Geography and the Market for CEOs*

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Abstract

I examine the role of geography in the labor market for CEOs. I begin by investigating the joint distribution of CEO state of origin and firm headquarters location and find that the frequency with which firms hire CEOs from their own state is five times more than is expected under a model where geography plays no role in the hiring process. When considering only external hiring decisions, this figure falls to just under three times. I show that geography affects both labor supply and labor demand. Specifically, smaller, less R&D-intensive firms located in less desirable locations, with weaker board incentive alignment, and whose previous CEO was locally hired are more likely to hire local CEOs. Compensation and turnover are lower for local CEOs than for non-local CEOs and adjusted operating performance significantly decreases when firms replace non-locally hired CEOs with local CEOs. These findings are consistent with the existence of search costs, agency conflicts and CEO geographic preference.

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I Introduction

Is the market for CEOs of large U.S. public corporations geographically segmented so that the probability of a CEO being hired by a firm depends on his state of origin as well as on the location of the firm? It would seem logical for the answer to this question to be "No." Labor market segmentation is often attributed to search costs, on the demand side, and moving costs or lack of transferability of skills, on the supply side. It is not likely that any of these factors play a role in the U.S. market for CEOs since search costs should be negligible for large corporations and CEOs are highly talented and highly paid individuals.[1] That the market for CEOs is national in nature, is in fact the presumption in the finance literature. For instance, in examining the effect of geography on broad based stock option plans, Kedia and Rajgopal (2009) write that "... labor markets for top executives are likely to be nationally segmented rather than geographically segmented." However, to my knowledge, there is no systematic study testing whether or not geography plays a role in the market for CEOs. This paper seeks to fill this void by testing empirically whether or not the market for CEOs is geographically segmented and if so why this is the case.

In order to conduct a test of geographic segmentation in the market for CEOs it is necessary to know the joint geographic distribution of firms and CEOs. Although it is easy to proxy for firm geography using the state of the firm's headquarters, measuring geographic attributes of CEOs can be much more difficult. I focus on state in which the CEO "grew up", or CEO state of origin. I obtain this data by combining two facts. First, social security numbers are issued by state; the first three numbers are linked to the state of issuance. Second, prior to the 1980's, individuals obtained social security numbers during adolescence when applying for their first job. Combining these facts, a CEO's social security number may reveal the state that he/she considers "home." I therefore begin my study by collecting a unique dataset of CEO state of origin for 12,974 firm-year observations of non-financial, non-utility S&P 1,500 firms covered by S&P's Execucomp database for the years 1997 through 2007. In total, the sample includes 2,820 unique CEOs from 1,594 unique firms.

[1] Kaplan and Rauh (2007) report that the median total compensation in 2004 for CEOs of non-financial firms was $2.54 million which is nearly 57 times the $44,684 U.S. median household income reported by the 2004 American Community Survey. This suggests that moving costs as a percentage of wealth for CEOs is negligible compared to the typical American family.

Upon inspection of the joint geographic distribution of firm headquarters location and CEO state of origin I find a striking pattern. For 3,912 (30.2%) of the 12,974 firm-year observations in the sample, the CEO's state of origin matches the firm's headquarters location. This preliminary evidence is suggestive of the existence of a local element in the market for CEOs.

After observing this pattern, I conduct formal tests for the existence of this local element. The tests are based on the following logic, if geography does not play a role in the market for CEOs, then the probability that a firm hires a CEO from its own state should be equal to the proportion of the CEO labor supply from that state. To limit the role of survivorship bias in the tests, the tests focus on the flow of CEOs, or the hiring decisions. In total there are 1,162 hiring decisions between 1998 and 2007 with which to conduct tests for a local hiring bias. I create a measure of the local hiring bias, which I refer to as the *hiring home bias*. The hiring home bias is essentially the observed percentage of local hires minus the expected number of local hires under the assumption that CEO state of origin is random. If geography does not play a role in the market for CEOs, then the hiring home bias should be indistinguishable from zero. For the full sample of hiring decisions this bias is 19.2%. Effectively, firms in the sample are over five times more likely to hire a local CEO than would be expected if geography does not play a role in the matching process. I find that a significant hiring home bias exists in 30 of the 43 sample states, and in each of the sample years. When considering only externally hired CEOs, local hiring decisions are roughly 3 times more likely than expected if geography does not play a role in the market for CEOs.[2]

Concluding that the market for CEOs is geographically segmented, I then ask why this is the case. I propose five theories that could explain the tendency of firms to hire locally. Included are both demand- and supply-driven theories, some of which are rational and others behavioral. Specifically, I test whether firms hire locally because the costs of extending the search process geographically outweigh the potential gains (*search costs theory*), because cultural "matching" facilitates the production process (*cultural matching theory*), because the selection committee is lazy (*shirking*

[2]The literature on CEO successions makes the distinction between firms hiring internally and externally (see for example Parrino (1997), Borokhovich, Parrino, and Trapani (1996), and Agrawal, Knoeber, and Tsoulouhas (2006)). Throughout the study I am careful to differentiate the results due to geography versus those found previously to be due to firms hiring internal CEOs.

theory), because the selection committee has a preference for "hiring their likes" (*cronyism theory*), or because CEOs have a preference for living and working close to home (*geographic preference theory*). These theories originate from both traditional labor economic theory and from field research evidence by Khurana (2002), who argues that the CEO labor market should not be viewed as a market in the classical sense.

I begin my assessment of the relative merits of these theories by testing for differences in firm, hired CEO, and predecessor CEO characteristics for local versus non-local hiring decisions. Consistent with the search cost theory these univariate tests indicate that firms that hire locally are smaller and less R&D intensive. Consistent with the agency theories of cronyism and shirking, firms that hire locally have lower outside board membership. When compared to firms that do not choose to hire locally, firms that hire locally more often have a predecessor CEO that is local. This finding could be due to cronyism, cultural matching, or search costs. Throughout the study I proxy for the desirability of a firm's location by the average percentage of clear days in the city of the firm's headquarters. The geographic preference theory predicts that firms in more desirable locations are better able to attract CEO talent. The univariate tests, suggest that this is indeed the case. I find that firms in more desirable locations are less likely to hire locally and that CEOs from less desirable places are more likely to be hired outside their home state.

I next test to see to what degree proxies for each of the theories can explain sample firms' decisions to hire local CEOs using a probit regression. Many of the univariate results are confirmed by these tests, smaller, less R&D intensive firms with weaker board/shareholder incentive alignment, located in less desirable locations, with locally hired predecessor CEOs are more likely to hire locally. An interesting finding uncovered in this analysis is that the supply-driven effect of the CEO geographic preference is remarkably large. For the average firm in the sample, a one standard deviation increase in the average percentage of clear days (0.085) decreases its probability of hiring locally by 0.05, this is nearly a 20% decrease in the probability of hiring locally. Another interpretation is that if the average firm in the sample is located in Cleveland, Ohio where the average percentage of clear days is 18.1%, the predicted probability that the firm hires a local CEO is 0.328. If that same firm is located in Los Angeles, CA where on average 43.1% of days are clear, the predicted probability of

hiring a local CEO is only 0.192. In this case, geographic preferences of the CEO supply make it 71% more likely that a firm located in Cleveland, OH must hire locally, than a similar firm located in Los Angeles, CA.

After uncovering this large labor supply effect, I further test the proposed theories of why firms hire local CEOs by focusing on the theories' predictions for executive compensation. If CEO geographic preference is truly influencing geographic segmentation of the market for CEOs, then local CEOs should be paid less than non-local CEOs. The assumption is that CEOs have a geographic preference for their home state. This may be because it is likely that CEOs have a larger network of family, friends, and business contacts in their home state. Living in close proximity to these networks is preferable for CEOs. If the geographic preference theory is correct, then there exists a tradeoff between compensation and geography for CEOs . This tradeoff predicts that on average, local CEOs will require lower compensation than non-local CEOs of the same ability. I find that local CEOs in their first full year of tenure receive 19% less compensation than non-locally hired CEOs. This finding that local CEOs are paid less is also consistent with the search costs and shirking theories, since CEOs hired locally may be of lower ability than non-local CEOs.

In order to more adequately control for unobservable firm characteristics I use a difference-in-difference approach to investigate changes in wages from the predecessor to the successor CEOs. My findings are generally supportive of earlier findings on compensation levels, however I find an asymmetric effect in changes in compensation. On average there is no significant change in compensation from the predecessor CEO to the successor CEO for the sample, but when a non-local CEO replaces a local CEO the new CEO requires a wage premium. However, when a local CEO replaces a non-local CEO, the new CEO does not accept a discount in pay. Overall the findings from the analysis of executive compensation are consistent with search costs, shirking, geographic preferences and sticky wages.

I next examine CEO turnover. Both the search costs and shirking theories predict that CEO turnover should be decreasing in the magnitude of search costs or of the shirking, but suggest that whether a CEO is local or not should have no effect on CEO turnover. The cronyism, cultural matching and geographic preference theories all predict that turnover should be lower for local

CEOs than non-local CEOs. I test this prediction using a probit regression and find support for these theories. The predicted probability of turnover when the CEO of the average firm is local is 0.077 compared to 0.102 when the CEO is not local. In addition to lower turnover for local CEOs, the cronyism theory also predicts that local managers may be more immune to disciplinary action by the board. I therefore investigate the performance sensitivity of turnover for local CEOs, but find no evidence that local managers are less likely to be disciplined for poor performance. In fact, I find weak evidence that local CEOs are more sensitive to the stock market performance of their firm's industry.

I conclude the analysis by investigating the relationship between hiring locally and adjusted operating performance. A difference-in-difference approach is taken to mitigate the effects of time invariant unobservable firm characteristics. I analyze these differences first in a univariate and then using a multiple regression model. The cultural matching theory predicts that locally hired CEOs may be more effective managers since their cultural match with the firm facilitates the production process. The agency theories of cronyism and shirking, as well as the search cost theory suggest that hiring locally may be a signal of lower ability CEOs. Similar to the idea of Bennedsen, Nielsen, Perez-Gonzalez, and Wolfenzon (2007), where family firms may limit the talent pool to only family members, these theories predict that the talent pool may be limited to only local candidates. If this is the case, then firms that replace a non-local CEO with a local CEO may experience erosion in performance and firms that replace a local CEO with a non-local CEO may experience an increase in operating performance. Consistent with these theories, I find that in the univariate tests, regardless of the predecessor CEO's origin, that industry, size, and prior performance-adjusted operating performance increases following the decision to hire a non-local CEO. Also, consistent with these theories, I find evidence that size and industry-adjusted operating performance declines when firms replace non-local CEOs with local CEOs and that size, industry, and prior performance-adjusted ROA increases when firms replace local CEOs with non-local CEOs.

Turning to the multiple regression results, I find that after controlling for firm characteristics known to affect changes in firm operating performance, the results consistent with the agency theories and search costs theory continue to hold. The results suggest that firms that change from

non-local CEOs to a local CEOs experience decreases in size and industry-adjusted ROA of 0.023 beyond those firms that have no such change in CEO origin from predecessor to successor CEO. This figure increases to 0.034 when considering size and industry-adjusted ROA. These changes in operating performance are sizable given that the median firm has unadjusted ROA of 0.137 in the fiscal year prior to the hiring decision. Inconsistent with the agency theories however, I find that this relationship between changes in firm performance and changes in CEO origin is not mitigated by better board incentives.

This paper proceeds as follows. In section II, I explain in greater detail why geography may matter in the market for CEOs. In section III, I describe the sample and the data collection process for CEO state of origin. In section IV, I test for a geographic segmentation in the market for CEOs. In section V, I conduct tests of why the market for CEOs is geographically segmented, In sections VI, VII, VIII, I test the predictions of the theories outlined in section II for executive compensation, CEO turnover, and changes in operating performance, respectively. In section IV, I conclude.

II Economics of the market for CEOs

In this section I outline several theories of how and why geography may play a role in the market for CEOs. For most of these theories the implication for firm hiring practices is that firms will tend to hire local CEOs with greater frequency than is expected in a frictionless market void of imperfections or geographic preferences. Although all of these theories predict that on average firms should have a local bias when hiring, they make different predictions in regard to the types of firms in which the local hiring bias should be the strongest. The theories also differ in their predictions for CEO compensation, turnover, and firm operating performance. Later, I use these competing predictions when conducting the empirical analysis to disentangle to what degree each theory is present in the market for CEOs. In order to make the differences in the various theories of the CEO labor market perfectly clear, I outline a general version of the baseline model. When explaining alternative theories, I show how each of the theories deviates from this baseline model.

The baseline model considered is a competitive model of heterogeneous managers and firms,

where managerial ability is an input in the production process, similar to that of Gabaix and Landier (2008).[3] Firms for which managerial ability is more productive will seek higher ability CEOs and higher ability CEOs will command a higher wage. In the model of Gabaix and Landier (2008), this leads to the efficient assignment of the best managers to the largest firms. Explicitly, labor demand is derived from the behavior of value-maximizing firms that offer a wage, w, to a manager of ability a, so that these choices of w and a maximize firm value, $\Pi(w, a)$. It is assumed that Π is increasing in a and decreasing in w. Labor supply is determined by the pool of utility maximizing managers, who maximize $U(w)$ subject to their outside option, $\bar{U}(a)$. In this baseline model, utility of managers depends only on compensation, and reservation utility depends only on ability.[4]

A Demand for CEOs

In reality the CEO hiring process is much more complicated than the baseline model suggests. Corporate boards form selection committees, these committees are often composed of the director in charge of the compensation committee along with other volunteers from the board (Khurana, 2002). It is also common for a powerful incumbent CEO to influence the board in the selection of his successor (Zajac and Westphal, 1996). Although theoretically, the selection committee is charged with choosing the manager that will lead to the maximization of shareholder value, Khurana (2002) describes the CEO selection as a process wrought with search costs, agency conflicts, and cronyism and suggests that selecting managers to "fit" corporate culture is also an important determinant in the selection process. In light of this evidence, I propose four theories of labor demand that suggest a role for geography in the market for CEOs, *search costs*, *cultural matching*, *shirking*, and *cronyism*. The role of geography in CEO demand for the first three of these theories is a result of the rational interaction of economic agents. For the *cronyism* theory the role of geography stems from a behavioral bias of the selection committee. Both *search costs* and *cultural matching* suggest that firms hiring locally can lead to efficient economic outcomes, whereas the agency cost theories

[3] Murphy and Zabojnik (2004, 2007) provide a partial equilibrium model where the firm's production function depends on the degree of general or specific managerial talent.

[4] Although this is a model of heterogeneous managers and firms, for simplicity I omit subscripts.

of *cronyism* and *shirking* lead to inefficient outcomes. I now explain these theories in more detail.

A.1 Search costs

It is possible that the executive search process is costly for firms. This cost may stem from diverting firm resources away from the production process in order to conduct the search, or there could be an explicit fixed cost such as the cost of hiring an executive search firm. Both Bebchuk and Fried (2004) and Khurana (2002) discuss the role and prevalence of executive search firms in the CEO hiring process. The mere existence of these firms suggests that search is costly in the market for CEOs. If hiring from the local supply of CEOs does not require these search costs (or has lower search costs), then only firms that stand to benefit from conducting a wider search will engage in one. This theory suggests that larger firms and firms in which managerial input is more productive will choose to conduct a nationwide search for CEO candidates, whereas smaller firms or firms where managerial input is less productive may choose not to conduct such a search. The search cost theory of CEO demand implies that smaller, less technical firms will tend to hire locally and that compensation of local CEOs hired by large companies should be lower than that of non-local CEOs hired by firms of the same size.[5]

For the search costs theory, labor demand changes from the baseline model in the following way, instead of firms maximizing $\Pi(w, a)$, they maximize $\Pi(w, a, C(g))$, where $C(g)$ is a cost associated with the search process. This cost could depend on geography, g (i.e. a broader search is more expensive) or it could just be a fixed cost, where $C(g)$ is the cost to the firm of hiring an executive search firm, for example.

