

Impact of Confucianism on Compensation Structure for Founder CEOs

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ABSTRACT

The need and desire for incentive compensation are lower for founder CEOs who have strong intrinsic motivation and large equity ownership. We predict that the resulting difference in compensation between founder CEOs and non-founder CEOs is larger in East Asia where founders' strong intrinsic motivation and influential power are amplified by the unique Confucian culture that emphasizes the importance of family and the value of having a sense of shame. Based on the test sample from Hong Kong and Singapore and the propensity-score-matched control sample from U.S., U.K., Canada, and Australia, we show that the proportion of incentives in compensation package is smaller for founder CEOs than for non-founder CEOs and that such difference in compensation is larger in East Asia. Using Hofstede's culture indexes, we also show that such difference in compensation increases with collectivism and long-term orientation.

JEL Classifications: M10, M12, M52

Keywords: Confucianism; founder CEO; executive compensation; Hofstede's index; intrinsic motivation; propensity score matching

I. INTRODUCTION

Among various components of CEO compensation package, incentives such as cash bonus and stock-based incentives tie CEO's personal wealth to company's performance and thus provide the CEO with monetary, extrinsic motivation to work hard (Murphy, 1985; Jensen and Murphy, 1990). However, the need for such monetary incentives is expected to be lower if the CEO is also the founder of the company since he/she is likely to already have strong intrinsic motivation resulting from the energy, time, and effort he/she spent during the start-up process (Arthurs and Busenitz, 2003), greater personal satisfaction from starting and running his/her own business (Blanchflower and Oswald, 1998), and concerns about reputation (Anderson and Reeb, 2003). Especially for equity-based incentives such as stock options and restricted stock awards, the desire is also lower for founder CEOs who usually have large equity ownership and want to diversify their portfolio (He, 2008). This suggests that compensation package for founder CEOs is expected to rely relatively less on incentives and more on non-incentive components such as salary (compared to that of non-founder CEOs). We predict that such a difference in compensation packages between founders and non-founders is larger in East Asia where the unique Confucian culture, which emphasizes the importance of family and the value of having a sense of shame, amplifies the strong intrinsic motivation of founders. We also predict that, more generally, the difference in the compensation structure increases with collectivism and long-term orientation, which are the main characteristics of Confucianism.

In this study, we examine how the impact of founder status on the composition of CEO compensation package varies across different countries and cultures, based on a sample of 10,186 CEO-year observations for the 2004-2017 period. Our sample consists of 1) the Confucian group with 5,093 observations from Hong Kong and Singapore and 2) the propensity-score-matched Anglo-Saxon group with 5,093 observations from U.S., U.K., Canada, and Australia. Consistent with our prediction, we find that the proportion of incentives (salary) in the compensation package for founder CEOs is significantly lower (higher) than that for non-founder CEOs and, more importantly, such a difference is significantly larger in magnitude in the East Asian countries. We also find that such a difference in the composition of compensation package between founder CEOs and non-founder CEOs is positively associated with both the degree of collectivism and degree of Confucianism.

Our study is expected to contribute to an understanding of the interrelation between intrinsic/extrinsic motivations of managers, managerial compensation structure, and impact of culture in multiple ways. First, prior studies on founder CEOs generally examine the compensation practice in a single country, which is usually the U.S. (e.g., Wasserman, 2006; He, 2008; Jaskiewicz et al., 2017). We complement those studies and expand the literature by examining the practice of founder CEO compensation in multiple countries and by explaining the difference. Second, while the prior studies explain the distinct CEO compensation for founders using psychological factors and ownership structure, we add to the literature by suggesting that those factors affecting the founder CEO compensation practice are influenced by culture. Lastly, while the prior studies on compensation for founder CEOs almost exclusively focus on the *level* of compensation,

we complement those studies by showing that the founder status is also associated with the *composition* of compensation package.

The rest of this study is organized as follows. Section II provides a literature review and hypotheses development. Section III outlines research methodology including empirical models and data descriptions. Section IV presents empirical results. We conclude in Section V.

II. LITERATURE REVIEW AND HYPOTHESES DEVELOPMENT

A. Agency Theory and Managerial Compensation – Overview

Agency theory suggests that moral hazard arises when a principal compensates an agent for performing certain acts that are beneficial to the principal and costly to the agent, and where it is costly for the principal to monitor the acts of the agent (Jensen and Meckling, 1976). In a classic example of an agency problem between shareholders and a manager, agency theory predicts that, to give a manager incentives to select and implement actions that increase shareholder wealth, the managerial compensation policy will be designed using a combination of fixed annual salary, incentives, and other types of compensation (e.g., perks). Among others, incentives especially play a critical role in mitigating the agency problem by tying managers' personal wealth to the company's performance and thus providing managers with "incentives" to maximize the company's short-term and/or long-term performance, which is likely to increase shareholder value (Murphy, 1985; Jensen and Murphy, 1990).

Incentives for managers can take various forms, including cash bonus and stock-based compensations. Cash bonuses are usually based on the firm's short-term performance and more strongly tied to managers' incentives to improve current corporate performance than any other component of executive compensation. Empirical studies typically find a positive association between executive bonus pay and short term performance measures (e.g., Murphy, 1985; Abowd, 1990). Incentives can also be in the form of equity-based compensation, such as stock option and restricted stock award. Stocks and options tie managers' and shareholders' wealth together and thus promote managerial decisions which increase long-term shareholder value (Murphy, 1985; Jensen and Murphy, 1990; Dechow and Sloan, 1991; Cheng, 2004). Long-term incentive plans (LTIPs) also align the interests of management and shareholders because managerial compensation is linked to the firm's long-term performance. On average, the adoption of LTIPs has been shown to be associated with an increase in shareholder value (Larcker, 1983; Kumar and Sopariwala, 1992).

B. Compensation for Founder CEOs

In the managerial hierarchy of a modern for-profit company, the top level is for executives or top managers—those making managerial decisions at the high level. Among these top managers, the chief executive officer (CEO) is the most senior manager, who leads the top management team and typically reports to the board of directors. The CEO is often considered the ultimate decision maker, who is also ultimately responsible and accountable for a firm's strategy and performance (Dalton and Kesner, 1985; Kesner and Sebor, 1994) and thus is likely to be the highest paid executive within the organization.¹ Often, a founder of a company himself/herself becomes the CEO of the

company and directly makes managerial decisions rather than leaving the management to a professional CEO. These so-called founder CEOs possess certain unique characteristics that distinguish themselves from professional CEOs (i.e., non-founder CEOs) who are either hired externally or promoted internally.

First, by nature, founder CEOs are likely to own a larger equity stake compared to their non-founder counterparts. They are also expected to enjoy even a larger beneficial ownership from the shares owned by their family. The large direct and indirect ownership reduces the threat of moral hazard for founder CEOs because their interests are inherently well aligned with those of the shareholders in general. This suggests that the need for incentive compensation is reduced for founder CEOs (He, 2008). In addition, the large equity ownership of founder CEOs is also expected to affect their wealth portfolio strategy. In specific, the large equity ownership is expected to reduce the demand for further equity-based incentive compensation, such as stock options and restricted stock awards, and more demand for non-equity compensation, such as cash salary, for risk minimization purpose. Such portfolio diversification is an important issue especially for senior executives (e.g., CEOs) with large investments in company stock since their human capital value already depends on firm performance (Ofek and Yermack, 2000).

Second, and more importantly, founder CEOs tend to have much higher non-monetary intrinsic motivation compared to their non-founder counterparts. The founder is usually the one who is more dedicated and committed to the company than anyone else. Founders spend a great deal of energy, time, and effort (as well as personal monetary wealth) during the process of creating value and starting/running the business. Because of such investment, founder CEOs are likely to be more strongly committed to the company than professional CEOs (Smith and Miner, 1983; Gimeno et al., 1997; Arthurs and Busenitz, 2003; Nelson, 2003; He, 2008). Founder CEOs often consider their company to be their life's achievement and thus care more about the future of the company than their non-founder counterparts (Fahlenbrach, 2009; Adams et al., 2009). Founder CEOs' nonmonetary intrinsic motivation is also driven by greater personal satisfaction from starting and running their own business (Blanchflower and Oswald, 1998) and concerns about their own reputation (Anderson and Reeb, 2003).

