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CORPORATE BRAND AND FIRM VALUE

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Corporate Brand and Firm Value

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Abstract

This dissertation aims to find if a strong Corporate Brand contributes positively to the market value of the firm. The sample in use corresponds to 362 US companies from COMPUSTAT database that were also considered by Fortune in 2002 to construct the America's Most Admired Companies index. The results obtained provide empirical evidence supporting the main hypothesis of the study and are consistent with existing branding theory, that brand activities create shareholders value by increasing the future cash flows. The findings are robust after controlling for other variables that are known from financial theory to impact the firm value and also after correcting the Fortune index for what is known to be the financial halo effect, i.e. by removing the effect created by the past financial performance.

JEL classification: G14; M31

Keywords: corporate brand, brand, firm value, social responsibility, Fortune and America's Most Admired Companies.

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1 Introduction

"Corporate branding is moving beyond its concern with consumers alone, to become increasingly concerned with inspiring confidence among investors, creating a positive work environment for employees, and protecting the communities and the environment within which an enterprise operates. This shift to a brand strategy of social responsibility is a brand management strategy for attracting and retaining customers by building corporate reputation through the practice of corporate social responsibility." in KLM, Inc. Management Consultation

A significant number of recent studies support the existence of a shift in marketing emphasis from product branding to corporate branding (see, for instance, Aaker 1996, de Chernatony, 1999, Hatch and Schultz, 2001, 2003, Keller, 2003). In addition, issues like corporate reputation and corporate social responsibility are gaining importance among investors and consumers, demanding a quick response from managers in what concerns the development of these new dimensions of the corporate brand. Investors and consumers around the world, particularly in Europe, are now paying additional attention to how a company manufactures its products and manages its resources, demanding continuing sustainability, through attention to economic, environmental, and social performance. If the company fails to satisfy these latest requirements its reputation can decline, and with it, a subsequent decrease in future sales and profits.

It is thus widely accepted that the corporate brand is a source of competitive advantage, by congregating strategic elements like the corporate mission, the internal values, the organisational culture and the corporate systems and networks where it is involved (Knox, Macklan and Tompson (2000)). In this sense, the corporate brand is a multidimensional and complex construction that impacts, and may be impacted by the relationship between the firm and some of its stakeholders, both internal and external. Moreover, it is expected that favourable associations with the company as a whole would reveal a more positive perception towards its particular aspects. Namely, toward its products and services' quality, its quality

as employer or its financial performance as observed by its customers, its employees or its investors, respectively (see, for instance, Aaker, (1996), Cohen (1963), Brown (1998), Berens, van Riel and Bruggen (2002), de Chernatony, L. and Harris (2001)).

When we take the managers perspective, these issues are always seen in terms of an investment versus return relation. However, the question "are brand-building activities projects with positive returns?" seams, so far, unanswered. As a matter of fact, the funds for branding are increasingly questioned by corporate boards as an anti-brand message gains power across marketing professionals. Some authors are even supporting the idea that the brand is passing through a period of crisis ((Klein (2000) and Schlosser (2001)). But, may this be just a matter of "what to brand" and not of "whether or not to brand"? Should the companies consider shifting the direction of its branding activities from the product level to the corporate level? Does a strong corporate brand, as perceived by the company stakeholders, have more than symbolic value? In a time when companies like Arthur Anderson, Enron and WorldCom have learned the hard way the strategic impact of the corporate brand, this paper adopts an empirical approach to explain the role of corporate brand as a determinant of the firm value.

The existing literature supports that brand equity at the product level, as well as some particular attributes of the corporate brand, have a positive impact on firm value. However, there is lack of evidence that brand-building activities at the corporate level create value for shareholders. In addition, the majority of studies that focus on marketing activities as determinants of financial performance fail in controlling for other determinants of the financial variable. This study aims to provide empirical evidence that corporate brand-building investment makes sense, while it impacts first, on the level and risk of the firm cash flows and, consequently, on its stock price. Therefore, corporate brand equity is expected to provide additional information in explaining the firm value, measured by the Tobin's Q[1] , after controlling for other financial variables that are known as determinants of firm value.

[1]Tobin's Q ratio is calculated as the the market value of a company, divided by the replacement costs of the firm's assets.

The empirical hypotheses is tested using 362 US firms from the COMPUSTAT database that were also listed as "America's most admired" firms by Fortune in 2002.

This paper proceeds as follows: section 2 reviews the existing literature; section 3 presents a conceptual framework and develops the empirical hypothesis; section 4 describes the data and methodology in use and section 5 tests for the relation between corporate brand and firm value. Finally, section 6 examines the robustness of the previous empirical findings and section 7 concludes.

2 Literature Review

2.1 The importance of Corporate Branding

Balmer (2001) and Argenti and Druckenmiller (2003) focus their research work in defining corporate branding and differentiating it from related concepts as corporate reputation and corporate identity. Balmer (2001) aims in his paper to develop explanations for the confusion that has been created around the recent domains of corporate identity and corporate marketing. Namely, he enumerates 15 contributory factors that may be responsible for this puzzlement. He also clarifies the relation between corporate brand and corporate identity. Finally, he argues that corporate branding involves the conscious decision by senior management to distil and make known the attributes of the organisation's identity in a clearly defined branding proposition. This proposition underpins organisational efforts to communicate, differentiate and enhance the brand to key stakeholder groups and networks.

Argenti and Druckenmiller (2003) also develop some efforts to relate corporate branding and reputation. In their view, corporate branding assumes primarily an internal dimension as being defined, build and communicated by managers to create expectations in stakeholders' minds of what the company will deliver in terms of products, services and costumer experience. In its turn, corporate reputation assumes an external dimension, being the col-

lective representation of multiple constituencies' images of a company, built up over time and based on a company's identity programs, its performance and how constituencies have perceived its behaviour.

In addition to the literature on the definition of corporate branding we find a set of studies on the impact of corporate branding in other marketing dimensions, as product evaluation, costumer behaviour or market strategies. For instance, Berens, Riel and Bruggen (2002) find that different types of associations regarding a company as a whole have different effects on costumer's evaluations of its products. More precisely, they find that positive associations related to the company produce a positive influence in the quality perception of products by its costumers, but do not influence their intentions to actually buy those products. Conversely, positive corporate social responsibility associations have a positive impact towards buying intentions but not in the perceived quality of the products. Related empirical evidence may be found in a paper by Czellar and Palazzo (2004) that models the relationship between corporate brand values attractiveness and brand preferences. They argue that corporate brand values should positively impact product brand preferences but that this link should be stronger for low-self monitor costumers, than for high self-monitors. Finally, Tarnovskaya, Elg and Burt (2005) use the case of IKEA to illustrate a company's need for a strong corporate brand in order to succeed while implementing a market driving strategy.

