CEO Perquisites and Family Firms

Kevin CW Chen [a]

Tai-yuan Chen

Kai Wai Hui

School of Business and Management
Hong Kong University of Science and Technology

March 2009

[a]Corresponding author:
Kevin Chen
School of Business and Management
Hong Kong University of Science and Technology
Clearwater Bay, Kowloon, Hong Kong
e-mail: acchen@ust.hk
Phone: 852-2358-7585

We thank Clive Lennox, Jeff Pittman, and the workshop participants at the Hong Kong University of Science and Technology, Nanyang Technological University, National University of Singapore, and the 2008 HKUST Summer Symposium on Family Business Research for their helpful comments. We also thank Yangxin Yu for his excellent research assistance.

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Abstract

Recent studies documented that U.S. family firms outperform non-family firms, and the effect is more pronounced when founder of the firm is involved. We find that family ownership reduces the consumption of managerial perquisites. Further, within family firms, founder- and hired-CEOs consume less, and the descendent-CEOs more, perks. Moreover, we find that the stock price drops by 2.1% around the disclosure of a descendent CEO's initial perk consumption, but does not react negatively to the announcement of the initial perk usage of other types of CEOs. Our findings are consistent with the notion that family ownership and management are both associated with agency problems that reveal themselves in the consumption of personal perks by CEOs.

This study examines the CEO perquisite consumption of family and non-family firms in the S&P 500 index. Family firms, which are the most prevalent form of business organization in the world, are distinct from non-family firms in their concentrated ownership structure, which leads to different performance and valuation (Claessens et al., 2000; Morck et al., 2004). The early findings in the U.S. are mixed. For example, Holderness and Sheehan (1988) find that family firms have lower valuations, whereas others studies, such as those by Morck et al. (1988) and Anderson and Reeb (2003a), find the opposite. Villalonga and Amit (2006) argue that, in addition to ownership, family management also has to be considered. They show that a firm's valuation is highest when it is managed by the founder (who serves as CEO or chairman) and lowest when it is managed by a descendent.

The previous family firm studies typically imply that the relative valuations (measured by Tobin's q ratio) across these firms are due to agency problems. For example, Villalonga and Amit (2006) interpret their results as showing that founder-CEOs have the fewest agency problems, followed by the hired CEOs of nonfamily firms, and that descendent-CEOs have the most severe agency problems. However, the superior performance of a founder CEO over a descendent CEOs could also be explained by managerial ability.[1] To provide more direct evidence of whether family firms do indeed face less severe agency problems, we investigate the association between executive

[1]Fahlenbrach (2006) shows that founder CEOs tend to have longer-term investment strategies compared to other types of CEOs, and they enjoy higher stock premiums. Perez-Gonzalez (2002) finds that the stock price drops around the announcement of the appointment of descendent CEOs, and this reduction is more prominent when the descendents did not attend a selective college.

perquisites, a representative example of agency problems (Jensen and Meckling, 1976), and family ownership and management.

The provision of executive perquisites (perks) in public corporations is one of the most controversial issues in corporate governance and is routinely featured in academic discourse and the business press.[2] The issue is so important that the Securities and Exchange Commission (SEC) changed the rule in August 2006 to lower the threshold of perk disclosure to enhance the transparency of the perk usage.[3] In the agency theory literature, Jensen and Meckling (1976) argue that executive perquisite consumption represents a misappropriation of company resources and should be regarded as a sign of weak corporate governance. Yermack (2006) shows that the stock market reacts negatively to the announcement of a CEO's first perk consumption. Accordingly, we focus on the *personal* consumption of perks by CEOs, as disclosed in proxy statements, to examine how family firms are different from non-family firms in their offering of managerial perquisites.

First, we compare the likelihood of perks being offered to, and the amount of perks consumed by, the CEOs of family firms compared with non-family firms. This comparison enables us to study whether the association between family ownership and managerial perks are consistent with the predictions by agency theory. If the superior performance of family firms documented by prior studies (Anderson and Reeb, 2003a; Villalonga and Amit, 2006) is indeed driven by lower total agency costs, then we should

[2]For example, see "Ten Ways to Restore Investor Confidence in Compensation" (*Wall Street Journal*, April 2007) and "For CEO Spouses, Corporate Jets are the Perfect Perk" (*Wall Street Journal*, June 2007).

[3] Before 2006, the disclosure of perks was required if total cost exceeds the lesser of $50,000 or 10% of the executive's salary plus bonus. After 2006, the threshold is reduced to $10,000, disregarding the amount of salary plus bonus (SEC Release 33-8732A, "Executive Compensation and Related Person Disclosure"). Grinstein et al. (2008) show that firms responded to this rule by disclosing larger amounts of perks.

find that family firms are associated with a lower likelihood and amount of CEO perquisites. The empirical results support our prediction. We find that, compared to the CEOs of non-family firms, the CEOs of family firms are less likely to consume perquisites and that they tend to consume fewer perks when they are offered. Our conclusions remain the same if we follow Yermack (2006) and focus on the CEO's personal use of corporate aircraft as the primary measure of executive perks.

Next, because Villanlonga and Amit (2006) show that the performance of family ownership is related to the degree of the founding family's involvement with the firm's management, we then separate family firms into three groups – founder-controlled firms, family firms with descendent CEOs, and family firms with hired-CEOs – and compare their CEO perk consumption with that in non-family firms. The empirical results indicate that the founder CEOs and hired CEOs of family firms are less likely than those in non-family firms to consume perks, and when these perks are offered, they consume a smaller amount. However, compared to their counterparts in non-family firms, the descendent CEOs in family firms have the greatest likelihood of consuming perks, and when perks are offered, they consume the largest amount. Our results are consistent with the notion that family ownership mitigates agency costs only when the founders or professional managers serve as CEOs, but that minority shareholders face an even greater risk of expropriation when descendent CEOs manage the firm.

Finally, we investigate how the stock market reacts to the announcement of a CEO's first perk consumption. We find that the stock price drops by 2.1% around the disclosure of a descendent CEO's initial perk consumption, but does not react negatively to the announcement of the initial perk usage of other types of CEOs. Thus, our results indicate

that shareholders regard only the perk consumption of descendent CEOs as a sign of managerial expropriation.

Our study contributes to two streams of literature. First, as previously mentioned, the prior research on family firms typically assumes that the different valuations for family and non-family firms are primarily due to agency problems (Morck et al., 1988; Anderson and Reeb, 2003a; Villalonga and Amit, 2006). However, the superior performance of family firms is subject to explanations other than agency costs (e.g., management quality). Our study provides more direct evidence on this issue. Our empirical results on the association between family ownership, management, and executive perquisites are consistent with the predictions of classic agency theory. We thus show that family ownership benefits shareholders the most when the founder serves as CEO, but that minority shareholders are worse off than they would be in non-family firms when descendent CEOs are present.