The stronger intrinsic motivation for founder CEOs suggests that, compared to those of non-founder CEOs, founder CEOs' interests are inherently better aligned with those of the company and other shareholders even without the help of monetary incentives. In other words, founder CEOs' strong intrinsic motivation reduces the need for extrinsic incentive compensation at least to a certain degree. In fact, the strong intrinsic motivation is expected to reduce the need for overall compensation in general (He, 2008). By nature, however, incentive compensation encourages managers (to work hard) more strongly and directly than non-incentive compensation does, and thus the substitution effect of strong intrinsic motivation for founder CEOs is expected to be larger on incentive compensation such as cash bonus or stock option than on non-incentive compensation such as fixed salary. As such, although prior studies on compensation for founder CEOs usually focus on the *level* of compensation and do not directly examine the *composition* of compensation package (e.g., He, 2008; Wasserman, 2006), it can be inferred from those studies that, compared to non-founder CEOs, founder CEOs receive their compensation relatively less (more) in the form of incentives (non-incentive components).

C. Impact of Confucian Culture on Compensation for Founder CEOs

How the characteristics of founder CEOs affect their compensation package discussed above is generally applicable to any capitalist markets/countries. However, the degree of such impact may vary across different countries and cultures. In particular, the difference in CEO compensation package between founders and non-founders is expected to be larger in East Asian countries than in the Western capitalist countries, as discussed in detail below, because of the unique Confucian culture, which emphasizes the importance of family and the value of having a sense of shame. Among others, the two East Asian countries that are most comparable to the U.S. (and other Anglo-Saxon countries that share common characteristics with U.S.) are Hong Kong and Singapore, which are considered to be the most economically developed, common law based, and dominated by Confucian culture.²

Traditionally, countries in the East Asian cultural sphere, including China, Hong Kong, Singapore, Taiwan, Korea, and Japan, have been strongly influenced by *Confucianism*, which refers to an ethical and philosophical system, developed from the teachings of the Chinese thinker Confucius. One of the main characteristics of Confucianism is that it particularly emphasizes the importance of family (Fingarette, 1998). In specific, Hofstede et al. (2010), who describe Confucianism as “a set of pragmatic rules for daily life derived from Chinese history” (p. 237), identify four key principles of Confucian teaching, one of which is “the family is the prototype of all social organizations” (p. 237).³ As further discussed below, the importance of family, combined with the distinctive self-evaluation approaches in Confucian culture, is expected to increase founder CEOs’ strong intrinsic motivation even further in the Confucian family-based society.

In Confucian culture, how people view themselves is relatively less important. On the other hand, others’ perception of them, or in other words, what their images are in the eyes of others, is crucial (Lockett, 1988; Wang, 2012). This is called *mianzi* in Chinese.⁴ In Confucian culture, people put a great deal of effort to gain *mianzi* and, once gained, not to lose *mianzi* (Ho, 1976; Hwang, 1987; Redding and Ng, 1982). First, *mianzi* can be obtained in three primary ways: 1) occupation of a high social rank, 2) achievement and accumulation of influence, and 3) family prestige, wealth, or power (Yan, 1995). This suggests that, especially in the early stage of a business’s life cycle, founder CEOs are likely to have stronger intrinsic motivation to work hard, compared to non-founders, to gain *mianzi* by getting more achievements and prestige for themselves and their family. Next, once *mianzi* is acquired, it becomes more important for the founder CEOs to avoid losing it, and this is when Confucian culture’s value of “having a sense of shame” becomes even more important. Hofstede et al. (2010) argue that having a sense of shame is the value element of the teachings of Confucius directly related to the above-mentioned principle emphasizing the importance of family. In specific, failure of the business is very likely to “shame” the founder and result in a loss of *mianzi* for the founder because of its nature, loss of social status, and sense of disappointing the family (Begley and Tan, 2001); and the desire to avoid such shame from disappointing the family is a primary motivator in Confucian culture (Carroll and Gannon, 1996). The fear of losing *mianzi* or disappointing the family provides founder CEOs, again, with strong intrinsic motivation to work hard, beyond the motivation that their non-founder counterparts may aspire to. Although the difference in the intrinsic motivation between founder CEOs and non-

founder CEOs related to the process of gaining and losing *mianzi* may also exist in the West, the prior literature (e.g., Ting-Toomey, 1988) generally argues that the magnitude of the difference is larger in the East Asian countries because, as discussed above, the importance of family and the value of having a sense of shame are essential parts in the teachings of Confucius and thus strongly emphasized in Confucian culture.

The strong emphasis on the importance of family in Confucian culture affects not only intrinsic motivation for founders but also ownership structure of firms. In particular, a strong ownership concentration among founder family members is one characteristic that most public companies in East Asia share in common. Some well-known examples include *chaebols* in South Korea (e.g., Samsung, Hyundai, LG) and Hong Kong firms owned by the so-called Big Four Families of Hong Kong (in the era of British Hong Kong), although such ownership concentration is not unique to large companies. Similarly as in many other East Asian countries, the majority of the businesses in Hong Kong are family-owned companies. In Hong Kong, a family controls at least 20 percent of voting rights in two-thirds of publicly listed firms (Claessens et al., 2000) and the top 15 family businesses control assets worth 84% of the GDP (*The Economist*, April 18, 2015). These family-owned companies share common characteristics of concentrated shareholders and a fairly limited voice of minority shareholders (La Porta et al., 1998). Interestingly, the minority shareholders of Hong Kong firms care less about the large family ownership but more about existence of effective corporate governance, which is more strongly associated with higher market value in Hong Kong (Cheung et al., 2007). Singapore companies also have the common characteristic of large family ownership. In Singapore, a family controls at least 20 percent of voting rights in 55 percent of publicly listed firms (Claessens et al., 2000) and the top 15 family businesses control assets worth 48% of the GDP (*The Economist*, April 18, 2015). Similarly as in Hong Kong, the large family ownership suggests that minority oppression may exist. The concentrated ownership in Singapore companies is also associated with low proportion of outside directors (i.e., low board independence), more CEO-chairman duality, and longer tenure for the CEO. Such ownership and board characteristics suggest that owners have a huge influence within the organization also in Singapore. For instance, high ownership concentration among family shareholders makes takeover attempts a challenge without the support of these shareholders, which is one reason why hostile takeovers are so rare in Singapore (Mak and Li, 2001). The large ownership by founder families and the weak potential opposition from the minority shareholders in Hong Kong and Singapore respectively suggest that, in these countries, 1) the relatively low desire for incentive compensation for founders is likely to be even lower and 2) founder CEOs are likely to have huge influence on the structure of their own compensation.

Taken together, Confucian culture that is expected to result in strong intrinsic motivation and large beneficial ownership in East Asian companies, both of which are often difficult to measure, lead to the following hypothesis:

Hypothesis 1: The relatively less (more) reliance on incentives (non-incentive components) in the compensation package for founder CEOs is more apparent in Hong Kong and Singapore than in Western countries.

In other words, the difference in the composition of compensation package between founder CEOs and non-founder CEOs is expected to be larger in magnitude in East Asia than in the West.