Among the literature that focuses on the corporate branding building process, Harris and de Chernatony (2001) defend the need for a different management approach from the product branding, which relies much more on company's internal factors and that requires the involvement of all employees in the branding activities. They develop a model to reduce the gap between the corporate brand's identity and the corporate reputation and identify the mechanisms that facilitate a greater congruence of brand perceptions among the brand team and the remaining employees. In the same spirit of the previous model, Urde (2001) develops a conceptual framework for corporate branding activities based on core values and uses the

particular case of Volvo to illustrate it. Hatch and Schultz (2001) develop a model to help managers to align the strategic vision, organizational culture and corporate brand image. They argue that corporate branding can be a useful organisational tool when correctly used in different strategic environments. Finally, they apply the model to the different stages of British Airways corporate brand development and conclude for the need of bringing the whole organization into corporate branding.

2.2 Branding activities and financial performance

There is not much literature focused on the relationship between marketing strategies or policies and firm value, in particular, between brand strategies and the creation of shareholders value. Doyle (2001) develops a theory on how brand planning, in general, contributes to the company global strategy of creating value for shareholders. He argues that strong brands affect positively the financial performance of a firm by increasing its cash flows level and by reducing its risk. Moreover, he identifies three critical factors determining whether a brand will create value for shareholders: the brand perceived quality, the market economics and the definition of a brand strategy to maximise cash flows. Kerin and Sethuraman (1998) focus on the particular case of the US consumer goods companies while studying the relationship between brand value and shareholder value. They provide empirical evidence that consumer goods' firms with high brand values have higher market-to-book ratios, arguing that firms' accumulated brand value explain as much as 40 percent of the variation of its market-to-book ratio. A Madden, Fehle and Fournier (2002) working paper provides additional empirical evidence on this relation by demonstrating the link between brand value and financial performance as measured by stock returns. They compare groups of companies attending to its brand building activities to see if companies with strong brands outperform the benchmark. In particular, they compare stock market returns between companies included in the Interbrand list of the "Best Global Brands" and those not appearing on that list, after accounting for differences in risk that may be driving the different stock returns.

This positive relationship between brand activity and value creation has also been demonstrated for some particular aspects that are part of the complex corporate brand concept, such as innovation, quality perception or consumer satisfaction. The most noteworthy study is a paper by Aaker and Jacobson (1994) that finds that customers' perceived quality contains incremental information to that reflected in financial statements, in order to explain future firm financial performance. They use an indicator of perceived product quality as a proxy for brand equity and stock price information to measure firms' value. The test uses a panel of 34 publicly traded firms for 1991 and 1993. Pauwels, Silva-Risso, Srinivasan and Hanssens (2003), while studying the innovation within the US automobile industry, conclude that the introduction of new products has a positive impact both on the top (sales) and bottom line (profit) of firms' financial performance.

Anderson, Fornell and Lehmann (1994) also corroborate the role of quality and customer satisfaction as determinants of financial performance, by presenting evidence from Sweden. Their findings support a positive impact of quality in customer satisfaction and, in turn, profitability as measured by the return on investment.

3 Conceptual Framework and Empirical Hypothesis

3.1 Corporate Branding

The American Marketing Association defines brand as a "name, term sign, symbol, or design, or a combination of them intended to identify the goods or services of one seller or group of sellers and to differentiate them from those of the competitors". In analogy, a firm engages in corporate branding when it markets the company itself as a brand. Corporate Brand may be, then, defined as a brand that spans from an entire company. This includes not just the expectations of what the company will deliver in terms of products, services and customer experience (Argenti and Druckenmiller (2003)), but also reflects the co-ordination

of internal resources and the interaction with different stakeholders that create a coherent corporate brand image (de Chernatony (1999)).

Aaker (2004) defines corporate brand as the brand that represents the organization and that is built primarily by organizational associations. The corporate brand will thus define the firm that will deliver, and stand behind the offering that the customers will buy and use. Additionally, he identifies the following set of characteristics that are intrinsic to the corporate brand:

(a) *Heritage:* corporate brands can benefit from going to its roots and identifying what made them special and successful in the first place. Typically, corporate brands have roots that are richer and stronger than product brands.

(b) *Assets and capabilities:* by communicating its corporate brand, a firm brings to the market the perception of having assets and capabilities in terms of creating value for customer and delivering innovative products.

(c) *People:* people in an organization, in particular for services companies, are the basis of corporate brand image. The attitude and culture that is intrinsic to corporate brand will be standing behind the actions of the company's employees.

(d) *Values and priorities:* the very essence of a company is what it considers important, that is to say, its values and priorities. Innovation, quality and customer concern are the three values and priorities that are most frequently adopted as drivers of corporate brand:

    a. *Innovation:* a firm that develops its reputation through innovativeness enhances its credibility among customers. However, this is not an easy task. R&D spending and a host of patents does not necessarily means strong products or corporate brands. Innovation needs to be relevant and visible through the corporate brand.

b. *Perceived quality:* when we talk about perceived quality we are asking if the firm delivers on its brand promise with reliability, if it stands behind its offering. Perceived quality was already shown to have a positive impact on return on investment.

c. *Customer concern:* it is a value that the majority of firms expect to achieve, by treating costumers with the highest respect and defining customer experience as a top priority.

(e) *Local vs. global orientation:* something that may strongly affect customer relationship is whether the organization assumes a local or a global orientation. On one hand, by assuming a local orientation the corporate brand can benefit mainly in two ways. Firstly, because customers usually take pride in successful local companies and express that pride in a purchase pattern. Secondly, because customers can identify themselves with a company that adopts a local culture. On the other hand, by assuming a global orientation, and achieving a global visibility, the corporate brand will benefit from the prestige and respect that all the brands reach by having made it globally.

(f) *Citizenship:* people and organizations prefer to do business with people and organizations they admire. What kind of people and values are behind the company? Does the company have any social concern about their employees, the community or the environment? This citizenship dimension is branded through the corporate brand itself and it is gaining importance in the minds of customers, suppliers, investors and the community in general.