Second, our study contributes to the extant literature on executive perquisites by identifying a setting (i.e., family firms) in which agency problems are most likely to manifest themselves. The identification of this setting is very useful, because previous studies have so far been unable to document a clear association between perk consumption and agency problems. For example, Yermack (2006) finds that the market reacts negatively to the disclosure that a firm permits its executives to use corporate aircraft for personal reasons and that such a firm underperforms the market subsequent to that disclosure. However, he finds no association between a CEO's personal use of a corporate jet and the variables that are measures of agency problems (e.g., managerial ownership and excessive compensation). Rajan and Wulf (2006) further show that perks

(primarily corporate jets and chauffeurs) are likely to be provided to enhance managerial productivity by firms headquartered in counties that have smaller populations or are far away from larger airports. However, they do not find that corporate jets are provided when agency problems are more severe, such as in firms with high free cash flows or in industries with limited investment opportunities. Because Rajan and Wulf's (2006) data include both business and personal uses of perks, it remains unclear whether the personal use of perks is related to agency problems. Our study helps to resolve these mixed results by showing that personal perk consumption is more likely when agency problems are more severe (e.g., in family firms managed by a descendent-CEO). Conversely, personal perk consumption is less likely when agency problems are less severe (e.g., in family firms managed by a hired CEO). Thus, family ownership and management allow us to provide more direct evidence that executive perks represent the misappropriation of corporate resources.[4]

The rest of the paper is organized as follows. Section 2 describes the development of the empirical hypotheses. Section 3 discusses the sample. Section 4 presents the results, and Section 5 discuss robustness tests. Finally, Section 6 concludes the paper.

I. Hypothesis Development

Family shareholders bring both benefits and costs to the performance and value of a firm. As summarized in Anderson and Reeb (2003a), there are three benefits and three costs associated with family ownership. The first benefit is that, because the founding

[4] In addition, we also find that some variables of agency problems are significant in determining executive perks: managerial ownership and institutional holdings are associated with less, while CEO tenure and excessive compensation are associated with higher perk consumption. These variables are in general not significant in Yermack (2006). The difference could be due to the higher power coming from our study's larger sample size (500 vs. 237) and longer period (1993-2006 vs. 1993-2003).

family members' personal wealth are closely tied to their firms, they have stronger incentives than small and diffuse shareholders to monitor the management of the firm (Demsetz and Lehn, 1985). Second, because founding families tend to treat their firms as an asset to pass on to the next generation, they are more likely to take a long-term perspective in their investment decisions (James, 1999). Further, due to the longer span of time over which they deal with outsiders, such as suppliers and the providers of capital, founding families should be more attentive to their reputations than the managers and directors of non-family firms, which see relatively continuous turnover.

There are also costs to family ownership. The first is that large undiversified shareholders (such as families) may derive greater benefits from pursuing non-value-enhancing objectives, such as a growth in size and firm survival (Fama and Jensen, 1985), which may have an effect on firm value or performance. The second is managerial entrenchment, because the family's large stake reduces the likelihood of a takeover. The third cost of family ownership is that, as large and sometimes controlling shareholders, families are in a position to expropriate wealth from minority shareholders. This expropriation can be in the form of excessive compensation, related party transactions, and the like. These three costs can all be ascribed to the conflict of interest between large family shareholders and minority shareholders.

As it is possible that family ownership can result in both congruence and conflict between the interests of families and those of minority shareholders, the issue of whether family ownership enhances firm performance or value is an empirical one. Earlier research in the U.S. (e.g., Holderness and Sheehan, 1988) finds that family firms have lower valuations. However, recent studies (e.g., Anderson and Reeb, 2003a) demonstrate

that family ownership enhances firm performance or value. Further studies also document that family firms provide higher-quality financial reporting (Wang, 2006; Ali et al, 2007) and enjoy lower costs of debt (Anderson, Mansi, and Reeb, 2003). These findings suggest that founding family ownership seems to align, rather than divorce, the interests of majority and minority shareholders.

Both Jensen and Meckling (1976) and Grossman and Hart (1980) argue that executive perquisite consumption represents a misappropriation of company resources and should be regarded as a sign of weak corporate governance. Yermack (2006) finds that the market reacts negatively to the disclosure that a firm permits its executives to use corporate aircraft for personal reasons and that such a firm underperforms the market subsequent to the disclosure. These results seem to indicate that the market views the disclosure of executive perk consumption as a revelation of agency problems. Yermack, however, finds no association between the usage of perks and the variables that are measures of agency problems (e.g., managerial ownership and excessive compensation).[5]

If, as maintained by Jensen and Meckling (1976) and Grossman and Hart (1980), executive perquisite consumption is indicative of agency problems, and these problems are fewer in family firms, then the CEOs of family firms are expected to be less likely to

[5]Rajan and Wulf (2006) show that perks (primarily corporate jets and chauffeurs) are likely to be provided to enhance managerial productivity by firms headquartered in counties that have smaller populations or are far away from larger airports. In addition, they do not find that corporate jets are provided when agency problems are more severe, such as in firms with high free cash flows or in industries with limited investment opportunities. It is difficult to reconcile the results of Yermack (2006) with those of Rajan and Wulf (2006), however, due to the different data used in the two studies. The former uses the disclosed costs of a CEO's personal use of corporate aircraft, whereas the latter uses data of perquisites for both business and personal purposes. Rajan and Wulf (2006) offer some reasons why perks can enhance managerial productivity, including efficiency and comfort for executives' business activities, a symbol of executive status, and tax savings. These arguments are not applicable to our study because we, like Yermack (2006), focus on the personal, rather than business, use of perks.

consume perks and to consume fewer perks than the CEOs of non-family firms. These predictions can be written as the following hypothesis (in alternative form):

> **H1**: Compared to the CEOs of non-family firms, the CEOs of family firms are less likely to consume perquisites, and they consume fewer perks when they are offered.

Although family firms on average are shown to outperform non-family firms in terms of profitability and valuation, this superior performance is primarily driven by family firms that are managed by founder CEOs. Villalonga and Amit (2006) find that family ownership enhances value for shareholders only when the founder serves as the CEO or as the chair of the board of directors with a hired professional CEO.[6] When descendents serve as the CEOs of family firms, the valuation of these firms is lower than that of nonfamily firms, and the stock market reacts negatively to the appointment of descendent CEOs (Perez-Gonzalez, 2001). These studies suggest that, compared with non-family firms, the agency costs are lower for family firms with founder CEOs or hired professional CEOs, but larger for family firms managed by descendent CEOs. Thus, we expect that executive perks are less likely to be provided, and are provided in smaller amounts, in family firms with founder CEOs or hired CEOs. In addition, we also posit that descendent CEOs are more likely to consume perks and to consume more when perks are provided. Hypotheses H2a and H2b summarize our expectations.

[6]The superior valuations of founder CEOs are also documented by Morck et al. (1988) and Adams et al. (2003).

H2a: In comparison to the CEOs of non-family firms, the founder CEOs and hired professional CEOs of family firms are less likely to consume perquisites, and they consume smaller amounts when they are offered.

H2b: In comparison to the CEOs of non-family firms, the descendent CEOs of family firms are more likely to consume perquisites, and they consume larger amounts when they are offered.

H1 to H2 are the result of the joint hypotheses that family ownership and management are associated with various degrees of agency problems and that the consumption of executive perks is a revelation of these problems. The failure to reject the null form of each hypothesis could indicate either that family involvement is not associated with agency problems or that executive perks are not a revelation of these problems. The rejection of each of the hypotheses, in contrast, indicates that the joint hypotheses are supported.

II. Sample and Descriptive Statistics

A. Sample Selection

Our sample consists of all S&P 500 firms. In 2002, *BusinessWeek* provided a classification of the S&P 500 firms into family and non-family firms. It defined a company as a family firm if the founder and/or his or her descendents still served as the top managers or directors or were among the firm's largest shareholders. Based on this

definition, 177 firms (35%) in the S&P 500 index are classified as family firms, and 91 of them are managed by the founding family members.[7] We further break down family-managed firms into founder-managed and descendent-managed firms, depending on who serves as CEO. Our sample period is from 1993 to 2006. During this period, 38.0% of the family firm-year observations have founder-CEOs and 16.3% have descendent CEOs; the other 45.7% have hired CEOs.

