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This article examines the concept of employee-based brand equity—the value that a brand provides to a firm through its effects on the attitudes and behaviors of its employees—and empirically demonstrates its significance on executive pay. Executives value being associated with strong brands and, therefore, accept substantially lower pay at firms that own strong brands. Consistent with identity theory, this effect is stronger for chief executive officers and younger executives than for other executives. Data from a large, cross-industry sample of executives suggest that academics and practitioners should take a broader view of the contributions of brand-related investments to firm value and make use of strong brands in pay negotiations that are typically viewed as being outside the realm of marketing.

Keywords: brand equity, executive pay, return on investment

Employee-Based Brand Equity: Why Firms with Strong Brands Pay Their Executives Less

Managers recognize the value of strong brands—that is, those that project a clear and consistent set of positive associations at high levels of awareness (Keller 2003)—and dedicate significant resources to building brand strength. The power of brands has not been lost on marketing academics either; they have spent decades conceptualizing brand equity (e.g., Aaker 1991; Keller 1993) and demonstrating its consequences (for a review, see Christodoulides and De Chernatony 2010). An assumption that is often taken for granted is that brands generate value for firms by affecting how customers think and what they do—in other words, that "the power of brands lies in the minds of consumers" (Leone et al. 2006, p. 126). Whether such thoughts and behaviors are captured by measuring customers' increased intention to purchase (e.g., Cobb-Walgren, Ruble, and Don-

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thu 1995), their willingness to accept price premiums (e.g., Ailawadi, Lehmann, and Neslin 2003), or their adoption of products and consequent increases in market share and cash flow (e.g., Agarwal and Rao 1996; Mizik and Jacobson 2008), the focus of existing academic research and managerial attention has been overwhelmingly on how brands help firms win the battle for customers.

We argue that a focus on customer-based outcomes, though undoubtedly important, may offer an incomplete account of brand value that understates brands' true contributions to the firm. This is because firms compete not only for customers but also for employees. Our central thesis is that just as strong brands can help attract customers at higher prices, they should also help attract employees at lower levels of pay. This is a nontrivial matter, as pay represents the largest cost in many organizations (Gomez-Mejia 2001), with salaries alone accounting for between 20% and 50% of operating expenses (Society for Human Resource Management 2008) and 30% of U.S. firms' revenues, on average (PwC Saratoga 2012). A significant (and increasingly controversial) aspect of this pay is devoted to top executives. With this research, we intend to motivate, explain, and demonstrate the effect of employee-based brand equity in the realm of executive pay.

We aim to make four contributions to theory and practice. First, on a substantive front, we highlight the concept of "employee-based brand equity"—which we define as the

value a brand provides to a firm through its effects on the attitudes and behaviors of its employees—and outline some of its implications for marketing, management, and economics. The concept of employee-based brand equity offers the potential to extend the domain of returns to branding. A traditional notion, embedded at least implicitly in research on returns to marketing, is that the payoff to brand investments largely exists in the revenue gains that they can yield. Our approach flips this notion by investigating the cost side of profits, an area rarely examined in marketing (e.g., Srivastava, Shervani, and Fahey 1998). We suggest that a significant part of the returns to marketing investments in brands may be in reducing payroll costs.

Second, on a conceptual front, we offer an identity-based framework that integrates research in psychology, economics, management, and marketing to explain the role of strong brands in limiting executive pay. This also enables us to propose hypotheses regarding contingencies under which the effect of strong brands on executive pay is likely to be especially pronounced. Identity is one of the most widely applied concepts in social psychology and consumer behavior (for a marketing review, see Reed et al. 2012). We highlight its potential in explaining the impact of strong brands at the highest executive levels of the firm.

Third, on an empirical front, we integrate dispersed data on brands, firms, and executives. We examine the link between brand strength and executive pay using a large sample of executives employed by publicly traded U.S. firms. Our sample incorporates brand strength data from BAV Consulting's Brand Asset Valuator (BAV), executive pay data from Compustat's ExecuComp, and data on a host of supporting variables from various other sources. These data demonstrate a negative effect of brand strength on executive pay that is stronger for chief executive officers (CEOs) and younger executives.

Fourth, on a prescriptive front, the concept of employeebased brand equity offers the potential to extend the domain of marketing research to an area that marketers rarely consider: the stratospheric pay levels of top executives. As executive pay levels seem to reach ever higher, they have fueled a heated debate and a torrent of academic studies in management, finance, and economics. Many of the recommendations from these discussions call for increased government regulation of executive pay (see Cadman, Carter, and Lynch 2012; The Economist 2013). We highlight an inherently marketing-based approach that enables firms to self-regulate executive pay by investing in strong brands. If top executives are prepared to accept lower pay for the privilege of running firms with strong brands, pay levels can be grounded, at least to some extent. This implies that practitioners should take a broader view of how to assess brand contributions to firm value and should more actively leverage brand strength in pay negotiations that are typically viewed as outside the realm of marketing.

We structure remainder of this article as follows. We first introduce our theoretical framework, which articulates how identity theory applies to organizations and their brands, facilitates equity transfer to employees, and affects pay. This framework describes specific conditions under which equity transfer from brands to employees is most likely to materialize or be most valued. We then describe the data and method used to empirically test our hypotheses and present and discuss our results and their implications.

THEORETICAL FRAMEWORK

Identity Theory

A core human need is to define our identity, in terms of both how we view and understand ourselves and how others perceive us (Tajfel and Turner 1985). A substantial body of literature in management has examined how employees' organizational affiliations affect their identities (e.g., Dutton, Dukerich, and Harquail 1994; Mael and Ashforth 1992; Tajfel 1978). A smaller literature stream in economics has analytically linked identity theory to employee compensation (Akerlof and Kranton 2008). Furthermore, a substantial area of research in marketing has demonstrated how consumers' identities are affected by the brands they consume (e.g., Reed et al. 2012). These clusters of research share common ancestors (see Cable and Turban 2003; Reed et al. 2012); yet many years of separation have caused each research cluster to evolve differently.

We integrate these streams of research and propose an identity-based framework that describes why executives accept lower pay to manage firms that own strong brands. The overarching theme underlying this effect is selfenhancement: strong brands offer greater possibilities for self-enhancement to the executives associated with them than do weak brands. This benefit should lead to a willingness to accept lower pay. In addition, we draw from several elements shared by employee and consumer identity research to explain two contingencies that buttress the negative effect of brand strength on executive pay. Specifically, we argue that the higher the perceived (1) strength of identification between the executive and the brand or (2) potential for uncertainty reduction afforded by the association with the brand, the greater the executive's willingness to accept lower pay.

Self-Enhancement

Identity theory proposes that self-enhancement—that is, the accrual of social, psychological, or economic benefits—is a core motivation for people to identify with particular entities. Previous research has shown that the more positive an entity's social standing, the stronger the identification people tend to have with it because they (vicariously or otherwise) partake in the success and status of the entity (Ashforth and Mael 1989). Research has found evidence of this robust relationship for sports teams (Cialdini et al. 1976), employers (Johnson et al. 2006), alma maters (Mael and Ashforth 1992), and brands (Hughes and Ahearne 2010).

The process by which brand equity is transmitted from the brand to those identified with it is referred to as brand equity transfer. Marketing research has shown that people use brand affiliations to affirm, express, and enhance their identity both privately (e.g., self-esteem) and publicly (e.g.,

¹Ambler (2003, chap. 7) and King and Grace (2009) use the term "employee-based brand equity" to note that brand knowledge can affect employee behavior. They do not, however, consider that it might lower pay.