(g) *Corporate performance:* the corporate performance, its size and the quality of management is often seen as a guaranty of competence and staying power. Large companies with a visible good performance are perceived by customers as being around to provide product and service back up.

Assuming these multiple dimensions, strong corporate brands are therefore important assets to companies, providing cohesiveness and credibility to new products and ventures in an environment where consumers, investors and employees are overwhelmed with choices.

3.2 Corporate Brand and Shareholder Value

The modern finance theory agrees that the financial market value of a firm arises from the net present value of its futures cash flows, which are generated by its tangible and intangible assets (Copeland, Keller, and Murrin 2000).

Brands in general and corporate brands in particular, are intangible assets, with economic value, in the sense that a firm is worth more with brands than without them. Moreover, it is reasonable to assume then that firms with successful and established brand names can generate future earnings and cash flows over and above the firms with unbranded and generic products or services (see, for instance Simon and Sullivan (1993)). The value of a brand should be derived, therefore, as the incremental cash flows that are generated from associating a well establish and strong brand to a certain product or service.

As any other intangible asset, the value of a corporate brand should manifest itself in shareholder value, assuming that capital markets assimilate the information contained in the corporate brand. This assumption relies on the "efficient capital markets hypothesis", which defends that the market value of a firm fully reflects all available information that may impact on a firm's cash flow and so on shareholders' value.

Doyle (2001) develops a theoretical model about how brands contribute to a firm's strategy and how brand planning needs to be geared to firm value. He argues that value creation occurs mainly through two ways: by increasing the level of the company cash flows or by reducing its risk. In what concerns to the corporate brand, we may expect the firm cash flows to be impacted in the following ways:

(a) *Differentiation:* The corporate brand can be more easily differentiated from other corporate brands than a product or service brands, which with time tend to become

similar. This differentiation is achieved through the organizational associations and become relevant for customers and are translated into a purchasing pattern, increasing the firm's cash in flows.

(b) *Organizational programs:* The corporate brand can draw on organizational programs that provide energy to product brands. Moreover, these corporate programs are often stronger than product brands when we talk about citizenship or sponsoring. These kind of programs are known to be connected to loyalty/retention and trust feelings from customers, which is in turn may not only positively impact the level of cash flows, but also smooth them, decreasing the firm's risk.

(c) *Positive associations and credibility:* Corporate brand associations can provide organizational credibility. For instance, a trustworthy organization will be given the benefit of doubt, a company will be particularly liked for its citizenship activities or social responsibility, and an expert company will be seen as competent in making and selling its particular type of products. In addition, trust is a quality that is easier to attach to an organization, which is made of people, than to a product. Purchase decisions but also financing decisions to be taken by creditors or investors, as well as the launch of new projects may be facilitated and positively influenced by organizational credibility.

(d) *Brand management:* at the brand management level, a company with a strong corporate brand may benefit from leveraging it across its products and markets. The brand management process becomes easier, more effective and more efficient, enabling the company to reduce some costs and therefore cash out flows.

(e) *Product branding vs. corporate branding:* strategically combining the corporate brand with the product brand companies may add value as well. The message provided by the corporate brand may be different from that of product brands, but it must still be coherent. This can be used, for example, by extremely valued, established and reliable corporate brands that are also perceived as boring and out to date. The solution is to

use the corporate brand to represent the heritage and the product brand to inject some energy. This strategic management of the different brand levels will add a degree of freedom while dealing with the customer, maximizing the positive aspects of a firm's brand portfolio and minimizing the negative ones.

The theoretical arguments presented above make us expect a positive relation between the strength of a corporate brand and the shareholders' value. In particular, we expect a company with a strong, successful and well established corporate brand to evidence incremental cash flows through higher Tobin's Q and resulting greater shareholder value.

Firms with stronger corporate brands (firms with high Fortune's index), should present higher Tobin's Q ratios than firms with weaker corporate brands (firms with low Fortune's index), when controlling for other variables that are known to impact firms' value.

4 Data and Methodology

Empirical testing of the above hypothesis is based on a sample of 362 US-based publicly traded firms from the COMPUSTAT Industrial Annual database, that were also considered by the "Fortune" magazine to construct its 2002 ranking on the "America's Most Admired Companies".

Fortunes' "America's Most Admired Companies" ranking is obtained from a survey of top managers at 582 companies with the largest revenues in each sector. Executives, directors and securities analysts, in a total of 10,000, rate companies within their industry on eight different attributes: innovativeness, employee talent, use of corporate assets, social responsibility, quality of management, financial soundness, long-term investment value and quality of products and services. Participants are asked to rate the companies on a scale between zero (poor) and ten (excellent) on each of the eight attributes. Then, the eight scores are averaged to arrive at a final score.

4.1 Tobin's q

Tobin's q is the dependent variable used in this study. I use the market-to-book ratio as an approximation of Tobin's q, which in turn is a proxy for firm value. This procedure is common in the literature [2]. Moreover, evidence provided by Allayannis and Weston (2001) shows that several measures used to proxy Tobin's q are highly correlated with each other and also highly correlated with the market-to-book ratio used here. The market-to-book ratio is computed as the ratio between the market value of assets and the book value of assets. The market value of assets is determined by the book value of assets, less the book value of equity, plus the market value of equity. I used the market value of equity at the end of the calendar year. This variable is observed in the year 2002.

4.2 Definition of exogenous variables

We use two types of exogenous variables: firm specific financial variables and a corporate brand strength measure.

4.2.1 Firm specific financial variables

In order to infer if corporate brand strength increases the firm value we need to exclude the effect of all the other variables that may impact Tobin's Q. The firm specific financial variables in use are, therefore, the ones considered by the literature to be determinants of the firm value and will have the role of controlling for the financial effects. In particular, I am using the variables proposed by Allayannis and Weston (2001) while studying the impact of the use of derivatives in firm value (Tobin's Q). All the firm specific financial variables presented below are computed as the average of the years 2000, 2001 and 2002.

(a) *Size*: there is no consensual evidence for US firms about the way in which size impacts

[2] See for instance Doidge, Karolyi, and Stulz (2003) for a study on cross-listing, Lang and Stulz (1994) and Servaes (1996) for corporate diversification, (Servaes (1991) for takeovers and Allayannis and Weston (2001) for risk management.

firms' profitability[3] . However, since that in many studies it seems to have a significant impact on firms' value, I'm including the firm's size, calculated as the natural logarithm of the book value of total assets and accounting for inflation by using 2002 prices.