The unique East Asian culture that heavily emphasizes others' perception, or *mianzi*, can also be described as *collectivism*, which is defined as a cultural tendency that focuses on the groups to which people belong (e.g., family), as opposed to *individualism*, which is defined as cultural tendency that emphasizes the self as the most meaningful unit (Triandis and Suh, 2002). Hofstede (1980) and related studies (e.g., Hofstede et al., 2010) generally characterize Anglo-Saxon countries as individualist and East Asian countries as collectivist. In particular, Hofstede et al. (2010) ranked 76 countries based on the degree of individualism and showed that the top four individualist countries are U.S., Australia, U.K., and Canada, in that order, while Hong Kong and Singapore are ranked 55th and 58th, respectively.

Another cultural dimension closely related to Confucianism is *long-term orientation*. Hofstede et al. (1991) describe long-term orientation as the cultural tendency to emphasize long-term values including "having a sense of shame," which is directly related to collectivism as well as the concept of *mianzi*, as discussed above. In fact, the culture index that Hofstede et al. (1991) used to capture the degree of long-term orientation is often called Confucianism index (e.g., Beechler and Bird, 1999) since many of the long-term oriented values used to construct the index are related to the teachings of Confucius. Hofstede et al. (2010) ranked 93 countries based on the degree of long-term orientation and showed that Singapore (16th) and Hong Kong (28th) are more long-term oriented than U.K. (40th), Canada (55th), U.S. (69th), and Australia (77th).⁵

The collectivism and long-term orientation of East Asian culture suggest that the first hypothesis can be extended as follows:

Hypothesis 2a: The difference in the composition of compensation package between founder CEOs and non-founder CEOs increases (decreases) with the degree of collectivism (individualism).

Hypothesis 2b: The difference in the composition of compensation package between founder CEOs and non-founder CEOs increases with the degree of long-term orientation.

III. RESEARCH METHODOGY

A. Sample Selection Using Propensity Score Matching

As discussed in Section II, our sample Confucian countries include Hong Kong and Singapore as those are the most economically developed common-law-based Confucian countries and thus considered most comparable to the Western world. For the Western group, we include U.S. as well as U.K., Canada, and Australia, which can be characterized as the Anglo-Saxon culture group.

We obtained data on founder status and executive compensation from S&P Capital IQ, and financial data from Compustat (for U.S. firms) and Compustat Global (for non-U.S. firms). Our initial sample consists of 146,142 CEO-year observations in Capital IQ dataset for fiscal years 2004-2017.⁶ This compensation dataset is then merged with financial dataset from Compustat and Compustat Global, which cover publicly listed

firms only, using GVKEY and fiscal year. This results in a reduced sample of 139,620 CEO-year observations. We further screen the data 1) for observations with missing variables needed in the regression models, and then 2) for outliers with extreme values (top or bottom 1% for each country) of total CEO compensation, total assets, and free cash flows (operating activities less capital expenditure scaled by total assets). The screening results in a further reduced sample of 73,126 CEO-year observations, which consist of 5,093 for the East Asian countries and 68,033 for the Western countries.

Next, to control for the potential differences in firm/CEO characteristics between the two sample groups and to mitigate potential concerns regarding the substantial difference in the sample size, we employ a propensity score matching approach (see Rosenbaum and Rubin, 1983). In particular, propensity scores are computed using a logit regression of a dummy variable for East Asian firms on the independent variables in our main regression model (see Regression (1) in the next subsection for the detailed list and definitions of the independent variables). For each of the 5,093 observations in the East Asian sample, an observation in the Western group with the closest propensity score was identified and matched, resulting in the final sample of total 10,186 observations.

B. Empirical Model

To examine the differences in the structure of compensation package between founder CEOs and non-founder CEOs for each culture group or country, we use the following OLS regression:

$$\begin{aligned} \text{COMP} = & \beta_0 + \beta_1 \text{FOUNDER} + \beta_2 \text{Log TA} + \beta_3 \text{LEVERAGE} \\ & + \beta_4 \text{FCF} + \beta_5 \text{CEO_AGE} + \beta_6 \text{FIRM_AGE} + \beta_7 \text{LOSS} \\ & + \beta_8 \text{DEC} + \beta_9 \text{DUALITY} + \text{Industry/Year Fixed Effects} \end{aligned} \quad (1)$$

where COMP is one of the following two compensation-related variables: (1) %INCENTIVE, defined as the sum of cash bonus, stock option grants, restricted stock awards, LTIP, and other incentives over total CEO compensation; and (2) %SALARY, defined as annual fixed salary over total CEO compensation. Our main variable of interest is FOUNDER, a dummy variable with a value of 1 if the CEO is also a founder of the company, and 0 otherwise. As discussed in Section II, the strong intrinsic motivation and large ownership of founder CEOs suggest a negative association between FOUNDER and %INCENTIVE. Considering that fixed salary is the main non-incentive component in the CEO compensation package, the expected relation between FOUNDER and %SALARY is positive although the existence of non-incentive compensations other than salary (e.g., pension, perks) makes the prediction less strong. The regression model also includes a number of both firm-level and CEO-level control variables. Log TA is the natural logarithm of total assets and used as a proxy for firm size. Larger firms tend to pay more compensation and rely relatively more (less) on incentives (fixed salary) (Yermack, 1995). LEVERAGE, defined as total liabilities over total assets, is a proxy for agency cost of debt. Highly leveraged firms have incentives to decrease the intensity of incentives provided by stock-based awards and shift the mix of CEO pay toward cash compensation (John and John, 1993; Yermack, 1995). Free-cash-flow (FCF), defined as cash flows from operating activities less capital expenditure

scaled by total assets, is included to control the firm's liquidity constraints. Firms with liquidity constraints are likely to compensate their CEOs more with stock-based compensation than with cash compensation (Yermack, 1995; Bryan et al., 2000). Since total incentives include both cash components (e.g., bonus) and non-cash components (e.g., restricted stock awards and stock options), we do not make a prediction regarding the sign of coefficient on LEVERAGE or FCF. We also include CEO's age (CEO_AGE), firm age (FIRM_AGE), and indicator variables for decreasing sales (DEC), losses (LOSS), and CEO-chairman duality (DUALITY) to control for other factors such as CEO's decision horizon, firm's stage in the life cycle, the effect of missing earnings benchmarks, and board structure. Lastly, we also include industry and year fixed effects.

Next, to statistically examine the difference in the result between the East Asian countries and the Western countries, we extend the previous model as follows:

$$\begin{aligned} \text{COMP} = & \gamma_0 + \gamma_1 \text{FOUNDER} + \gamma_2 \text{ASIA} + \gamma_3 \text{FOUNDER} \times \text{ASIA} + \gamma_4 \text{Log TA} \\ & + \gamma_5 \text{LEVERAGE} + \gamma_6 \text{FCF} + \gamma_7 \text{CEO_AGE} + \gamma_8 \text{FIRM_AGE} \\ & + \gamma_9 \text{LOSS} + \gamma_{10} \text{DEC} + \gamma_{11} \text{DUALITY} + \text{Industry/Year Fixed Effects} \quad (2) \end{aligned}$$

where ASIA is an indicator variable which has a value of 1 for Hong Kong and Singapore, and 0 for the four Western countries. H1 specifically predicts that the coefficients on FOUNDER and FOUNDER×ASIA will be both negative in the regression of %INCENTIVE. Both FOUNDER and FOUNDER×ASIA are expected to have a positive coefficient in the regression of %SALARY as salary is the major non-incentive component in CEO compensation package.