²Srivastava, Shervani, and Fahey (1998) note that brand equity could potentially lower costs by increasing advertising and promotion efficiency. However, they also "clearly emphasize that the value of any asset ultimately is realized, directly or indirectly, in the external product market-place" (p. 4).

status) (Bearden and Etzel 1982; Levy 1959; Solomon 1983). For example, owning an iPhone may affect both the consumer's own perception of identity and the identity that others ascribe to this person. Consumers do so, in particular, by vesting their self-conceptions in entities that they and relevant others perceive as being successful and well respected (e.g., luxury brands; Han, Nunes, and Drèze 2010). Brands can also diminish consumers' identities. For example, a Blackberry-wielding journalist recently lamented that the brand is no longer cool and that he will have to replace it, adding, "No longer being an object of public derision would, of course, be an added bonus" (Garrahan 2013).

Analogous to why people value products that enhance their identity, people seek employment at firms that own strong brands, at least in part, to benefit their self-esteem (e.g., Cable and Turban 2003) and social standing (Tajfel 1978). Indeed, a person's chosen employer might say more about him than the products he consumes (Du Gay 1995): working at Blackberry or Apple as an "insider" may well contribute to a person's identity more than owning a Blackberry or an Apple product as an "outsider" (Scott and Lane 2000). Moreover, people consume numerous products but typically hold only one job at a time. In addition, whereas a customer chooses a product, a job entails a choice by both the employee and the firm. This "stamp-of-approval" inference is akin to consumer beliefs that a strong brand will only partner with other high-quality brands to avoid diminishing its own brand (Cao and Sorescu 2013).

These self-enhancement arguments offer an identity-based explanation for why strong brands can pay their executives less. Next, we build on this explanation to describe two constructs that help answer a contingent question: Why do strong brands offer some executives greater opportunities for self-enhancement and thus make them more willing to accept lower pay?

Strength of Identification

One basis is strength of identification, that is, the degree to which people perceive themselves as being one with an entity (Ashforth and Mael 1989; Dutton, Dukerich, and Harquail 1994; Muniz and O'Guinn 2001). Self-enhancement benefits derived from associating with a strong brand should increase with the strength of the person's identification with the brand.

Why would some executives perceive greater identification with a strong brand than other executives? One possible reason is that strength of identification increases with the salience of the association, or the extent to which the person in question is visibly and prominently associated with the entity (Bearden and Etzel 1982; Dutton, Dukerich, and Harquail 1994). The more visible the association, the more likely it is that social benefits can be derived from it. For example, equity transfer from brands to consumers is stronger when consumption is public rather than private (Bearden and Etzel 1982). Similarly, executives' leadership positions publicly confirm their stewardship of strong brands, making it more likely that they identity with these brands and rely on equity transfer as a source of self-definition (Hogg and Terry 2000). This increases both the opportunities for and the potency of self-enhancement derived from a brand association (Dutton, Dukerich, and Harquail 1994).

Potential for Uncertainty Reduction

Uncertainty about a person's identity increases with the lack of relevant information that could be used to define her or his identity. Thus, the potential for uncertainty reduction is highest for people whose identity is unclear or yet to be fully shaped (Hogg and Terry 2000). In such cases, equity transfer from brands can serve as a basis for inferring the missing information (e.g., Shapiro 1982).

Why would some executives perceive greater potential for uncertainty reduction through association with strong brands than others? A substantial body of literature in psychology and economics implies that executives who have had fewer opportunities to define their identity (and therefore have greater uncertainty associated with their social identities) are likely to perceive greater opportunities for self-enhancement through an association with strong brands. Association with strong brands offers such executives the ability to signal their own unobserved quality to themselves as well as to others who matter to their psychological (e.g., peers, friends, family; Hogg and Terry 2000) and financial (e.g., future employers, future peers; Spence 1973; Weiss 1995) well-being.

HYPOTHESES

Self-Enhancement as a Substitute for Pay

Research in marketing has shown that consumers value the self-enhancement benefits that strong brands offer and that this translates into top-line financial benefits that include price and volume premiums as well as a higher customer lifetime value (e.g., Ailawadi, Lehmann, and Neslin 2003; Gupta, Lehmann, and Stuart 2004; Srinivasan, Park, and Chang 2005). The theoretical framework outlined in the previous section suggests that strong brands can also form a basis for employee-based equity by enhancing the bottom line in terms of reduced payroll costs. This is because employees should value the self-enhancement benefits offered by firms that own strong brands. We consider these benefits a nonfinancial reward of employment—in other words, a substitute for pay.

Economists have recently added identity-based benefits to utility models of wages (Akerlof and Kranton 2008), but empirical evidence remains lacking. The only empirical support for the effect of brands on pay levels can be found in laboratory studies in which undergraduate students indicated that they would hypothetically accept lower pay to work for a strong brand (DelVecchio et al. 2007) or for a firm with a good corporate reputation (Cable and Turban 2003). Whether this relationship holds for actual job searches, more experienced job seekers, more ecologically valid environments, and actual pay remains to be seen. It is possible, for example, that brand strength effects are limited to early stages of the recruitment cycle, when awareness leads to consideration and the lack of information on job attributes leads to halo-type inferences (Uggerslev, Fassina, and Kraichy 2012).

That said, our theoretical framework suggests that executives' leadership positions enable them to credibly position the brands they manage as a central part of their identity and to rely on equity transfer from these brands as a potent source of self-definition. This is because professional peers, future employers, and current or future members of their

social circle may (rightly or wrongly) attribute part of the brand equity of the firm to the actions and qualities of its leaders (Phillips and Lord 1981). As leaders of their firms, executives derive current and future utility from being at the helm of companies with high brand equity and thus have an increased willingness to accept lower pay for such positions. Formally,

H₁: Firms with strong brands pay their executives less.

CEO Visibility and Strength of Identification

Our theoretical framework also suggests that the size of the negative effect of strong brands on executive pay should vary by the type of executive. Extending our arguments, we expect that the highest-ranked executive, the CEO, will be most willing to accept lower pay for leading firms with strong brands. Chief executive officers are typically the most prominent members of an organization (Hogg and Terry 2000). They give a public face to an otherwise abstract identity, causing many outsiders to view them as one and the same (Scott and Lane 2000). Given the CEO's responsibility for a firm as a whole as well as his or her highly visible role, external parties are likely to identify the CEO with the firm, and its brands in particular (Bettman and Weitz 1983; Dutton and Dukerich 1991). Thus, strong brands are likely to provide more social self-enhancement benefits to CEOs than to other high-ranking executives at the firm. We therefore expect that CEO pay will show a greater negative impact of brand strength than the compensation of other executives. Formally,

H₂: The negative effect of brand strength on executive pay is strongest for the CEO compared with other executives.

Uncertainty About Younger Executives' Identities

From an uncertainty-reduction perspective, our framework suggests that younger executives should be more likely to value the equity transfer they could obtain through employment in firms with strong brands. Working for a strong brand reduces uncertainty in two ways. First, in the short run, younger executives have fewer building blocks to define their identity, which makes the contemporaneous equity transfer from their current employment especially valuable in terms of their private (e.g., self-esteem) and public (e.g., status) identity.