[Insert Table I here]

Table I presents descriptive statistics on certain firm characteristics of family and non-family firms. We find that, compared with non-family firms, family firms have a similar firm size, a higher market-to-book ratio, better profitability, longer CEO tenure, and lower institutional ownership and leverage ratios.

B. Descriptive Statistics of Perks

We collect the CEO perk data of all firms included in S&P 500 manually from companies' annual proxy statements. As mentioned earlier, the SEC mandates disclosure of perks used by each executive as long as the total amount exceeds certain thresholds. In this study, we focus on the perks used by each firm's CEO for personal purposes. Figure 1 shows the percentage of firms in S&P 500 that report CEO's consumption of perks for personal use in each year from 1993 to 2006. Consistent with the trend of CEO's personal use of corporate aircraft reported by Yermack (Figure 1, 2006, which covers 1992-2003),

[7] *BusinessWeek*'s definition of a family firm follows that of Anderson and Reeb (2003a), and the same definition has been used by Anderson and Reeb (2003b, 2004), Anderson et al. (2003), Villalonga and Amit (2006), and Ali et al. (2007).

the percentage of perk disclosure increased gradually from 1993 (5%) to 2001 (25%). It jumped to 33% in 2002 and soared to 51% in 2005 and 61% in 2006. Yermack (2006) offers some possible reasons for the increase up to 2003, including (1) the rise of fractional aircraft ownership on a time-sharing basis; (2) the increased pressures for more complete disclosure due to a high frequency of shareholder lawsuits and enactment of the Sarbanes-Oxley Act in 2002; and (3) the increased demand for the convenience of corporate jets after the terrorist attacks of September 11, 2001. The increase in 2006 was mostly due to the reduced reporting threshold imposed by the SEC (see fn. 3).

[Insert Figure 1 here]

Table II reports the descriptive statistics on CEO perquisites for family and non-family firms. In family firms, 22.3% of 2,478 firm-year observations report personal consumption of perks by CEOs; while 27.7% of 4,522 observations in non-family firms do so. Since the SEC requires disclosure of individual perks if any individual component exceeds 25% of the overall perk costs, we also collect the components of perks. Table II shows that most CEO perks include personal use of corporate aircraft: 69.4% in family firms and 68.7% in non-family firms. This is consistent with Yermak (2006).[8] Other perks not reported in Table II include financial counseling, a company car, club membership, extra medical benefits, and personal or home security.

[Insert Table II here]

[8]Among all firm-year observations in our sample, 19.5% allow the CEO's personal use of a company jet, as comparison to the 15.9% reported in Yermack (2006).

Table II also shows the mean and median amounts of CEO's total perks disclosed in the proxy statements. The mean (natural log) is 10.97 (or $58,104) for family firms and 11.14 (or $68,872) for non-family firms. The difference is significant in a t-test ($p < 0.01$). In other words, family firms provide lower amounts of perks than non-family firms when their perks are disclosed. The cost of personal use of corporate aircraft represents a majority of total perks: 55.6% in family firms and 54.0% in non-family firms. The importance of personal use of corporate aircraft in the perks is consistent with Rajan and Wulf (2006) and Yermack (2006) and it will be analyzed separately in the empirical tests reported later.

We also collect data on corporate aircraft ownership from the database of the U.S. Federal Aviation Association (FAA) and data on CEO golf membership from the U.S. Golf Association's website. Table II indicates that 50.3% (68.1%) of family (non-family) firms own or lease an aircraft and that this difference is statistically significant. In addition, 17.6% of family firms provide golf club memberships to CEOs, which is significantly lower than in non-family firms (24.6%). To summarize, the univariate results in Table I show that, compared with non-family firms, family firms are less likely to have their own aircraft and are less likely to provide corporate aircraft for a CEO's personal use or any other kinds of managerial perquisites.

III. Empirical Results

A. The Likelihood and the Amount of CEO Perk Consumption

To examine the likelihood of perquisite consumption, we estimate the following probit regression model, which is similar to that used in Yermack (2006).

$$Dummy\_Perk = a_0 + a_1*FAMILY + a_2*EXCESS\_COMP + a_3*CEO\_OWN + a_4*SIZE + a_5*LEV + a_6*AGE + a_7*TOTINST + a_8*TREND + a_9*ROA + a_{10}*MB + a_{11}*TENURE + Industry\ Dummies + e, \quad (1)$$

where *Dummy_Perk* is a binary variable that equals one if the CEO has been offered any kind of perquisite and zero otherwise; *FAMILY* is a dummy variable that equals one if the company is a family firm and zero otherwise; *EXCESS_COMP* measures a CEO's excessive compensation by the residuals from the regression of the CEO's total compensation on CEO tenure, firm size, abnormal stock performance, year dummy variables, and industry dummy variables; *CEO_OWN* is the percentage of CEO stock ownership; *SIZE* is the natural logarithm of market capitalization at the end of the fiscal year; *LEV* is the long-term debt divided by total assets; *AGE* is the CEO's age; *TOTINST* is the percentage of institutional holdings; *TREND* is the year minus 1993; *ROA* is earnings before extraordinary items divided by total assets; *MB* is a firm's market-to-book ratio defined as the market value of equity divided by the book value of equity; and *TENURE* is the number of years since the CEO assumed the position. The model includes two-digit SIC code dummy variables for industry membership, and we use the Fama-French definitions of industry. We expect a_1 to be negative.

[Insert Table III here]

The results of the regression based on eq. (1) are presented in panel A of Table III. The coefficient on *FAMILY* is significantly negative (0.25, z = -5.45), which supports the notion that family firms on average face less severe agency problems and thus are less

likely to offer managerial perks than are non-family firms. The other control variables, when significant, are consistent with the predicted signs.

Next, we replace *FAMILY* with three dummy variables, *FOUNDER*, *DESCENDENT*, and *HIRED_CEO*, to further examine how family management affects CEO perquisite consumption. The results are presented in panel B of Table III. The coefficient on *FOUNDER* is significantly negative (-0.28, z = -3.91), whereas that on *DESCENDENT* is significantly positive (0.34, z =3.61), which indicates that founder CEOs are less likely, and descendent CEOs more likely, to consume perks, compared with the hired CEOs of non-family firms. This result is consistent with the notion that family management mitigates agency costs when the founder of the firm serves as the CEO, but creates more severe agency problems when the CEO is a descendent. The coefficient on *HIRED_CEO* is significantly negative (-0.21, z = - 3.74), which indicates that the monitoring by family shareholders mitigates the agency problem that arises from the separation of ownership and management. The other control variables, when significant, are consistent with the predicted signs.