(b) *Profitability*: a more profitable firm is considered to be traded at a premium in comparison to a less profitable one. In this sense, I expect this variable to have a positive impact in Tobin's Q. Return on assets (ROA) is the measure chosen for profitability and is computed as EBITA over total assets.

(c) *Leverage*: this variable is used to account for differences in the capital structure of firms, which is known, since the seminal work of Modigliani and Miller (1958), to impact the firms' value. Leverage here is computed as total debt over total assets.

(d) *Investment growth*: Myers (1977) argued, and it is until now well accepted, that firms' value also depends on its future investment opportunities. In this study I'm considering two variables to proxy investment growth. The first variable is capital expenditures (CAPEX). This variable is measured using the ratio of capital expenditures over net assets. Research and development spending (R&D) is the other variable used to proxy future investment opportunities, but it also proxies a firm's intangible assets as technological know-how and expertise. This is an important control in this study in the sense that it allows controlling for the effect of intangible assets other than corporate brand. Given that a considering part of firms in the sample did not report this item the missing values were treated as zero investment in R&D. This procedure is common to other studies that use the COMPUSTAT data.

(e) *Access to financing*: the ability of a firm to access to financial markets may impact its Tobin's Q in the sense that if a firm has limited access to financing, managers will have to choose which projects to finance and thus will undertake only profitable projects. Therefore, we expect that access to financing leads to a decrease in Tobin's

[3]Mueller (1987) provides a summary of the literature on this issue.

Q, since otherwise firms will get funds only for projects with unquestionable positive net present value (NPV). In order to measure the firms' access to external financing I use a dividend dummy, which is a variable set to one if the firm paid a dividend in any of the years 2000, 2001 or 2002 and set to zero if it did not. If a firm has paid dividend in one of these years, it is less likely to be capital constrained during this period and may therefore have a lower Tobin's Q. Consequently, it is expected a negative relation between Tobin's Q and the dividend dummy.

4.2.2 Corporate brand strength variable

Corporate brand strength is measured using the overall score obtained by each company on Fortunes' "America's Most Admired Companies" ranking. This score is the average of the scores on all eight individual attributes: innovativeness, employee talent, use of corporate assets, social responsibility, quality of management, financial soundness, long-term investment value and quality of products and services, as perceived by participants in the survey. These attributes are repeatedly referred in the literature to constitute different dimensions of the corporate brand concept.

4.3 Descriptive statistics and univariate tests

Table 1 reports the summary statistics for the variables in use in this study for the full sample of firms, in a total of 362 observations. Firms in this sample have a mean size of 8.56 (median of 8.46) in terms of the normalized variable, what corresponds to approximately $5,225 million. On average, the return on assets is 12.8% and the leverage ratio 67%. Investment growth is measured by R&D expenses with a mean of 1.5% and CAPEX with a mean value of 12.7%, with both measures computed as a percentage of firms' assets. The mean Tobin's Q is 1.53 (median of 1.27) which is similar to other studies such as, for example, Allayannis and Weston (2001). The measure of corporate brand strength (CBS) given by Fortune's America's most admired companies ranking varies in this sample between 1.1 and

8.7 points with an average value of 6.1.

Table 2 shows the correlation between independent variables. The correlation coefficients are, in general, low and the highest correlation, in absolute value, occurs between the variables return on assets and leverage, but does not exceed 0.4. Considering the most innovative variable in this study, corporate brand strength, the highest correlations with this variable are no greater than 0.26 in absolute value and occur with respect to Leverage and ROA. This is rather important for the robustness of our regression results on the significance of the corporate brand strength coefficient. It is also shown that corporate brand strength is positively correlated with all the remaining independent variables, with exception for leverage.

Table 3 presents univariate tests of the hypothesis that corporate brand strength is positively related to firm value. First, I split the sample into quarters according to the level of corporate brand strength. The companies considered to have a very strong (weak) corporate brand strength are the ones in the top (bottom) quarter of the sample (Panel A and D, respectively). The companies considered to have strong (weak) corporate brand are the ones in the second (third) quarter of the sample (Panels B and C, respectively). Then, I compute the descriptive statistics of the following variables across firm groups: Tobin's Q, Size, ROA, R&D, CAPEX, Leverage and CBS. Consistent with this study's hypothesis, firms with the strongest corporate brand, in the top quarter, are also the ones with the highest Tobin's Q value (both speaking in terms of mean and median). Moreover, the average Tobin's Q increases monotonically across quarters: firms in the first quarter have the lowest Tobin's Q mean (1.24), firms in the second quarter have the second lowest Tobin's Q mean (1.37), in the third quarter firms have the second highest mean (1.62) and finally, in the last quarter, firms have the highest Tobin's Q (1.91). The same pattern occurs when we compute Tobin's Q median across the quarters.

Analysing now the remaining variables across panels, we can see that, on average, firms with stronger corporate brand are bigger, have higher Return on Assets and higher CAPEX, and invest more in R&D. Although, there is not a monotonic increase of these variables

across quarters, as for Tobin's Q, a similar pattern can be inferred from the comparison between the first and the fourth quarters. The firms in Panel D (first quarter) have, on average, a size of 8.34, a ROA of 9.8%, R&D expenses of 0.1% and CAPEX of 7.5%, while the firms in Panel A (fourth quarter) have, on average a size of 8.99, a ROA of 15.4%, R&D expenses of 1.9% and CAPEX of 11.7%. Finally, the only variable with a negative relation with CBS is leverage, and we may verify that firms with very high CBS are the ones with the lowest leverage ratio (62.5%, on average) and that firms with very weak corporate brands are the ones with highest leverage ratio (74.3%, on average).

Overall, these univariate tests provide first evidence supporting the main hypothesis that a strong corporate brand contributes positively to the creation of value for shareholders. Moreover, it provided useful information on the characterization of firms with different levels of corporate brand strength, in terms of size, profitability, growth and risk, which are characteristics that are also known to be related to Tobin's Q. In this sense, the multivariate tests to be performed in the next section will be determinant to understand if there is a true and robust relation between corporate branding and the value of the firm.