Second, from the perspective of investing in future employment opportunities, a strong brand can serve as a signal about executives' unobserved qualities. For less experienced, younger executives, brand equity transfer from their current employer should be more significant in terms of reducing uncertainty about their human capital for potential future employment opportunities. Previous research has shown that a person's schooling and work experience can be used as signals of her abilities, traits, and values (Spence 1973; Weiss 1995). Experimental evidence has shown that brands can also be used as signals and have the ability to boost résumé power. Specifically, in a hypothetical setting, undergraduate students indicated that they would be willing to accept a lower wage from a strong brand (Jack Daniels whiskey or Ray-Ban sunglasses) than a weak brand (Old Forester whiskey or SunGear sunglasses) as a signal of their competency (DelVecchio et al. 2007). Therefore, employees might view working for a firm with a strong brand for lower pay as an investment in their identity because future employers may rely on the brand affiliation as a credible indicator of human capital, even beyond the skills associated with the previous employment experience. Because younger executives have longer careers ahead of them, they are also likely to have greater opportunities to leverage this equity for social or economic gains. Younger executives should, therefore, value any brand equity transfer more than older executives. Formally,

H₃: The negative effect of brand strength on executive pay is stronger for younger executives than older executives.

METHOD AND MEASURES

We obtain brand strength data from the U.S. BAV metrics survey. Samples of 1,200 or more consumers are selected each quarter from a panel of 15,000 people who are asked to complete a 45-minute survey once a year. Survey respondents provide answers to multiple-item scales that yield measures of brand strength. The BAV is one of the few sources of brand equity data that span more than ten years. It also has the value of precedent, having been used by other researchers who have shown that brand strength is positively related to customer lifetime value metrics (Stahl et al. 2012), cost of debt (Larkin 2013), and firm performance (Mizik and Jacobson 2009).

We obtain compensation data from ExecuComp. Execu-Comp is a Standard & Poor's database that contains data on total pay as well as fixed and variable components of pay for one or more of the top five highest-compensated executives working for companies that are part of the S&P 1500 index. These executives are typically the CEO, the chief financial officer, and various other top executives such as chief operating officers and senior vice presidents. Firm size and performance data are from Compustat. Data on control variables (which we describe subsequently) are from BoardEx (a database of executive characteristics that includes, among other data, information on pay and board membership), the Fortune 100 Best Companies to Work For annual ranking, Fortune's 100 Most Admired Companies (FMAC) annual ranking, and Trading Economics (a website that aggregates historical data for more than 300,000 economic indicators, exchange rates, stock market indices, government bond yields, and commodity prices).

The intersection of the BAV metrics data and executive pay data results in data for 2,717 executives, 495 of whom are CEOs. Data are available in an unbalanced format between 2000 and 2010. Not all brands are included in every annual edition of the BAV survey, and not all executives appear in ExecuComp for the duration of our sample. We exclude the year of the appointment and the terminal year, when compensation might not reflect a full 12-month period and would therefore not be readily comparable to the remaining years for which compensation is computed on an annual basis.³ We also exclude CEOs who are the founders of the company because their pay structure tends to be distorted from that of the average CEO (He 2008). The intersection of the brand with executive-level (compensation and

³This also reduces the likelihood that our measure of compensation includes sign-up ("golden hello") or sign-off ("golden parachute") bonuses, which are not a typical part of annual compensation.

board membership) and firm-level data yields a sample of 10,107 observations for all executives and 1,869 observations for CEOs across 393 firms.

Next, we present measures for our dependent and independent variables as well as controls included in our empirical models. Table 1 summarizes these measures.

Dependent Variable: Total Pay

We use total pay as reported in ExecuComp, a measure used in numerous previous studies (e.g., Deng and Gao 2013; Kaplan and Rauh 2010; Webb 2008). This measure includes salary, bonus, other annual pay, restricted stock grants, long-term incentive plan payouts, net value of options exercised, and all other payments. Kaplan and Rauh (2010) argue that the total pay measure, which estimates the total compensation realized by an executive in a given year, is the closest measure to an executive's true adjusted gross income. To reduce skewness in the raw pay data, and in line with previous research (e.g., Deng and Gao 2013; Kaplan and Rauh 2010; Webb 2008), we apply a log transformation to the raw data when including it in our empirical model.

Alternative Dependent Variables: Salary and Equity-Based Pay

We also investigate whether brand strength has a differential effect on various components of total pay. Specifically, we use, as alternative dependent variables, (1) the logarithm of salary as reported in ExecuComp and (2) the logarithm value of equity-based pay, which is calculated as the value of the stock-related and option-related awards that the company gave to the executive in each fiscal year.

Independent Variables

Brand strength. Our measure of brand strength is based on the BAV model from BAV Consulting (part of Y&R); these data are derived from the world's largest study of consumer attitudes, beliefs, familiarity, and evaluation of different product brands. The BAV model includes data on four brand pillars: brand knowledge (familiarity), esteem (e.g., quality, value), energized differentiation (the extent to which the brand is distinctive, unique, and dynamic), and relevance (the extent to which consumers can relate to the brand). The BAV combines these pillars into a single brand asset measure. Because the pillars that compose the brand asset measure are highly correlated (e.g., Stahl et al. 2012) and we have no theoretical reason to expect a differential effect of any of these components on pay, we use BAV's brand asset metric as our measure of brand strength.

The BAV data have several advantages. Most importantly, they are a direct measure of consumers' assessments of a brand rather than one derived from firm or stock market variables, which decreases the probability of a spurious correlation with executive pay. Second, the sampling for the BAV surveys is representative of the U.S. population, thereby broadly capturing public sentiment. Finally, the brands surveyed are designed to maintain a fair representation of all major industry competitors, thus providing varying degrees of brand strength across at least the major brands.

Merging BAV and Compustat Data

In the majority of cases, BAV assesses brand strength at the product level (e.g., Tide) (and, only in a few cases, at the firm level as well, should these differ [e.g., Procter & Gamble]), which is the unit of analysis for the CEO and financial data. Given the nature of these data, some previous authors have restricted their analysis to monobrand firms (e.g., Mizik and Jacobson 2009)—that is, firms for which a single brand represents the bulk of its business (e.g., America Online, IBM, Starbucks, Wal-Mart). Focusing just on monobrands, however, would unduly reduce the sample size (Larkin 2013). Firms using the more common multibrand strategy include Kimberly-Clark, which owns brands such

Table 1
VARIABLES AND DATA SOURCES

Conceptual Variable	Measured Variable	Data Source
Dependent Variable Total pay	Logarithm of total compensation (tdc2 measure from ExecuComp)	ExecuComp
Independent Variables Brand strength	Brand asset metric	BAV metrics
Leadership position (CEO)	Dummy variable (value of 1 if the executive is the firm's CEO and 0 otherwise)	ExecuComp
Executive age	Age of the executive	ExecuComp
Control Variables External social capital	Number of company boards on which the executive sits (public and private)	BoardEx
Firm performance	Percentage change in sales from previous year	Compustat
Firm size	Logarithm of total assets	Compustat
Firm governance	Dummy variable (value of 1 if the firm's CEO is also the chairperson and 0 otherwise)	ExecuComp
Quality of workplace	Dummy variable (value of 1 if the firm is listed in the top 100 Best Companies to Work For annual ranking and 0 otherwise)	Fortune
Corporate reputation	Dummy variable (value of 1 if the firm is listed in the FMAC annual ranking and 0 otherwise)	Fortune
Recessionary environment	Number of negative GDP growth quarters in the previous year	Trading Economics
Industry controls	Set of dummy variables based on Standard Industrial Classification codes	Compustat

as Kleenex, Huggies, and Cottonelle. Importantly, consumers may not even recognize the corporate name in the case of a multibrand strategy, or they may not be able to match familiar product brands to familiar company names. One way to address some of these challenges is to use a weighted average of a firm's brands. However, not all firms' major brands are typically surveyed, and it is unclear how to weight them, especially because data on brand-level sales are not readily available. To merge the BAV data with firmlevel CEO and financial data, we select for each firm the brand with BAV's highest brand asset score available. For robustness, we also report additional analyses of our model using (1) the average brand strength score for all brands tracked by BAV for each firm and (2) the subsample of monobrand firms for which the BAV score is available at the firm level.