A.2 Cultural matching

There is a growing literature on the effects of culture on economic outcomes (see Guiso et al. (2006) for a recent review). If culture is an input in the production process and there are regional cultural differences, then it could be optimal for firms to hire local CEOs. The cultural matching theory of

[5]Firms in which managerial input is less productive should hire less talented CEOs and less talented CEOs have lower outside options.

CEO demand suggests that firms will pay a premium for a local CEO over a non-local CEO with the same ability, since the cultural "match" of local CEOs aid the production process. Explicitly, the baseline model of labor demand changes from firms choosing w and a to maximize $\Pi(w, a)$, to firms choosing w, a, and c to maximize $\Pi(w, a, c)$, where c is a cultural characteristic of the manager and can be more or less productive for a firm depending on its match with the firm.

A.3 Shirking

The first two theories discussed assume that the selection committee selects the manager that maximizes firm value. The next two theories of CEO demand relax this assumption by introducing an agency problem between the selection committee and shareholders. These theories are closely related to the "managerial power" approach to executive compensation of Bebchuk and Fried (2004). The shirking theory of CEO demand assumes that the hiring process requires effort on the part of the selection committee and that effort is costly for those on the committee. If less effort is required to conduct a local CEO search, then this model predicts that firms with poor board incentive alignment will tend to hire locally. Unlike the previous two theories, this theory leads to an inefficient allocation of CEOs to firms.

In relation to the baseline model, the shirking theory introduces an agency cost, so previously labor demand was derived by value maximizing firms, but under the shirking theory it is determined by value maximizing agents. Labor demand is derived in the following way, the selection committee chooses w, a, and e to maximize utility, $V(\Pi(w, a(e)), 1 - e)$, where e is the effort exerted by the selection committee in the search. It is assumed that search is costly for the search committee and that conducting a wider search is more effort. V is decreasing in the search committee's effort level, but is increasing with firm value and since the ability of the manager chosen depends on the effort exerted by the search committee and firm value is increasing with managerial ability, there is a tradeoff between maximizing firm value and exerting effort.

A.4 Cronyism

Like the shirking theory, the cronyism theory of CEO demand stems from a selection committee/shareholder agency problem. The cronyism theory posits that CEOs are hired based not only on their ability, but that some preference is given for their "fit" with the selection committee. Zajac and Westphal (1996) show evidence that boards favor new CEOs who are demographically similar to them. If inside board members tend to be local, then the cronyism theory of CEO demand predicts that firms with lower board independence are more likely to hire locally. Under this theory it is also possible that the selection committee may choose someone less competent for their private benefits. For example, they may hire a son-in-law, friend, or son of a friend, who are more likely to allow the board members to keep their board seats or continue a consulting contract with the firm. For the cronyism theory of CEO demand, the local hiring bias stems from a behavioral bias of the selection committee and is not due to the rational interaction of economic agents. Like the shirking theory, the cronyism theory leads to an inefficient allocation of CEOs to firms.

For the cronyism theory, labor demand is derived similarly to that of the shirking theory, the selection committee chooses w, a, and b to maximize utility, $V(\Pi(w,a),b)$, where b is some characteristic of the manager that provides no value to the firm, but is considered in the selection process due to a bias of the selection committee. It is possible that this bias favors those demographically similar to the selection committee (Zajac and Westphal, 1996). If directors are local, then it is possible that this bias would be toward hiring local CEOs.[6]

B Supply of CEOs

It is also possible that geography may play a role in the market for CEOs through the supply side of the market. Labor force immobility, which is often attributed to either non-transferability of skills or to moving costs, has a plausible influence on labor supply for most markets. However, it is not likely that either of these factors play a role in the market for CEOs, since CEOs are highly

[6]Fahlenbrach, Low, and Stulz (2008) find that outside CEO directors are from firms geographically close to the firms' boards they sit on.

talented and highly paid individuals.[7] A more likely theory of why geography may matter for the supply of CEOs is that CEOs may have a preference for where they live and work (CEO utility depends not only on compensation, but also on geography). If this is the case, then managers may be more inclined to accept employment opportunities in locations that are more desirable to them. This idea that CEOs have geographic preferences leads to the final theory of the role of geography in market for CEOs, the *geographic preference* theory.

B.1 Geographic preference

The geographic preference theory postulates that individuals in the CEO labor pool have a preference for where they work and live. If members of the CEO talent pool have geographic preferences, then these preferences should be considered when deciding whether to accept or reject an offer for employment. The theory predicts that firms headquartered in more desirable locations may be better able to attract CEOs than firms headquartered in less desirable locations. In addition, this theory implies a tradeoff between compensation and geographic preferences. A CEO moving to a less geographically desirable location should require a wage premium over a similarly talented individual who may have a preference for that same location. If individuals with CEO type talents have a stronger network of family, friends, and business contacts near their homes, then this could cause a local geographic preference. If CEOs have a local geographic preference, then firms can hire local CEOs for a lower wage than non-local CEOs with the same ability. This theory suggests that an efficient allocation of firms to CEOs will be influenced by the geographic preferences of the supply of CEOs and has implications for optimal firm location.

Explicitly, this means that labor supply is derived from value maximizing managers, who maximize $U(w, g)$, instead of $U(w)$ under the baseline model. In this theory, utility not only depends on wage, but also on the location of the firm, g. In addition, the outside option of managers may be written as $\bar{U}(a, \bar{g})$, where, $\bar{g}$ is a benchmark location. Maybe this benchmark is where the manager

[7] Kaplan and Rauh (2007) report that the median total compensation in 2004 for CEOs of non-financial firms was $2.54 million which is nearly 57 times the $44,684 U.S. median household income reported by the 2004 American Community Survey. This suggests that moving costs as a percentage of wealth for CEOs is negligible compared to the typical American family.

currently lives, or maybe it is based on a past experience with a location, such as his/her state of origin.

III Data

The data come from three main sources. I use S&P's Execucomp database to identify the CEO of each firm in each year, and for information on CEO age, tenure, and compensation. Using the data from Execucomp, I identify CEOs' states of origin by searching the Lexis Nexis online public record database. I describe this process in detail in the next subsection. All firm level accounting data are from Compustat. In addition to these main sources, I also obtain data on firm-level board and governance characteristics from the RiskMetrics database, security prices from the Center for Research on Security Prices (CRSP), and I use several sources from U.S. government agencies for data on city and state-level demographic and geographic characteristics.

I begin with the sample of firms covered by S&P's Execucomp database for the years 1997 through 2007. In total there are 18,978 firm-year observations averaging 1,725 observations per year. I next remove financial firms (SIC codes 6000 to 6999) and utilities (SIC codes 4900 to 4999), as is standard when investigating corporate policies, since these firms are regulated. These screens remove 2,688 and 1,111 firm-year observations respectively, for a total of 15,179 firm-years left in the sample. I next filter out an additional 1,049 firm-year observations, where the firm's headquarters is located outside the United States. This leaves me with a final sample of 14,130 firm-year observations. For the sample there are 1,639 unique firms and 3,177 unique CEOs.

A CEO state of origin

It is not obvious how to systematically link CEOs to geographic locations. Is it best to link CEOs to a location just before the time of their hiring? or is better to focus on where he/she were raised? Maybe, it is best to focus on where CEOs attended college, began their first jobs, or where they were born. Although all these links have their merits, in this paper I try to isolate where CEOs "grew

up", or what I refer to as *CEO origin*. I argue that a CEO's link to his/her origin is more important than any other geographic link that a CEO possesses. Not only does it provide their location at a point in time, but it also could provide information associated with their past experiences,[8] or the location of a network of family and friends. CEO origin could be a place where others are aware of the CEO's existence, since most individuals that rise to the top of the corporate ladder are exceptional people. Finally, if there are regional differences in culture across the U.S. and personality is shaped during adolescence then origin provides a way of measuring unobserved CEO characteristics.[9] Another advantage to this geographic measure is that it is unlikely that CEO origin is a choice variable of the CEO.

I identify CEO U.S. state of origin using the following logic and methodology. I hand collect the data on CEO state of origin by utilizing the "People Search" function for the Lexis Nexis online public records database. This search function utilizes data from nationwide bankruptcy records, deeds, motor vehicle registrations, phone records, voter registrations, judgments and liens, and UCC sources to locate and provide information on individuals.[10] Searches are conducted based on data from the Execucomp annual compensation database. Specifically, for each firm year I identify the CEO of the firm as the executive who is CEO for all or most of the fiscal year (CEOANN="CEO"). I use the first, middle, and last name, as well as the CEO's current age as inputs into the Lexis Nexis "People Search". I conduct this initial search on a nationwide basis as to not bias my results toward finding a CEO living in the state of the firm headquarters. For most CEOs with complete data from Execucomp I am able to easily identify the CEO. For CEOs with common surnames the search process is more difficult, however a unique first or middle name can make identifying even those individuals with common surnames quite easy. If I do not identify the CEO using only

[8]For example Malmendier and Nagel (2007) show that individuals who experience low stock market performance during their lives are less willing to take financial risk and participate less in the stock market.

[9]Persico, Postlewaite, and Silverman (2004) explain the wage premium commanded by taller individuals, by showing that it is not actually adult height driving the wage premium, but height during adolescence. They show that short adults, who were tall adolescents also command a wage premium. They attribute height in adolescence with confidence and conclude that there is a wage premium for confidence not for adult height.

[10]Note that information that is subject to regulation by the Drivers' Privacy Protection Act, Gramm-Leach-Bliley Act, and other applicable state rules and regulations is not available to researchers unless a "permissible use" is selected. All data collected for this study used the search functionality that only searches unregulated data.

age and name, then I perform an additional search in which I also include the state of the firm's headquarters in the search field "previous state." This narrows the search to only those individuals for whom the database has some record of them occupying a residence in the state of the firm headquarters at some point in time. The output from the search process typically lists both current and past addresses. Since many CEOs list their address as the company's headquarters address, I also search for CEOs based on the address of the firm headquarters. For approximately, 800 of the sample CEOs I cross check my results with the data on CEO residences collected by Cronqvist, Makhija, and Yonker (2009), this aids considerably in the identification process.

In addition, to current and previous addresses, the output from the people search also typically includes birth year, telephone numbers, the first five digits of the individual's social security number, and the year of social security number issuance. The data on the social security number provides a unique method by which to identify a person's state of origin, since social security numbers are non-random. The first three digits are assigned by the state of issuance and digits four and five indicate the sequence of issuance. So by using the first three digits of their social security number, I am able to determine the state where each CEO in the sample resided at the time his/her card was issued. During the time period when most of the sample CEOs obtained their social security numbers (the 1950's and 1960's) these numbers were primary used for employment purposes.[11] Consequently, most people during this time period obtained their social security cards when they began their first job. In the U.S., it is typical for individuals to first begin work at 15 or 16 years of age. If this is the case, then the social security number data could provide information on where CEOs "grew up."

Using data on year of birth and the social security number procurement year, I calculate the age that CEOs in the sample obtained their social security cards. As expected, I find that the median CEO in the sample procured his/her social security card at the age of sixteen. I define a CEO's state of origin as the state in which the CEO obtained his/her social security card. By this methodology I identify the year and state in which 2,820 (88.8%) of the sample CEOs obtained their social security

[11]Currently, the tax code requires children over one years of age (passed in 1990) to have a social security number in order to be claimed as a dependent on their parents tax returns and between 1986 and 1990 this requirement was for children over the age of five.

numbers. After merging this data with the original panel of 14,130 firm-year observations, complete data on CEO origin is obtained for 12,974 (91.2%) of the firm-year observations.

There are two interesting cases in the sample where the CEOs origin may not necessarily be determined by where he/she obtained his/her social security card. The first is for foreign-born CEOs. The place where these CEOs obtained their social security numbers may not be where they grew up. However, since I have data on year of birth as well as the year each CEO obtained their social security card I create a method for identifying foreign-born CEOs. I assume that a CEO is foreign-born if the age that he/she obtained his/her social security card is greater than 21 years of age. Twenty-one years of age is chosen, since it is possible that a U.S.-born CEO may not work until after the completion of college. The age at graduation for most individuals is 21 year of age, at which time most graduates begin work. In order to work, one needs a social security number. Thus, the identification of foreign-born CEOs relies on the assumption that domestic-born CEOs are employed at some point by the time they are twenty-one years of age. Note that this proxy for foreign-born CEOs will underestimate the number of CEOs that are actually foreign-born, but it will mitigate the problem of incorrectly associating foreign-born CEOs with the cultural background of the state in which they first entered the country. Using this classification technique I find that 231 (8.2%) of the sample CEOs are foreign-born.

The second interesting case is due to data unavailability. The data on the year in which the social security number was obtained is limited. For all those individuals who obtained their social security card between 1936 and 1952, the issue year is listed as 1936 to 1952. This makes the classification of foreign-born CEOs difficult for the sample of CEOs born prior to 1931, since for these CEOs it is impossible to determine whether or not they obtained their social security number prior to age 22. There are 116 (4.1%) such cases in the sample, which I classify as domestic born, since the bias produced by removing the oldest CEOs seems to outweigh the bias of incorrectly identifying a small percentage of foreign-born CEOs.

IV Does geography matter?

In section II, I outlined several theories of why a local hiring bias may exist in the market for CEOs. In this section I try to answer the question, "Does geography play a role in the market for CEOs?" Specifically, I investigate whether there is geographic segmentation in the CEO labor market, which leads to a local bias in hiring CEO candidates. I begin the analysis by examining the joint distribution of CEO origin and firm headquarters location for the stock of CEOs. I then conduct formal tests to determine whether there is a bias toward hiring local CEOs.

Table I displays the joint distribution of CEO state of origin and firm headquarters location for all firm-year observations in the sample. A striking pattern emerges. The diagonal elements of the matrix reveals that a large proportion of the firms in each state are run by CEOs from that same state. For 3,912 (30.2%) of the 12,974 firm-year observations in the sample, the CEO's state of origin matches the firm's headquarters location. This pattern holds for large states, such as New York, where for 473 (52.0%) of 910 firm-year observations firms are headed by local CEOs and even for many smaller states (by population), such as Utah where for 29 (72.5%) of 40 firm-year observations firms are run by local CEOs.

The marginal distribution of CEO origin shows that CEOs from every state (and Washington, DC) are represented. New York State overwhelmingly produces the greatest number of CEOs in the sample with New Yorkers managing firms in 1,764 (13.6%) of the 12,974 firm-year observations. Foreign-born CEOs constitute the second largest percentage of the sample with foreign-born CEOs running firms in 1,054 (8.1%) of the firm-year observations, followed by CEOs native to the states of California, Illinois and Ohio. CEOs from these states constitute 7.00%, 6.50%, and 6.04% of firm-year observations, respectively.