As documented in Rajan and Wulf (2006) and Yermack (2006), a CEO's personal use of a corporate jet represents the most important component of executive perquisites. Thus, we also examine whether our results remain consistent if we focus on the CEO's personal use of corporate aircraft by using the following equation:

$$\begin{aligned} Dummy\_Aircraft = {} & a_0 + a_1*FAMILY + a_2*EXCESS\_COMP + a_3*CEO\_OWN + a_4*SIZE \\ & + a_5*LEV + a_6*AGE + a_7*TOTINST + a_8*TREND + a_9*ROA \\ & + a_{10}*MB + a_{11}*TENURE + a_{12}*AIR\_T1 + a_{13}*AIR\_T2 + a_{14}*GOLG + \\ & + a_{15}*AIR\_REG + Industry\ Dummies + e, \end{aligned} \quad (2)$$

where *Dummy_Aircraft* is a binary variable that equals one if the CEO has used corporate aircraft for personal reasons and zero otherwise. Eq. (2) includes *AIR_REG*, *AIR_T1*, *AIR_T2*, and *GOLF* as additional control variables: *AIR_T1* is a dummy variable that equals one if the company headquarters are within one hour's drive of a Tier I airport. *AIR_T2* is a dummy variable that equals one if the company headquarters are within one hour's drive of a Tier II airport. *GOLF* is a dummy variable that equals one if the CEO has an out-of-state golf club membership or is a member of the Augusta Golf Club.[9]

[Insert Table IV here]

The results of estimating equation (2) are provided in panel A of Table IV. The coefficient on *FAMILY* is significantly negative (-0.23, z = -4.32), which indicates that family firms are less likely to allow the CEO's personal use of corporate aircraft. In panel B of Table IV, we replace *FAMILY* with three dummy variables, *FOUNDER*, *DESCENDENT*, and *HIRED_CEO*, to further examine how family management affects the likelihood of a CEO's personal use of a corporate jet. We find that, compared with the hired CEOs of non-family firms, founder CEOs are less likely (-0.28, z = -3.91), and descendent CEOs more likely (0.34, z = 3.61), to use corporate aircraft for personal purposes. Finally, the coefficient on *HIRED_CEO* is significantly negative (-0.21, z = -3.74), which indicates that the hired CEOs of family firms are less likely to be allowed to

[9]The data on whether the company headquarters are within one hour's driving range of a Tier I or Tier II airport are collected from the U.S. FAA database. The data on a CEO's golf or country club membership are obtained from the U.S. Golf Association's website, and we classify this membership as "out-of-state" if the club is located outside of the CEO's home state or if the CEO is a member of the Augusta National Golf Club. This classification is similar to that used in Yermack (2006).

use corporate aircraft for personal purposes, compared with hired CEOs of non-family firms.

Both Tables III and IV show that the coefficient on *EXCESS_COMP* is significantly positive, which indicates that excessive compensation is associated with a greater probability of perk consumption. The coefficient on *CEO_OWN* is significantly negative, which is consistent with the argument that as a manager's degree of ownership declines, his or her perk consumption increases (Jensen and Meckling, 1976). In addition, Tables 3 and 4 both show that the institutional holdings variable is significantly negative in the regressions, indicating that institutions might be a countering force to deter the provision of personal perks. None of these three variables is found to be significant in Yermack (2006). One possible explanation for this difference is that our sample is larger. Yermack (2006) uses 237 large firms in the *Fortune 500* list, whereas we include all firms in the *S&P 500*. In addition, our sample period (1993-2006) is longer than his (1993-2002) and the frequency of firms disclosing perks increased drastically in 2003-2006 (see Figure 1).

To summarize, the results in Tables 3 and 4 support the argument that family firms face less severe agency problems than do non-family firms, thus leading to a lower likelihood of CEO perk consumption. Moreover, the non-controlling shareholders in founder-managed family firms face the least risk of expropriation by the controlling families, whereas those in descendent-managed family firms are subject to greater risk. Further, CEOs' excessive compensation is positively associated, while their own and institutions' share ownerships are negatively associated with CEOs' personal

consumption of perks, providing additional evidence that executive perks are related to other variables of agency problems.

B. The Disclosed Costs of CEO Perk Consumption

In addition to the likelihood of consuming perks, we also test our hypotheses using the disclosed costs of perks. We estimate equation (2) by using the total disclosed costs of a CEO's perquisite consumption as the dependent variable and retaining the same independent variables as in equation (1). Because the SEC requires disclosure of perks if their total cost exceeds the lesser of $50,000 or 10% of the executive's salary plus bonus, the dependent variable in equation (2) is censored. Therefore, we use the following Tobit regression model:

$$\begin{aligned} Total\_Perk = {} & a_0 + a_1*FAMILY + a_2*EXCESS\_COMP + a_3*CEO\_OWN + a_4*SIZE \\ & + a_5*LEV + a_6*AGE + a_7*TOTINST + a_8*TREND + a_9*ROA \\ & + a_{10}*MB + a_{11}*TENURE + Industry\ Dummies + e, \end{aligned} \quad (3)$$

where *Total_Perk* is the total amount of CEO's personal perks disclosed by each firm year and all the independent variables are the same as those in eq. (1). The results are reported in Table 5.

[Insert Table V here]

Panel A of Table V shows that the coefficient on *FAMILY* is significantly negative (-0.94, z = -4.06), which indicates that family firms consume fewer perks when they are offered. Next, we replace *FAMILY* with three dummy variables, *FOUNDER*,

DESCENDENT, and *HIRED_CEO*, to estimate equation (3), and the results are provided in panel B of Table V. Similar to the results reported in panel B of Tables III and IV, we find that the coefficient on *FOUNDER* is significantly negative (-1.20, z = -3.98) and that on *DESCENDENT* is significantly positive (1.46, z = 3.81), which indicates that founder CEOs consume less, and descendent CEOs more, when perks are offered. Finally, the coefficient on *HIRED_CEO* is significantly negative (-0.93, z =-4.12), which is consistent with the notion that the monitoring by controlling family members leads to fewer perks being consumed by hired CEOs, compared with non-family firms. Consistent with the results in Tables 3 and 4, we find that the coefficient on *EXCESS_COMP* is significantly positive and that on *CEO_OWN* is significantly negative.

We also estimate equation (3) by using the disclosed costs of a CEO's personal use of corporate aircraft as the dependent variable, and the results are reported in Table 6. We find that these results are similar to those reported in Table 5.

[Insert Table VI here]

To summarize, the results in Tables V and VI provide additional support for the argument that family firms face less severe agency problems than do non-family firms, which leads to less CEO perk consumption in the former. Further, among family firms, the expropriation risk is least severe in founder CEO-managed firms and most severe in descendent CEO-managed firms.

C. Stock Market Reaction to the Initial Disclosure of a CEO's Perquisite Consumption

Yermack (1996) finds that the stock market reacts negatively to the disclosure of a CEO's first use of a corporate aircraft for personal reasons, which implies that investors view the award of perquisites as a sign of a manager's personal rent-seeking behavior. Accordingly, we also examine whether the stock market reacts differently to the initial perk consumption by founder CEOs, descendent CEOs and hired CEOs of family and non-family firms.

Specifically, following Yermack (2006), we calculate the six-day abnormal stock returns (t = -4 to 1) around the filing date of the proxy statements that contain the disclosure of the CEO's first perk consumption using standard market model methodology.[10]

[Insert Table VII here]

Table VII reports the results for a CEO's first consumption of any perquisite. We find that *only* the initial perk consumption of descendent CEOs is related to significantly negative stock returns (t = -2.23). However, we do not find significantly negative stock market reactions for the other types of CEOs.[11] The 2.1% drop in the stock price indicates that shareholders regard the initial perk consumption of descendent CEOs to be an indication of managerial expropriation. It could also mean that the perk disclosure conveys information about the reputation of the CEOs. On the one hand, the market trusts

[10]In the test of market reaction, a measure of "unexpected perk usage" can be calculated using the probit regression models reported in Table III. However, this is not done here because some sub-groups, particularly the group of descendent-CEO firms, include as few as 15 firms only.