5 Empirical Results

In order to test the impact of corporate brand strength in the value of a firm I ran a set of regressions using firms' Tobin's Q as the dependent variable and corporate brand strength as one of the explanatory variables, controlling for additional items that are known to be determinants of firms' value, as suggested by previous theoretical and empirical work in this area. Namely, and following Allayannis and Weston (2001), I am controlling for the following factors: (1) size, by using the log of total assets as a proxy; (2) profitability, by using ROA as a proxy; (3) investment growth and intangible assets, by using as proxies the ratio of capital expenditures to assets (CAPEX) and the ratio of R&D to assets; (4) leverage, by using the ratio of total debt to total assets; and (5) access to financial markets, by using a dividend

dummy as a measure of the firm's ability to obtain and access external financing.

The dependent variable used in all the regressions is the natural logarithm of Tobin's Q ratio observed in the year 2002. The logarithm is taken here in order to normalize the dependent variable. The remaining accounting variables described above are computed as the average for the years of 2000, 2001 and 2002.

Table 4 reports on the regression results for the full sample of firms using ordinary least squares (common) and industry effects regression methods. To run the industry effects regression method I included a dummy variable for each industry, defined by the 2-digit SIC code. This particular procedure aims to control for industry specific effects on firm's Tobin's Q not be addressed by any of the other explanatory variables as they are firm specific.

On both regressions the findings support the hypothesis that a strong corporate brand contributes positively to firms' value. In fact, the CBS variable has a positive and statistically significant coefficient of 0.07 in the common regression and 0.08 in the industry effects one. This is consistent with the theoretical model proposed by Doyle (2001), in which a strong brand may add value for the shareholders in the sense that it impacts positively the cash flows of a firm. The result is also in line with the previous empirical results obtained by Kerin and Sethuraman (1998) and Madden et al. (2002) while linking branding value with financial performance. In addition, both models have a very good explanatory power of Tobin's Q, as reported by the adjusted R squared that takes the value of 44% in the common regression and 43% in the industry effects one.

For most of the controlling variables I find statistically significant results as well as the sign predicted, with exception for size and dividend dummy. As explained before, the size effect on firms' value is rather ambiguous, which may explain the negative and non significant coefficient values found for both regressions. Moreover, this negative relationship between size and Tobin's Q, suggests that small firms deliver higher shareholder values, which is consistent with the results found by Allayannis and Weston (2001) and by Lang and Stulz (1994) in a paper that looks at Tobin's Q and diversification at the firm level. In

what concerns the dividend dummy, the sign of its coefficient is negative, as predicted, but not statistically significant. This supports the hypothesis that firms with better access to financial markets, i.e. without financing constraints, have lower Tobin's Q and so the variable is only economically significant. The remaining variables, as said, are both statistically and economically significant. Similarly to Lang and Stulz (1994) and Allayannis and Weston (2001), we find that more profitable firms, as captured by ROA, are more valuable; firms with more leverage have higher Q values as well, which is consistent with the theories defending the monitoring benefits of debt; and finally, that there is a positive relationship between a strong investment growth, as proxied by CAPEX and R&D expenses, and the market value of a firm as measured by it's Tobin's Q.

The result on R&D variable is particularly relevant in order to conclude that the corporate brand matters to value creation for shareholders. This is so, because this variable is supposed to capture the effect of other intangible assets in the value of the firm, and by including it, we are controlling for those and therefore guarantying that the corporate brand strength variable is capturing its own effect and not the effect of any other intangible assets.

Table 5 reports the regression results using two sub samples of firms divided by corporate brand strength level. More precisely, a firm is set to have high (low) corporate brand strength if it is ranked above (below) the median. The most relevant result obtained here is that for low CBS firms, the CBS variable is positive but has no statistical significance. For the high CBS firms, however, the CBS coefficient is still positive and significant. The main conclusion from this result is that CBS is more relevant as a firm value predictor, for firms with stronger corporate brands. Regarding the remaining independent variables, only the variables with ambiguous predicted coefficient signs, such as size and dividend dummy, have different signs across the sub samples. The coefficients for these variables on both panels and models are not statistically significant.

Table 6 shows the regressions results predicting firms' value on different levels of corporate brand strength. Both the ordinary least squares and the industry effects regression contain

the same dependent and independent controlling variables used in the previous regressions. In order to measure the differences between firms with strong and weak corporate brand, while explaining the firm value, I constructed two corporate brand strength dummy variables (CBS Dummy (1) and CBS Dummy (2)). The CBS Dummy (1) is a variable set to one if a firm is considered to have high corporate brand strength and zero if not. More precisely, a firm has high (low) corporate brand strength if it has a level of CBS higher (lower) than the median. The CBS Dummy (2) is a variable set to one if a firm is considered to have very high corporate brand strength and zero if it is considered to have very low corporate brand strength. In this case, a firm has very high (low) corporate brand strength if it has a level of CBS higher (lower) than the 75th (25th) percentile.

In the first panel I use the first CBS dummy to distinguish firms with different levels of CBS. Both the common and the industry effect regressions have strong results supporting that firms with different levels of CBS have, all else constant, different levels of firm value. In fact, for firms with high level of corporate brand strength this variable explains 16.5% more of the value of the firm than for firms with low corporate brand strength, when we split the sample using the median.

When we consider just the companies in the bottom and top quarters of the sample (panel B) this difference is even stronger, and the coefficient for the CBS dummy assumes the value of 22% in the common regression and 27% in the industry effects regression. This result provides further evidence in favour of the argument that firms with a strong strength of its corporate brand are able to create additional value to their shareholders, since this suggests that the effect of corporate branding is self reinforcing.

Regarding the controlling variables, in general, I obtain similar results to the full sample ones. In the first panel, and according to the results predicted, I find significant evidence that more profitable firms with growing investments and lower leverage are the ones with higher Tobin's Q. More precisely, ROA, R&D and CAPEX have positive and statistically significant coefficients while explaining firms' value. Leverage has a negative significant

coefficient, suggesting that firms with higher debt to assets ratio are less valuable. Again, size and dividends payment are not significant and surprisingly both variables have opposite signs in the common and industry effects regressions.

In panel B, when we use just firms with extreme values of CBS we still obtain similar results on controlling variables. Although not statistically significant, the size coefficient is, as in the full sample tests, negative suggesting that small firms have higher Tobin Qs. The leverage and profitability variables remain economically and statistically significant in both regressions, while one of the proxies for investment growth, CAPEX loses its statistical significance. The R&D expenses coefficient has the same predicted sign and remains statistically significant.