Lastly, to examine the impact of collectivism/individualism (H2a) and long-term orientation (H2b) on the difference in the compensation package between founder CEOs and non-founder CEOs, we use two of the Hofstede's culture indexes. In particular, we use Hofstede's individualism (IDV) index (Hofstede, 1980), which is designed to be higher (lower) for stronger individualism (collectivism), and long-term orientation (LTO) index (Hofstede et al., 1991), which is designed to capture the culture's relative emphasis on long-term values. Using these two culture indexes, we modify Regression (2) as follows:

$$\begin{aligned} \text{COMP} = & \delta_0 + \delta_1 \text{FOUNDER} + \delta_2 \text{IDV} + \delta_3 \text{FOUNDER} \times \text{IDV} + \delta_4 \text{Log TA} \\ & + \delta_5 \text{LEVERAGE} + \delta_6 \text{FCF} + \delta_7 \text{CEO_AGE} + \delta_8 \text{FIRM_AGE} + \delta_9 \text{LOSS} \\ & + \delta_{10} \text{DEC} + \delta_{11} \text{DUALITY} + \text{Industry/Year Fixed Effects} \quad (3) \end{aligned}$$

$$\begin{aligned} \text{COMP} = & \zeta_0 + \zeta_1 \text{FOUNDER} + \zeta_2 \text{LTO} + \zeta_3 \text{FOUNDER} \times \text{LTO} + \zeta_4 \text{Log TA} \\ & + \zeta_5 \text{LEVERAGE} + \zeta_6 \text{FCF} + \zeta_7 \text{CEO_AGE} + \zeta_8 \text{FIRM_AGE} + \zeta_9 \text{LOSS} \\ & + \zeta_{10} \text{DEC} + \zeta_{11} \text{DUALITY} + \text{Industry/Year Fixed Effects} \quad (4) \end{aligned}$$

where IDV is defined as Hofstede's IDV score (scaled by 100); LTO is defined as Hofstede's LTO score (scaled by 100). The index scores are obtained from Hofstede et al. (2010). H2a predicts the coefficient on FOUNDER×IDV (δ_3) to be positive in the %INCENTIVE regression and negative in the %SALARY regression. H2b predicts the coefficient on FOUNDER×LTO (ζ_3) to be negative in the %INCENTIVE regression and positive in the %SALARY regression.

C. Sample Distribution and Summary Statistics

Table 1 presents distribution of the East Asian sample and the Western sample both before and after propensity score matching. The table shows that the country composition of the Western sample did not change substantially after the matching. It also shows that the matching has narrowed down the difference in the percentage of founder CEOs between the East Asian sample (19.3%) and the Western sample (11.2% before matching; 19.6% after matching). Overall, the (untabulated) mean propensity score is 0.114 for both groups and the difference between the two groups is not statistically significant (p -value = 0.973), suggesting that the propensity score matching resulted in a highly comparable control sample.

Table 1
Sample distribution

	Overall		Founder CEO		Non-Founder CEO	
	No. Obs	No. Obs	% of Overall	No. Obs	% of Overall	No. Obs
East Asian Sample						
Hong Kong	4,630	922	19.9%	3,708	80.1%	
Singapore	463	63	13.6%	400	86.4%	
Total	5,093	985	19.3%	4,108	80.7%	
Western Sample – Unmatched						
U.S.	48,630	5,911	12.2%	42,719	87.8%	
U.K.	7,821	659	8.4%	7,162	91.6%	
Canada	7,306	640	8.8%	6,666	91.2%	
Australia	4,276	404	9.4%	3,872	90.6%	
Total	68,033	7,614	11.2%	60,419	88.8%	
Western Sample – Matched						
U.S.	3,411	725	21.3%	2,686	78.7%	
U.K.	726	123	16.9%	603	83.1%	
Canada	536	85	15.9%	451	84.1%	
Australia	420	63	15.0%	357	85.0%	
Total	5,093	996	19.6%	4,097	80.4%	

Notes: Table 1 presents the sample distribution. For each of the 5,093 observations in the East Asian sample, an observation in the Western sample with the closest propensity score was identified and matched, resulting in the final sample of total 10,186 observations. Propensity scores were computed using a logit regression of a dummy variable for East Asian firms (i.e., ASIA = 1 for Asian countries, = 0 for Western countries) on the following variables: FOUNDER = 1 if the CEO is also the founder, = 0 otherwise; Log TA = Log of total assets (in million USD); LEVERAGE = total liabilities / total assets; FCF = Net operating cash flows – capital expenditures (scaled by total assets); CEO_AGE = Age of the CEO in years; FIRM_AGE = Age of the firm in years; LOSS = 1 if net income < 0, = 0 otherwise; DEC = 1 if current revenue < previous year's revenue, = 0 otherwise; DUALITY = 1 if the CEO is also the chairperson, = 0 otherwise.

Table 2 presents descriptive statistics for the East Asian sample and the propensity-score-matched Western sample. Panel A shows that our sample East Asian CEOs receive, on average, \$573.4k of total compensation, which consists of \$307.6k of

fixed salary, \$221.9k of incentives, and \$43.9k of other types of compensation (e.g., pension, perks). On average, founder CEOs in Hong Kong and Singapore receive smaller total compensation (\$487.8k) and incentives (\$94.6k) compared to their non-founder counterparts (who receive total compensation of \$593.9k and incentives of \$252.5k, respectively). Regarding the composition of compensation package, East Asian founder CEOs receive 78.0% and 13.9% of their compensation in the form of salary and incentives, respectively, on average.⁷ For non-founders, on the other hand, the proportion is significantly lower for salary (67.8%) and higher for incentives (24.3%). Panel A also shows that firms with founder CEOs are relatively younger and smaller than those with non-founder CEOs, which is easily predictable considering that a firm in which a living founder is working as a CEO is likely to be relatively new and still growing. Overall, the descriptive statistics and the univariate comparison results for the East Asian sample are consistent with our prediction based on the prior literature (e.g., He, 2008; Wasserman, 2006).

Table 2
Descriptive statistics

Panel A. East Asian Sample	Overall	Founder	Non-Founder	Founder vs. Non-Founder
	Mean	Mean	Mean	Diff (P-value)
Total Compensation (in thousand USD)	573.4	487.8	593.9	-106.1 (0.00)
Level of Compensation Components (in thousand USD)				
Salary	307.6	345.1	298.5	46.6 (0.00)
Total incentives	221.9	94.6	252.5	-157.9 (0.00)
Cash bonus	156.1	76.2	175.3	-99.1 (0.00)
Restricted stock award	23.3	1.0	28.6	27.6 (0.00)
Stock option	39.7	17.4	45.1	-27.7 (0.00)
Long-term incentive plan (LTIP)	1.9	0.0	2.3	-2.3 (0.07)
Other incentives	0.9	0.0	1.2	-1.2 (0.22)
Other compensation	43.9	48.1	42.9	5.2 (0.19)
Composition of Compensation Package (% of Total Compensation)				
Salary	69.8%	78.0%	67.8%	10.2% (0.00)
Total incentives	22.3%	13.9%	24.3%	-10.4% (0.00)
Cash bonus	16.3%	10.8%	17.6%	-6.8% (0.00)
Restricted stock award	1.1%	0.1%	1.3%	-1.2% (0.00)
Stock option	4.8%	2.9%	5.2%	-2.3% (0.00)
Long-term incentive plan (LTIP)	0.1%	0.0%	0.1%	-0.1% (0.04)
Other incentives	0.0%	0.0%	0.0%	-0.0% (0.17)
Other compensation	7.9%	8.1%	7.8%	0.3% (0.31)
Total assets (in million USD)	925.8	302.2	1,075.3	-773.1 (0.00)
Leverage	0.411	0.394	0.415	-0.021 (0.02)
Free cash flow (scaled by total assets)	-0.004	0.002	-0.006	0.008 (0.02)
% of firms with a loss	25.7%	22.3%	26.5%	-4.2% (0.00)
% of firms with declining sales	38.2%	38.9%	38.1%	0.8% (0.32)
Firm age	27.9	22.7	29.2	-6.5 (0.00)
CEO age	51.9	54.4	51.3	3.1 (0.00)
% of CEO-chair duality	26.4%	47.7%	21.3%	26.4% (0.00)
No. of observations	5,093	985	4,108	