[11] The difference of the stock market reaction is statistically significant between descendent CEOs and non-family firms (t = -1.86), but is insignificant between founder CEOs, hired CEOs and non-family firms, respectively.

the quality of the founders, so their perk consumption is not viewed as bad news. On the other hand, the market could be judging the quality of descendent CEOs prior to the disclosure of perk consumption, and the disclosure confirms the market's suspicion of their entrenchment. In general, this result is consistent with the argument that the minority shareholders of family firms face the greatest risk of expropriation when descendents serve as CEOs.

IV. Robustness Checks

As discussed earlier, although managerial perk becomes more popular in recent years, many firms in our sample still do not disclose any perks. Those firms either provide no perks or the perks they provide are below the SEC's thresholds. However, it is also possible that firms under-report their offering of perks to avoid the perk disclosure.[12] If this reporting bias is related to family ownership or management, then the results reported in this study could be driven by this bias. For example, our finding that family firms provide less perks could be due to those firms' under-reporting of perks.

However, the evidence in prior research is not consistent with the existence of family firms' under-reporting bias of perks. For example, both Ali et al. (2007) and Wang (2006) show that family firms in S&P500 index exhibit higher quality in their financial reporting than non-family firms, and Ali et al. (2007) further shows that the former are

[12] SEC requires firms to disclose the "aggregate incremental cost" of the perks but offers no guidance on the determination of the amounts. It is likely that firms might understate the amounts disclosed or to circumvent the disclosure altogether. The understatement is likely since the incremental costs of some items, such as personal use of corporate aircraft, are very difficult to determine. However, as pointed by Yermack (2006), the SEC has scrutinized firms' disclosure of perks and compensation at least in a few cases (e.g., Tyson Foods) recently. Thus, there is some deterrence against the abuses of the discretion in disclosing the perks. Yermack (2006) further shows that the both the frequency and amount of perk disclosure are not associated with auditor choice. In addition, firms that disclose personal aircraft use by the CEO were more likely than average to be sued for securities fraud before or after the original perk report.

associated with more informative analyst forecasts and smaller big-ask spreads. Whether the superior financial reporting quality of family firms also exists in the perk disclosure can be inferred from analyzing the *voluntarily* disclosure of perks whose amount falls below the threshold required by the SEC. Our analysis (not tabulated) reveals that family firms are more likely to provide voluntary perk disclosure than non-family firms in our sample, although the difference is insignificant. In addition, family firms with founder or hired CEOs are more likely to voluntarily disclose their perks than those with descendent-CEOs. Thus, there is no evidence that family firms, especially those with founder or hired CEOs, are more likely to underreport perks. Hence our results are not likely to be driven by the bias in the perk disclosure, if there is any.[13]

To further examine whether our results are affected by the financial reporting quality, we include a proxy for corporate transparency in the estimation of equations (1) to (3). Following Anderson et al. (2008), we construct the corporate transparency measure based on four individual proxies: trading volume, bid-ask spread, analyst forecast errors, and analyst following.[14] We find that our results remain the same after including the corporate transparency measure in the estimation of equations (1) and (2).[15]

Another issue related to perk disclosure is that the SEC tightened the threshold of disclosure to enhance the transparency in 2006. Before 2006, disclosure was required if the total amount exceeds the lesser of $50,000 or 10% of the executive's salary plus

[13] In the probit and Tobit regressions reported earlier, we include the voluntarily disclosed perks. Results related to family firm variables are robust after censoring those observations to zero.
[14] Anderson et al.'s (2008) measure is constructed by redefining each individual variable as one if the value is above the median and zero otherwise. The four binary variables are summed as a composite measure. This composite measure is further redefined as one if the value is above the median and zero otherwise.
[15] We find that Anderson et al.'s (2008) transparency measure is positively associated with family firms, indicating that family firms are related to better financial reporting quality. This is consistent with prior research's finding mentioned earlier that family firms in the S&P500 index provide better quality of financial reporting.

bonus; whereas after 2006, the threshold was reduced to $10,000 disregard of salary and bonus. This change increased the number of firms disclosing CEO perks from 256 (51%) in 2005 to 307 (61%) in 2006 (see Figure 1). Thus, the sample in 2006 includes many firms whose total perks are relatively small (below $50,000 or 10% of salary plus bonus, whichever is lower) and they might not be comparable to firms disclosing perks earlier under the higher threshold. We rerun the regression models by excluding the data in 2006 and find the main results similar (i.e., family firms are less likely to and provide less perks, and descendent-CEOs consume more perks than other types of CEO.)

Since both the measures of family firms and the provision of executive perks are quite sticky, there is a certain degree of dependency in the residuals in the Probit or Tobit regression model. As a robustness check, we use standard error adjusted for clustering at firm level and a test similar to the Fama-Macbeth approach. Specifically, we first run cross-sectional regression for each year of our sample, and then calculate the t-statistics of the coefficients in the annual regressions. In both tests, all the coefficients on the main independent variables (family, founder, descendent, hired CEO) have the consistent sign and are significant at two-tailed 1% level.

Finally, in the results presented in this study, we define family ownership as a binary variable. As a further robustness check, we replace the binary variable (*FAMILY*) in equations (1) to (3) by the level of family ownership. Specifically, we rank the level of family ownership into deciles and then use the ranking to estimate equations (1) to (3). The results (not tabulated) indicate that family ownership is significantly negatively associated with CEO's consumption of total perks and personal use of corporate jet. Thus,

the result is consistent with the notion that higher level of family ownership is related to lower agency problems and thus reduces CEO's perk consumption.

V. Conclusions

Using the data of perks used by CEOs that are disclosed in the corporate proxy statements of firms in the S&P 500 index, we show that family firms provide fewer perks to their CEOs than do non-family firms. Within family firms, founder-CEOs consume fewer, and descendent-CEOs more, perks. The market reaction to the initial disclosure of CEO's perk consumption is consistent with this pattern: stock prices drop by 2.1% around the first disclosure of a descendent CEO's perk consumption, whereas there is no significant reaction when the market becomes aware of the perk consumption of other types of CEOs.

Our results support our two joint hypotheses. On the one hand, when executive perks are taken as an indication of agency problems, our results show that family ownership and management are associated with various degrees of these problems. On the other hand, when family ownership and management are hypothesized to result in different degrees of agency problems, our results indicate that these problems manifest themselves in the likelihood and amount of CEOs' perk consumption.

Thus, our study contributes to two streams of literature. First, recent research documents that family ownership is associated with higher valuation (Anderson and Reeb, 2003a). Furthermore, this association is due to the value created by the founders who still manage the firms; value is destroyed when the firms are managed by the founders' descendents (Villalonga and Amit, 2006). Our results show that the pattern of value

creation or destruction is consistent with the likelihood and amount of executive perk consumption. Valuation creation (destruction) is observed in situations where family involvement is related to less (more) executive perk consumption.

The second stream of research to which our study contributes is that on executive perk consumption. The research so far has been unable to document a link between executive perk consumption and agency problems. For example, Yermack (2006) finds that the market reacts negatively to the disclosure that a firm permits its executives to use corporate aircraft for personal reasons. However, he finds no association between perk usage and the variables that are measures of agency problems (e.g., managerial ownership and excessive compensation).[16] Our study fills the gap in Yermack (2006) by showing that perk consumption is more likely when agency problems are more severe (e.g., in family firms managed by a descendent-CEO). Conversely, perk consumption is less likely when agency problems are less severe (e.g., in family firms managed by a hired CEO). Thus, it appears that family ownership and management provide more powerful measures of agency problems and allow us to document more direct evidence that executive perks represent a misappropriation of corporate resources, as postulated by Jensen and Meckling (1976) and Grossman and Hart (1980).