Leadership position (CEO). Executive pay is typically higher for the CEO than for other top executives within the same firm (Frydman and Saks 2010). We use a dummy variable that takes a value of 1 if the executive is the CEO and 0 otherwise. We obtained these data from ExecuComp.

Executive's age. Pay typically increases with an executive's age (McKnight et al. 2000). We obtained the age of each executive—a time-varying, annual variable—from ExecuComp.

Control Variables

External social capital. In line with prior research (Belliveau, O'Reilly, and Wade 1996), we use the number of boards that the executive sits on for each year in the sample. This variable captures the executive's external social capital.

Firm performance. Following Gomez-Mejia, Tosi, and Hinkin (1987), we use percentage change in sales from the previous year as our focal measure of firm performance. For robustness, we also use earnings per share and change in market value from the previous year. All three measures have been used as metrics of firm performance in studies included in the Tosi et al. (2000) meta-analysis of executive pay research.

Firm size. In line with prior studies, we measure firm size using the log of the firm's assets (e.g., Deng and Gao 2013). We obtained these data from Compustat.

Firm governance. Firms for which the CEO is also the chairman of the board of directors are typically deemed to have weaker governance (e.g., Bebchuk and Fried 2004). Such firms may be more prone to agency problems and may pay their executives more. We use a dummy variable that takes a value of 1 if a firm's CEO is also its chairman and 0 otherwise. We obtained these data from ExecuComp.

Quality of workplace. It is possible that an executive may accept lower pay if the firm is a great place to work. We control for this theoretical possibility using Fortune magazine's annual ranking of the 100 Best Companies to Work For (e.g., Faleye and Trahan 2011). We use a dummy variable that takes a value of 1 if the firm is listed in a given year and 0 otherwise.

Corporate reputation. Our model includes a 1–0 variable for whether a firm is ranked among FMAC in a given year. The FMAC rankings have been used as a reputation metric in 42% of empirical studies on corporate reputation (for a meta-analysis, see Walker 2010). On the one hand, corporate reputation and brand equity are interrelated constructs because they build on each other and damage to one can

weaken the other (Aaker 2004). On the other hand, they are conceptually distinct and, although a good corporate reputation might be associated with strong brands, prior research has shown that corporate reputation alone is not sufficient to build strong brands (Page and Fearn 2005).

The FMAC rankings are based on a highly correlated ($\alpha =$.97) set of subcomponents—ability to attract and retain talented people, quality of management, social responsibility, innovativeness, quality of products or services, wise use of corporate assets, financial soundness, long-term investment value, and effectiveness in doing business globally—with a single factor accounting for 84% of variance subcomponents (Fombrun and Shanley 1990). Their correlation is likely due to a halo effect based on financial performance. The FMAC rankings have been further criticized for assessing only the perceptions of a limited set of stakeholders (i.e., industry peers) while ignoring other relevant stakeholders (e.g., customers, employees, regulators) (Brown and Perry 1994). These concerns are not germane to our purposes, however, because peer perceptions (even if biased) may capture incremental identity effects beyond what the brand image (i.e., BAV's brand asset metric) captures. If so, we would expect that a strong reputation would have the same negative effect on pay as a strong brand.

Industry effects and year. We control for industry effects by including in our models Standard Industrial Classification code dummies for each industry in our sample. We obtained data from Compustat. We include the year to capture the effects of inflation.

Recessionary environment. We measure the intensity of the recessionary environment with the number of negative gross domestic product (GDP) growth quarters in the previous year. We obtained data on GDP growth from Trading Economics.

MODEL

We tested our hypotheses using a panel regression model with Driscoll and Kraay (1998) robust standard errors that account for heteroskedasticity, autocorrelation, and crosssectional dependence among panel units (in our case, the panel units are the executives) (Hoechle 2007). We found evidence in our panel of both heteroskedasticity (documented using a likelihood test that compares the fit of a model with panel-level heteroskedasticity correction and one without) and autocorrelation (documented using the Wooldridge [2002, pp. 282–83] test for autocorrelation). The nature of our panel, in which a significant number of units (executives) are present for only one to three time periods, does not allow for a formal test for cross-sectional dependence. Nevertheless, this dependence is likely in the subsample of executives tracked for a longer period of time because compensation committees often use the compensation of peers at similar firms in determining the pay for their firm's executives. In summary, as Hoechle (2007, p. 282), describes, the Driscoll and Kraay model utilizes "a nonparametric covariance matrix estimator that produces heteroskedasticity- and autocorrelation-consistent standard errors that are robust to general forms of spatial and temporal dependence," and therefore, this specification controls for all crucial econometric issues present in our empirical context. The results obtained with this specification are substantively identical to those obtained with a simpler random effects model (in terms of direction and significance), with the only difference being the larger magnitude of the Driscoll and Kraay standard errors.

A panel regression with Driscoll and Kraay (1998) standard errors can be estimated either as a pooled or as a fixed-effects specification. A fixed-effects model is not ideal in our setting for several reasons. First, 631 of the 2,717 executives had only one full year of compensation data (excluding the year they were appointed and their terminal year). These observations cannot be leveraged in a fixed-effects specification. Second, in a fixed-effects specification, we cannot estimate the effects of covariates that do not vary with time, such as industry effects; furthermore, other variables in our model, such as the quality of workplace, firm governance, and external capital, have a small variance within units, which limits the inferences that can be drawn from the coefficients of these variables (Clark and Linzer 2013).

We estimate the following model for the overall sample of executives:

- (1) $Pay_{it} = \alpha_0 + \alpha_1 BrandStrength_{it} + \alpha_2 CEO_{it} + \alpha_3 BrandStrength$
 - \times CEO_{it} + α_4 Age_{it} + α_5 BrandStrength \times Age_{it}
 - + α_6 FirmPerformance_{it} + α_7 FirmSize_{it}
 - + α_8 WorkplaceQuality_{it} + α_9 ExternalSocialCapital_{it}
 - + α_{10} FirmGovernance_{it} + α_{11} CorporateReputation_{it}
 - + α_{12} Recession_{it} + α_{13} Year_{it} + ϵ_{1it} ,

where i stands for executive and t stands for year.

We estimated the model described in Equation 1 over the full sample of data, excluding the year of appointment and the terminal year, as we explain in the "Method and Measures" section. Next, we describe an alternative specification in which the models are estimated over the first full year of appointment to the specific executive position.

RESULTS AND ROBUSTNESS CHECKS

Table 2 presents statistics that describe the characteristics of the executives and firms included in our sample. The executives' average age is 52 years and ranges from 28 to 90 years; the average CEO age is 55 years and ranges from 33 (Edward Rosenfeld, CEO of Steven Madden) to 81 years (Ralph J. Roberts, CEO of Comcast). Sixty-five percent of CEOs also chair their respective firms' board of directors. The average number of external boards on which the CEOs in our sample sit is 1.72, but some sit on as many as 6 external company (public and private) boards.