Turning to the marginal distribution of firm location, there are firms from 46 of the 50 states represented in the sample in addition to Washington, DC. Firms headquartered in the state of California have the most firm-year observations in the sample with 2,087 (16.1%) of the 12,974 observations, followed by Texas, New York, and Illinois with 1,257 (9.7%), 910 (7.0%), and 744 (5.7%) firm-year observations, respectively.

A The hiring home bias

After observing that over thirty percent of the firms in the sample are run by local CEOs, I set out to test formally whether there exists a local bias in the matching of CEOs to firms for large U.S. public corporations. In order to mitigate the effects of survivorship bias for these tests I concentrate on the "flow" of CEOs, or the hiring decision of CEOs. I identify hiring decisions as those observations where the CEO of the firm changes from one fiscal year to the next. The hiring event occurs in the fiscal year of the change in CEO. Because data on the CEO for the previous year is necessary in order to identify hiring decisions using this method, observations occurring in 1997 are removed. The sample of hires therefore, includes the fiscal years 1998 through 2007. In addition, for some observations, I am unable to identify the CEO in the previous year, which makes it impossible to identify hiring decisions for these observations. Removing these observations reduces the sample to 11,218 observations for which I am able to identify CEO turnover. For the years 1998 through 2007, I identify 1,162 (10.4%) hiring decisions in the sample.

After defining the sample with which to conduct the tests of a local bias, I next define the test. The tests are based on the following logic, if geography does not play a role in the market for CEOs, then the probability that a firm hires a CEO from its own state should be equal to the proportion of the CEO labor supply from that state. Given this logic, I define a measure B, which I refer to as the *hiring home bias*. A hiring home bias exists if the percentage of observed local hires in the sample is significantly greater than expected under the assumption that CEO origin is random. I compute the hiring home bias as,

$$B = \frac{N_L - E(N_L)}{N}, \tag{1}$$

where N is the number of hiring decisions in the sample, N_L is the observed number of local CEOs hired in the sample, and $E(N_L)$ is the expected number of locally hired CEOs in the sample. The hiring home bias is zero if the number of local CEOs in the sample is equal to the expected number of sample CEOs, it is close to one if all CEOs in the sample are locally hired, and if the number of local CEOs in the sample is less than expected, then the hiring home bias is negative. Thus, B

is bounded above by $1 - E(N_L)/N$ and it is bounded below by $-E(N_L)/N$. There exists a hiring home bias if B is greater than zero and larger B indicates a larger hiring home bias. Effectively, the hiring home bias is the observed minus the expected percentage of local hires in the sample, given that CEO origin is random.

In order to compute the hiring home bias it is necessary to define both what it means to be a "local" hiring decision, and the distribution of state of origin for the CEO labor pool. A hiring decision is considered *local* if the firm's headquarters is located in the same state as the hired CEO's state of origin. Although previous research has used distance to measure local biases, the data on CEO origin reveals only the state of origin, so under a distance measure any estimate of a local hiring bias will be greater than under the proposed definition.[12] When testing for a local hiring bias I make two alternative assumptions for the geographic distribution of adolescent age CEO talents and abilities. The first is that those with CEO talents and abilities are uniformly spread across the U.S. adolescent population. The second allows there to be non-uniformity across regions that leads to more CEOs per capita emerging from different states. For the first distributional assumption I use population data to proxy for the distribution of CEO talents and for the second I assume that the observed marginal distribution of CEO origin is representative of the population of CEO adolescent age talents and abilities.

Formally, I define a time dependent random variable $S(t)$ which is equal to the state of origin of a hired CEO. This random variable follows a multinomial distribution. For a firm headquartered in state s_i at time t_i the probability that hiring decision i is local is $Pr(S_i = s_i|t_i)$. Let $p_i(s_i|t_i)$ denote this probability. The expected value of N_L is then just the sum of the sample $p_i(s_i|t_i)$'s. I compute $E(N_L)$ as $\sum_{i=1}^{N} p_i(s_i|t_i)$. In order to compute $E(N_L)$, for each hiring decision i, I must choose some proxy for $p_i(s_i|t_i)$ for each of the N total hiring decisions.

Under the first distributional assumption of CEO labor pool state of origin (uniformity), I proxy for $p_i(s_i|t_i)$ by utilizing state level population data from the U.S. Decennial Census for the years 1960 and 1970. For each year I compute the proportion of the U.S. population living in each state. I proxy for the probability that a firm selects a CEO from its own state by the percentage of the

[12]See Coval and Moskowitz (1999) for an example of a measure of "local" that involves distance.

U.S. population living in the state in which the firm is headquartered 36 years prior to the hiring decision. I choose 36 years prior to the hire because the median CEO at the time of hire is 52 years old and the median age when the CEOs in the sample obtain their social security cards is 16 years of age. The difference is 36 years and so the probabilities measure the probability that the firm selects a CEO of median hire age, who procured his social security card at the median age in the sample. Because I have U.S. population data in ten-year intervals, I choose the Census data closest to 36 years prior to the date of hire.

If CEO talents are not spread uniformly across the U.S. population (as suggested by the fact that 13.6% of CEOs are from New York state), then the hiring home bias will be overestimated in states that have a greater proportion of adolescents with talent necessary to become CEOs relative to the population and it will be underestimated in states where CEO abilities are more rare in the adolescent age population relative to the population. The assumption that CEO talents are spread uniformly across the U.S. adolescent population could potentially bias the estimation of the home bias for the entire sample upward if firms tend to locate in states with more adolescent CEO talent relative to the state population.[13] For this reason, I also estimate the hiring home bias under the alternative assumption that the observed distribution of the 12,974, firm-year observations on CEO state of origin is representative of the geographic distribution of adolescent-age CEO talent.

B Estimation of the hiring home bias

Table II reports the results of tests for geographic segmentation in the market for CEOs. In Panel A, I conduct two different types of tests for a local hiring bias. First, I compute the hiring home bias for each state and test whether on average the hiring home bias is different from zero. I compute this test for all states included in the sample and also for only those states with 20 or more hiring decisions. Second, for the entire sample as well as each state subsample, I compute exact binomial tests, testing if the number of local hires observed in each subsample comes from a

[13]To see this realize that if a large number of the firms in the sample are from states where the expected number of CEOs growing up in those states is assumed to be too low, then these states will receive greater weight in the estimation of the hiring home bias.

binomial distribution where the probability of hiring locally is the expected percentage of local hires and the number of trials is the number of hiring decisions within the given sample. The estimated hiring home bias is displayed in columns (1) and (2). Column (1) displays the hiring home bias under the assumption that CEO talent is spread uniformly across the U.S. population and in column (2) CEO talent is assumed to follow the observed geographic distribution of CEO origin for the stock of CEOs. The observed percentage of CEOs is listed in column (3) and the expected percentages under the two different distributional assumptions are given in columns (4) and (5). Thus, the hiring home bias displayed in column (1) is just the difference between the values in columns (3) and (4) and the hiring home bias in column (2) is the difference between columns (3) and (5).

For the full sample, I find that the hiring home bias is 0.192 under CEO talent uniformity and 0.190 if CEO talents follow the observed marginal distribution of the stock of CEOs. This means that the full sample of hiring decisions has 19.2% more local CEOs than expected if CEO talents is spread uniformly across the U.S. population. Effectively since 23.8% of hired CEOs are local and the expected percent of local hires is 4.6%, this suggests that firms hire locally 5.2 times more than expected. When focusing on the estimates of the hiring home bias for the state subsamples, for 30 of the 43 states the binomial sign test is rejected and the hiring home bias is positive. So for these 30 state subsamples, I reject the hypothesis that CEO origin is random. The hiring home bias ranges from -0.011 in Kansas (which had 3 hiring decisions, none of which were local) to 0.998 in Delaware (which had one local hiring decision). Focusing on states with more than 20 hiring decisions, firms in the states of New York, Wisconsin, and Ohio all exhibit hiring home biases over 0.30 and firms in the states of Pennsylvania, Missouri, Tennessee, Massachusetts, Michigan and New Jersey, all have hiring home biases of over 0.20. There are however, some states with a large sample of hiring observations where on average firms do not exhibit a local hiring bias. These states include Connecticut, Colorado, and Florida. The t-tests testing that the average state exhibits no home hiring bias are overwhelmingly rejected under both distributional assumption and for both the full sample of states and the sample of states with over 20 hiring decisions. In addition, the exact binomial test for the full sample of hires is also rejected at the 0.01 significance level.

In Panel B of Table II, I estimate the hiring home bias for the sample of hires in each of the

sample years. The table shows that the average hiring home bias is 0.194 under the assumption that CEO origin is uniform and 0.192 under the assumption that the observed marginal distribution of CEO origin is representative of the true distribution. T-statistics testing whether the time series average is different from zero are overwhelmingly rejected. Although the hiring home bias falls from 0.238 in 1998 to 0.194 in 2007 this decline does not appear to be steady across the years. The estimated coefficient on the time trend is negative, but only significant at the 10% level (unreported). If the hiring home bias is in part due to search costs, then this downward trend could be due to technological advances over the sample period.

C Robustness checks

The results of the tests for a local bias indicate that geographic segmentation is present in the market for CEOs. They are consistent using either distributional assumption of CEO talent and indicate that a hiring home bias is pervasive across states and time. However, the literature on CEO selection shows that the majority of CEOs are hired from within the company (Parrino, 1997; Borokhovich et al., 1996; Agrawal et al., 2006; Murphy and Zabojnik, 2007; Frydman, 2007). In addition, the literature shows that a significant proportion of firms are run by descendant CEOs (Anderson and Reeb, 2003; Pérez-González, 2006; Villalonga and Amit, 2006). These two facts could be driving the hiring home bias. Another potential problem with the analysis lies in the data collection of CEO origin that could bias the results toward finding a hiring home bias. I now investigate these issues.

C.1 Inside hires & descendant CEOs

It is possible that the CEO hiring home bias could be partly due to firms promoting from within the company or the prevalence of descendent CEOs. Why is the state of origin of a CEO hired from within the company more likely to be the same as the firm headquarters? It is possible that for smaller firms, if the labor supply in the U.S. is not perfectly mobile, then these firms may rely on the local labor supply to meet their demand. If this is the case and firms hire internally then, the

pool of talent from which firms draw could have a disproportionate number of local candidates. Turning to descendent CEOs, it may be more likely for these CEOs to be local since it is probable that their families resided in the states of the firms' headquarters during their adolescence.

Assuming that descendant CEOs are likely to have worked for the family business in some capacity prior to becoming CEO, by controlling for inside hires, I also control for descendant CEOs. I determine an inside hire as any hire where the CEO joined the company at least one year prior to becoming CEO. The problem with measuring an inside hire in this way is that of the 1,162 hiring decisions for which I have data, the data detailing when the CEO joined the company is incomplete in the Execucomp database. For only 618 (53.2%) of the hiring events, does Execucomp have complete data on when the CEO joined the company. Of these 618 events, 241 (39.0%) are categorized as external hiring decisions using this methodology. This percentage of external hires is slightly greater than found in most of the literature[14], however the literature finds an upward time trend in the decision the hire from outside the company and data utilized in this study is more current than that used in previous studies.

Panel C of Table II shows the estimates of the hiring home bias for the subsample of externally hired candidates for each sample year as well as for all years combined. The hiring home bias falls by more than half to 0.099, but remains significantly positive and the binomial tests are rejected under both distributional assumptions for CEO origin. The home bias remains high in many states, however the number of observations is large for only a few states. For New York the hiring home bias remains high at 0.410 and for IL the home hiring bias is 0.245 (unreported). The average home hiring bias across the ten sample years is 0.091, which is significantly greater than zero at the 0.01 significance level. Although it appears, that both family firms and inside hiring decisions play a role in the hiring home bias, these previously documented features of the CEO labor market do not fully explain why firms tend to hire locally.[15]

[14]Murphy and Zabojnik (2007) find the percentage of externally hired CEOs in their sample of large U.S. firms is 26.5% during the 1990s and 32.7% from 2000 to 2005. Frydman (2007) finds this figure to be 30.0% during the 1990s. Both studies document an upward time trend in the percentage of externally hired CEOs.

[15]In future efforts I intend on collecting data which will identify inside and outside hires for the entire sample. Unfortunately, for this draft, time does not permit doing so.

C.2 Data biases

Another potential reason for observing the hiring home bias in the sample is that there exists a bias in the data collection process for CEO state of origin, which increases the probability of incorrectly identifying CEOs so that their state of origin is recorded as the same state as the firm headquarters. How might this be possible? When collecting CEO origin, the first step is to use first, middle, and last name and age to search nationally for the individual. If the CEO is not located in this manner, then additional criteria are added. The additional criteria are that the individual occupied a residence in the state of the firm's headquarters at some point in time. According the 2000 U.S. Census, sixty percent of the U.S. population lives in the state in which they were born. If the CEO is incorrectly identified, then this could bias the data toward finding that the CEO's state of origin matches the state in which the firm is headquartered. This could ultimately be the reason for observing a hiring home bias in the data.

In order to test whether a data bias due to identification error is the cause of the hiring home bias, I calculate the hiring home bias after eliminating those CEOs, who are most likely to be improperly identified. I do this in the following way. First, I filter from the data all CEOs whose surname is one of the 1,000 most common surnames listed in the 2000 U.S. Census. The more common the surname, the more likely it is that the CEO is incorrectly identified. Next, I compute the hiring home bias for the total sample and for each year in the sample. The filter reduces the sample of hiring decisions by 303 (26.1%) to 859 hiring decisions. The results are virtually unchanged. The hiring home bias for the filtered sample is 0.194 versus 0.192 for the unfiltered sample. The results do not appear to be driven by identification error.

V Why does geography matter?

In the previous section I showed that large U.S. corporations hire local CEOs five times more than expected if CEO origin is random. In short, I show that geography matters in the market for CEOs. In this section I try to explain why firms exhibit this local hiring bias. Specifically, I test to what

degree the search costs, cultural matching, shirking, and cronyism theories of CEO demand and the geographic preference theory of CEO supply, outlined in section III, can explain the local CEO hiring bias. Most of the tests in this section rely on the flow of CEOs (hiring decisions). The exception is when investigating CEO turnover the entire panel is used in the analysis.

I begin the analysis by merging the data on firm location and CEO origin with firm, hired CEO, and previous CEO characteristics. Of the 1,162 hiring decisions identified in the sample there are ten for which accounting data is not yet available from Compustat. This leaves me with 1,142 hiring decisions with which to conduct the analysis. Table III displays summary statistics for the variables that are used in the analysis for the sample of hiring decisions. Definitions and data sources for these variables are found in the Appendix. The summary statistics show that the sample is composed of large mature firms. The median firm has book value of assets of $1.38 billion and is 37 years old. In regard to board characteristics, two-thirds of the directors of the median firm are outsiders and 10.6% of firms have outside board members that collectively own 1% or more of the firm. Consistent with my findings in the previous sections, 23.7% of hired CEOs are local and 9.0% are foreign-born. The median age that CEOs in the sample are hired is 52 years of age and 42.1% of hired CEOs are also hired as chairman of the board. The median CEO in the sample leaves the firm at age 60 and slightly more of the previous CEOs are local (25.9%) and fewer are foreign-born (7.7%) when compared to the newly hired CEOs. The majority of both previous and new CEOs are internally hired, 60.9% and 62.4%, respectively. This suggests that it may be important to control for internal hiring practices throughout the analysis.