We realize that the interpretation of our results is subject to certain limitations. First, executive perquisites are only one of many indications of agency problems. Future studies can use other indications to further support the association between agency problems and family involvement in listed companies. Second, our sample includes all of

[16] Rajan and Wulf (2006) show that perks (primarily corporate jets and chauffeurs) are likely to be provided to enhance managerial productivity. That study, however, is not comparable with ours because they use perks provided for both business and personal uses. In addition, they include a different sample (300 large firms covered in a survey by a consulting firm).

the firms in the S&P 500 that had data available. Although this sample is larger than that used in previous studies (e.g., Yermack [2006] includes 237 large firms listed in *Fortune 500*), it still includes large firms only, and this may limit the generalizability of our results to smaller firms. The third limitation relates to the sample size of firms with descendent CEOs (i.e., only 15). This limits the power of the tests related to this variable and also make it infeasible to incorpoate market expectations of perk usage in the test of market reaction to the initial disclosure of perk consumption in the proxy statement. Finally, unlike Yermack (2006), our study doesn't examine the stock and accounting performance measures of firms subsequent to the initial disclosure of perk consumption. Yermack (2006) shows that firms adopting a policy to allow CEO use of corporate aircraft under-perform the market in stock returns up to two years after the disclosure of this policy. However, there is no under-performance in accounting profitability. Yermack (2006) ascribes the under-performance in stock returns to managers' timing in disclosing personal use of corporate jet. Since more systematic tests are needed to validate this conjecture, we have to defer this "disclosure timing" issue to future studies.

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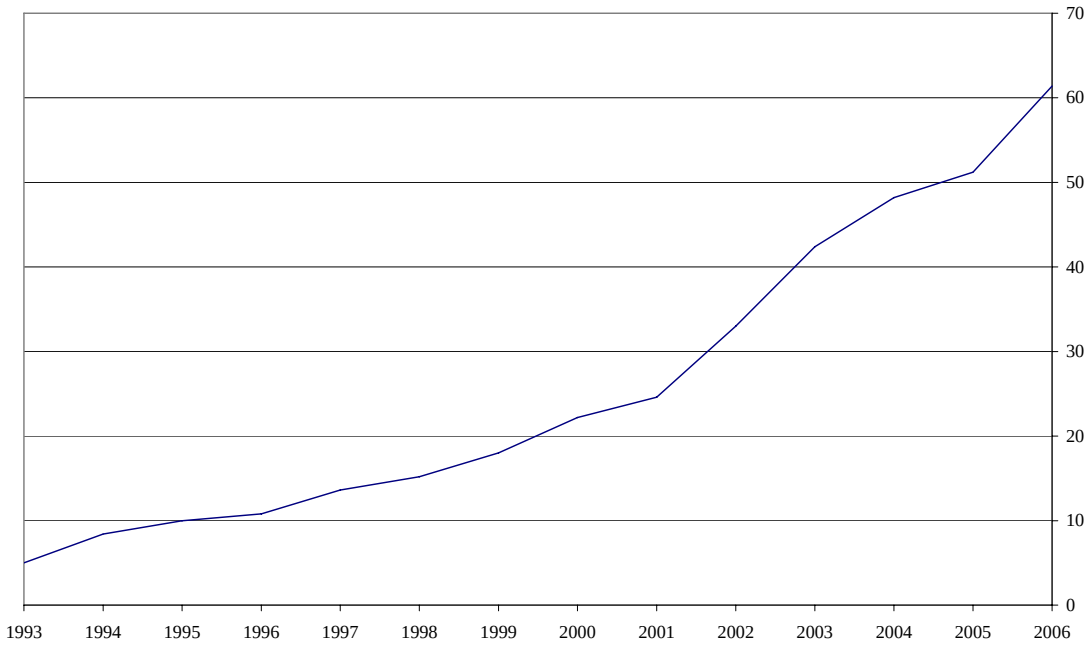

Figure 1. Percentage of S&P 500 Firms Reporting Executive Perk Consumption for Personal Use, 1993 to 2006. This figure presents the percentage of firms included in S&P 500 that report executive consumption of perks for personal use in each year from 1993 to 2006.

Table I
Descriptive statistics of family and non-family firms in S&P 500, 1993-2006

Variable Definitions: *SIZE* is the natural logarithm of market value of equity at the beginning of the fiscal period. *MB* is a firm's market-to-book ratio defined as the market value of equity divided by the book value of equity. *ROA* is earnings before extraordinary items divided by total assets. *LEV* is the long-term debt divided by total assets. *TOTINST* is the percentage of institutional holdings. *TENURE* is the number of years since the CEO assumed the position. *Cash comp* is the natural logarithm of cash salary and bonus received by the CEO in the fiscal year, and *Total comp* is the natural logarithm of *Cash comp* and the value of all other compensation. The numbers reported in "Difference" column are *t*- or *z*-statistics for the difference in the mean or median between family and non-family firms. *** indicates significance at the 0.01 level, and * indicates significance at the 0.10 level.

	Mean			Median		
	Family firm	Non-family firms	Difference (*t*-statistic)	Family firm	Non-family firms	Difference (z-statistic)
SIZE	8.81	8.93	-1.18	8.77	8.95	-0.98
MB	4.63	3.68	9.14***	3.39	2.57	3.30***
ROA	0.15	0.13	8.30***	0.15	0.13	8.71***
LEV	0.16	0.19	-7.82***	0.13	0.17	-10.37***
TOTINST	0.54	0.55	-1.45	0.60	0.62	-1.95*
TENURE	9.11	5.49	18.55***	6.00	4.00	12.27***
Cash comp	13.86	14.21	-3.96***	13.71	14.21	-5.01***
Total comp	14.99	15.35	-4.11***	15.11	15.38	-3.43***
No. of firm-year observation	2,478	4,522		2,478	4,522	
No. of unique firms	177	323		177	323	

Table II
Descriptive statistics of CEO perks

[a]The means and medians of disclosed amounts of CEO's total perks include non-zero observations only. The number of observations is 556 in family firms, and 1,254 in non-family firms.
[b]The numbers reported in "Difference" column are *z*- or *t*-statistics for the difference in the percentage (or mean) between family and non-family firms.
*** indicates significance at the 0.01 level and ** indicates significance at the 0.05 level.

	Percentage or Mean		
	Family firms	Non-family firms	Difference[b]
Firms disclosing any CEO personal perks (%)	22.3%	27.7%	-4.47***
Among disclosing firms, % of firms whose CEO personal perks include personal use of corporate aircraft	69.4%	68.7%	---
Disclosed amounts of CEO's total perks (natural log)[a]	10.97	11.14	-2.92**
Percentage of the cost of personal use of corporate aircraft in total perks	55.6%	54.0%	---
Perks-related information from other sources			
Company owns or leases aircraft (%)	50.3%	68.1%	-3.58***
CEO has golf club membership (%)	17.6%	24.6%	-6.72***
No. of firm-year observations	2,478	4,522	

Table III
Probit Regression of the Likelihood of CEO's Consumption of Any Perquisites

Variable Definitions: The dependent variable *DUMMY_PERK* is a binary variable that equals one if the CEO has been offered perquisites, and zero otherwise. *FAMILY* is a dummy variable that equals one if the company is a family firm, and zero otherwise. *FOUNDER* is a dummy variable that equals one if the family firm's CEO is its founder, and zero otherwise. *DESCENDENT* is a dummy variable that equals one if the family firm's CEO is the descendent of its founder, and zero otherwise. *HIRED_CEO* is a dummy variable that equals one if the family firm's CEO is not related to the firm's founding family, and zero otherwise. *EXCESS_COMP* measures the CEO's excessive compensation and is the residuals from the regression of the CEO's total compensation on CEO tenure, firm size, abnormal stock performance, year dummy variables, and industry dummy variables. *CEO_OWN* is the percentage of a CEO's stock ownership. *SIZE* is the natural logarithm of market capitalization at the end of the fiscal year. *LEV* is the long-term debt divided by total assets. *AGE* is the CEO's age. *TOTINST* is the percentage of institutional holdings. *TREND* is the year minus 1993. *ROA* is earnings before extraordinary items divided by total assets. *MB* is a firm's market-to-book ratio defined as the market value of equity divided by the book value of equity. *TENURE* is the number of years since the CEO assumed the position. The model uses Fama-French industry definitions. *** indicates significance at the 0.01 level, ** indicates significance at the 0.05 level, and * indicates significance at the 0.10 level.