Total pay also varies significantly across the sample. On average, executives in our sample are awarded approximately \$5 million in total compensation per year; CEOs make, on average, approximately \$10 million per year, while the other top executives make an average of approximately \$3.7 million per year.

Average brand strength is 4.92 and varies significantly across firms (ranging from .01 to 54.61), even though the BAV survey tends to focus on well-known brands. Brand strength also varies intertemporally within companies. For example, the rating for Disney dropped from 54.61 in 2002 to 22.58 in 2010.

Descriptive statistics on control variables reveal that the firms in our sample range from relatively small companies such as Visteon and Verisign to behemoths such as Ford and Exxon Mobil. The average annual sales growth of the companies in our sample is approximately 8%.

Test of Hypotheses

Table 3, Panel A, presents the results from the estimation of Equation 1. Model 1 establishes the effect of previously documented determinants of executive pay. In line with prior research, we find that the pay is higher for CEOs (p <.01), older executives (p < .01), executives working for companies in which the CEO is also the chair, and executives working for large firms (p < .01) and well-performing firms (p < .01). Total pay increases over time but is lower following a recessionary year (p < .01). Being listed in either Fortune's 100 Best Companies to Work For ranking or the FMAC ranking does not significantly affect pay, consistent with previous research (Faleye and Trahan 2011). We also find that executives with higher external social capital are paid more, on average (p < .01). Model 2 presents, for comparison, the results of the same equation estimated with a simpler generalized least squares (GLS) random-effects method. The direction and significance of coefficients is essentially the same as in Model 1.

Model 3 includes brand strength and the two hypothesized interactions. As we predicted, brand strength negatively affects pay (H_1) and further lowers the total pay for CEOs (H_2) and younger executives (H_3) (all *p*-values < .01). The direction of the effects of the control variables remains consistent with that obtained in the benchmark model. The finding that the effect of brand strength remains significant even when we control for external social capital, a variable that is indicative of the quality of the executive (Belliveau, O'Reilly, and Wade 1996), means that the negative effect of

Table 2
CORRELATION MATRIX AND DESCRIPTIVE STATISTICS

	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Log of total compensation	7.81	1.14	1										
2. Brand strength	4.92	5.82	.048	1									
3. CEO	.19	.39	.358	.001	1								
4. Age	51.79	7.14	.301	.005	.205	1							
5. Firm performance	8.04	28.39	.096	.036	009	024	1						
6. Firm size (log of assets measured in millions)	8.94	1.83	.491	.204	004	.155	.022	1					
7. Workplace quality	.08	.28	.076	.135	.007	02	001	.137	1				
8. Corporate reputation	.42	.49	.224	.233	004	.081	047	.489	.205	1			
9. Governance	.16	.37	.357	.008	.643	.335	01	.082	.008	.055	1		
External social capital	1.72	2.26	.239	.006	.021	.156	.053	.248	.048	.124	.089	1	
11. Recessionary environment	.81	1.16	024	054	005	.039	129	021	021	083	004	077	1

Table 3
DETERMINANTS OF TOTAL PAY: FULL SAMPLE

		A: All Top Executives				
	Dependent Variable: Log of Total Pay					
Independent Variables	Model 1: Regression with Driscoll–Kraay SEs (n = 10,107)	Model 2: Random-Effects GLS (n = 10,107)	Model 3: Regression with Driscoll–Kraay SEs (n = 10,107)	Model 4: Random-Effects GLS (n = 10,107)		
Brand strength	_	_	071 (.021)**	086 (.019)**		
CEO	.778 (.024)**	.649 (.046)**	.89 (.035)**	.722 (.057)**		
Brand strength × CEO	_	_	023 (.007)**	016 (.006)*		
Age	.018 (.003)**	.023 (.002)**	.012 (.003)**	.016 (.002)**		
Brand strength × age	_	_	.001 (.0004)**	.002 (.0003)***		
Firm performance	.004 (.001)**	.003 (.001)**	.004 (.001)**	.003 (.001)**		
Firm size	.283 (.014)**	.298 (.009)**	.291 (.014)**	.307 (.009)**		
Workplace quality	.063 (.068)	.025 (.047)	.082 (.07)	.035 (.047)		
Recessionary environment	074 (.026)**	079 (.007)**	072 (.024)**	076 (.007)**		
Corporate reputation	.026 (.037)	.005 (.024)	.035 (.035)	.009 (.024)		
External social capital	.056 (.003)**	.053 (.007)**	.055 (.003)**	.052 (.007)**		
Governance	.336 (.024)**	.226 (.048)**	.331 (.026)**	.224 (.048)**		
Year	.069 (.011)**	.083 (.004)**	.067 (.01)**	.079 (.004)**		
Constant	-135.260 (21.708)**	-162.457 (8.709)**	-129.881 (20.205)**	-155.209 (8.999)**		
Adjusted R-square	44.1%	43.4%	44.5%	43.7%		

D. CEOS Om	<i>B</i> :	: CEOs	Onl
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	Dependent Variable: Log of Total Pay						
Independent Variables	Model 1: Regression with Driscoll–Kraay SEs (n = 1,869)	Model 2: Random-Effects GLS $(n = 1,869)$	Model 3: Regression with Driscoll–Kraay SEs (n = 1,869)	Model 4: Random-Effects GLS $(n = 1,869)$			
Brand strength	_	_	182 (.021)**	124 (.041)**			
Age	.022 (.006)**	.0198 (.006)**	.008 (.004)*	.011 (.007)			
Brand strength × age	_	_	.003 (.0003)**	.002 (.001)*			
Firm performance	.004 (.001)**	.004 (.001)*	.005 (.001)**	.004 (.001)**			
Firm size	.263 (.008)**	.278 (.025)**	.295 (.011)**	.300 (.024)**			
Workplace quality	042 (.15)	.029 (.129)	.028 (.147)	.057 (.124)			
Recessionary environment	075 (.031)*	074 (.017)**	066 (.028)*	068 (.017)**			
Corporate reputation	.011 (.036)	006 (.06)	.026 (.037)	002 (.059)			
External social capital	.075 (.032)*	.081 (.027)**	.07 (.035)*	.079 (.027)**			
Governance	.133 (.035)**	.087 (.066)	.102 (.034)**	.078 (.066)			
Year	.062 (.012)**	.071 (.011)**	.053 (.011)**	.063 (.012)**			
Constant	-119.524 (23.788)**	-137.595 (22.198)**	-100.129 (22.103)**	-121.119 (23.066)**			
Adjusted R-square	25.8%	25.4%	27.7%	27.2%			

^{*}p < .05.

Notes: Robust standard errors for the coefficients are in parentheses. Industry dummies (not shown) are also included in the model.

brand strength on pay should not be a reflection of such brands attracting lower-quality executives.⁴ Model 4 reports the results using a GLS random-effects model, which are consistent with those obtained from Model 3.⁵

Table 3, Panel B, presents results for the sample of CEOs only. This analysis is useful because a significant portion of

⁴Previous research on executive compensation has used several of our other control variables as indicators of human capital (e.g., age [McKnight et al. 2000]; tenure [Graham, Li, and Qui 2012]; dual chairperson roles [Core, Holthausen, and Larcker 1999]; firm size [Rosen 1982]; and firm performance [Terviö 2008]).