A Univariate Analysis

I begin assessing the relative merits of the proposed theories of the hiring home bias by conducting univariate tests for differences between firm, new CEO, and previous CEO characteristics for firms that hire locally versus those that hire non-local CEOs. Table IV displays the sample means for the partitions of these characteristics as well as the value of t-statistics testing for their differences. The search costs theory predicts that smaller firms and firms in which managerial talent is less

productive should be more likely to hire local CEOs. Although the univariate tests do not show a significant difference in firm size as measured by the natural log of the book value of firm assets ($Assets$), the mean R&D expense (RD) is 34.8% lower for firms that hire local CEOs.

The agency theories of shirking and cronyism suggest that local CEOs are hired due to the lack of board incentives or independence. The table shows support for these theories, both the average percentage of outside directors on the board ($PctOutsideDir$) and the percentage of firms with outside directors owning more than 1% of the firm ($OutsideDirOwnDum$) are significantly lower for firms that hire locally than those that do not.[16] Additional support for the cronyism theory is suggested by the fact that a larger percentage of firms that hire locally have previous CEOs that are local ($PrevCeoLocal$). If the incumbent CEO exhibits some influence over the board in their hiring decision then he/she might encourage the board to hire a friend, relative or business contact. If the incumbent CEO is local, then it may be more likely that his "cronies" are local. Additionally, this finding could support the cultural matching theory or search costs theory. It could be that those firms that hire locally do so consistently because there is a cultural match between local candidates that aids in the production process or it might be that firms in which the costs of broadening the search to the national level consistently outweigh the benefits, and so hiring locally is a optimal equilibrium outcome.

The geographic preference theory predicts that firms in more desirable locations will be less likely to hire locally than firms located in less desirable locations. In order to test this theory I must create a proxy for geographic desirability. Throughout the analysis I proxy for the desirability of a location by the average percentage of clear days in a given location. Although there are many other ways to proxy for location desirability, such as average temperatures or distinguishing between rural versus urban areas, this measure only implies one simple assumption; human beings prefer sunny days to cloudy days. It does not assume that people prefer a warmer climate to a cooler climate or that CEOs prefer urban areas to rural areas, just that they prefer sunshine to clouds. I hypothesize that there is much less heterogeneity in people's preferences for sunshine than the other

[16] Although previous studies have used the average percentage of ownership of board members as a measure of board incentives (e.g. Core et al., 1999), descriptions of the hiring process by Khurana (2002) suggest that a collective measure may be more appropriate.

proposed measures of geographic desirability. The data on the percentage of clear days are from the National Climatic Data Center (NCDC), which records city level data on weather patterns. Most of the data are recorded at local airports or National Weather Service weather stations and are based on 50 or more years of observations. For the percentage of clear days per year in the city of the firm headquarters ($FirmHQPctClear$), I match data from the NCDC with the city of firm headquarters. For firms headquartered in cities not covered by the NCDC, I use data from a covered city that is close to the firm's headquarters. For example, the headquarters of Wal-mart Stores is in Bentonville, Arkansas. This city is not covered by the NCDC, thus I use weather data from Fort Smith, Arkansas, which is approximately 85 miles south of Bentonville. To measure the desirability of the CEO state of origin ($CeoOriginPctClear$), I convert city-level data into state-level data. I do this by averaging the percentage of clear days of all cities in a given state.[17]

Table IV shows preliminary support for the geographic preference theory. The percentage of clear days in the city of the firms' headquarters for firms that hire locally is significantly less on average than for firms that do not hire local CEOs. This suggests that firms in more desirable locations can better attract CEOs. In addition, the table shows that CEOs from less desirable states are more often hired outside their state, which suggests that talented individuals are more likely to relocate if they are from a less desirable location. The geographic preference theory also makes predictions for CEO compensation. If CEOs prefer to live close to home, then local CEOs should be paid less than non-local CEOs with similar ability. The table shows that in a univariate setting that this is indeed the case, however this also could be a result of the search costs or shirking theories, which suggests that locally hired CEOs may be of lower ability than non-local CEOs and that this is the reason for the wage differential.

The univariate analysis also confirms previous findings on the role of external hiring decisions and family firms, showing that locally hired CEOs are more often hired from within the company ($InsideHire$) and that family firms may play a role in the decision to hire locally. The latter point is evidenced by the larger proportion of incumbent CEOs that are founders ($Founder$) at the time of the hiring decision for firms that hire local CEOs.

[17] An alternative to this measure would be to population weight these city averages for each state.

Table V shows the percentage of local hires in the sample by two-digit SIC code. The table shows that SIC code 73, business services has the highest frequency of firms in the sample with 142 (12.4%) of the of 1,142 hiring decisions. The search cost theory predicts that firms in which managerial talent is more productive will be more likely to hire non-local CEOs. Supportive of this hypothesis, the table shows that firms in the engineering and management services industry (SIC 87) made 19 hiring decisions and for none of the hiring decision did the firms hire locally. This is precisely the type of industry where managerial talents should be most productive.

B Predicting local hiring decisions

I now test the ability of the proposed theories to explain why firms hire local CEOs by estimating a probit regression for the sample of 1,142 hiring decisions, where the dependent variable is a dummy variable that equals one if the firm hires a local CEO and is zero otherwise. For all estimated models I include both industry (using 2-digit SIC codes) and year fixed effects, but do not report the coefficient estimates or standard errors of these estimates. All standard errors are White (1980) heteroscedasticity-consistent standard errors, clustered at the industry-level. I first test each of the theories' predictions independently and then jointly.

Table VI shows the estimated marginal effects and their standard errors for nine different models. For each model, in addition to proxies related to the underlying theories I include the percentage of the U.S. population in the state of the firm headquarters 36 years prior to the hiring decision ($PctPop$) in order to control for the probability of hiring from ones own state. As expected, for each of the nine models the estimated marginal effect of this variable is significantly positively related to the probability of hiring locally. In column (1), I include proxies for the search cost hypothesis. The search cost hypothesis predicts that larger firms and firms in which managerial input is more productive should be more likely to hire locally. Both Murphy and Zabojnik (2007) and Gabaix and Landier (2008) develop models of the market for CEOs in which managerial input is productive. Empirically, Bertrand and Schoar (2003), provide evidence that managers affect firm performance. Consistent with this theory, the estimated marginal effect on R&D expense is

negative and significant at the 0.01 level, but firm size as measured by *Assets* is not related to hiring locally. For the remaining models I include both Assets and R&D in order to control for these firm characteristics.

The agency theories of cronyism and shirking suggest that board characteristics should influence the firm's decision to hire locally. The model in column (2) includes the percentage of outside directors on the board in the year prior to the hiring decision (*PctOutsideDir*). According to the cronyism theory, greater board independence should decrease the probability that a firm hires locally since independent boards may be more objective in their decision-making. As predicted by the cronyism theory, the marginal effect of *PctOutsideDir* is estimated to be significantly negatively related to hiring locally. For the average firm a one standard deviation increase in *PctOutsideDir* (0.166) is associated with a 0.06 decline in the probability of hiring locally. This is nearly a 24% decrease in the probability that the average firm hires locally. The shirking theory predicts that boards whose incentives are more aligned with shareholders will exert more effort in the search process, thus will be less likely to hire local CEOs. The model in column (3) of the table includes a dummy variable that equals one if the collective ownership of all outside board members is greater than one percent in the fiscal year preceding the hiring decision (*OutsideDirOwnDum*). As predicted by the shirking theory, the probability that the average firm hires locally falls by 0.085 for firms where outside board members have strong incentives.

An alternative test of the cronyism theory is to test whether the previous CEO's origin has any bearing on whether the new CEO is local, since the incumbent CEO often has significant influence in the hiring process. If this is the case, then he may influence the board to hire a friend or family member. This could also be a test of cultural matching or search costs since firms that find it optimal to hire locally may be likely to find this choice optimal again in the future. In column (4) I test this prediction by including a dummy variable that is equal to one if the previous CEO is local (*PrevCeoLocal*). I find that the average firm has a 0.069 higher probability of hiring locally if the previous CEO is local. This could be supportive of cronyism, search costs, and cultural matching.

In columns (5) and (6) I test whether CEO geographic preferences influence a firm's choice to hire locally. The geographic preference theory predicts that firms in more desirable locations will be

able to attract CEO talent more easily, thus will be less likely to hire locally. It also predicts that members of the CEO labor supply from less desirable locations will be more willing to relocate since their reservation utility may be lower. This effect may cause members of the CEO labor force from desirable locations to be less likely to accept a job outside their home location and members of the CEO labor force from less desirable locations to be more willing to accept a position outside their home state. Thus, this predicts that CEOs from desirable locations are more likely to be locally hired, due to their unwillingness to leave their desirable home state. I find evidence of both these effects. The marginal effect of the desirability of the firm location is estimated significantly negative and the marginal effect of the desirability of the CEOs origin is significantly positively related to firms hiring locally. The magnitude of both of these effects is surprisingly large as I will discuss in the next paragraph.

In column (7) I test all five theories jointly by including all of independent variables from models (1) through (6) in the probit regression. I find that all of the results from models (1) through (6) continue to hold and that these models are able to explain a fair amount of the variation in local hiring practices across firms. The pseudo r-squared for the model in column (7) is 0.129. As stated earlier, a surprising result is the magnitude of marginal effect of the desirability of firm location on market for CEOs. The estimated marginal effects in column (7) on $FirmHQPctClear$ suggests that for the average firm in the sample, a one standard deviation increase in the average percentage of clear days (0.085) decreases its probability of hiring locally by 0.05, this is nearly a 20% decrease in the probability of hiring locally. Another interpretation, is that if the average firm in the sample is located in Cleveland, Ohio where the average percentage of clear days is 18.1%, the predicted probability that the firm hires a local CEO is 0.328. If that same firm is located in Los Angeles, CA where on average 43.1% of days are clear, the predicted probability of hiring a local CEO is only 0.192. In this case, geographic preferences of the CEO supply make it 71% more likely that a firm located in Cleveland, OH must hire locally, than a similar firm located in Los Angeles, CA.

In columns (8) and (9) I test the robustness of these results to controlling for external hires and family successions, respectively. As detailed earlier, I control for internal hiring decisions by including a dummy variable that equals one if the new CEO was hired from within the firm ($InsideHire$).

Including this variable decreases the sample size by almost one half, but does not significantly alter the inferences made in the previous analysis. In addition, the estimated marginal effect of hiring internally is positive, but not significantly estimated. I attempt to control for those hiring decisions that are family successions by including a dummy variable that equals one if the newly hired CEO owns five percent or more of the firm at the time of the hiring decision ($CeoBlockholder$). The idea being, CEOs that own such a large of a stake in the firm at the time of the hiring decision could potentially be family members or at least are firm insiders. I find that the estimated marginal effect from this variable is large and significant. The probability that a hired blockholder CEO is local is nearly double that of a non-blockholder. However, even after controlling for family successions in this way, I find that the previous inferences are unaltered.

VI CEO compensation

Several theories predict differences in the level of CEO compensation for local versus non-local CEOs. The geographic preference theory predicts that a CEO hired with a geographic preference for the firm's location will accept lower compensation than a similar ability member of the labor pool with an aversion to the firm's location. If on average CEOs prefer to live and work in their home states, then the observed compensation of locally hired CEOs should be lower than that of similar non-local CEOs. This implies that the compensation of locally hired CEOs should be lower than what a benchmark model of compensation would predict. The search cost and shirking theories make similar predictions on CEO compensation. For both of these theories a local CEO may be a signal of a lower ability CEO. If this is the case, then lower ability CEOs should be paid less than higher ability CEOs. The cultural matching theory suggests that local CEOs may be more productive than similar ability non-local CEOs. If this is the case, then these local CEOs should be compensated for their additional productivity as long as there is adequate competition for the candidate's cultural traits and the supply of CEOs with these traits is not perfectly elastic. The prediction regarding CEO wage for the cronyism theory is ambiguous. It could be that the selection committee may want to pay their "cronies" more highly, but it also could be that the only way they

can rationalize their choice to shareholders is by offering a lower wage.

In order to test these predictions, I estimate a regression model, for which the dependent variable is CEO compensation during the first full fiscal year of the newly appointed CEO's tenure and the regressors include variables that the literature has shown to effect CEO compensation plus a dummy variable that equals one if the hired CEO is local ($LocalCeo$). The CEO geographic preference, shirking, and search cost theories suggests that the coefficient on $LocalCeo$ should be significantly negative and the cultural matching theory predicts that this coefficient may be positive.

In conducting the analysis, I use two different measures of executive compensation. The first is total compensation ($TotalComp$), which includes salary, bonuses, restricted stock grants, and the Black-Scholes value of stock options grants. The second is total cash compensation ($TotCashComp$), which is the sum of salary and bonuses. I convert compensation to 2003 dollars, by adjusting these amounts using the GDP deflator. In the regressions I use the natural logarithm of these compensation measures, since executive compensation is right-skewed and because the previous literature has shown that executive compensation follows a power function with regard to firm size.[18]

I follow mainly Core et al. (1999) in the development of my benchmark model of CEO compensation. I include proxies for firm size, growth opportunities, performance, firm risk, and corporate governance. It is well documented that executive compensation increases with firm size. I proxy for size with the natural log of the book value of assets computed in 2003 dollars ($Assets$). I proxy for growth opportunities using a measure of Tobin's Q (Q). Prior empirical work has documents a positive relationship between growth opportunities and executive compensation (Smith and Watts, 1992). Firm performance is measured using both accounting and a market measures, which are expected to be positively related to CEO compensation. $StockReturn$ is the buy-and-hold return over the previous fiscal year and ROA is operating income before depreciation over lagged assets. The expected sign on the coefficient on firm risk is unclear as theoretical models make competing predictions on the sign of this variable. I proxy for firm risk with the standard deviation of daily

[18]See Gabaix and Landier (2008) for a complete list of references on the relationship between executive compensation and firm size.

stock market returns over the fiscal year ($StockVol$). Firm governance has also been found to be related to executive compensation (Core et al., 1999). Firms with weaker governance tend to pay executives more highly. I measure governance using measures of board composition and incentives previously discussed ($PctOutsideDir$ and $OutsideOwnDum$). All control variables are lagged by one year.

In addition, to these control variables also included in all specifications are both year and industry (by 2 digit SIC code) fixed effects. Coefficient estimates are estimated using ordinary least squares and standard errors are heteroscedastic-robust and are clustered by industry. So that the sample is not affected by partial-year compensation, compensation is measured during each CEO's first full year of tenure. CEOs who do not hold office for at least one full fiscal year are excluded from the sample. This reduces the sample of CEO hiring decisions by 124 to 1,018 with which to conduct the analysis, however limitations on board data reduce the sample to 853 and there are seven observations for which total compensation data is missing.

Table VII reports results of the analysis. In columns (1) through (3) the dependent variable is $TotalComp$ and in columns (4) through (6) the dependent variable is $TotalCashComp$. In the first model specification (columns (1) and (4)), the coefficient on $LocalCeo$ is estimated significantly negative, consistent with the theories of geographic preference, search costs, and shirking. The estimate on the coefficient suggests that in their first year of tenure, local CEOs earn 19.8 percent less total compensation and 24.2 percent less cash compensation than non-local CEOs. For both measures of compensation the coefficient estimate is significantly different from zero at the 1% level. Given that the compensation for the average hired CEO in the sample is $2.7 million, this implies that local CEOs earn on average $535,000 less than non-local CEOs in their first year of tenure. The second model specification (columns (2) and (4)) includes an interaction term between $LocalCeo$ and the size of the state of the firm headquarters by population. The reason for including this interaction term is to try to differentiate between the geographic preference theory and the search cost and shirking theories. The search cost and shirking theories predict a lower wage for local CEOs because these CEOs may be less talented, due to a limiting of the talent pool. It is more likely that a local hire is a result of limiting the talent pool in states where the population is small.