Panel B. Propensity-Score-Matched Western Sample	Overall	Founder	Non-Founder	Founder vs. Non-Founder
	Mean	Mean	Mean	Diff (P-value)
Total Compensation (in thousand USD)	1,758.2	1,511.9	1,818.1	-306.1 (0.00)
Level of Compensation Components (in thousand USD)				
Salary	450.1	421.7	457.1	-35.4 (0.00)
Total incentives	992.0	816.6	1,034.7	-218.1 (0.00)
Cash bonus	167.2	155.5	170.1	-14.6 (0.22)
Restricted stock award	492.7	337.8	530.4	-192.6 (0.00)
Stock option	291.8	303.8	288.8	15.0 (0.32)
Long-term incentive plan (LTIP)	15.2	3.8	18.0	-14.2 (0.01)
Other incentives	25.1	15.8	27.4	-11.6 (0.04)
Other compensation	316.0	273.6	326.4	-52.8 (0.03)
Composition of Compensation Package (% of Total Compensation)				
Salary	51.3%	53.7%	50.7%	3.0% (0.00)
Total incentives	34.6%	32.1%	35.2%	-3.1% (0.00)
Cash bonus	10.7%	10.2%	10.8%	-0.6% (0.15)
Restricted stock award	12.1%	9.3%	12.8%	-3.5% (0.00)
Stock option	10.2%	11.7%	9.9%	1.8% (0.00)
Long-term incentive plan (LTIP)	0.5%	0.2%	0.6%	-0.4% (0.01)
Other incentives	1.1%	0.7%	1.2%	-0.5% (0.01)
Other compensation	14.1%	14.3%	14.1%	0.2% (0.37)
Total assets (in million USD)	1,485.9	916.1	1,624.5	-708.4 (0.00)
Leverage	0.414	0.371	0.424	-0.053 (0.00)
Free cash flow (scaled by total assets)	-0.004	-0.012	-0.002	0.010 (0.07)
% of firms with a loss	25.9%	28.9%	25.1%	3.8% (0.01)
% of firms with declining sales	37.4%	30.1%	39.1%	-9.0% (0.00)
Firm age	26.7	17.4	29.0	-11.6 (0.00)
CEO age	52.1	52.6	51.9	0.7 (0.01)
% of CEO-chair duality	25.9%	42.9%	21.8%	21.1% (0.00)
No. of observations	5,093	996	4,097	

Notes: Panels A and B of Table 2 present descriptive statistics of our sample CEOs and firms for the East Asian sample and the propensity-score-matched Western sample, respectively. The mean salary as a percentage of total compensation represents the average of [salary / total compensation] ratio, not [average salary / average total compensation]. (The same applies to all other compensation components.) Leverage is defined as total liabilities / total assets. Free cash flow is defined as net operating cash flows – capital expenditures (scaled by total assets).

Panel B of Table 2 shows descriptive statistics for our control sample, the Western group. Consistent with the statistics for the East Asian CEOs, founder CEOs in the West receive significantly smaller total compensation and incentives compared to their non-founder counterparts. Regarding the composition of compensation package, the proportion of incentive (salary) is lower (higher) for founder CEOs in the Western countries compared to their non-founder counterparts, although the differences are relatively small in magnitude compared to those for the East Asian sample. The relatively weak difference in the composition of compensation package between founders and non-founders are consistent with H1, although the inference from the univariate analysis is limited due to the difference in characteristics between founder CEO firms and non-founder CEO firms.

Table 3 presents the correlation matrix. Consistent with our prediction and the univariate analysis in Table 2, the Pearson and Spearman correlations show that compensation package for a founder-CEO tends to rely less on incentives and more on salary, and that a founder-managed firm tends to have a smaller firm size and younger age. While most of the independent variables in our regression model are significantly correlated, none of the correlations is large in magnitude, suggesting that multicollinearity is not a concern in the model estimation.

IV. EMPIRICAL RESULTS

A. Impact of Founder Status on CEO Compensation for Each Group/Country

Panels A and B of Table 4 present the estimation results of the impact of founder status on relative reliance on incentives for the East Asian countries and the Western countries, respectively. Panel A shows that founder CEOs in Hong Kong and Singapore receive their compensation relatively less in the form of incentives compared to their non-founder counterparts, consistent with our prediction. In specific, the highly significant and negative coefficient on FOUNDER shown in Column (1) suggests that, for the East Asian sample, the proportion of incentives is expected to be 7.4% lower for founder CEOs. The subsample regression results shown in Columns (2) and (3) suggest that the proportion is expected to be 7.2% lower for Hong Kong founder CEOs and 12.2% lower for Singapore founder CEOs, respectively, compared to those for their non-founder counterparts. Panel B shows that the proportion of incentives is lower for founder CEOs in Western countries as well. However, the relatively small coefficient on FOUNDER in Column (1), -0.026 (i.e., 2.6% lower for founders), suggests that the difference in the reliance on incentives between founder CEOs and non-founder CEOs is smaller in magnitude in the Anglo-Saxon countries than in the Confucian countries, consistent with H1. Columns (2) – (5) show that the proportion of incentives is only 3.8% lower for founder CEOs in U.S. and the difference is even insignificant in U.K., Canada, and Australia. Overall, the relatively stronger relation between %INCENTIVE and FOUNDER in the East Asian sample is consistent with H1.

Table 3
Correlation matrix

	1	2	3	4	5	6	7	8	9	10	11
1 %INCENTIVE		-0.824	-0.093	0.384	0.031	0.087	-0.007	0.055	-0.127	-	0.002
2 %SALARY	-0.812		0.082	-0.397	-0.045	-0.104	-0.025	-0.067	0.145	0.081	-0.025
3 FOUNDER	-0.101	0.086		-0.120	-0.052	-0.002	0.088	-0.151	-0.002	-	0.213
4 Log TA	0.393	-0.402	-0.119		0.195	0.278	0.097	0.226	-0.320	-	-0.015
5 LEVERAGE	0.052	-0.077	-0.053	0.298		-0.051	-0.014	0.052	0.005	0.004	0.001
6 FCF	0.161	-0.180	0.006	0.188	0.001		0.071	0.133	-0.442	-	0.032
7 CEO_AGE	0.007	-0.034	0.082	0.107	0.001	0.060		0.177	-0.073	0.086	0.163
8 FIRM_AGE	0.067	-0.061	-0.129	0.197	0.067	0.159	0.271		-0.155	0.071	0.018
9 LOSS	-0.154	0.160	-0.002	-0.318	-0.058	-0.442	-0.067	-0.185		0.219	-0.054
10 DEC	-0.088	0.082	-0.034	-0.090	-0.017	-0.077	0.091	0.094	0.219		-0.013
11 DUALITY	-0.003	-0.018	0.213	-0.003	0.005	0.034	0.159	0.057	-0.054	-	

Notes: Table 3 reports Pearson (Spearman) correlations in the upper (lower) diagonal. The table includes all variables used in our main regression model except for industry/year dummies. %INCENTIVE = Sum of cash bonus, stock option grants, restricted stock awards, LTIP, and other incentives over total CEO compensation; %SALARY = Annual fixed salary over total CEO compensation; FOUNDER = 1 if the CEO is also the founder, = 0 otherwise; Log TA = Log of total assets (in million USD); LEVERAGE = total liabilities / total assets; FCF = Net operating cash flows – capital expenditures (scaled by total assets); CEO_AGE = Age of the CEO in years; FIRM_AGE = Age of the firm in years; LOSS = 1 if net income < 0, = 0 otherwise; DEC = 1 if current revenue < previous year's revenue, = 0 otherwise; DUALITY = 1 if the CEO is also the chairperson, = 0 otherwise.

