
CAMPBELL SOUP	4	43.7%	INTEL	6	20.8%	SUN MICROSYSTEMS	3	31.4%
CENDANT	2	3.9%	INTUIT	2	1.0%	SYBASE	2	10.7%
CISCO SYSTEMS	2	5.8%	ITT INDUSTRIES	2	4.6%	SYMANTEC	2	6.9%
CITIGROUP	2	8.4%	JOHNSON & JOHNSON	5	6.0%	TEXACO	1	7.3%
CLOROX	4	31.4%	KELLOGG	7	67.3%	TEXAS INSTRUMENTS	1	6.3%
COCA-COLA	7	48.9%	KIMBERLY-CLARK	7	14.8%	TIFFANY & CO	1	70.1%
COLGATE-PALMOLIVE	7	44.3%	LAUDER ESTEE	4	85.8%	TRICON RESTAURANTS	1	113.8%
COMPAQ COMPUTER	6	32.4%	LIZ CLAIBORNE	2	49.9%	UAL	2	113.1%
COMPUTER ASSOCIATES	3	10.4%	LOEWS	4	55.7%	US AIRWAYS	2	99.2%
CONAGRA FOODS	2	9.8%	MARRIOTT	2	8.2%	UST	4	50.5%
CONTINENTAL AIRLS	2	177.3%	MATTEL	6	50.9%	VERIZON	1	27.0%
COORS	4	25.5%	MAYTAG	4	34.9%	VF	3	68.8%
CORNING	3	1.0%	MCCORMICK	4	38.2%	VIACOM	4	14.1%
DARDEN RESTAURANTS	2	49.4%	MCDONALDS	5	67.8%	WALT DISNEY	5	60.2%
DELL COMPUTER	4	37.4%	MERCK	1	4.5%	WENDY'S	2	55.0%
DELTA AIR LINES	2	69.9%	MERRILL LYNCH	1	32.2%	WHIRLPOOL	2	36.3%
DOW CHEMICAL	4	1.4%	MICROSOFT	7	14.8%	WRIGLEY	7	50.3%
DOW JONES	2	58.1%	MOTOROLA	7	22.9%	XEROX	7	59.1%
EASTMAN KODAK	7	68.6%	NEWELL RUBBERM.	2	37.8%	YAHOO	3	15.8%

[9] Brand / Cap is calculated as follows: for each available year, the Interbrand brand value is divided by the company's market capitalization at the end of July. For each company, the ratio is then averaged over all available years.

Table 2a
Fama-French Regression Results

Portfolio	Monthly Returns	Alpha	Market Beta
BGBS	1.98	.57	.85
Benchmark	1.34	-.25	1.07

Table 2b
Fama-French Regression Results: Brand Value Weighting Scheme

Portfolio	Monthly Returns	Alpha	Market Beta
BGBS	2.49	1.32	.84
Benchmark	1.34	-.25	1.07