Local hires in large states draw from a larger talent pool. Thus, on average local hires from larger states should be of higher ability than local hires from small states, which implies that they should be paid more. Consistent with this idea, I find that the interaction term is significantly positively related to total compensation, but has no significant relationship to cash compensation. [19]

Both Agrawal et al. (2006) and (Murphy and Zabojnik, 2007) show that CEOs hired from within the firm have lower compensation than CEOs hired from outside the firm. The models estimated in columns (3) and (6) control for inside hiring decisions, by including the dummy variable $InsideHire$. Consistent with the previous literature, I find that CEOs hired from within the company are paid significantly less in terms of both total and cash compensation. Although the inclusion of this variable reduces the sample by almost one half, the coefficient estimate for $LocalCeo$ remains negative and significant.

In order to more adequately control for unobservable firm characteristics, I employ a difference-in-difference approach to investigate changes in wages from predecessor to successor CEOs. In Table VIII, I examine changes in executive compensation between newly hired CEOs and their predecessors for the sample of 1,018 hiring decisions. The change in executive compensation is measured as the compensation of the newly hired CEO in his/her first full fiscal year of tenure minus the compensation of the previous CEO in his/her last full year of tenure. CEOs who do not hold office for at least one full fiscal year are excluded from the sample. The table reports means (Panel A) and medians (Panel B) of the natural logarithm of compensation of the predecessor, successor, and the difference, for various sample splits. In addition, I test whether the changes in compensation from the successor to the predecessor CEO are significantly different from zero, since the geographic preference, shirking, and search cost theories all predict that executive compensation should increase (decrease) for firms that replace a local (non-local) CEO with a non-local (local) CEO. Results in Panel A report significance levels of two-side t-tests testing for the differences in means and in Panel

[19] I could also focus on the demand side to judge whether the talent pool is being limited, although there are conflicting predictions. Under the shirking theory if a large firm in a small state hires from its own state, then these CEOs should be of lower ability. However, under the search cost theory, observing a large firm hiring from its own state may be efficient, thus there is no difference in managerial ability. In unreported results, I include an interaction between firm size and *CeoLocal* and find no significant relationship. In addition, I try an interaction between firm size, state population, and *CeoLocal* and again find nothing.

B significance levels are reported for the non-parametric Wilcoxon-Mann-Whitney test.

Column (1) of the table shows that for the full sample, neither total compensation nor cash compensation changes significantly from predecessor to successor according to the results of the difference in means tests. However the Wilcoxon-Mann-Whitney test indicates that newly hired CEOs receive lower cash compensation than their predecessors, but that total compensation does not vary significantly. This finding suggests, that in general wages are sticky in the market for CEOs. In columns (2) and (3) the sample is split by the origin of the new CEO. When spitting the sample in this manner, the results of the tests for changes in compensation are identical to those of the full sample. In columns (4) through (7) the sample is split into specific transitions between predecessor and successor CEO origin. Column (4) shows that compensation does not change when the transition occurs from a locally hired predecessor to a locally hired successor. The most striking result is found in the column (5), which shows the change in compensation from a locally hired predecessor to a non-locally hired successor. Total compensation increases substantially for this transition according to both the test of means and medians. For the median paid executive a non-local predecessor receives \$2.55 million in total compensation in his/her first year of tenure, while his local successor only received \$1.84 million in compensation during his last year in office. This is a \$710,000 premium over the previous CEOs pay. Interestingly, column (7) shows that that when the transition occurs from a non-local CEO to a local CEO the newly hired local CEO does not accept a discount. These results are generally supportive of the geographic preference, shirking, and search cost theories, but indicate also that sticky wages may also play a role in the determination of CEO compensation.

Although the univariate difference-in-difference approach employed controls for time invariant firm-specific variables, other firm characteristics may also change around CEO turnover that could affect changes in compensation. For this reason I further explore the changes in compensation using a multiple regression framework. Table IX shows the estimation results of regressing changes in CEO compensation on control variables as well as changes in CEO origin from predecessor to successor CEOs. Control variables include changes in the lagged variables described in Table VII, as well as, the level of lagged assets ($Assets$) and the percentage of outside directors on the board

in the year prior to the hiring decision ($PctOutsideDir$). The variable of interest is $LocalCeoChg$, which is equal to one if the new CEO is local and the previous CEO is non-local, is -1 if the new CEO is non-local and the previous CEO is local, and is zero otherwise. In addition, asymmetric effects on $LocalCeoChg$ are isolated using the variables $NonLocToLoc$, which is a dummy variable that equals one if the previous CEO is non-local and the new CEO is local, and $LocToNonLoc$, which is a dummy variable that is equal to one if the previous CEO is local and the new CEO is non-local. The dependent variable is the change in the natural logarithm of compensation from the previous CEO to the new CEO. In columns (1) through (6) the measure of compensation is $TotalComp$ and in columns (7) through (12) the measure utilized is $TotalCashComp$.

In column (1) I estimate the model without including the control variables. The coefficient estimate on $LocalCeoChg$ is -0.162 and is significant at the 0.01 significance level. This supports the findings on levels in compensation as well as the findings on changes in the compensation in the univariate setting. When control variables are included in the model in column (2) the estimated coefficient on $LocalCeoChg$ remains significant and increases to -0.191. In column (3), I control for changes in inside hiring status, as this has been previously shown to be related to changes in CEO compensation. The estimated coefficient on this variable is insignificant and the coefficient estimate on $LocalCeoChg$ is virtually unchanged and remains statistically significant.

In columns (4) through (6) I allow for asymmetric effects from changes in local status, since the univariate analysis suggests that when a non-local CEO replaces a local CEO, the new CEO receives an increase in compensation, but when a local CEO replaces a non-local CEO, the local CEO does not receive lower compensation than his/her predecessor. I find this result to also holds in the current analysis. Column (6) shows that this result is robust to controlling for changes in firms' practices of hiring internally or externally. In columns (7) through (12) the models are estimated for changes in total cash compensation. The results are much weaker when using only cash compensation as the metric of CEO compensation, however the coefficient estimates on the variables of interest in general have the same signs, but in many cases lack statistical significance.

The findings from the analysis of CEO compensation are generally supportive of the search costs, shirking, geographic preferences, and sticky wages and are do not support the theory of cultural

matching.[20] The level of CEO total compensation is nearly 20% lower for local CEOs than predicted by a benchmark model. In addition, the analysis of the changes in CEO compensation indicate that when a non-local CEO replaces a local, the new CEO requires additional compensation, but that when local CEOs replace non-local CEOs, these new CEOs do not accept lower compensation. These findings are robust to findings in the previous literature that CEOs hired from within the firm are paid less than externally hired CEOs.

VII CEO turnover

I next examine CEO turnover. Both the search cost and shirking theories predict that CEO turnover should be decreasing in the magnitude of search costs or of the shirking, but suggest that whether a CEO is local or not should have no effect on CEO turnover. The geographic preference, cronyism, and cultural matching theories all predict that turnover should be lower for local CEOs than non-local CEOs. Why might this be? For the geographic preference theory, if managers prefer to live in the geographic location of the firm headquarters, then they are less likely to retire early or leave the company for a job in a another location. Local CEOs may tend to prefer firms located in their state of origin since they are more likely to have a network of family, friends, and business contacts in that state. Thus, this labor supply effect may cause CEO turnover to be lower for local CEOs. For the cronyism theory, it is possible that the board is less likely to discipline their friends for poor performance. This implies that not only should turnover be lower for local CEOs under the cronyism theory, but also performance sensitivity of turnover should be lower for local CEOs.[21] The cultural matching theory could also lead to lower turnover for local CEOs than non-local CEOs since the cultural matching theory suggests that local CEOs may facilitate the production

[20] This does not mean that cultural matching is not present in the market for CEOs, merely that the effect on wage from the other theories may outweigh the effect of cultural matching or that limited demand or perfectly elastic supply do not allow local CEOs to demand a premium for the additional productivity that they provide to the firm.

[21] Although both these theories suggest that turnover should be lower for local CEOs, the reasons are different. The geographic preference theory has implications for the rate of normal turnover, but the cronyism theory's implications are for forced turnover. Currently, I do not have adequate data to make these distinctions. In future versions of this paper I will attempt to collect this information. For now I rely on performance sensitivity of turnover to measure the CEOs immunity to poor performance.

process and better firm performance leads to lower turnover (Huson, Malatesta, and Parrino, 2004). However, after controlling for performance, the cultural matching theory suggests no difference between turnover rates of local and non-local CEOs.

I test these predictions for local CEOs on CEO turnover by estimating a probit regression for the panel of 10,920 firm-year observations between the years 1998 and 2007, where the dependent variable is a dummy variable that is equal to one in year t if the firm's CEO is different from the firm's CEO in year $t-1$. Turnover occurs in 1,129 (10.33%) of the firm-year observations.[22] The variable of interest is $CeoLocal$, which is a dummy variable that equals one if the CEO at time $t-1$ is from the same state as the firm's headquarters. The geographic preference and cronyism theories predict that the coefficient on $CeoLocal$ should be negative.

The baseline model specification is similar to that of Kaplan and Minton (2006) only instead of using the S&P 500 as the market return, I use the CRSP value-weighted index. The literature on CEO turnover has shown that poor stock market performance increases the likelihood of CEO turnover (Warner, Watts, and Wruck, 1988). I control for firm stock market performance by decomposing stock market returns as in Kaplan and Minton (2006). I include the buy-and-hold return on the market over the fiscal year ($MktRet$), the firm's industry's return in excess of the market return ($IndExRet$), and the firm's return in excess of its industry's return ($FirmExRet$). I also control for CEOs retiring by including a dummy variable that equals one if the firm's CEO in year $t-1$ is greater than 59 years of age ($Age60Dum$).

Table X displays the estimated marginal effects and their heteroscedasticity-consistent standard errors, clustered at the firm-level for eight different models. Consistent with the previous literature (Warner et al., 1988; Kaplan and Minton, 2006; Fahlenbrach et al., 2008), I find that turnover is higher in firms with poor stock market performance, after controlling for market and industry performance. Consistent with the predictions of the geographic preference and cronyism theories, the estimated marginal effect of $CeoLocalLag$ is -0.025 for the model in column (1) and is significant at the 0.01 percent significance level for every model specification. For the average firm in the sample if the CEO is not local, then the predicted probability of CEO turnover is 0.102, if that

[22]The number of observations falls from 11,054 due to missing values for the control variables.

same firm has a local CEO the predicted probability of turnover falls to 0.077. This is a 24 percent decrease in the probability of turnover.

In columns (2) through (4), I test whether performance sensitivity of turnover is different for local CEOs than non-local CEOs by interacting *CeoLocal* with the decomposed measures of stock market performance. The cronyism theory suggests that local CEOs may be more immune to disciplinary actions by the board for poor performance. I do not find evidence supporting this prediction. In fact, I find that although CEO turnover on average is not sensitive to industry performance, that local CEOs are sensitive to industry performance, suggesting that poor industry performance can lead to the dismissal of local CEOs. This finding is at odds with the predictions of the cronyism theory.

In columns (5) through (8) of the table I control for variables that could affect the finding that turnover is lower for local CEOs than non-local CEOs. Weisbach (1988) shows that firms with greater board independence have higher CEO turnover. In Table IV I found that board independence is lower in firms that hire local CEOs, thus it could be that lower board independence in firms that hire local CEOs is actually the reason that turnover is lower for local CEOs. The model in column (5) controls for board independence and shows that estimated marginal effect of *CeoLocal* on CEO turnover is unchanged from the baseline model. It is also possible that more powerful CEOs are more immune to disciplinary action by the board, thus have lower turnover. In columns (6) and (7) I control for this possibility by including a dummy variable that is equal to one if the CEO at time $t-1$ owns at least 5% of the firm (*CeoBlockholder*) and by controlling for company founders (*Founder*). I find that CEOs that are large blockholders are less likely to be dismissed, but that this does not eliminate the effect of *CeoLocal* on turnover. Interestingly, the magnitude of the estimated marginal effect on the probability of turnover of CEOs that are blockholders is very similar to that of local CEOs. Although it is unclear why an internally hired CEO would have lower turnover than an externally hired CEO, many local CEOs are hired internally, so it is worth controlling for this fact. The results of the estimation in column (8) show that the results are unaltered by the inclusion of *InsideHire*.

In summary, I find that local CEOs have a lower probability of turnover than non-local CEOs.

This finding is consistent with geographic preferences and cronyism. Cronyism also predicts that performance sensitivity of turnover should be lower among local CEOs. I find no support for this additional prediction and actually find weak evidence that local CEOs have greater industry performance sensitivity of turnover. These findings lend additional support to the labor supply theory of geographic preferences and are weakly supportive of the agency theory of cronyism.

VIII Firm Performance

I next investigate changes in firm performance around the decision to hire local CEOs. The cultural matching theory predicts that locally hired CEOs may be more effective managers since their cultural match with the firm facilitates the production process. The agency theories of cronyism and shirking, as well as the search cost theory suggest that hiring locally may be a signal of lower ability CEOs. Similar to the idea of Bennedsen et al. (2007), where family firms may limit the talent pool to only family members, these theories predict that the talent pool may be limited to only local candidates. If this is the case, then firms that replace a non-local CEO with a local CEO may experience an erosion in performance and firms that replace a local CEO with a non-local CEO may experience an increase in operating performance.

I test the effects of local hires on firm operating performance using a difference-in-difference estimation technique. Specifically, I calculate the difference between the average firm performance for the three years after the hiring event minus firm performance two years prior to the hiring event. If the hiring event occurs in time $t = 0$, then firm performance after the hiring event is measured as the average performance from years $t = 1$ through $t = 3$ and the firm's performance prior to the hiring event is the average of the firm's operating performance in years $t = -1$ and $t = -2$. Since Compustat data is only currently available through June of 2008 and the average operating performance calculation requires that operating performance is available for time $t + 3$, the sample for this portion of the analysis is limited to those hiring decisions occurring prior to fiscal year 2005 for firms with fiscal year-end of July or later and to decisions prior to fiscal year 2006 for firms with fiscal year-end of June or earlier. In addition, the hired CEO is required to be in office during the

years in which post-hiring operating performance is measured (in this case for at least three years). These data requirements reduce the sample to 585 hiring decisions.

I measure operating performance in year t as the firm's operating income minus depreciation over the one-year lagged book value of assets (ROA). Barber and Lyon (1996) show that in order to accurately assess changes in operating performance, these changes should be measured relative to an appropriate benchmark. I therefore, investigate changes in firm ROA relative to several different benchmarks. Specifically, I create three different measures of adjusted ROA: Industry-adjusted ROA, industry and size-adjusted ROA, and industry, size, and prior performance-adjusted ROA. For industry adjusted ROA, I subtract from the firm's ROA the ROA of the median firm in the universe of all Compustat firms with the same two-digit SIC code for each pre- and post-hire year prior to computing the average pre- and post-hire ROA. For industry and size adjusted ROA I subtract the ROA of the median firm from the universe of Compustat firms with the same two-digit SIC code that are within +/- 30% of the size of the firm as measured by book value of total assets in year $t-2$. If no firm meets this criteria, then I enlarge the size universe by including all firms in the same two-digit SIC code that have assets that are greater than 0.7^2 and less than 1.3^2. If again, no firms meet this criteria then I increase the size range again by squaring these "size-matching factors."[23] For the sample, 317 (54.2%) of the 585 matches are made in the first iteration and 527 (90.1%) are matched within three iterations. The third methodology used for benchmarking operating performance is by matching firms based on industry, size, and pre-event performance. The methodology follows that of the industry, size-adjusted ROA, but in addition, the universe of firms is limited to those firms with ROA in year $t-2$ within +/- 10% of the firm's ROA in year $t-2$. For firm's where an initial match does not occur, both the "size-match factor" and the "prior performance-match factor" are squared until a match occurs. Note that for all three matching methodologies, the firm that is being benchmarked is excluded from the universe of benchmark firms.