Panel A: Family vs. Non-family Firms

Variables	Predicted Sign	Coefficient	z-statistics	Marginal probability
Intercept	?	-1.27***	-4.31	-
FAMILY	-	-0.25***	-5.45	-0.07
EXCESS_COMP	+	0.00***	4.84	0.00
CEO_OWN	-	-0.01***	-4.66	-0.00
SIZE	-	0.01	0.47	-0.00
LEV	?	-0.09	-0.46	-0.09
AGE	-	-0.01	-1.16	-0.00
TOTINST	-	-0.18**	-2.00	-0.05
TREND	+	0.17***	26.49	0.05
ROA	+	0.07	0.27	0.02
MB	?	-0.02***	-2.78	-0.00
TENURE	+	0.01**	2.09	0.00
Likelihood Ratio		2724.1		
Pseudo R^2		20.3%		
No. of observations		5,814		

Panel B: Founder CEOs, Descendent CEOs, and Hired CEOs of Family firms vs. Non-Family Firms

Variables	Predicted Sign	Coefficient	z-statistics	Marginal probability
Intercept	?	-1.24***	-4.19	-
FOUNDER	-	-0.28***	-3.91	-0.08
DESCENDENT	+	0.34***	3.61	0.10
HIRED_CEO	-	-0.21***	-3.74	-0.06
EXCESS_COMP	+	0.00***	4.89	0.00
CEO_OWN	+	-0.00***	-4.87	-0.00
SIZE	-	-0.00	-0.98	-0.00
LEV	?	-0.29*	-1.81	-0.09
AGE	-	-0.00	-1.34	-0.00
TOTINST	-	-0.19**	-2.10	-0.06
TREND	-	0.17***	26.53	0.05
ROA	+	0.08	0.30	0.02
MB	?	-0.02***	-2.82	-0.00
TENURE	+	0.01**	2.43	0.00
Likelihood Ratio	2723.3			
Pseudo R^2	20.4%			
No. of observations	5,814			

Table IV
Probit Regression of the Likelihood of CEO's Personal Use of Corporate Aircraft

Variable Definitions: The dependent variable *DUMMY_AIRCRAFT* is a binary variable that equals one if the CEO is allowed to use the company aircraft for personal purposes, and zero otherwise. *FAMILY* is a dummy variable that equals one if the company is a family firm, and zero otherwise. *FOUNDER* is a dummy variable that equals one if the family firm's CEO is its founder, and zero otherwise. *DESCENDENT* is a dummy variable that equals one if the family firm's CEO is the descendent of its founder, and zero otherwise. *HIRED_CEO* is a dummy variable that equals one if the family firm's CEO is not related to the firm's founding family, and zero otherwise. *EXCESS_COMP* measures the CEO's excessive compensation and is the residuals from the regression of the CEO's total compensation on CEO tenure, firm size, abnormal stock performance, year dummy variables, and industry dummy variables. *CEO_OWN* is the percentage of a CEO's stock ownership. *SIZE* is the natural logarithm of market capitalization at the end of the fiscal year. *LEV* is the long-term debt divided by total assets. *AGE* is the CEO's age. *TOTINST* is the percentage of institutional holdings. *TREND* is the year minus 1993. *ROA* is earnings before extraordinary items divided by total assets. *MB* is a firm's market-to-book ratio defined as the market value of equity divided by the book value of equity. *TENURE* is the number of years since the CEO assumed the position. *AIR_T1* is the dummy variable one if the company headquarters are within one hour's drive of a Tier I airport. *AIR_T2* is the dummy variable one if the company headquarters are within one hour's drive of a Tier II airport. *GOLF* is a dummy variable one if the CEO has an out-of-state golf club membership or is a member of the Augusta Golf Club. The model uses Fama-French industry definitions. *** indicates significance at the 0.01 level and * indicates significance at the 0.10 level.

Panel A: Family vs. Non-Family Firms

Variables	Predicted Sign	Coefficient	z-statistics	Marginal probability
Intercept	?	-4.39***	-12.11	-
FAMILY	-	-0.23***	-4.32	-0.04
EXCESS_COMP	+	0.01***	3.60	0.00
CEO_OWN	-	-0.01***	-3.79	-0.00
SIZE	-	0.01	0.47	-0.00
LEV	?	-0.09	-0.46	-0.01
AGE	-	-0.01	-1.32	-0.00
TOTINST	-	-0.20*	-1.87	-0.03
TREND	+	0.19***	22.82	0.03
ROA	+	0.35	1.15	0.06
MB	?	-0.01	-1.03	-0.00
TENURE	+	0.01	1.56	0.00
AIR_T1	+	0.07	1.29	0.01
AIR_T2	+	0.04	0.74	0.01
GOLF	+	0.60***	10.90	0.12
AIR_REG	+	1.88	15.37	0.16
Likelihood Ratio		1955.7		
Pseudo R^2		30.3%		
No. of observations		5,814		

Panel B: Founder CEOs, Descendent CEOs, and Hired CEOs of Family firms vs. Non-Family Firms

Variables	Predicted Sign	Coefficient	z-statistics	Marginal probability
Intercept	?	-4.39***	-12.08	-
FOUNDER	-	-0.26***	-3.06	-0.04
DESCENDENT	+	0.19*	1.81	0.03
HIRED_CEO	-	-0.22***	-3.41	-0.03
EXCESS_COMP	+	0.00***	3.61	0.00
CEO_OWN	-	-0.00***	-3.79	-0.00
SIZE	-	-0.00	-0.47	-0.00
LEV	?	-0.09	-0.45	-0.01
AGE	-	-0.01	-1.31	-0.00
TOTINST	-	-0.19*	-1.83	-0.03
TREND	+	0.19***	22.78	0.03
ROA	+	0.35	1.14	0.06
MB	?	-0.01	-1.30	-0.00
TENURE	+	0.01	1.55	0.00
AIR_T1	+	0.07	1.25	0.01
AIR_T2	+	0.04	0.74	0.01
GOLF	+	0.60***	10.89	0.12
AIR_REG	+	1.89***	15.34	0.16
Likelihood Ratio		1955.6		
Pseudo R^2		30.3%		
No. of observations		5,814		