Table 3
Market Shares for BGBS Companies and Matching Companies

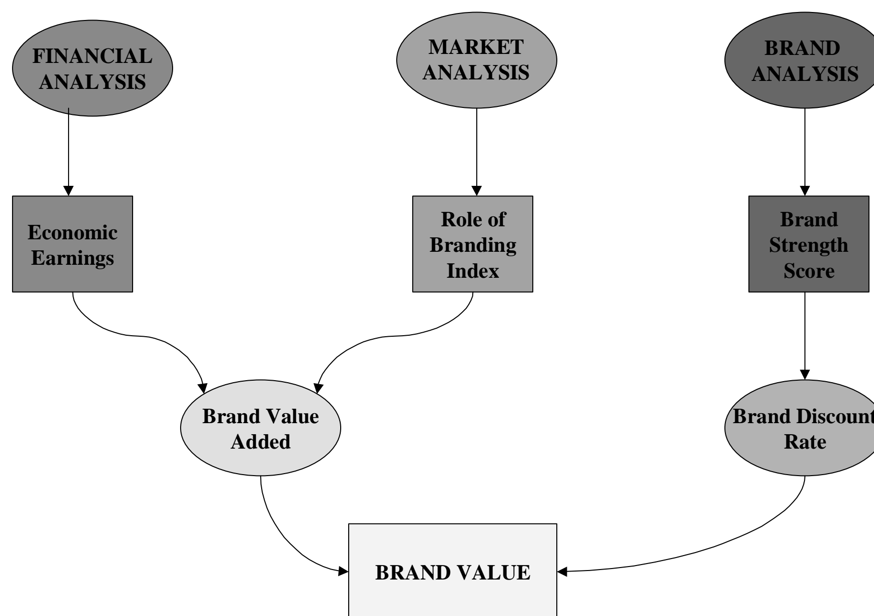
SIC Descriptor	Two-Digit SIC Code	# BGBS Companies	Market Share BGBS Companies	Market Share Matching Companies
Food	20	15	51%	36%
Tobacco	21	3	66%	33%
Apparel	23	2	24%	12%
Paper	26	2	19%	25%
Printing/Publishing	27	1	3%	8%
Chemicals	28	14	37%	31%
Petroleum	29	2	28%	24%
Rubber/Plastics	30	4	50%	15%
Primary Metal	33	2	15%	12%
Fabricated Metal	34	1	13%	10%
Machinery	35	10	39%	23%
Electronics/Electrical	36	5	16%	38%
Transportation Equipment	37	3	26%	34%
Instruments	38	1	15%	7%
Misc. Manufacturing	39	2	35%	19%
Airlines	45	7	59%	33%
Communications	48	8	42%	28%
Apparel Retail	56	1	11%	14%
Restaurants	58	4	45%	13%
Misc. Retail	59	2	1%	21%
Investment Banks	61	2	40%	29%
Brokerage	62	2	33%	30%
Insurance	63	1	5%	7%
Holdings	67	2	10%	8%
Lodging	70	1	21%	18%
Business Services	73	11	38%	21%
Motion Pictures	78	1	5%	43%
Nonclassified	99	1	65%	9%
	Average		29%	21%

Table 4
Financial Ratio Analysis

	BGBS	Asset Matched Group	Share Matched Group
Liquidity Ratios			
Current Ratio	1.59	1.37	1.40
Quick Ratio	1.05	.87	.85
Activity Ratios			
Average collection period	92.51	181.56	155.29
Accounts receivable turnover	15.0	9.4	12.9
Inventory turnover	18.39	13.51	15.01
Fixed asset turnover	6.1	4.5	5.4
Total asset turnover	1.1	.9	1.2
Leverage Ratios			
Total debt-to-assets	.72	.81	.79
Debt-to-equity	.53	1.51	1.34
Times interest earned*	35.25	7.37	10.14
Profitability Ratios			
Gross profit margin	44.89	39.09	35.82
Operating profit margins	15.2	14.8	13.0
Net profit margin	7.35	5.69	4.85
Cash flow margin	12.5	12.5	10.4
Return on assets	7.18	4.04	4.03
Return on equity	20.43	12.28	13.37
Return on investment	13.03	7.58	8.68

* Compustat measure: Interest coverage before tax

Figure 1
Interbrand's Brand Valuation Methodology[10]



[10] Interbrand calculates the economic value of the brand using an extensive process that integrates financial analysis, market analysis, and brand analysis. In the Market Analysis phase, a *Role of Branding* Index is calculated, which captures the percentage of earnings attributable to the brand, in light of drivers of competitive performance in the business. The Role of Branding Index thus separates the economic earnings the brand generated from those generated from other intangibles in the business. This Index is then applied to the EVA calculations obtained in the Financial Analysis to determine the brand value added – the specific economic earnings reasonably attributed to the brand. In the Brand Analysis phase, an appropriate risk rate to apply to the brand earnings going forward is calculated. A proprietary, multi-faceted brand strength model is employed here, governed by the logic that strong brands should receive lower discount rates in light of their greater confidence in future earnings. This discount rate is applied to forecasted brand earnings in order to effect a net present value of the overall brand value. (Description adapted from Parkhurst 2002.)

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