Table XI displays means (Panel A) and medians (Panel B) of the four different measures of operation performance before and after the hiring decision, as well as the change in operating

[23]This squaring procedure, in the limit produces the same matches as the industry matches.

performance for various partitions of the sample. Panel A shows that for the full sample, unadjusted ROA, industry-adjusted ROA, and industry, size-adjusted ROA, all fall after the hiring decision, but once prior performance is controlled for, there is a significant increase in operating performance among sample firms. Focusing on this change in industry, size and prior performance-adjusted performance, evidence from partitioning the sample into firms that hire local versus non-local CEOs indicates that it is due to the increase in operating performance that is experienced by firms after hiring non-local CEOs. Adjusted operating performance increases by 0.0179 after a non-local CEO is hired. Given that mean unadjusted ROA for the sample prior to the hiring decision is 0.1726, this is an increase of 10.4%. Although the mean differences in the changes in operating performance between firms that hire locally and non-locally are significant under a test of means, they are not significantly different under the test of medians.

In columns (5) through (8) I decompose the changes in operating performance even further, to specific changes in origin from predecessor to successor CEOs. When adjusting for size and industry, operating performance significantly changes when a non-local CEO is replaced with a local CEO. The mean adjusted operating performance falls by 0.0311 in this case. For no other transitions does operating performance change significantly under this measure of operating performance. Turning to industry, size, and performance-adjusted ROA, I find that when a non-local CEO replaces a local CEO that average operating performance increases significantly under both the test of means and medians. Although this evidence is in no way conclusive, it at least suggests that local CEOs on average may be of lower ability than non-local CEOs and lends some support to the theories that suggest that hiring locally may be a signal of limiting the talent pool.

Although the univariate difference-in-difference approach employed controls for time invariant firm-specific variables as well as size, industry, and prior performance, it may be important to control for other firm characteristics that could influence changes in firm value. For this reason I further explore the changes in firm performance using a multiple regression model. Table XII, displays the estimated coefficients and standard errors for ten models, where the dependent variable is the change in industry, size-adjusted ROA in columns (1) through (5) and the change in industry, size, and prior performance-adjusted ROA in columns (5) through (10). The sample of performance

changes is the same as those used in the univariate tests. Control variables mainly follow those used in Fahlenbrach et al. (2008) and are measured as the average of these variables in event years -2 and -3. Firm Age ($FirmAge$) is measured in event year -1 and is constructed using data from Loughran and Ritter (2004) and Fahlenbrach (2008). The variables of interest are the same as those used earlier in analysis of changes in CEO compensation. If hiring a local CEO is a signal of limiting the talent pool, then the estimated coefficient on $LocalCeoChg$ should be negative. When testing for asymmetric effects, the estimated coefficient on $LocToNonLoc$ ($NonLocToLoc$) should be positive (negative).

The first model (columns (1) and (6)), shows that after controlling for additional firm characteristics, that the estimated coefficient on $LocalCeoChg$ is negative and significant at the 5% level for both measures of adjusted operating performance. Model 2 (columns (2) and (7)) allows for asymmetric effects in the transitions between local and non-local successor and predecessor CEOs. For both measures of adjusted operating performance, I find that the coefficient on $NonLocToLoc$ is significantly, negatively estimated, while the coefficient on $LocToNonLoc$ is positive, but not significant. This indicates that firms that replace non-local CEOs with local CEOs experience a decrease in adjusted operating performance, but replacing a local CEO with a non-local CEO is not associated with a change in operating performance.

In model 3 (columns (3) and (8)), I test whether the changes in operating performance are associated with firms with poor board incentives. If this is the case, then I should find a positive coefficient on the interaction between $LocalCeoChg$ and $OutsideDirOwnDum$, since firms with better board incentives may choose a local CEO when it is optimal to do so. The estimates indicate that this is not the case. This finding weakens the evidence that the agency theories of shirking or cronyism are driving the relationship between changes in CEO origin and changes in firm performance.

In model 4 (columns (4) and (9)), I examine whether changes in the firms' practices of hiring insiders is driving the negative relationship between changes in adjusted operating performance and $LocalCeoChg$. The estimated coefficients on $LocalCeoChg$ are very similar to those in estimated in models 1 through 3, and for changes in industry, size, and prior performance-adjusted ROA the

estimated coefficient remains, significant at the 5% significance level, however for industry and size-adjusted ROA the coefficient is not statistically different from zero. This could be due to the reduced sample size. Note that in neither of the estimations is the coefficient on $InsideHireChg$ significantly estimated, thus it is not likely that this is the cause of the observed relationship between changes in firm performance and changes in CEO origin.

The final model estimated in the table (columns (5) and (10)) tests whether the decreases in firm performance are due to the previous finding that descendant CEOs have poor performance.[24] I control for this by including an indicator variable that is equal to one if the previous CEO is the founder of the firm ($PrevCeoFounder$). Founder data are from Fahlenbrach (2008). Using either measure of adjusted performance, I find that the inverse relationship between $LocalCeoChg$ and the change in adjusted firm operating performance is significantly estimated, as previously found.

Overall, the results from the analysis of changes in operating performance are supportive of theories that suggest that hiring locally could be a signal of limiting the talent pool. However, without an instrument, nothing can be said about causation at the moment. That these findings are supportive of the agency theories of local hiring is weakened by the fact that stronger board incentive alignment does not weaken the relationship between changes in CEO origin and changes in operating performance. Nonetheless, a relationship exists that cannot be explained by relationships previously found in the literature to affect changes in firm performance.

IX Conclusion

I began this paper with a simple question, "Is the market for CEOs geographically segmented and if so why is this the case?" In conducting the analysis, I provide conclusive evidence that geography does play a role in the labor market for top executives. For the stock of non-financial S&P 1,500 firms over 30 percent of firms are run by local CEOs. When examining hiring decisions, firms hire CEOs from their own state five times more frequently than would be expected if geography plays

[24]Several studies have shown that firms run by founders have superior performance or higher market valuations (Anderson and Reeb, 2003; Pérez-González, 2006; Villalonga and Amit, 2006; Fahlenbrach, 2008).

no role in the hiring process.

Trying to answer why this is the case, I propose five theories; search costs, cultural matching, shirking, cronyism, and geographic preferences. I then test how well these theories can predict local hiring decisions, as well as their predictions for CEO compensation, CEO turnover, and changes in firm operating performance. I find some support for each of the proposed theories when estimating the probability of hiring locally. The most surprising finding in this portion of the analysis is the effect size of the desirability of the firm's location on a it's ability to hire from outside the state. When investigating the relationship between executive compensation and local hiring decisions, I find that local CEOs are compensated less than non-local CEOs, but after examining changes in CEO compensation I find that non-local CEOs require a premium when hired, but that local CEOs do not accept a discount. These findings are consistent with the geographic preference, search costs, and shirking theories.

I then examine CEO turnover and find that it is significantly lower for local CEOs, which is consistent with geographic preferences, and cronyism, however I do not find that performance sensitivity of turnover is lower for local CEOs as the cronyism theory predicts. The analysis of changes in operating performance is supportive of the theories that suggest that hiring locally is a signal of limiting the talent pool. Adjusted operating performance decreases significantly after a local CEO replaces a non-local CEO. However I find that changes in operating performance are not sensitive to board characteristics, which raises concerns as to whether the agency theories are driving the performance results.

When consolidated, these results suggest that the role of geography in the market CEOs is driven by a complex combination of all of these theories. Some theories however, seem to play a larger role than others. For instance, the results of all tests are supportive of the geographic preference theory. These results have implications for two main areas of the finance literature. First, they suggest that the market for CEOs is not a frictionless competitive market. Including elements uncovered by this empirical analysis may enrich competitive assignment models used in the executive compensation literature. Second, there are several recent papers that focus on the role of geography in corporate

policies.[25] Evidence from this paper suggests that geography also plays a substantial role in the matching of top executives to firms.

[25]See for example Kedia and Rajgopal (2009) and Almazan, De Motta, Titman, and Uysal (2008).

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Appendix: Variable Definitions

The data appendix provides definitions of variables used in the study. All accounting variables and CEO compensation variables are winsorized at the 0.50% level in both tails. Variable names are given in the first column, definitions are provided in the second column, and the data source is provided in the third column.

Variable	Definition	Source
CEO Characteristics		
CEO state of origin	The state in which the CEO's social security card was issued	Lexis Nexis
Foreign-born CEO	Any CEO, who received his/her social security card after 21 years of age	Lexis Nexis
$LocalCeo$	A dummy variable that equals one if the CEO's state of origin is the same as the state in which the firm is headquartered and is zero otherwise	
$PrevCeoLocal$	A dummy variable that is equal to one if the previous CEO is local and zero otherwise	
$LocToNonLoc$	A dummy variable that is equal to one if the previous CEO is local and the new CEO is non-local and is zero otherwise	
$NonLocToLoc$	A dummy variable that is equal to one if the previous CEO is non-local and the new CEO is local and is zero otherwise	
$InsideHire$	A dummy variable that is equal to one if the CEO worked for the firm for more than 365 days prior to being hired as CEO	Execucomp
$CeoBlockholder$	A dummy variable that is equal to one if the CEO owns 5% or more of the firm	Execucomp
$Age60Dum$	A dummy variable that is equal to one if the CEO is greater than 59 years old	Execucomp
$PrevCeoFounder$	A dummy variable that is equal to one previous CEO is a founder of the firm	Fahlenbrach (2008)
CEO Compensation		
$TotalComp$	Total compensation in (Thousands of 2003 $), which includes salary, bonuses, restricted stock grants, and the Black-Scholes value of stock options grants	Execucomp
$TotalCashComp$	Total cash compensation (Thousands of 2003 $), which includes salary and bonuses	Execucomp
Firm Characteristics		
Firm headquarters location	The city and state, where the firm is currently headquartered	Compustat
$Assets$	The natural log of the book value of assets (Millions of 2003 $)	Compustat
RD	R&D expenditures / lagged assets. Missing values are substituted with zero unless indicated.	Compustat
$StockRet$	Buy-and-hold return on the firm's stock for the fiscal year minus the return on the equal-weighted portfolio return of the firm's industry (by 2-digit SIC code).	CRSP
Q	Tobin's Q - (Assets - book equity + market value of equity - deferred taxes) / assets	Compustat
$StockVol$	Daily volatility of the firm's stock return for the fiscal year	CRSP
ROA	Return on Assets - Operating income before depreciation / lagged assets	Compustat
$MktRet$	Buy-and-hold return on the CRSP value-weighted index for the firm's fiscal year	CRSP
$IndExRet$	Industry excess return - the difference between the fiscal year buy-and-hold return of the equal-weighted industry portfolio for which the firm is a member (by 2 digit SIC code) minus $MktRet$	CRSP
$FirmAge$	Fiscal year minus founding year	Loughran and Ritter (2004) & Fahlenbrach (2008)

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Variable	Definition	Source
$DividendDum$	A dummy variable that is equal to one if the firm pays a dividend during the fiscal year	Compustat
$Capex$	Capital expenditures / lagged assets	Compustat
$CapIntense$	Net PPE / sales	Compustat
$SalesGrwth$	Current sales / lagged sales	Compustat
Board Characteristics		
$PctOutsideDir$	The percentage of outsiders on the board	Riskmetrics
$OutsideDirOwnDum$	A dummy variable that equals one if the outside directors on the board cumulatively own at least one percent of the firm and is zero otherwise	Riskmetrics
$CeoChair$	A dummy variable that equals one if the CEO is chairman of the board	Riskmetrics
Geographical		
$FirmHQPctClear$	The average percentage of clear days per year in the city of the firm headquarters	National Climatic Data Center
$CeoOriginPctClear$	The average percentage of clear days in CEO's state of origin	National Climatic Data Center
$PctPop$	The state's percentage of the U.S. population 36 years prior to the hiring decision	1960, 1970 U.S. Census

Table I:

Firm Location and CEO Origin

The table reports the joint distribution of CEO state of origin and the state in which the firm is headquartered for the sample of 12,974 firm-year observations of non-regulated S&P 1,500 firms covered by the ExecuComp database for the years 1997 through 2007. CEO state of origin is defined as the state in which the CEO's social security card was issued. Foreign-born CEOs are defined as any CEO, who received his/her social security card after 21 years of age.. Firm location is the state in which the firm is currently headquartered according to the Compustat database. State abbreviations follow U.S. postal code abbreviations and the abbreviation FB is used to indicate foreign-born CEOs.