In what concerns to the explanatory power of the models used, I can see that all the models have strong adjusted R squares. The regression models in Panel A are able to explain 43% of firms' value, considering industry effects and 45%, in the common regression. The models in Panel B are even more powerful, being able to explain 50% of Tobin's q, in the common regression and 49% in the industry effects regression.

6 Robustness

Brown and Perry (1994) and Fryxell and Wang (1994) argue that Fortune's annual ratings of America's most admired companies are heavily influenced by the previous financial results. They suggest that research using this data is affected by a halo effect that should be removed before any measure can be appropriately used to proxy corporate brand strength. However, evidence against this view is provided by Cordeiro and Sambharya (1997), who found that a non-financial component of Fortune's index obtained after partialling-out the financial halo from scores significantly and positively influenced security analyst forecasts of future earnings. Also Dunbar and Schwalbach (2000) in a study of German companies find no evidence of the existence of a financial halo effect.

In this section and in order to test for the robustness of my previous results I follow a procedure in the same spirit to the one suggested by Brown and Perry and used by Cordeiro and Sambharya (1997) and Cordeiro and Schwalbach (2000).

In these additional regressions to predict the firm value I use an adjusted measure of corporate brand strength corrected for the financial halo effect. More precisely, the adjusted corporate brand strength is obtained by using an instrumental variable and a two stage least-squares methodology. In order to obtain a consistent estimator for corporate brand strength and overcome the eventual endogeneity of the model, I use the participation of the firms in the index S&P 500 as an instrument.

By using the instrumental variable methodology, I expect to capture the isolated contribution of corporate brand to firm value, since this new measure expurgates any financial effect that could be contained in the Fortunes' global index.

Table 7 shows the results for the full sample, predicting firms' value on corporate brand strength, using the instrumental variables methodology in a two stages least-squares regression. The results using this methodology that accounts for the endogeneity of the model strongly sustain the results previously obtained by simply regressing the firm value on corporate brand strength. In fact, the positive and significant coefficient on the corrected measure for corporate brand strength provides additional evidence supporting the hypothesis that firms with stronger corporate brands evidence higher shareholders' value, measured by their Tobin's Q.

The instrumental variable I use is a dummy variable set to one of the firm is part of S&P 500 in 2002 and zero otherwise. This variable is used in an auxiliary regression that has corporate brand strength as independent variable and S&P participation and all the additional firm specific attributes (size, leverage, profitability, access to markets and growth) as independent variables. In a second stage the fitted values obtained in this regression are used in substitution of the corporate brand strength measured used in the previous regressions. As I already said the coefficient on corporate brand strength is positive and significant

and presents no difference for common regression and industry effects methodology. With respect to controlling variables I obtain similar coefficients to the ones obtained before, with the unadjusted global Fortune's index. Both size and dividend dummy remain negative and non-significant. All the other controlling variables present the expected sign with statistically significant coefficients that are similar to the ones obtained before. These results sustain the robustness of our previous conclusions to an eventual endogeneity of the model generated by the variables firm value and corporate brand strength.

7 Conclusion

This paper tests empirically if a strong Corporate Brand contributes positively to the market value of a firm. Previous studies relating marketing activities with the creation of shareholder value had focused primarily in product brands and fail to control for other financial variables. The main contribution of this paper to the existing literature is precisely the focus on corporate brand and the use of financial controls while testing the hypothesized relationship.

Using a sample of 362 US firms, I find strong evidence that firms with superior corporate brands create additional shareholders' value. This result is consistent with existing branding theory, which argues that brand activities at the product level add value to the firm by increasing the level of cash flows and reducing their future risk. The findings remain robust after correcting the Fortune index for the financial halo effect, using an instrumental variable.

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Table 1: **Summary statistics of firm variables**

TThe table presents the descriptive statistics for our sample of firms. The sample includes 362 US-based publicly traded firms. All the accounting variables, except for the Tobin's q ratio that is observed in the year 2002, are computed as the average of the years 2000, 2001 and 2002. The Tobin's q ratio is measured as the book value of assets, less the book value of equity, plus the market value of equity, divided by assets. Size is defined as the natural logarithm of total assets. ROA is computed as EBITA over total assets. Leverage is total debt over total assets. Other firm variables displayed include measures of research and development (R&D) spending and capital expenditures (CAPEX). CBS is the level of the Corporate Brand Strength measured by the "Fortune" ranking on the "America's Most Admired Companies". N is the number of non missing observations in the sample for each variable.

	Mean	Median	Max	Min	St. Deviation	N
Tobin' Q	1.5349	1.2657	5.5369	0.5511	0.8183	362
Size	8.5613	8.4614	13.1875	1.2308	1.4779	362
ROA	0.1280	0.1237	0.5627	-0.2384	0.0771	362
R&D	0.0151	0.0000	0.2401	0.0000	0.0370	362
Leverage	0.6766	0.6669	2.1935	0.1371	0.2205	362
Dividend Dummy	0.6796	1.0000	1.0000	0.0000	0.4673	362
CAPEX	0.1274	0.0409	9.9610	0.0000	0.5801	362
CBS	6.1481	6.1950	8.6900	2.6300	1.0581	362

Table 2: **Correlation Matrix**

The table presents the correlations between independent variables, for our sample of 362 US-based publicly traded firms. All the accounting variables are computed as the average of the years 2000, 2001 and 2002. Size is defined as the natural logarithm of total assets. ROA is computed as EBITA over total assets. Leverage is total debt over total assets. Other firm variables displayed include measures of research and development (R&D) spending and capital expenditures (CAPEX). CBS is the level of the Corporate Brand Strength as measured by the "Fortune" ranking on the "America's Most Admired Companies". N is the number of non missing observations in the sample for each variable.