5We also considered the possibility of simultaneity between brand strength and, respectively, the 100 Best Companies to Work For ranking and the FMAC ranking. We note, however, that Table 3 presents results from an estimation that measures the effect of brand strength on pay beyond the effect of a good work environment and good corporate reputation. As Table 3 indicates, the workplace quality and corporate reputation variables do not have a significant effect on pay when brand equity is included in the model. Furthermore, as Model 1 (Table 3) shows, the effect of the two variables on pay when we exclude brand strength from model predicting pay remains nonsignificant, while the adjusted R-square of the model is reduced. Thus, we conclude that potential simultaneity between brand strength and the workplace quality and corporate reputation variables does not explain our pattern of results.

compensation literature (and a significant part of the controversy around executive pay) focuses on CEOs only because their pay tends to be significantly higher than that of the other top executives at the same firm and, as such, is a more important component of firm costs.

All results obtained using the subsample of CEOs are consistent with those obtained for the full sample of executives. The main effect of brand strength remains negative (p < .01), and the interaction of CEO age and brand strength remains positive (p < .01). We also note that the significance of hypothesized effects is maintained if a random-effects model with robust cluster error is used instead of the regression with Driscoll and Kraay (1998) standard errors (Table 3, Panel B, Models 2 and 4).

Economic Interpretation of Results

To obtain an economic interpretation of our results, we first aim to provide a financial value of our main effect for both CEOs and non-CEOs. To that end, we reestimate our model using mean-centered age and firm performance variables for both the CEO and the non-CEO sample and

^{**}p < .01.

compute the percentage change in pay as $1 - \exp(\text{brand strength coefficient} \times \text{standard deviation of brand strength})$. For the subsample of CEOs, we find that a one-standard-deviation increase in brand strength is associated with a 12.13% decrease in pay, or \$1,268,130 in savings for the average CEO compensation. For the subsample of non-CEOs, we find a 2.42% decrease in pay for a one-standard-deviation increase in brand strength, or \$89,978 in savings for the average non-CEO compensation. Thus, the decrease in pay is higher in both absolute and relative value for CEOs, as our theory predicts.

We also aim to provide a dollar estimate of the interaction effects. We first examine the interaction between CEO status and brand strength. This interaction shows that the stronger the brand, the smaller the pay differential between CEOs and non-CEOs. Using the coefficients of the full model reported in Table 3, we conclude that at median brand strength, CEOs are paid 2.29 times more than the average non-CEO executive. For a brand whose strength is in the 75th percentile, CEOs are paid only 2.09 times more. The average dollar savings obtained from the difference between CEO and non-CEO executive compensation when moving from the 50th to the 75th brand strength percentile is \$744,853.

We interpret the interaction between brand strength and age in a similar manner. From Table 3, we conclude that at median brand strength, pay increases for each year of age by 1.59%. For brand strength in the 75th percentile, pay increases for each year of age by 2.12%. Therefore, an executive who is ten years younger than the average would make 21.2% - 15.9% = 5.3% less at a firm with brand strength in the 75th percentile than at one in the 50th percentile. For the average top five executive pay, this finding results in savings of \$263,379.

Robustness Tests and Additional Analysis

Does brand strength influence the initial pay that an executive receives upon a new appointment? A skilled executive could positively affect firm performance, which in turn could increase both brand strength and the executive's pay. To tease out the effect of executives' actions on brand strength as well as on their pay, we estimate Equation 1 over a subsample that includes only the first full year of appointment to the executive position.

This subsample is much smaller (n = 284 for CEOs and n = 616 for all executives) and contains one observation per executive. We therefore use ordinary least squares to estimate two models that include the same dependent and independent variables as in Equation 1. Table 4, Panels A and B, report results for the overall sample of executives and the CEO-only sample, respectively. The effect of brand strength on pay remains significantly negative for both subsamples (p < .05). Furthermore, the negative effect of brand strength remains more pronounced for CEOs (p < .01) and younger executives (p < .05) than for other executives.

Are the results robust to alternative specifications of our models? In the following subsections, we present results from a series of analyses designed to check the robustness of our results.

Alternate measures of the independent variables. As we mentioned previously, brand strength is a composite measure of what are commonly referred to as the four brand pillars of

brand equity: knowledge, esteem, relevance, and energized differentiation. First, we verify the robustness of our results for each of the four pillars. We replace brand strength in Equation 1 with knowledge, esteem, relevance, and energized differentiation, respectively, and estimate our model in each of these four cases. Table 5 presents the results. H_2 and H_3 are supported for all four components of brand strength, while H_1 is supported for knowledge, esteem, and relevance (p < .05) but not for energized differentiation.

Second, we reestimate our model using two alternate measures of firm performance. We obtain results consistent with those presented in Table 3 if we replace our main performance variable (percentage change in sales) with earnings per share and changes in market value obtained from Compustat, respectively. Third, we check whether the results hold for the subsample of firms using a monobrand (branded house) versus a house-of-brands strategy. Seventyseven percent of our observations belong to firms that subscribe to a monobrand strategy: all our results hold for this subsample. H₁ and H₃ are also supported in the much smaller subsample of firms that do not use their corporate brands on the products they sell, but H₂ is not supported. The finding that the negative effect of brand strength on pay is not stronger for CEOs in this subsample could be due to the significantly lower power of the statistical tests (the effect is directionally consistent with that obtained in the larger sample), but it could also be due to a weaker identity transfer from the equity of the firm's brands to the CEO.

Alternate measures of the dependent variable. In line with prior research (Deng and Gao 2013; Kaplan and Rauh 2010; Webb 2008), our primary model specification and results use total pay as the dependent variable. This measure has the merit of being the most comprehensive measure of executive pay. To test robustness to alternate specifications, we also examine whether our hypothesized variables have a similar effect on the equity-based portion of executive compensation. We estimate Model 3 from Table 3 using the log of equity-based portion of total compensation as the dependent variable, first for the overall sample of all executives and then for the sample of CEOs. The results (which are available on request) closely mirror those presented in Table 4 for total pay. All three hypotheses are supported if this partial measure of pay is used in each of the two samples (p < .05). In addition, we use the log of salary as a dependent variable and reestimate Model 3 for each of the two samples. None of the hypothesized relationships are supported if salary alone is used as a dependent measure of performance.

Additional control variables. We collected data on an additional set of control variables that could potentially affect pay. To check for differences in pay between male and female executives, we added a gender dummy to the model (less than 10% of all executives in our data are women). Gender has no effect on pay. We also investigated whether idiosyncratic firm risk, measured using stock return volatility over the previous time period, is positively related to pay, but we did not find a significant effect.