Table 4
Impact of founder status on CEO compensation-reliance on incentives

Variable	Panel A. East Asian Sample		
	Overall (1)	Hong Kong (2)	Singapore (3)
FOUNDER	%INCENTIVE -0.074*** (-7.25)	%INCENTIVE -0.072*** (-6.81)	%INCENTIVE -0.122*** (-3.23)
Log TA	0.048*** (17.58)	0.046*** (15.62)	0.059*** (8.36)
LEVERAGE	-0.008 (-0.56)	-0.006 (-0.42)	-0.133** (-2.39)
FCF	0.059 (1.61)	0.061 (1.58)	-0.033 (-0.28)
CEO_AGE	-0.001 (-1.47)	-0.001** (-2.07)	0.001 (0.93)
FIRM_AGE	0.000 (0.88)	0.000 (0.37)	-0.000 (-0.97)
LOSS	-0.051*** (-5.14)	-0.041*** (-4.02)	-0.087*** (-2.66)
DEC	-0.017** (-2.03)	-0.020** (-2.31)	0.005 (0.21)
DUALITY	0.020** (2.15)	0.024** (2.57)	-0.047 (-1.37)
Constant	0.038 (0.53)	0.069 (0.84)	-0.102 (-0.65)
Fixed Effects	Industry/Year	Industry/Year	Industry/Year
Observations	5,093	4,630	463
Adj. R ²	0.160	0.151	0.426

Panel B. Propensity-Score-Matched Western Sample

Variable	Overall	U.S.	U.K.	Canada	Australia
	(1)	(2)	(3)	(4)	(5)
FOUNDER	%INCENTIVE -0.026*** (-2.86)	%INCENTIVE -0.038*** (-3.34)	%INCENTIVE -0.023 (-1.11)	%INCENTIVE 0.022 (0.66)	%INCENTIVE -0.037 (-1.17)
Log TA	0.071*** (35.44)	0.066*** (26.12)	0.060*** (13.16)	0.068*** (9.57)	0.038*** (4.72)
LEVERAGE	-0.020 (-1.45)	-0.035** (-2.04)	-0.008 (-0.19)	-0.069 (-1.23)	0.045 (1.34)
FCF	-0.068*** (-2.94)	-0.060** (-1.99)	-0.017 (-0.27)	-0.023 (-0.37)	-0.024 (-0.44)
CEO_AGE	-0.002*** (-5.66)	-0.003*** (-6.00)	-0.003*** (-3.05)	-0.004*** (-3.29)	-0.001 (-0.88)
FIRM_AGE	-0.001*** (-3.85)	-0.001*** (-4.89)	0.000 (0.64)	0.000 (0.37)	0.001 (1.52)
LOSS	0.024** (2.48)	0.035*** (2.86)	-0.022 (-0.96)	-0.041 (-1.47)	0.015 (0.50)
DEC	-0.031*** (-4.10)	-0.030*** (-3.17)	-0.053*** (-3.19)	0.014 (0.57)	-0.047** (-2.23)
DUALITY	0.022*** (2.67)	0.008 (0.85)	0.045* (1.81)	-0.038 (-1.36)	-0.067** (-2.04)

Constant	-0.026*** (-2.86)	-0.038*** (-3.34)	-0.023 (-1.11)	0.022 (0.66)	-0.037 (-1.17)
Fixed Effects	Industry/Year	Industry/Year	Industry/Year	Industry/Year	Industry/Year
Observations	5,093	3,411	726	536	420
Adj. R ²	0.262	0.250	0.288	0.331	0.208

Notes: Panels A and B of Table 4 reports the OLS estimation results for the impact of founder status on relative reliance on incentives in CEO compensation package for the East Asian sample and the propensity-score-matched Western sample, respectively. %INCENTIVE = Sum of cash bonus, stock option grants, restricted stock awards, LTIP, and other incentives over total CEO compensation; FOUNDER = 1 if the CEO is also the founder, = 0 otherwise; Log TA = Log of total assets (in million USD); LEVERAGE = total liabilities / total assets; FCF = Net operating cash flows – capital expenditures (scaled by total assets); CEO_AGE = Age of the CEO in years; FIRM_AGE = Age of the firm in years; LOSS = 1 if net income < 0, = 0 otherwise; DEC = 1 if current revenue < previous year's revenue, = 0 otherwise; DUALITY = 1 if the CEO is also the chairperson, = 0 otherwise. *, **, and *** denote significance at levels of 0.1, 0.05, and 0.01. T-statistics are in parentheses.

Table 5 presents the estimation results of the impact of founder status on relative reliance on annual salary, the main non-incentive component of compensation package. Consistent with our prediction, the results in Panel A show that founder CEOs in Hong Kong and Singapore receive their compensation relatively more in the form of fixed salary compared to their non-founder counterparts. In specific, the highly significant and positive coefficient on FOUNDER in Column (1) suggests that the proportion of salary

Table 5
Impact of founder status on CEO compensation-reliance on salary

Panel A. East Asian Sample	Overall	Hong Kong	Singapore
	(1)	(2)	(3)
Variable	%INCENTIVE	%INCENTIVE	%INCENTIVE
FOUNDER	0.077*** (7.08)	0.077*** (6.78)	0.144*** (3.77)
Log TA	-0.046*** (-15.67)	-0.042*** (-13.47)	-0.058*** (-8.18)
LEVERAGE	0.011 (0.76)	0.017 (1.10)	0.092 (1.63)
FCF	-0.049 (-1.23)	-0.044 (-1.07)	-0.012 (-0.10)
CEO_AGE	0.000 (0.60)	0.001 (1.46)	-0.003* (-1.83)
FIRM_AGE	0.000 (1.01)	0.000** (2.28)	-0.000 (-0.91)
LOSS	0.054*** (5.06)	0.039*** (3.51)	0.111*** (3.35)
DEC	0.016* (1.87)	0.020** (2.16)	-0.004 (-0.18)
DUALITY	-0.024** (-2.45)	-0.035*** (-3.47)	0.070** (2.00)
Constant	0.801*** (10.46)	0.706*** (8.02)	1.171*** (7.38)
Fixed Effects	Industry/Year	Industry/Year	Industry/Year
Observations	5,093	4,630	463
Adj. R ²	0.146	0.139	0.457

Panel B. Propensity-Score-Matched Western Sample					
	Overall	U.S.	U.K.	Canada	Australia
	(1)	(2)	(3)	(4)	(5)
Variable	%INCENTIVE	%INCENTIVE	%INCENTIVE	%INCENTIVE	%INCENTIVE
FOUNDER	0.016*	0.029***	-0.030	-0.024	0.062*
	(1.74)	(2.88)	(-1.24)	(-0.62)	(1.65)
Log TA	-0.080***	-0.082***	-0.059**	-0.054***	-0.031***
	(-40.50)	(-36.21)	(-11.31)	(-6.32)	(-3.20)
LEVERAGE	-0.001	-0.002	0.012	-0.008	-0.018
	(-0.04)	(-0.12)	(0.25)	(-0.12)	(-0.46)
FCF	0.069***	0.006	0.138*	0.078	0.048
	(3.05)	(0.21)	(1.95)	(1.06)	(0.73)
CEO_AGE	0.001***	0.003***	0.003**	0.002	-0.002
	(3.05)	(5.34)	(2.10)	(1.37)	(-1.15)
FIRM_AGE	0.000	0.000**	0.000	-0.001	-0.001
	(1.49)	(2.53)	(0.11)	(-0.69)	(-0.93)
LOSS	-0.005	0.001	0.025	0.014	-0.011
	(-0.50)	(0.07)	(0.94)	(0.41)	(-0.30)
DEC	0.039***	0.041***	0.036*	0.021	0.028
	(5.18)	(4.74)	(1.85)	(0.71)	(1.13)
DUALITY	-0.033***	-0.009	-0.006	0.029	0.025
	(-4.07)	(-1.06)	(-0.19)	(0.88)	(0.62)
Constant	-0.026***	-0.038***	-0.023	0.022	-0.037
	(-2.86)	(-3.34)	(-1.11)	(0.66)	(-1.17)
Fixed Effects	Industry/Year	Industry/Year	Industry/Year	Industry/Year	Industry/Year
Observations	5,093	3,411	726	536	420
Adj. R ²	0.345	0.432	0.205	0.166	0.091