	Firm headquarters Location																																															
CEO Origin	AK	AL	AR	AZ	CA	CO	CT	DC	DE	FL	GA	HI	IA	ID	IL	IN	KS	KY	LA	MA	MD	ME	MI	MN	MO	MS	MT	NC	NE	NH	NJ	NM	NV	NY	OH	OK	OR	PA	RI	SC	SD	TN	TX	UT	VA	WA	WI	TOTAL
AK	0	0	0	7	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8
AL	0	56	0	0	1	0	0	0	0	2	4	0	0	0	7	0	1	1	0	0	4	0	0	0	0	8	0	4	0	0	0	0	0	0	0	0	0	0	0	0	6	3	0	0	0	0	0	97
AR	0	0	57	0	0	0	0	0	0	3	0	0	0	0	7	0	0	0	0	0	0	5	2	0	1	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	20	0	0	0	0	1	98
AZ	0	0	0	16	13	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	7	5	0	0	0	0	0	0	6	6	0	0	0	0	55
CA	0	0	0	20	505	20	0	0	0	19	0	0	0	12	38	1	0	3	0	29	3	0	2	3	18	0	0	1	0	0	1	0	25	38	28	0	20	29	0	0	4	1	52	2	5	22	7	908
CO	0	0	0	7	15	28	0	0	0	8	0	0	0	0	0	0	0	10	0	0	1	0	0	0	0	0	0	0	4	0	13	0	2	0	0	0	0	0	9	0	0	13	13	0	0	0	0	123
CT	0	0	0	2	18	20	30	0	0	18	0	0	0	0	1	8	0	0	0	6	0	6	8	17	6	8	0	0	0	0	10	0	0	25	0	0	1	11	0	0	0	0	2	0	4	0	0	201
DC	0	0	0	0	4	6	3	0	0	0	0	0	0	0	0	0	0	0	0	11	3	0	0	0	0	0	0	0	11	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	3	0	0	43
DE	0	0	0	0	6	0	0	0	1	0	6	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	0	0	29
FL	0	0	0	0	23	4	2	0	0	99	34	0	0	0	6	0	3	4	10	7	0	0	6	4	0	0	0	3	0	0	10	0	0	10	0	0	11	0	8	7	0	10	9	0	6	3	7	286
GA	0	4	0	0	5	1	8	0	0	8	112	0	0	0	11	0	0	0	0	0	0	0	0	0	5	2	0	11	0	0	3	0	6	0	7	9	0	7	0	0	0	5	7	0	14	0	1	226
HI	0	0	0	0	1	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	0	11
IA	0	0	0	0	36	2	10	0	0	0	6	0	47	0	21	0	0	0	0	0	7	0	7	11	3	0	0	0	1	0	0	0	0	0	0	0	6	6	0	0	0	8	33	0	0	4	0	208
ID	0	0	0	0	4	0	0	0	0	4	0	0	0	14	0	0	0	0	0	0	0	0	0	7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0	2	0	35
IL	0	3	0	24	129	9	19	9	3	60	16	0	0	0	228	0	0	0	0	35	4	0	15	39	17	0	0	19	6	7	15	0	0	16	31	0	0	12	0	0	0	0	62	0	0	22	43	843
IN	0	0	0	0	33	12	9	0	0	16	7	0	0	0	28	98	0	14	0	0	4	0	19	14	5	0	0	0	0	0	3	0	6	2	26	0	3	4	0	3	0	8	4	0	11	0	35	364
KS	0	4	8	0	4	0	0	0	0	0	0	0	1	0	0	0	13	0	0	6	7	0	1	3	9	3	0	2	9	0	0	0	3	11	8	2	0	6	0	0	0	0	20	0	0	0	0	120
KY	0	0	0	0	9	6	0	0	0	0	10	0	0	0	3	0	0	30	0	15	0	0	0	0	4	0	0	0	0	0	0	0	0	10	6	0	0	0	1	0	0	19	0	0	0	0	0	113
LA	0	0	11	0	13	4	0	0	0	0	10	0	0	0	11	0	0	0	39	3	0	0	5	0	0	0	0	0	0	0	3	0	0	8	0	0	0	0	0	0	3	40	0	0	0	0	6	156
MA	0	0	0	4	95	1	20	0	1	3	21	0	0	0	19	4	0	0	3	175	13	0	13	14	3	0	0	0	0	12	28	0	0	55	1	11	0	11	8	0	0	1	35	0	7	7	8	573
MD	0	0	0	0	7	0	0	7	13	13	3	2	0	0	5	0	0	0	0	14	19	0	0	0	0	0	0	1	0	4	14	0	1	10	5	0	0	3	0	0	0	2	4	0	0	1	0	128
ME	0	0	0	0	4	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	2	0	0	0	0	0	18	0	0	0	0	6	0	0	0	0	39
MI	0	0	0	3	69	10	0	0	4	13	19	0	1	0	25	2	8	0	0	4	0	0	120	9	6	0	0	4	0	0	12	0	1	15	15	0	8	13	0	6	0	0	34	0	0	16	13	430
MN	0	0	0	1	62	0	0	0	0	0	9	0	15	0	9	8	8	0	0	0	0	0	0	109	2	0	0	0	0	0	0	0	0	13	0	0	3	0	0	0	0	0	19	0	3	0	3	264
MO	0	2	5	0	8	7	0	0	0	0	0	0	0	0	15	2	11	8	0	11	0	0	9	9	75	0	0	0	0	0	0	0	0	10	21	3	4	0	0	0	0	1	44	0	6	0	6	257
MS	0	0	6	4	8	0	0	0	0	0	1	0	0	0	4	0	0	0	0	0	0	0	6	0	10	8	0	0	0	0	0	0	0	9	0	0	0	0	0	0	0	14	31	0	7	0	0	108
MT	0	0	0	0	5	0	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	6	0	0	2	0	18
NC	0	1	0	0	5	0	20	0	0	16	2	0	0	0	0	0	0	0	0	11	0	0	6	1	3	0	0	81	0	0	0	0	0	0	9	0	0	0	0	4	0	6	1	0	0	0	0	166
ND	0	0	0	0	4	3	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	12	0	0	0	5	0	0	3	0	0	0	0	0	0	3	0	0	0	0	2	4	0	2	0	43
NE	0	0	0	0	16	15	0	0	0	0	3	0	0	0	4	0	0	0	0	0	0	0	0	7	0	0	0	0	18	5	0	0	0	4	0	0	0	0	0	0	0	5	0	0	0	0	0	77
NH	0	0	0	0	9	6	0	0	0	0	0	0	0	0	4	0	0	0	0	10	11	0	2	0	0	0	0	0	0	0	6	0	0	0	1	0	0	0	0	0	0	7	0	0	0	0	0	56
NJ	0	0	0	0	55	8	11	0	0	15	11	0	0	0	29	5	0	0	0	10	0	1	3	24	13	0	0	15	0	10	80	3	2	53	10	0	7	30	10	5	0	22	9	0	9	4	0	454
NM	0	0	0	0	0	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	12	0	5	11	0	41
NV	0	0	0	0	0	0	0	0	0	4	0	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	17	0	0	0	0	0	0	0	0	4	0	0	0	0	34
NY	11	12	1	32	230	12	90	2	2	65	22	0	0	5	66	12	0	11	3	103	8	3	36	35	40	0	0	17	3	8	139	0	11	473	39	0	17	52	1	0	0	5	131	0	33	18	16	1,764
OH	0	0	0	14	100	10	36	0	1	17	29	0	3	3	24	9	0	3	0	30	4	0	22	30	5	0	0	6	0	4	19	0	0	5	303	0	6	27	0	0	0	4	43	0	16	6	4	783
OK	0	0	0	0	8	15	7	0	0	0	2	0	0	0	0	0	0	0	0	5	0	0	0	0	11	0	0	0	0	0	0	0	0	0	0	11	43	0	0	0	7	0	3	66	0	8	0	5	191
OR	0	0	0	4	15	1	0	0	0	0	1	0	0	0	4	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	7	0	23	5	0	0	0	0	0	0	0	0	1	75
PA	0	0	0	4	50	0	12	0	0	28	17	9	0	0	33	1	0	5	5	42	9	0	9	14	9	0	0	24	0	9	13	0	1	34	54	0	0	208	0	3	0	8	69	0	15	15	13	713
RI	0	0	0	0	1	0	6	0	0	0	0	0	0	0	1	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	7	0	0	0	15	0	0	0	0	0	0	0	3	53
SC	0	0	0	0	0	0	0	0	0	1	15	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	13	0	0	0	0	0	5	2	0	0	3	0	25	0	7	5	0	0	0	0	81
SD	0	0	0	0	9	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	25
TN	0	0	0	0	2	14	0	0	3	0	13	0	0	0	13	0	0	0	0	0	0	0	0	9	0	0	0	11	0	0	4	0	0	0	4	0	0	0	0	0	0	0	119	7	0	0	0	195
TX	0	0	0	1	17	9	3	0	0	4	0	0	0	5	14	2	9	0	2	4	11	0	0	6	0	0	0	6	0	0	0	0	0	0	9	7	4	1	0	0	0	8	308	0	2	2	1	435
UT	0	0	0	19	7	0	0	0	0	0	0	0	0	0	8	5	0	0	0	0	11	0	0	0	0	0	0	7	0	0	0	0	0	0	5	0	0	10	0	0	0	0	16	29	0	0	0	117
VA	0	0	4	0	23	5	3	0	0	6	0	0	0	0	12	0	0	0	0	6	0	0	8	5	5	0	0	14	0	0	0	0	0	0	5	13	0	0	28	10	0	0	1	9	0	133	7	0	297
VT	0	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	9	0	0	0	0	0	0	0	0	0	0	0	0	0	8	0	0	0	0	0	0	0	0	0	22
WA	0	0	0	0	56	8	0	0	0	8	0	0	10	0	0	1	0	0	0	0	0	0	0	4	0	0	0	0	0	0	12	0	3	4	0	0	2	13	0	0	0	6	0	0	56	0	183
WI	0	4	0	1	47	2	5	0	0	0	1	0	7	0	11	0	0	0	0	6	0	0	7	20	9	0	0	11	0	0	1	0	0	0	18	0	11	0	0	0	0	2	21	0	3	5	102	294
WV	0	0	0	0	13	0	4	0	0	0	4	0	7	0	0	0	0	5	0	0	0	0	0	0	3	0	0	0	0	0	0	0	0	0	6	0	0	3	0	0	0	8	0	0	8	0	3	64
WY	0	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	10	0	0	0	0	16
FB	0	0	0	26	337	0	41	0	0	32	40	0	0	6	60	10	0	5	0	57	18	0	27	30	16	0	0	19	11	0	49	1	0	80	31	0	16	47	0	3	0	9	67	0	2	4	10	1,054
TOTAL	11	86	92	189	2,087	240	344	18	28	474	423	11	91	49	744	176	53	99	62	627	137	15	333	455	278	29	7	267	63	59	437	6	85	910	677	77	152	557	62	67	4	299	1,257	40	300	209	288	12,974

Table II:

The Hiring Home Bias

The table reports statistics and test results on the hiring home bias for the sample of 1,162 hiring decisions made by non-financial S&P 1,500 firms between 1998 and 2007. In columns (1) and (2) the hiring home bias is displayed for each state as well as for the entire sample. The hiring home bias for a given sample is defined as $B = (N_L - E(N_L)) \div N$, where N is the number of hiring decisions in the sample, N_L is the observed number of local CEOs hired in the sample, and $E(N_L)$ is the expected number of locally hired CEOs for the sample. A hiring decision is considered "local" if the state in which a firm's headquarters is located is the same as the hired CEO's state of origin. Columns (1) and (2) differ in their assumptions regarding the distribution of CEO origin. The hiring home bias in column (1) is the difference between the percentage of observed local hiring decisions displayed in column (3) minus the expected percentage of local hiring decisions displayed in column (4). In column (4), the expected percentage of local hiring decisions is computed under the assumption that CEO talents are spread uniformly across the U.S. adolescent population. Using state level population data from the U.S. Decennial Census for the years 1960 and 1970, I compute the proportion of the U.S. population living in each state. I proxy for the probability that a firm selects a CEO from its own state by the percentage of the U.S. population living in the state in which the firm is headquartered 36 years prior to the hiring decision, using the Census data closest to 36 years prior to the date of hire. The computation of the hiring home bias in column (2) relaxes the assumption of CEO talent uniformity and assumes that the distribution of the observed CEO origin for the sample of 12,974 firm-year observations of CEOs of non-financial S&P 1,500 firms is representative of the distribution of CEO talents in the U.S. adolescent population. The expected percentage of local hires under this distributional assumption is shown in column (5). So the home bias in column (2) is just the difference between columns (3) and (5). Column (6) lists the number of hiring observations included in the estimation of the hiring home bias. For columns (1) and (2) stars indicate the results of testing the hypothesis that the observed number of local hires comes from a binomial distribution where the probability of hiring a local CEO is given in column (4) for the tests in column (1) and column (5) for the tests in column (2) and the number of trials is given in column (6). Panel B of this table shows statistics for the home hiring bias for all hires in each sample year and tests whether the time series average is different from zero using a two-sided t-test. Panel C shows results for a sample of 241 external hiring decisions. Note that the data on when CEOs joined the firm is incomplete in Compustat, so these 241 external hiring decisions do not constitute all external hiring decisions in the sample of 1,162 hires. Significance levels are denoted by *, **, ***, which correspond to 10, 5, and 1 percent levels, respectively.

	CEO Hiring Home Bias		Pct. Local CEO			Num. of Hires
			Obs	Exp_1	Exp_2	
State	(1)	(2)	(3)	(4)	(5)	(6)
		Panel A				
DE	0.998***	0.998***	1.000	0.002	0.002	1
UT	0.745***	0.740***	0.750	0.005	0.010	4
LA	0.649***	0.654***	0.667	0.018	0.013	6
IA	0.541***	0.538***	0.556	0.015	0.017	9
AR	0.490***	0.492***	0.500	0.010	0.008	4
OK	0.487**	0.484**	0.500	0.013	0.016	2
AL	0.358***	0.367***	0.375	0.017	0.008	8
WI	0.345***	0.342***	0.367	0.022	0.025	30
NY	0.328***	0.271***	0.419	0.091	0.148	86

Table II continued on the following page.

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State	CEO Hiring Home Bias (1)	(2)	Pct. Local CEO Obs (3)	Exp_1 (4)	Exp_2 (5)	Num. of Hires (6)
OH	0.318***	0.306***	0.371	0.053	0.066	70
NV	0.298***	0.297***	0.300	0.002	0.003	10
PA	0.287***	0.288***	0.348	0.060	0.060	46
KY	0.269***	0.276***	0.286	0.016	0.009	7
MD	0.268***	0.275***	0.286	0.018	0.011	7
MO	0.262***	0.264***	0.286	0.023	0.022	28
WA	0.250***	0.251***	0.267	0.016	0.015	15
TN	0.250***	0.253***	0.269	0.020	0.016	26
MA	0.247***	0.228***	0.276	0.028	0.048	58
MI	0.242***	0.250***	0.286	0.044	0.036	35
SC	0.237***	0.243***	0.250	0.013	0.007	8
NJ	0.200***	0.197***	0.235	0.035	0.038	34
IL	0.195***	0.179***	0.250	0.055	0.071	84
NC	0.175***	0.186***	0.200	0.025	0.014	20
GA	0.168***	0.172***	0.190	0.022	0.019	42
RI	0.162**	0.162**	0.167	0.005	0.004	6
CA	0.137***	0.155***	0.231	0.094	0.076	173
VA	0.131***	0.129***	0.154	0.023	0.025	26
MN	0.109***	0.106***	0.128	0.019	0.022	47
IN	0.108*	0.103*	0.133	0.026	0.031	15
TX	0.097***	0.114***	0.151	0.054	0.036	106
OR	0.049	0.053	0.059	0.010	0.006	17
CT	0.040	0.037	0.054	0.014	0.017	37
CO	0.035	0.035	0.045	0.010	0.010	22
FL	-0.003	0.004	0.028	0.031	0.024	36
NH	-0.003	-0.005	0.000	0.003	0.005	6
HI	-0.004	-0.001	0.000	0.004	0.001	1
ID	-0.004	-0.003	0.000	0.004	0.003	2
ME	-0.005	-0.003	0.000	0.005	0.003	1
NM	-0.005	-0.003	0.000	0.005	0.003	3
NE	-0.007	-0.006	0.000	0.007	0.006	3
AZ	-0.008	-0.005	0.000	0.008	0.005	15
MS	-0.011	-0.009	0.000	0.011	0.009	3
KS	-0.011	-0.010	0.000	0.011	0.010	3
AK						
DC						
MT						
ND						
VT						
WV						
WY						
ALL	0.192***	0.190***	0.238	0.046	0.048	1,162
Mean (Full)	0.218	0.218				
T-Stat. (Full)	6.614	6.647				
Mean (20)	0.188	0.185				
T-Stat. (20)	8.397	8.839				

Table II continued on the following page.