Finally, for the subsample of CEOs only, we were able to obtain the date when they joined the company. We considered the possibility that job tenure is positively related to brand strength—in other words, that executives may stay longer with companies that own strong brands and that their

(.044)***

(.019)***

(.102)

.116

.134

.078

-150.715 (38.381)***

33.03%

Table 4 DETERMINANTS OF TOTAL PAY: FIRST YEAR AFTER APPOINTMENT

	A: All Top Ex	xecutives		
	De	pendent Variable: Log of Total Pay		
Independent Variables	Model 1 (n = 616)	Model 2 $(n = 616)$	Model 3 $(n = 616)$	
Brand strength	_	014 (.006)**	101 (.04)**	
CEO	.983 (.07)***	1.003 (.07)***	1.114 (.083)***	
Brand strength × CEO		<u>—</u>	026 (.011)**	
Age	.011 (.005)**	.011 (.005)**	.002 (.006)	
Brand strength × age			.002 (.001)***	
Firm performance	.003 (.001)**	.003 (.001)***	.003 (.001)***	
Firm size	.263 (.023)***	.281 (.024)***	.28 (.024)***	
Workplace quality	.078 (.148)	.133 (.149)	.15 (.148)	
Recessionary environment	034 (.028)	029 (.028)	027 (.028)	
Corporate reputation	115 (.076)	115 (.076)	111 (.075)	
External social capital	.044 (.015)***	.041 (.015)***	.04 (.015)**	
Governance	.206 (.084)**	.203 (.084)**	.195 (.084)**	
Year	.07 (.012)***	.063 (.012)***	.063 (.012)***	
Constant	-136.579 (23.983)***	-121.721 (24.743)***	-121.201 (24.574)***	
Adjusted R-square	58.17%	58.47%	59.1%	
	B: CEOs	Only		
		Dependent Variable: Log of Total Pay	V	
Independent Variables	Model 1 $(n = 284)$	$Model\ 2\ (n=284)$	$Model\ 3\ (n=284)$	
Brand strength	_	016 (.008)**	171 (.063)***	
Age	.005 (.009)	.005 (.009)	009 (.01)	
Brand strength × age	_	_	.003 (.001)**	
Firm performance	.003 (.002)	.003 (.002)*	.003 (.002)**	
Firm size	.224 (.037)***	.244 (.038)***	.249 (.038)***	
Workplace quality	.141 (.213)	.214 (.216)	.246 (.214)	
Recessionary environment	111 (.047)**	101 (.047)**	103 (.047)**	
Corporate reputation	15 (.115)	136 (.115)	153 (.114)	
E-411-114-1	104 (045)***	110 (044)***	116 (014)***	

Governance

Year Constant

Adjusted R-square

External social capital

Notes: Robust standard errors for the coefficients are in parentheses. Industry dummies (not shown) are also included in the model.

(.045)***

(.019)***

(.103)

.124

.156

.09

-173.991 (37.424)***

31.02%

Table 5 DETERMINANTS OF TOTAL PAY BY SEPARATE COMPONENTS OF BRAND STRENGTH

(.044)***

(.103)

.079 (.019)***

-153.238 (38.739)***

31.73%

.119

.147

	Dependent Variable: Log of Total Pay						
Independent Variables	Brand Strength Component = Esteem	Brand Streng Component Knowledge	= Comp	Brand Strength Component = Relevance		Brand Strength Component = Energized Differentiation	
Brand strength component	775 (.281)*	345 (.05	396	(.125)**	388	(.35)	
CEO	.961 (.052)*	1.094 (.08	1.1	(.085)**	.983	(.047)**	
Brand strength component \times CEO	245 (.076)*	09 (.02:	3)**113	(.03)**	411	(.116)**	
Age	.009 (.004)*	006 (.00:	003	(.006)	.01	(.003)**	
Brand strength component × age	.013 (.006)*	.007 (.00	.008	(.002)**	.017	(.007)*	
Firm performance	.004 (.001)*	.004 (.00	.004	(.001)**	.003	(.001)**	
Firm size	.296 (.014)*	.286 (.013	3)** .286	(.014)**	.282	(.015)**	
Workplace quality	.085 (.071)	.062 (.07	.065	(.07)	.029	(.071)	
Recessionary environment	071 (.025)*	073 (.020	6)**074	(.025)**	078	(.026)**	
Corporate reputation	.037 (.035)	.034 (.034	.035	(.033)	.026	(.035)	
External social capital	.055 (.003)*	.056 (.003	3)** .056	(.003)**	.057	(.003)**	
Governance	.343 (.026)*	.343 (.029	336	(.024)**	.334	(.022)**	
Year	.065 (.01)**	.069 (.01)	** .07	(.011)**	.071	(.011)**	
Constant	-125.185 (19.285)*	-133.838 (20.199	9)** -134.226 (21.298)**	-138.694 (22.080)**		
Adjusted R-square	44.47%	44.45%	44.	31%	44.47%		

^{*}p < .05.

Notes: Robust standard errors in parentheses for the coefficients. Industry dummies (not shown) are also included in the model.

^{*}p < .10. **p < .05. ***p < .01.

^{**}p < .01.

lower compensation may be a result of fewer opportunities for market adjustments in pay. A correlation of .15 over the sample of CEOs suggests a weak positive association between tenure and brand strength. Furthermore, our theoretical arguments of self-enhancement can also explain why executives may stay longer at firms with strong brands, particularly the CEOs, who benefit from salient associations with these brands. To test the effect of tenure on compensation, we tried two alternative specifications of our main model: one that included the number of years of tenure in the company and one that included a dummy that captures whether the CEO was an internal or external hire. None of these potential control variables are a significant determinant of executive pay in our sample.

An additional avenue of investigation could involve direct process measures of the psychological processes we describe in this article. We did not have access to the executives' own brand perceptions or to the degree to which they perceived brand-based benefits. Such an investigation is beyond the scope of this research, and we leave it as an opportunity for future study.

Endogeneity check. We acknowledge the possibility that there may be determinants of compensation for which we have not accounted, despite our best efforts to retrieve all previously documented drivers of executive pay. If there are variables not included in our model that are positively associated with brand strength and negatively associated with compensation, our estimation could suffer from endogeneity. As a first step in alleviating such concerns, we provide a robustness check that suggests that endogeneity cannot fully explain the pattern of our results. We use as instruments "deep lags" of variables that are related to the potentially endogenous variable (see Malmendier, Tate, and Yan 2010). Although correlated with the endogenous variable in question, the appropriate instrumental variable in this case should not be correlated with the error term in the explanatory equation.

We use deep lags of advertising expenditures as instruments for brand strength. Specifically, we use the log of advertising expenditures measured five years before the year in which brand strength is measured as the instrumental variable in a two-stage least squares equation. Previous advertising expenditures should have contributed to building a stronger brand and should be correlated with brand strength. At the same time, advertising expenditures lagged five years are not correlated with the error term in the equation that predicts executive pay. We estimate a generalized two-stage least squares-type model for panel data that uses lagged advertising as an instrument for brand strength. The first-stage regression shows that lagged advertising is a strong determinant of brand strength (z = 6.48, p < .01). The second-stage regression shows that the main effect of brand strength, as well as our two hypothesized interactions, remains significant at p < .05 even when brand strength is instrumented. Though not definitive, these results suggest that our results are robust when an instrumentation approach is used.

Additional Analysis and Alternative Explanations

Can executives employed by strong brands use this brand equity to command a higher salary in subsequent jobs? An affirmative answer to this question would provide an addi-

tional test of our theory. However, the data requirements for empirically testing it are stringent. Specifically, we would need a subsample of executives who moved from one public S&P 1500 company to another in the same year or consecutive years within our sample period and who have remained one of the top-five paid executives in their new firm to be listed in ExecuComp. Furthermore, we would also need to ensure that BAV Consulting tracks the executive's previous company's brand(s) and, ideally, the brand(s) of his or her new company. There are only 84 executives who fulfill the first two conditions and 41 who fulfill all three conditions. For these executives, in the first year on their new job, we indeed find a positive relationship between previous brand strength and current total pay using a simple ordinary least squares model with heteroskedasticity-adjusted robust standard errors. We note that in the sample of 41 executives for whom we have brand strength for both their previous and current job, we no longer find a significant effect of the current brand strength, even though the sign continues to be negative. We caution that these results constitute just a preliminary foray into studying the relationship between previous job brand strength and current pay, and more research using larger samples is needed to draw definitive conclusions.