Notes: Panels A and B of Table 5 reports the OLS estimation results for the impact of founder status on relative reliance on salary in CEO compensation package for the East Asian sample and the propensity-score-matched Western sample, respectively. %SALARY = Annual fixed salary over total CEO compensation; FOUNDER = 1 if the CEO is also the founder, = 0 otherwise; Log TA = Log of total assets (in million USD); LEVERAGE = total liabilities / total assets; FCF = Net operating cash flows – capital expenditures (scaled by total assets); CEO_AGE = Age of the CEO in years; FIRM_AGE = Age of the firm in years; LOSS = 1 if net income < 0, = 0 otherwise; DEC = 1 if current revenue < previous year's revenue, = 0 otherwise; DUALITY = 1 if the CEO is also the chairperson, = 0 otherwise. *, **, and *** denote significance at levels of 0.1, 0.05, and 0.01, respectively. T-statistics are in parentheses.

is expected to be 7.7% higher for founder CEOs in East Asia (7.7% higher in Hong Kong and 14.4% higher in Singapore). The estimation results in Panel B show that, however, the positive relation between founder status and relative reliance on fixed salary is weaker in Western countries. In specific, the proportion of fixed salary is expected to be 2.9% higher for U.S. founder CEOs and 6.2% higher for Australia founder CEOs (than for their non-founder counterparts), and the difference is not even statistically significant in U.K. or Canada. Overall, the positive relation between founder status and relative reliance on fixed salary (i.e., coefficient on FOUNDER) is smaller in magnitude (0.016) and less significant ($t = 1.74$), compared to the one for the East Asian sample. To summarize, the relatively smaller and statistically weaker coefficients on FOUNDER in the Western sample suggest that the impact of founder status on relative reliance on salary is weaker for Western countries or, conversely speaking, stronger for East Asian countries, consistent with H1. The (untabulated) collinearity diagnostics indicate that the highest

VIF for the independent variables across all the regressions in Tables 4 and 5 is only 2.72 (while the generally accepted threshold is 10), suggesting multicollinearity is not a problem in our model.

B. East Asia vs. the West – Comparison Based on Pooled Sample

The estimation results of Regression (2) in Table 6 more clearly show that the difference in the composition of compensation package between founder CEOs and non-founder CEOs is larger in the two East Asian countries than in the Western countries. Particularly, the significant and negative coefficients on FOUNDER (-0.023, $t = -2.45$) and FOUNDER×ASIA (-0.039, $t = -3.02$) in Column (1) respectively indicate that 1) *ceteris paribus*, the proportion of incentives is expected to be 2.3% lower for founder CEOs in the West than for their non-founder counterparts and 2) such difference is amplified to 6.2% ($-0.062 = -0.023 - 0.039$) in East Asian countries. Similarly, in Column (2), the significant and positive coefficients on FOUNDER (0.020, $t = 2.07$) and FOUNDER×ASIA (0.042, $t = 3.09$) respectively indicate that 1) *ceteris paribus*, the proportion of salary is expected to be 2.0% higher for founder CEOs in the West than for their non-founder counterparts and 2) such difference is amplified to 6.2% ($0.062 = 0.020 + 0.042$) in East Asian countries. Overall, the results in Table 6 are consistent with our hypothesis that the impact of founder status on CEO compensation package is stronger in East Asian countries dominated by Confucian culture.

C. East Asia vs. the West – Comparison Based on Hofstede's Culture Indexes

Table 7 presents the estimation results for Regressions (3) and (4), our models to test H2a and H2b, respectively. The estimation result in Column (1) indicates that the proportion of incentives in the compensation package is expected to be 7.8% lower for founder CEOs in a hypothetical country, which has an IDV score of zero and the difference is reduced by 0.062% when the IDV score increases by 1. Likewise, the result in Column (2) suggests that the proportion of salary is expected to be 7.8% higher for founder CEOs in a hypothetical country, which has an IDV score of zero and the difference is reduced by 0.064% when the IDV score increases by 1. To summarize, the results show that, for both incentives and salary, the difference between founders and non-founders is mitigated (magnified) as the degree of individualism (collectivism) increases, consistent with H2a.

The estimation result in Column (3) indicates that the proportion of incentives in the compensation package is expected to be 1.1% higher for founder CEOs in a hypothetical country, which has an LTO score of zero and the difference is reduced by 0.117% when the LTO score increases by 1. This suggests that the difference between founders and non-founders is expected to be zero in another hypothetical country with an LTO score of 9.4 ($= 1.1 / 0.117$). Considering that only 3 out of 93 countries in the study of Hofstede et al. (2010), and none in our sample, have an LTO score lower than 9.4, the result in Column (3) suggests that in most countries the proportion of incentives is lower for founder CEOs compared to non-founder CEOs and that the difference is further magnified as the degree of long-term orientation increases, consistent with our prediction. Column (4) shows that, also as expected, the difference in the proportion of salary gets

larger when the degree of long-term orientation increases. The results in Columns (3) and (4) are consistent with H2b. Overall, the results in Table 7 are consistent with our prediction based on the argument that the difference in the composition of compensation package between founder CEOs and non-founder CEOs is magnified under Confucian culture which has strong collectivism and emphasizes the long-term oriented value such as the value of having a sense of shame.

Table 6
Comparison of impact of founder status on CEO compensation based on pooled sample

Variable	Pooled Sample	
	(1) %INCENTIVE	(2) %SALARY
FOUNDER	-0.023** (-2.45)	0.020** (2.07)
ASIA	-0.125*** (-19.07)	0.188*** (27.71)
FOUNDER×ASIA	-0.039*** (-3.02)	0.042*** (3.09)
Log TA	0.062*** (38.71)	-0.066*** (-39.79)
LEVERAGE	-0.025** (-2.53)	0.008 (0.84)
FCF	-0.052*** (-2.66)	0.034* (1.69)
CEO_AGE	-0.002*** (-4.85)	0.001*** (2.60)
FIRM_AGE	-0.000* (-1.93)	0.000 (1.64)
LOSS	-0.010 (-1.49)	0.022*** (3.10)
DEC	-0.027*** (-4.78)	0.029*** (5.04)
DUALITY	0.018*** (2.89)	-0.027*** (-4.35)
Constant	-0.010 (-0.22)	0.991*** (20.65)
Fixed Effects	Industry/Year	Industry/Year
Observations	10,186	10,186
Adj. R ²	0.228	0.289

Notes: Table 6 reports the OLS estimation results for comparison of the impact of founder status on CEO compensation between the East Asian sample and the propensity-score-matched Western sample. %INCENTIVE = Sum of cash bonus, stock option grants, restricted stock awards, LTIP, and other incentives over total CEO compensation; %SALARY = Annual fixed salary over total CEO compensation; FOUNDER = 1 if the CEO is also the founder, = 0 otherwise; ASIA = 1 if the country is Hong Kong or Singapore, = 0 if USA; Log TA = Log of total assets (in million USD); LEVERAGE = total liabilities / total assets; FCF = Net operating cash flows – capital expenditures (scaled by total assets); CEO_AGE = Age of the CEO in years; FIRM_AGE = Age of the firm in years; LOSS = 1 if net income < 0, = 0 otherwise; DEC = 1 if current revenue < previous year's revenue, = 0 otherwise; DUALITY = 1 if the CEO is also the chairperson, = 0 otherwise. *, **, and *** denote significance at levels of 0.1, 0.05, and 0.01, respectively. T-statistics are in parentheses.