Table V
Tobit Regression of the Disclosed Costs of a CEO's Total Perks

Variable Definitions: The dependent variable *TOTAL_PERK* is the natural logarithm of the total disclosed costs of a CEO's perk consumption. *FAMILY* is a dummy variable that equals one if the company is a family firm, and zero otherwise. *FOUNDER* is a dummy variable that equals one if the family firm's CEO is its founder, and zero otherwise. *DESCENDENT* is a dummy variable that equals one if the family firm's CEO is the descendent of its founder, and zero otherwise. *HIRED_CEO* is a dummy variable that equals one if the family firm's CEO is not related to the firm's founding family, and zero otherwise. *EXCESS_COMP* measures a CEO's excessive compensation and is the residuals from the regression of the CEO's total compensation on CEO tenure, firm size, abnormal stock performance, year dummy variables, and industry dummy variables. *CEO_OWN* is the percentage of a CEO's stock ownership. *SIZE* is the natural logarithm of market capitalization at the end of the fiscal year. *LEV* is the long-term debt divided by total assets. *AGE* is the CEO's age. *TOTINST* is the percentage of institutional holdings. *TREND* is the year minus 1993. *ROA* is earnings before extraordinary items divided by total assets. *MB* is a firm's market-to-book ratio defined as the market value of equity divided by the book value of equity. *TENURE* is the number of years since the CEO assumed the position. The model uses Fama-French industry definitions. *** indicates significance at the 0.01 level, ** indicates significance at the 0.05 level, and * indicates significance at the 0.10 level.

Panel A: Family vs. Non-Family Firms

Variables	Predicted Sign	Coefficient	t-statistics
Intercept	?	-5.29***	-4.64
FAMILY	-	-1.09***	-5.82
EXCESS_COMP	+	0.01***	5.11
CEO_OWN	-	-0.01***	-4.63
SIZE	-	-0.01	0.84
LEV	?	-1.16*	1.74
AGE	-	-0.01	-0.82
TOTINST	-	-0.75**	-2.05
TREND	-	0.71***	31.04
ROA	+	-0.04	-0.03
MB	?	-0.06**	-2.48
Adjusted R^2	10.3%		
N	5,814		

Panel B: Founder CEOs, Descendent CEOs, and Hired CEOs of Family Firms vs. Non-Family Firms

Variables	Predicted Sign	Coefficient	z-statistics
Intercept	?	-5.23***	-4.56
FOUNDER	-	-1.20***	-3.98
DESCENDENT	+	1.46***	3.81
HIRED_CEO	-	-0.93***	-4.12
EXCESS_COMP	+	0.01***	5.10
CEO_OWN	-	-0.01***	-4.67
SIZE	-	-0.00	-0.84
LEV	?	-1.10	-1.64
AGE	-	-0.01	-0.93
TOTINST	-	-0.78**	-2.11
TREND	-	0.71***	30.89
ROA	+	-0.01	-0.01
MB	?	-0.06**	-2.53
TENURE	+	0.04***	2.70
Pseudo R^2	10.3%		
N	5,814		

Table VI
Tobit Regression of the Disclosed Costs of a CEO's Personal Use of Corporate Aircraft

Variable Definitions: The dependent variable *AIRCRAFT* is the natural logarithm of the disclosed costs of a CEO's personal use of corporate aircraft. *FAMILY* is a dummy variable that equals one if the company is a family firm, and zero otherwise. *FOUNDER* is a dummy variable that equals one if the family firm's CEO is its founder, and zero otherwise. *DESCENDENT* is a dummy variable that equals one if the family firm's CEO is the descendent of its founder, and zero otherwise. *HIRED_CEO* is a dummy variable that equals one if the family firm's CEO is not related to the firm's founding family, and zero otherwise. *EXCESS_COMP* measures a CEO's excessive compensation and is the residuals from the regression of the CEO's total compensation on CEO tenure, firm size, abnormal stock performance, year dummy variables, and industry dummy variables. *CEO_OWN* is the percentage of the CEO's stock ownership. *SIZE* is the natural logarithm of market capitalization at the end of the fiscal year. *LEV* is the long-term debt divided by total assets. *AGE* is the CEO's age. *TOTINST* is the percentage of institutional holdings. *TREND* is the year minus 1993. *ROA* is earnings before extraordinary items divided by total assets. *MB* is a firm's market-to-book ratio defined as the market value of equity divided by the book value of equity. *TENURE* is the number of years since the CEO assumed the position. *AIR_T1* is the dummy variable one if the company headquarters are within one hour's drive of a Tier I airport. *AIR_T2* is the dummy variable one if the company headquarters are within one hour's drive of a Tier II airport. *GOLF* is the dummy variable one if the CEO has an out-of-state golf club membership or is a member of the Augusta Golf Club. The model uses Fama-French industry definitions. *** indicates significance at the 0.01 level, ** indicates significance at the 0.05 level, and * indicates significance at the 0.10 level.

Panel A: Family vs. Non-Family Firms

Variables	Predicted Sign	Coefficient	t-statistics
Intercept	?	-9.30***	-6.59
FAMILY	-	-0.94***	-4.06
EXCESS_COMP	+	0.01***	4.44
CEO_OWN	+	-0.01***	-3.26
SIZE	+	-0.01	0.27
LEV	-	-0.86	1.04
AGE	-	-0.03*	-1.80
TOTINST	?	-1.09**	-2.36
TREND	-	0.81***	26.37
ROA	-	-0.36	-0.27
MB	+	-0.02	-0.78
TENURE	+	0.02	1.12
AIR_T1	?	0.78***	3.10
AIR_T2	+	0.30	1.31
GOLF	+	1.84***	8.21
Likelihood Ratio		4664.1	
Pseudo R^2		12.1%	
N		5,814	

Panel B: Founder CEOs, Descendent CEOs, and Hired CEOs of Family firms vs. Non-Family Firms

	Sign	Coefficient	t-statistics
Intercept	?	-9.23***	-6.49
FOUNDER	-	-0.83**	-2.20
DESCENDENT	+	1.34***	2.69
HIRED_CEO	-	-0.90***	-3.17
EXCESS_COMP	+	0.00***	4.44
CEO_OWN	-	-0.00***	-3.21
SIZE	-	-0.00	-0.28
LEV	?	-0.81	-0.97
AGE	-	-0.03*	-1.83
TOTINST	-	-1.17**	-2.53
TREND	+	0.81***	26.32
ROA	+	-0.42	-0.31
MB	?	-0.02	-0.79
TENURE	+	0.02	1.21
AIR_T1	+	0.79***	3.10
AIR_T2	+	0.30	1.30
GOLF	+	1.84***	8.19
Likelihood Ratio		4635.9	
Pseudo R^2		12.1%	
No. of observations		5,814	

Table VII
Stock Market Reactions to CEO's First Perk Consumption Six-day cumulative abnormal returns around the disclosure of a CEO's first perk consumption

Variable Definitions: *CAR* is the [-4, 1] abnormal stock return around the announcement date of the proxy statements that contain the disclosure of a CEO's first perquisite consumption. The abnormal returns are calculated using standard market model methodology and are reported for each type of CEO. The numbers in parentheses reported in each column test whether the CAR in each cell is significantly different from zero. ** indicates significance at the 0.05 level and * indicates significance at the 0.10 level.

	Mean				Median			
	Family firms			Non-family firms	Family firms			Non-family firms
	Founder CEO	Descendent CEO	Hired CEO		Founder CEO	Descendent CEO	Hired CEO	
6 Day CAR	-0.003 (-0.25)	-0.021** (-2.23)	-0.010 (-1.34)	0.001	0.005 (0.37)	-0.019* (-1.73)	-0.007 (-1.45)	-0.001
N	36	15	49	215	36	15	49	215