	Size	ROA	R&D	Leverage	Dividend Dummy	CAPEX	CBS
Size	1.0000	-0.2059	0.0561	0.1713	0.2662	-0.3465	0.1654
ROA		1.0000	0.0156	-0.3951	0.0471	-0.2096	0.2619
R&D			1.0000	-0.1742	-0.1343	-0.0434	0.0740
Leverage				1.0000	0.0524	0.0676	-0.2636
Dividend Dummy					1.0000	-0.1306	0.1182
CAPEX						1.0000	0.0344
CBS							1.0000

Table 3: **Descriptive statistics of companies with high, very high, low and very low corporate brand strength**

The table presents the descriptive statistics for four sub-samples of firms. A firm is considered to have a strong (weak) Corporate Brand Strength if it has a CBS value on the 3rd (2nd) quarter of the distribution. A firm is considered to have very strong (weak) Corporate Brand if it has a CBS value on the 4th (1st) quarter of the distribution. All the accounting variables, except for the Tobin's q ratio that is observed in the year 2002, are computed as the average of the years 2000, 2001 and 2002. The Tobin's q ratio is measured as the book value of assets, less the book value of equity, plus the market value of equity, divided by assets. Size is defined as the natural logarithm of total assets. ROA is computed as EBITA over total assets. Leverage is total debt over total assets. Other firm variables displayed include measures of research and development (R&D) spending and capital expenditures (CAPEX). CBS is the level of the Corporate Brand Strength measured by the "Fortune" ranking on the "America's Most Admired Companies". N is the number of non missing observations in the sample for each variable.

	Mean	Median	Max	Min	St. Dev.	N
Panel A: Firms with very high Corporate Brand Strength						
Tobin' Q	1.9090	1.6046	5.1905	0.6298	0.9891	90
Size	8.9893	8.9257	13.1875	6.6031	1.3646	90
ROA	0.1544	0.1507	0.4190	0.0000	0.0811	90
R&D	0.0191	0.0000	0.2275	0.0000	0.0418	90
Leverage	0.6251	0.6224	1.0470	0.1585	0.1860	90
CAPEX	0.1167	0.0411	2.6282	0.0000	0.3068	90
CBS	7.3978	7.2400	8.6900	6.9200	0.4523	90
Panel B: Firms with high Corporate Brand Strength						
Tobin's Q	1.6217	1.2689	5.1428	0.5511	0.8893	91
Size	8.7455	8.6084	13.0769	1.2308	1.7418	91
ROA	0.1275	0.1223	0.3758	-0.2384	0.0796	91
R&D	0.0146	0.0000	0.2025	0.0000	0.0312	91
Leverage	0.6748	0.6681	1.2988	0.2178	0.1792	91
CAPEX	0.1897	0.0338	9.9610	0.0000	1.0527	91
CBS	6.5747	6.5600	6.9100	6.2000	0.2039	91
Panel C: Firms with low Corporate Brand Strength						
Tobin's Q	1.3724	1.2198	5.5369	0.5994	0.6984	89
Size	8.1704	8.1396	12.0582	4.3270	1.3213	89
ROA	0.1329	0.1245	0.5627	0.0000	0.0716	89
R&D	0.0175	0.0000	0.2401	0.0000	0.0453	89
Leverage	0.6617	0.6593	1.3592	0.1371	0.2003	89
CAPEX	0.1288	0.0408	2.5195	0.0000	0.3639	89
CBS	5.8455	5.8500	6.1900	5.5100	0.1975	89
Painel D: Firms with very low Corporate Brand Strength						
Tobin' Q	1.2403	1.0988	3.1501	0.6337	0.4312	89
Size	8.3385	8.1742	11.4298	4.9900	1.3192	89
ROA	0.0977	0.0966	0.2396	-0.0891	0.0657	89
R&D	0.0096	0.0000	0.1671	0.0000	0.0271	89
Leverage	0.7433	0.7172	2.1935	0.1862	0.2847	89
CAPEX	0.0752	0.0483	0.8912	0.0000	0.1095	89
CBS	4.7964	5.0450	5.4900	2.6300	0.7067	89

Table 4: **Full Sample Regressions Predicting the Firm Value on the Level of Corporate Brand Strength**

The dependent variable on both the regressions is the natural logarithm of Tobin's q ratio observed in 2002 and computed as the book value of assets, less the book value of equity, plus the market value of equity, divided by assets. All the accounting variables are computed as the average of the years 2000, 2001 and 2002. Size is defined as the natural logarithm of total assets. ROA is computed as EBITA over total assets. Leverage is total debt over total assets. Dividend dummy is a variable set to one if the firm paid a dividend in one of the years 2000, 2001 or 2002 and set to zero if it did not. Other firm variables displayed include measures of research and development (R&D) spending and capital expenditures (CAPEX). CBS is the level of the Corporate Brand Strength measured by the "Fortune" ranking on the "America's Most Admired Companies". N is the number of non missing observations in the sample for each variable. The industry effects regression is run with a dummy variable for each industry defined by the 2-digit SIC code. All t-statistics are corrected for heteroskedasticity using White's (1980) correction.

	Common	Industry Effects
Constant	-0.8311	-0.8612
	(-5.68)	(-5.45)
Size	-0.0023	-0.0020
	(-0.18)	(-0.11)
ROA	3.1985	3.2326
	(11.94)	(9.36)
R&D	2.8001	1.6631
	(4.71)	(2.69)
Leverage	0.3692	0.3879
	(2.83)	(4.60)
Dividend Dummy	-0.0023	-0.0227
	(-0.06)	(-0.49)
CAPEX	0.1969	0.1429
	(8.48)	(1.96)
CBS	0.0742	0.0821
	(4.60)	(2.85)
N	362	362
Adjusted R_2	0.44	0.43

Table 5: **Sub-sample Regressions Predicting the Firm Value on the Level of Corporate Brand Strength for Firms**

The dependent variable on all the regressions is the natural logarithm of Tobin's q ratio observed in 2002 and computed as the book value of assets, less the book value of equity, plus the market value of equity, divided by assets. All the accounting variables are computed as the average of the years 2000, 2001 and 2002. Size is defined as the natural logarithm of total assets. ROA is computed as EBITA over total assets. Leverage is total debt over total assets. Dividend dummy is a variable set to one if the firm paid a dividend in one of the years 2000, 2001 or 2002 and set to zero if it did not. Other firm variables displayed include measures of research and development (R&D) spending and capital expenditures (CAPEX). CBS is the level of the Corporate Brand Strength measured by the "Fortune" ranking on the "America's Most Admired Companies". The sub-samples are defined using CBS. A firm is considered to have strong (weak) Corporate Brand Strength if its CBS value is higher (lower) than the median. The level of the Corporate Brand Strength is measured using the "Fortune" ranking on the "America's Most Admired Companies". N is the number of non missing observations in the sample for each variable. The industry effects regression is run with a dummy variable for each industry defined by the 2-digit SIC code. All t-statistics are corrected for heteroskedasticity using White's (1980) correction.