Could firm risk explain the effects? A different source of employee-based brand equity—one not related to identity—is that high brand equity is associated with lower firm risk (Madden, Fehle, and Fournier 2006). For example, brand strength has been linked to increased revenue certainty and decreased revenue volatility based on brand loyalty, thereby lowering the cost of debt (Larkin 2013) and, more generally, increasing the value of the firm beyond what current revenues capture (Mizik and Jacobson 2009). From an executive's perspective, lower financial risk translates into lower expected earnings volatility and higher job security. A risk-averse executive would, therefore, require lower levels of pay at strong brands because earnings are more certain (e.g., Akerlof and Kranton 2005).

Although this risk-based explanation has the potential to explain or contribute to the main effect in H_1 , it does not predict the significant interactions proposed by H_2 and H_3 . Indeed, it makes precisely the opposite prediction of H_3 . This is because older executives are typically more risk averse (e.g., Hambrick and Mason 1984; Veiga 1983), and they should value strong brands' lower expected risk, associated earnings, and job certainty more than do younger executives. We found the opposite—namely, that younger, rather than older, executives are more willing to accept lower pay at stronger brands. We also note that we did not find a significant effect of idiosyncratic firm risk on total compensation but that the effect of brand strength on compensation remains significantly negative even when risk is added to the compensation model.

IMPLICATIONS

Our overarching message is an appeal to broaden contemporary thinking and practice about the scope of brand equity. Our findings imply that academics and practitioners should extend the scope of their thinking and actions about the ways (1) brands create value, (2) returns to marketing are measured, and (3) marketers can engage in human resource and finance activities.

Look for Brand Value Beyond Customer-Based Brand Equity

The employee-based view of brand equity that we propose should encourage managers to fundamentally rethink how brands create value for firms. Brand equity is typically viewed as synonymous with customer-based brand equity; consequently, the focus has been overwhelmingly on returns to brand equity through potential increases in revenues. This perspective is advocated by leading academics who study customer-based returns to brand equity (e.g., loyalty, retention, cross selling) while explicitly excluding other sources of brand value: "a mature business would be hard-pressed to increase profits otherwise" (Rust, Zeithaml and Lemon 2004, p. 110). Popular measures of brand value are similarly predicated only on customer-based returns. For example, WPP, the world's largest marketing services company, argues that the financial contribution of brands to firms' earnings is based on "the power of brand where it most counts—in the mind of the consumer" (WPP 2013). Moreover, Interbrand's Brand Value Chain is based on "the portion of the purchase decision that is attributable to the brand ... and the ability of the brand to create loyalty and, therefore, to keep generating demand and profit into the future" (Rocha 2013).

We argue that brand equity is a much broader construct. The employee-based view of brand equity emphasizes that strong brands can enhance earnings through cost reductions, making it possible for firms to employ key personnel more cheaply. Moreover, our theoretical arguments and empirical results suggest that the impact of these investments may touch those at the very pinnacle of firms: the top managers who are often accused of underappreciating the value of marketing in their firms. As we note in the following subsections, this broadened view of brand equity offers new possibilities for research and practice on how to value brands on the balance sheet, measure returns on investments in brands, and transcend traditional functional boundaries.

Broaden the Scope of Marketing Metrics

A recent survey suggests that "the majority (70 per cent) of CEOs have lost trust in marketers' ability to deliver growth after becoming frustrated by what they see as an inability to prove ROI" (Baker 2012). Marketing academics have similarly argued that the inability to account for marketing's contribution to firm performance is a key factor in marketers' loss of internal stature (Webster, Malter, and Ganesan 2005), a conclusion that reflects more than a decade of scholarly debate about marketers facing pressures for greater accountability (Rust et al. 2004). The insights from our research suggest that the challenge of assessing returns to marketing will not be resolved solely by measuring things correctly (Ambler 2003). Marketing researchers should also aim to measure the right things. Thus, we hope that our findings provide an impetus for more research that demonstrates how market-based assets can lead to employee-based returns.

Make Brand Core to Human Resource Practices

One reason brands may not be emphasized as much as they should be in human resource (HR) management is that they are often viewed as the domain of marketing. In the

realm of pay, HR-led communications are likely to emphasize the firm's credentials as a great place to work. Research on employer branding (see Ambler and Barrow 1996) has focused mostly on the extent to which HR can leverage brands to successfully recruit (e.g., Hieronimus, Schaefer, and Schröder 2005). Our research shows that a strong brand can do more than help recruit; it can go as far as to lower the compensation that new recruits are willing to accept. Thus, in their recruitment efforts and the popular practice of pay benchmarking, HR departments should leverage the strength of the brand just as they leverage the tangible advantages that employees of the firm receive. A better understanding of the role of brands in recruitment might help break down the organizational silos in which marketing and HR departments operate. Our research represents merely a beginning to what could be a promising field of study of the impact of brands on HR practices.

Expand the Scope of Research on the Marketing-Finance Interface

The employee-based brand equity perspective also has implications for the marketing-finance interface. Although research on this topic has experienced an explosive growth in recent years (for a review, see Srinivasan and Hanssens 2009), most articles tend to focus on how Wall Street responds to marketing actions and investments. By combining research on a core finance variable (executive pay) with a core marketing variable (brand equity), we propose another promising area for research on the interface between marketing and finance.

Many discussions of the seemingly inexorable increases in executive pay in recent decades imply that executives hold much of the bargaining power in pay discussions and that nothing short of government action can alter this equilibrium. Backlash to what has been considered obscene executive pay has ranged from the "say-on-pay" provision of the Dodd–Frank Wall Street Reform and Consumer Protection Act, which requires shareholder approval of executive compensation, to national referendums such as the one held in Switzerland, where 68% of voters backed curbs on corporate wages that take the power away from company boards (*The Economist* 2013).

Our results suggest that compensation committees can use brand equity as an effective bargaining tool when establishing executive pay. Among all executives, strong brands are most likely to be effective in negotiations with CEOs, who, because of their apparent power, influence, and wealth, are perceived by many as the archetypical "fat cats." In executive compensation negotiations, governing boards of firms with strong brands should, therefore, emphasize the equity transfer benefits of strong brands and also adjust peer pay benchmarks according to brand strength.

Researchers in corporate finance and strategy who study the determinants of executive pay typically focus on observable firm characteristics such as firm size and performance or managerial characteristics such as gender and rank in the organization (e.g., Graham, Li, and Qiu 2012; Tosi et al. 2010). Our research presents theoretical arguments and empirical evidence to suggest that the effects of these factors—which have been the focus of a vast literature in finance, economics, and management—are actually contingent on a key marketing variable: brand equity. Failing to recognize

these contingencies can result in potentially erroneous conclusions on the highly charged topic of executive pay.

CONCLUSION

The employee-based brand equity perspective we offer argues for and empirically demonstrates a novel dimension of the impact of brand equity. Conceptually, we highlight the role of brands in shaping executives' identity, a core human need and one of the most widely applied concepts in social psychology and consumer behavior. Empirically, we use data on 2,717 top executives over an 11-year period to show that firms with strong brands pay their top executives less than other firms and that this effect is stronger for CEOs and younger executives. Our results imply that academics and practitioners should take a broader view of the contributions of brands to firm value. Moreover, they should make use of strong brands in pay negotiations that are typically viewed as being outside the realm of marketing.

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