Table 7
Impact of culture on compensation structure for founder CEOs

Variable	Individualism Index		Long-Term Orientation Index	
	(1)	(2)	(3)	(4)
	%INCENTIVE	%SALARY	%INCENTIVE	%SALARY
FOUNDER	-0.078*** (-5.78)	0.078*** (5.53)	0.011 (0.61)	-0.002 (-0.11)
IDV	0.187*** (18.64)	-0.286*** (-27.55)		
FOUNDER×IDV	0.062*** (3.10)	-0.064*** (-3.08)		
LTO			-0.371*** (-19.95)	0.546** (28.29)
FOUNDER×LTO			-0.117*** (-3.11)	0.093** (2.37)
Log TA	0.062*** (38.71)	-0.066*** (-39.81)	0.062*** (38.47)	-0.066*** (-39.45)
LEVERAGE	-0.025** (-2.57)	0.009 (0.90)	-0.020** (-2.09)	0.002 (0.25)
FCF	-0.053*** (-2.74)	0.037* (1.81)	-0.045** (-2.32)	0.024 (1.21)
CEO_AGE	-0.002*** (-4.83)	0.001*** (2.61)	-0.002*** (-5.12)	0.001*** (2.95)
FIRM_AGE	-0.000* (-1.85)	0.000 (1.54)	-0.000* (-1.67)	0.000 (1.23)
LOSS	-0.011 (-1.55)	0.023*** (3.17)	-0.013* (-1.91)	0.026*** (3.65)
DEC	-0.027*** (-4.80)	0.030*** (5.10)	-0.028*** (-4.98)	0.031*** (5.31)
DUALITY	0.017*** (2.82)	-0.027*** (-4.25)	0.011* (1.86)	-0.019*** (-2.95)
Constant	-0.177*** (-3.80)	1.245*** (25.73)	0.108** (2.30)	0.820*** (16.85)
Fixed Effects	Industry/Year	Industry/Year	Industry/Year	Industry/Year
Observations	10,186	10,186	10,186	10,186
Adj. R ²	0.226	0.288	0.231	0.290

Notes: Table 7 reports the OLS estimation results for comparison of the impact of founder status on CEO compensation between countries based on Hofstede's culture indexes—individualism index (IDV) and long-term orientation index (LTO). %INCENTIVE = Sum of cash bonus, stock option grants, restricted stock awards, LTIP, and other incentives over total compensation; %SALARY = Annual fixed salary over total CEO compensation; FOUNDER = 1 if the CEO is also the founder, = 0 otherwise; IDV = Hofstede's individualism index (scaled by 100); LTO = Hofstede's long-term orientation index (scaled by 100); Log TA = Log of total assets (in million USD); LEVERAGE = total liabilities / total assets; FCF = Net operating cash flows – capital expenditures (scaled by total assets); CEO_AGE = Age of the CEO in years; FIRM_AGE = Age of the firm in years; LOSS = 1 if net income < 0, = 0 otherwise; DEC = 1 if current revenue < previous year's revenue, = 0 otherwise; DUALITY = 1 if the CEO is also the chairperson, = 0 otherwise. *, **, and *** denote significance at levels of 0.1, 0.05, and 0.01, respectively. T-statistics are in parentheses.

D. Robustness Checks

We perform several sensitivity analyses to reconfirm our findings from the main analysis. First, many of the prior studies on executive compensation exclude financial companies since the managerial compensation scheme can be substantially different for financial companies (e.g., Coles et al., 2006). Accordingly, we remove financial companies from our sample and repeat the analyses. Second, we also consider potential endogeneity due to simultaneous causality between variables and use 1-year lag values, instead of current values, for the independent variables related to firm performance or financial status—Log TA, LEVERAGE, FCF, LOSS, and DEC. The (untabulated) results for 1) non-financial firms ($n = 9,707$) and 2) lag model ($n = 7,616$) show that our main findings remain unaffected.

V. CONCLUSION

In this study, we examine how the difference in the composition of compensation package between founder CEOs and non-founder CEOs varies across different countries/cultures. The prior literature finds that the level of incentive compensation is lower for founder CEOs than for non-founder CEOs, which suggests that compensation package for founder CEOs is expected to rely relatively less on incentives and more on non-incentive components such as fixed salary, compared to that for non-founder CEOs. Considering the unique Confucian culture, which emphasizes the importance of family and the value of having a sense of shame and thus is expected to amplify the intrinsic motivation for founders, we predict that the difference in the composition of compensation package between founder CEOs and non-founder CEOs is larger in East Asia. We further predict that the difference in the compensation package between founder CEOs and non-founder CEOs increases with collectivism and long-term orientation, which are the two distinctive characteristics of Confucianism.

To test our hypotheses, we select 5,093 CEO-year observations from two Confucian countries—Hong Kong and Singapore—as our treatment group and equal number of observations from four Anglo-Saxon countries—U.S., U.K., Canada, and Australia—as our comparison group, using propensity score matching. Based on total 10,186 CEO-year observations, we find strong empirical evidence that founder CEOs receive their compensation relatively less (more) in the form of incentives (non-incentive components) than non-founder CEOs and that such difference is larger in magnitude in the East Asian countries than in the Western countries. Using Hofstede's culture indexes, we also provide strong evidence that the difference in the compensation package between founder CEOs and non-founder CEOs increases with collectivism and long-term orientation.

Our study contributes to the prior literature on executive compensation in multiple ways. First, while prior studies on founder CEOs generally focus on a single country, we expand the literature by examining the practice of CEO compensation in multiple countries and explaining the difference. This study also contributes to the prior literature, which suggests founder CEOs' strong intrinsic values as an important factor affecting their compensation structure, by showing that those intrinsic values are deeply and philosophically shaped by culture. Lastly, this study also complements the prior literature on founder CEO, which has almost exclusively focused on the level of compensation by

showing that the founder status is associated also with the composition of compensation package.

This study possesses some limitations, which offer venues for future research. First, considering substantial inherent differences in many firm/economy characteristics between common law countries and civil law countries, we focus only on common law countries for a clear comparison between the Confucian culture and the Western culture. Considering that Confucianism is a dominant culture also in many civil law countries in East Asia, such as South Korea and Japan, future studies examining the founder compensation in civil law Confucian countries or the difference in the impact of Confucianism between different legal systems will complement the literature and this study. Second, this study does not distinguish non-founder CEOs who are members of the founding family from professional CEOs who are hired from outside as there is no practical way to do it given the size of our dataset. Although non-founder family CEOs do not have the same intrinsic motivation as founder CEOs (Jaskiewicz et al., 2017), they are also expected to be different from externally hired professional CEOs by nature. As such, our study is expected to be extended by future studies examining how the relation between culture and compensation structure is different for non-founder family CEOs.

ENDNOTES

1. Hallock and Torok (2010) found that the CEO was the highest paid executive in 81 percent of the 2,108 U.S. firms they studied.
2. According to International Monetary Fund, Singapore and Hong Kong have nominal GDP per capita (USD, 2017) of \$57,713 and \$46,080, respectively, which are second and third highest, respectively, among East Asian countries. The East Asian country with the highest GDP per capita is Macau (\$77,111 USD in 2017), whose economy is very small in size and heavily dependent on gambling and tourism.
3. The other three key principles are as follows (Hofstede et al., 2010):
 - a. The stability of society is based on unequal status relationships between people.
 - b. Virtuous behavior toward others consists of not treating others as one would not like to be treated oneself.
 - c. Virtue with regard to one's tasks in life consists of trying to acquire skills and education, working hard, not spending more than necessary, being patient, and preserving.
4. *Mianzi* is translated into *face* literally and called differently in other Asian countries (e.g., it is called *chemyon* in Korea).
5. The four most long-term oriented countries are South Korea, Taiwan, Japan, and China, in that order, which are civil law Confucian countries (Hofstede et al., 2010).
6. The sample period starts in 2004 because of the data availability for Hong Kong and Singapore.
7. Note that the mean salary as a percentage of total compensation (e.g., 69.8% for overall sample) is the average of [salary / total compensation] ratio, not [average salary / average total compensation]. The same applies to all other compensation components in Table 2.

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