	Common	Industry Effects
Panel A: Firms with strong Corporate Brand		
Constant	-0.8328	-1.1168
	(-2.24)	(-2.74)
Size	0.0094	0.0304
	(0.49)	(1.02)
ROA	3.6093	4.1464
	(8.63)	(6.21)
R&D	2.8601	0.8214
	(4.07)	(0.84)
Leverage	0.0028	0.1908
	(0.02)	(0.95)
Dividend Dummy	0.0397	-0.0677
	(0.57)	(-0.75)
CAPEX	0.2433	0.0857
	(7.31)	(1.07)
CBS	0.0830	0.0881
	(1.85)	(1.82)
N	181	181
Adjusted R2	0.45	0.32
Panel B: Firms with weak Corporate Brand		
Constant	-0.4778	-0.5784
	(-2.24)	(-2.33)
Size	-0.0045	-0.0070
	(-0.28)	(-0.31)
ROA	2.5904	2.7526
	(6.54)	(5.51)
R&D	2.4121	2.1465
	(3.35)	(2.72)
Leverage	0.4612	0.5487
	(3.89)	(4.34)
Dividend Dummy	-0.0118	-0.0499
	(-0.28)	(-0.87)
CAPEX	0.1831	0.2167
	(2.18)	(1.74)
CBS	0.0105	0.0227
	(0.45)	(0.78)
N	181	181
Adjusted R2	0.38	0.37

Table 6: **Regressions Predicting the Firm Value on the Level of Corporate Brand Strength Testing for Differences in the Level of Corporate Brand Strength**

The dependent variable is the natural logarithm of Tobin's q ratio observed in 2002 and computed as the book value of assets, less the book value of equity, plus the market value of equity, divided by assets. The accounting variables are computed as the average of the years 2000, 2001 and 2002. Size is defined as the natural logarithm of total assets. ROA is computed as EBITA over total assets. Leverage is total debt over total assets. Dividend dummy is a variable set to one if the firm paid a dividend in one of the years 2000, 2001 or 2002 and set to zero if it did not. R&D stands for research and development spending and CAPEX for capital expenditures. CBS Dummy (1) is a variable set to one if a firm has a strong corporate brand and zero if it has not. A firm has a strong corporate brand if it has a level of CBS higher than the median. CBS Dummy (2) is a variable set to one if a firm has a very strong corporate brand and zero if it has a very weak corporate brand. A firm has very strong (weak) corporate brand if it has a level of CBS higher (lower) than the 75th (25th) percentile. The level of the Corporate Brand Strength is measured using the "Fortune" ranking on the "America's Most Admired Companies". N is the number of non missing observations. The industry effects regression is run with a dummy variable for each industry defined by the 2-digit SIC code. All t-statistics are corrected for heteroskedasticity using White's (1980) correction.

	Common	Industry Effects
Panel A: Firms with strong/weak Corporate Brand		
Constant	-0.4186	-0.4537
	(-3.24)	(-2.82)
Size	-0.0044	0.0021
	(-0.33)	(0.12)
ROA	3.2262	3.3177
	(11.86)	(9.48)
R&D	2.8256	1.7016
	(4.80)	(2.74)
Leverage	0.3269	0.3332
	(2.60)	(2.54)
Dividend Dummy	0.0035	-0.0178
	(0.09)	(-0.40)
CAPEX	0.1959	0.1574
	(8.42)	(2.24)
CBS Dummy (1)	0.1650	0.1651
	(4.78)	(4.33)
N	362	362
Adjusted R_2	0.45	0.43
Panel B: Firms with very strong/weak Corporate Brand		
Constant	-0.1297	-0.0933
	(-0.67)	(-0.37)
Size	-0.0289	-0.0389
	(-1.47)	(-1.41)
ROA	2.8866	2.8764
	(7.53)	(5.59)
R&D	4.0885	3.1776
	(6.02)	(3.60)
Leverage	0.2833	0.3300
	(1.65)	(1.83)
Dividend Dummy	-0.0027	0.0028
	(-0.05)	(0.05)
CAPEX	0.0699	0.0758
	(0.95)	(0.76)
CBS Dummy (2)	0.2177	0.2740
	(4.35)	(3.81)
N	179	179
Adjusted R_2	0.50	0.49

Table 7: **Regressions Predicting the Firm Value on the Level of Corporate Brand Strength, removing the financial performance halo effect from the "Fortune's Most Admired" ranking**

The dependent variable on the regression is the natural logarithm of Tobin's q ratio observed in 2002 and computed as the book value of assets, less the book value of equity, plus the market value of equity, divided by assets. All the accounting variables are computed as the average of the years 2000, 2001 and 2002. Size is defined as the natural logarithm of total assets. ROA is computed as EBITA over total assets. Leverage is total debt over total assets. Dividend dummy is a variable set to one if the firm paid a dividend in one of the years 2000, 2001 or 2002 and set to zero if it did not. Other firm variables displayed include measures of research and development (R&D) spending and capital expenditures (CAPEX). CBSI is a halo-removed measure of Corporate Brand Strength using an instrumental variable and the methodology of two stage least-squares. The instrumental variable in use is a dummy variable set to one of the firm is part of S&P 500 in 2002 and zero otherwise. N is the number of non missing observations in the sample for each variable. The industry effects regression is run with a dummy variable for each industry defined by the 2-digit SIC code. All t-statistics are corrected for heteroskedasticity using White's (1980) correction.

	Common	Industry Effects
Constant	-0.8311	-0.8612
	(-5.68)	(-5.19)
Size	-0.0023	-0.0020
	(-0.18)	(-0.11)
ROA	3.1985	3.2326
	(11.94)	(11.43)
R&D	2.8001	1.6631
	(4.71)	(2.98)
Leverage	0.3692	0.3879
	(2.83)	(4.34)
Dividend Dummy	-0.0023	-0.0227
	(-0.06)	(-0.57)
CAPEX	0.1969	0.1429
	(8.48)	(2.13)
CBSi	0.0742	0.0821
	(4.60)	(4.44)
N	362	362
Adjusted R_2	0.44	0.43