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year	CEO Hiring Home Bias (1)	(2)	Pct. Local CEO Obs (3)	Exp_1 (4)	Exp_2 (5)	Num. of Hires (6)
			Panel B			
2007	0.194	0.192	0.246	0.051	0.054	118
2006	0.169	0.166	0.218	0.049	0.053	119
2005	0.154	0.154	0.204	0.050	0.050	137
2004	0.181	0.181	0.224	0.043	0.043	98
2003	0.208	0.208	0.259	0.051	0.051	112
2002	0.223	0.220	0.267	0.043	0.047	120
2001	0.196	0.193	0.241	0.045	0.047	158
2000	0.169	0.165	0.213	0.044	0.048	122
1999	0.208	0.205	0.253	0.045	0.047	99
1998	0.238	0.237	0.278	0.040	0.041	79
Mean	0.194	0.192				
T-Stat.	23.465	23.072				
			Panel C			
2007	0.172	0.172	0.231	0.059	0.058	26
2006	0.045	0.042	0.087	0.042	0.045	23
2005	0.119	0.119	0.179	0.059	0.060	28
2004	0.093	0.089	0.143	0.050	0.054	21
2003	0.031	0.033	0.091	0.059	0.057	22
2002	0.137	0.135	0.179	0.042	0.043	28
2001	0.119	0.121	0.167	0.048	0.046	42
2000	0.098	0.096	0.143	0.045	0.047	21
1999	0.061	0.059	0.118	0.057	0.058	17
1998	0.031	0.033	0.077	0.045	0.044	13
Mean	0.091	0.090				
T-Stat.	6.037	5.981				
ALL	0.099***	0.098***	0.149	0.051		241

Table III:

CEO Hire Sample Summary Statistics

This table reports summary statistics for 1,142 firm-year observations for the sample of non-financial S&P 1,500 firms that experienced CEO turnover during the years 1998 through 2007. The sample is constructed by identifying changes in the executive who is considered the CEO for all or most of the fiscal year by S&P's Execucomp database. The turnover event occurs ($t = 0$) in the first year that a new CEO is considered the CEO for all or most of the fiscal year by the Execucomp database. Summary statistics on firm and previous CEO characteristics are measured at t=-1 and new CEO characteristics are measured at time $t = 0$. All variables are defined in the appendix.

	Mean	Median	St. Dev.	10^{th}	90^{th}	N
Firm Characteristics						
Ln(Assets) (*Assets*)	7.268	7.190	1.598	5.384	9.556	1142
Firm age (*FirmAge*)	52.514	37.000	40.053	12.000	110.000	1108
R&D expense ratio (*RD*)	0.042	0.006	0.085	0.000	0.120	1141
Total debt to assets (*Lev*)	0.159	0.123	0.155	0.000	0.375	1125
Dividend payor (*Dividend*)	0.505	1.000	0.500	0.000	1.000	1139
Capital expenditures (*Capex*)	0.063	0.043	0.072	0.014	0.124	1128
Capital intensity (*CapIntense*)	0.362	0.204	0.523	0.064	0.729	1140
Sales growth (*SalesGrwth*)	1.098	1.059	0.372	0.842	1.361	1140
Industry-adj FY stock return (*StockRet*)	-0.003	-0.077	0.622	-0.582	0.558	1129
FY stock return volatility (*StockVol*)	0.032	0.027	0.018	0.015	0.055	1131
Pct. of outside directors (*PctOutsideDir*)	0.652	0.667	0.166	0.418	0.857	962
Outside directors own more than 1% (*OutsideDirOwnDum*)	0.106	0.000	0.308	0.000	1.000	1142
Pct. clear days in HQ city (*FirmHQPctClear*)	0.291	0.269	0.085	0.200	0.438	1142
Tobin's q (Q)	2.154	1.564	1.809	0.968	3.743	1131
ROA (*ROA*)	0.141	0.137	0.156	0.003	0.293	1136
New CEO Characteristics						
CEO is local (*LocalCEO*)	0.237	0.000	0.426	0.000	1.000	1142
Foreign born CEO (*Foreign*)	0.090	0.000	0.287	0.000	0.000	1142
CEO Age (*Age*)	52.159	52.000	7.089	43.000	61.000	1142
log(CEO compensation ($1000s)) (*TotalComp*)	7.902	7.890	1.126	6.474	9.330	1131
log(CEO cash compensation ($1000s)) (*TotalCashComp*)	6.684	6.727	1.073	5.846	7.734	1142
CEO owns 5% of firm (*CeoBlockholder*)	0.031	0.000	0.173	0.000	0.000	1101
CEO is chairman of the board (*CeoChair*)	0.421	0.000	0.494	0.000	1.000	1142
CEO is hired from within the company (*InsideHire*)	0.609	1.000	0.488	0.000	1.000	606
Pct clear days in CEO state of origin (*CeoOriginPctClear*)	0.271	0.247	0.065	0.193	0.364	1039
Previous CEO Characteristics						
CEO is local (*PrevLocalCEO*)	0.259	0.000	0.438	0.000	1.000	1142
Foreign born CEO (*PrevForeign*)	0.077	0.000	0.267	0.000	0.000	1142
CEO Age (*PrevAge*)	58.871	60.000	8.139	48.000	68.000	1142
log(CEO compensation ($1000s)) (*PrevTotalComp*)	7.721	7.700	1.175	6.228	9.245	1132
log(CEO cash compensation ($1000s)) (*PrevTotalCashComp*)	6.747	6.777	1.058	5.821	7.865	1142
CEO owns 5% of firm (*PrevCeoBlockholder*)	0.128	0.000	0.334	0.000	1.000	1049
CEO is chairman of the board (*PrevCeoChair*)	0.626	1.000	0.484	0.000	1.000	1142
CEO is hired from within the company (*PrevInsideHire*)	0.624	1.000	0.485	0.000	1.000	577
CEO is a founder of the company (*Founder*)	0.088	0.000	0.283	0.000	0.000	1142

Table IV:

Difference of Means Tests

This table displays results of unconditional difference of means tests for various firm, new CEO, and previous CEO characteristics for the sample of 1,142 hiring decisions of non-financial S&P 1,500 firms between 1998 and 2007 covered by S&P's Execucomp database. New CEO characteristics are measured in event time 0, where the event time is as explained in Table III, and firm and previous CEO characteristics are measured in event time -1. Column (1) displays variable means for non-local hiring decisions and column (2) reports variable means for local hiring decisions. A hiring decision is considered local if the new CEO's state of origin is the same as the state in which the firm's headquarters is located. Column (3) displays t-statistics of the two-sided test for differences between the two groups. Significance levels are denoted by *, **, ***, which correspond to 10, 5, and 1 percent levels, respectively.

	Hire Type		t-stat
	Non-Local (1)	Local (2)	(1)-(2) (3)
Observations	871	271	
Firm Characteristics			
Ln(Assets) (*Assets*)	7.291	7.191	0.958
Firm age (*FirmAge*)	52.564	52.352	0.077
R&D expense ratio (*RD*)	0.046	0.030	3.140***
Total debt to assets (*Lev*)	0.161	0.154	0.683
Dividend payor (*Dividend*)	0.486	0.565	-2.265**
Capital expenditures (*Capex*)	0.063	0.063	-0.082
Capital intensity (*CapIntense*)	0.366	0.349	0.518
Sales growth (*SalesGrwth*)	1.100	1.091	0.474
Industry-adj FY stock return (*StockRet*)	-0.007	0.009	-0.378
FY stock return volatility (*StockVol*)	0.032	0.033	-0.474
Pct. of outside directors (*PctOutsideDir*)	0.667	0.606	4.778***
Outside directors own more than 1% (*OutsideDirOwnDum*)	0.117	0.070	2.476**
Pct. clear days in HQ city (*FirmHQPctClear*)	0.294	0.283	1.987**
Tobin's q (Q)	2.186	2.049	1.233
ROA (*ROA*)	0.137	0.151	-1.309
New CEO Characteristics			
CEO Age (*Age*)	52.328	51.616	1.300
log(CEO compensation ($1000s)) (*TotalComp*)	7.967	7.696	3.453***
log(CEO cash compensation ($1000s)) (*TotalCashComp*)	6.736	6.516	2.497**
CEO owns 5% of firm (*CeoBlockholder*)	0.020	0.064	-2.772***
CEO is chairman of the board (*CeoChair*)	0.425	0.410	0.443
CEO is hired from within the company (*InsideHire*)	0.582	0.712	-2.794***
Pct clear days in CEO state of origin (*CeoOriginPctClear*)	0.267	0.280	-2.558**
Previous CEO Characteristics			
Previous CEO is local (*PrevCeoLocal*)	0.231	0.351	-3.701***
CEO Age (*PrevAge*)	58.452	60.218	-2.908***
log(CEO compensation ($1000s)) (*PrevTotalComp*)	7.746	7.641	1.240
log(CEO cash compensation ($1000s)) (*PrevTotalCashComp*)	6.769	6.675	1.185
CEO owns 5% of firm (*PrevCeoBlockholder*)	0.108	0.190	-3.045***
CEO is chairman of the board (*PrevCeoChair*)	0.619	0.649	-0.917
CEO is hired from within the company (*PrevInsideHire*)	0.605	0.683	-1.706*
CEO is a founder of the company (*Founder*)	0.077	0.122	-2.052**

Table V:

Local Hires by Industry

The table reports the percentage of local hires by two-digit Standard Industry Classification (SIC) code for the sample of 1,142 hiring decisions of non-regulated S&P 1,500 firms followed by the Execucomp database from 1998 through 2007. The definition of "local" CEOs is found in the Appendix and in Table II.

SIC Code	Industry Description	Percent Local	Num. Obs.
10	Metal mining	16.7	12
12	Bituminous coal mining	0.0	1
13	Oil and gas extraction	20.0	30
14	Mining non-metal minerals	0.0	2
15	General building contractors	0.0	4
16	Heavy construction, except buildings	14.3	7
20	Food and kindred products	24.4	41
21	Tobacco products	0.0	3
22	Textile mill products	50.0	10
23	Apparel and other textile products	45.5	11
24	Lumber and wood products	50.0	10
25	Furniture and fixtures	40.0	10
26	Paper and allied products	26.7	30
27	Printing and publishing	29.6	27
28	Chemical and allied products	26.8	97
29	Petroleum and coal products	0.0	6
30	Rubber and miscellaneous plastic products	45.5	11
31	Leather and leather products	25.0	4
32	Stone, clay, and glass products	0.0	3
33	Primary metal industries	23.8	21
34	Fabricated metal products	18.2	22
35	Industrial machinery and equipment	21.0	105
36	Electronic and other electrical equipment	17.2	116
37	Transportation equipment	22.2	45
38	Instruments and related products	17.5	63
39	Miscellaneous manufactruing products	33.3	9
40	Railroad transportation	0.0	5
41	Transit and passenger transit	0.0	2
42	Trucking and warehousing	28.6	7
44	Transportation by water	66.7	3
45	Transportation by air	10.0	10
47	Transportation services	33.3	3
48	Communications	34.6	26

Table V continued on next page.

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SIC Code	Industry Description	Percent Local	Num. Obs.
50	Wholesale trade–durable goods	32.3	31
51	Wholesale trade–nondurable goods	18.8	16
52	Building materials and gardening	40.0	5
53	General merchandise stores	5.9	17
54	Food stores	0.0	7
55	Auto dealers and service stations	44.4	9
56	Apparel and accessory stores	29.4	17
57	Funiture and home furnishings	23.1	13
58	Eating and drinking places	30.4	23
59	Miscellaneous retail	22.6	31
70	Hotels and other lodging places	66.7	3
72	Personal services	37.5	8
73	Business services	23.9	142
75	Auto repair, services, and parking	42.9	7
78	Motion pictures	0.0	1
79	Amusement and recreation services	40.0	10
80	Health services	22.2	18
82	Educational services	20.0	5
87	Engineering and management services	0.0	19
99	Conglomerates	50.0	4

Table VI:

Explaining the Home Hiring Bias

This table examines the ability of the search cost, cultural matching, shirking, cronyism, and geographic preference theories to explain why firms hire local CEOs. Reported are the results of probit regressions testing these hypotheses using 1,142 hiring decisions for non-financial S&P 1,500 firms covered by the Execucomp database between 1998 and 2007. The dependent variable is a dummy variable that is equal to one if the firm hires a local CEO. The definition of a "local" CEO is found in Table II. The table reports estimated marginal effects and their standard errors (in parenthesis) for nine different models. Each model includes both year and industry (using 2-digit SIC codes) fixed effects (estimates and standard errors not reported). *PctPop* is equal to the proportion of the U.S. population living the state of the firm headquarters in 1960. Firm level accounting and board structure variables are measured in event time -1 and are defined in the appendix. *PrevCeoLocal* is a dummy variable that is equal to one if the previous CEO at the time of the hiring decision is local and zero otherwise. *FirmHQPctClear* is the average percentage of clear days per year in the city of the firm headquarters. *CeoOriginPctClear* is the average percentage of clear days in the hired CEO's state of origin. *InsideHire* is a dummy variable that is equal to one if the newly hired CEO worked for the firm for more than 365 days prior to being hired as CEO. *CeoBlockholder* is a dummy variable that is equal to one if the hired CEO owns 5% or more of the firm in the first year of the hiring decision. Also reported are the number of observations used in the estimation as well as the pseudo adjusted R^2. The table reports White (1980) heteroscedasticity-consistent standard errors, clustered at the industry-level. Significance levels are denoted by *, **, ***, which correspond to 10, 5, and 1 percent levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
PctPop	1.454***	1.735***	1.422***	1.408***	1.860***	1.655***	2.350***	2.083***	2.4614***
	(0.444)	(0.500)	(0.442)	(0.425)	(0.476)	(0.465)	(0.586)	(0.6719)	(0.5777)
Assets	-0.011	-0.015**	-0.013	-0.010	-0.014	-0.013	-0.023***	-0.0157	-0.0213***
	(0.009)	(0.007)	(0.009)	(0.008)	(0.009)	(0.010)	(0.007)	(0.0099)	(0.0077)
RD	-0.485***	-0.338***	-0.479***	-0.460***	-0.394***	-0.578***	-0.318**	-0.2927**	-0.2918*
	(0.084)	(0.120)	(0.085)	(0.083)	(0.100)	(0.098)	(0.161)	(0.1302)	(0.1628)
PctOutsideDir		-0.314***					-0.311***	-0.2176***	-0.3178***
		(0.079)					(0.091)	(0.0703)	(0.1045)
OutsideDirOwnDum			-0.085**				-0.094**	-0.0721*	-0.0902**
			(0.030)				(0.034)	(0.0304)	(0.0351)
PrevCeoLocal				0.069***			0.061**	0.0752**	0.0458*
				(0.026)			(0.029)	(0.0415)	(0.0282)
FirmHQPctClear					-0.426***		-0.590***	-0.327*	-0.6687***
					(0.120)		(0.182)	(0.1935)	(0.1961)
CeoOriginPctClear						0.505**	0.653***	0.9152***	0.6823***
						(0.198)	(0.233)	(0.2617)	(0.2305)
InsideHire								0.0432	
								(0.0313)	
CeoBlockholder									0.2427***
									(0.1089)
Pseudo AdjR^2	0.076	0.094	0.082	0.082	0.083	0.087	0.129	0.202	0.142
N	1141	962	1141	1141	1141	1038	879	465	852

Table VII:

Local Hires and CEO Compensation Levels

This table tests whether executive compensation for locally hired CEOs is different from that of non-local CEOs during their first year of tenure. Reported are ordinary least squares regression results of hired CEO compensation on executive compensation determinants for 1,053 hiring decisions for non-financial S&P 1,500 firms covered by the Execucomp database between 1998 and 2007. Executive compensation is measured during the first full fiscal year of the newly appointed CEO's tenure. In columns (1) through (3) The dependent variable is the natural logarithm of one plus the hired CEO's total compensation ($TotalComp$), in his/her first full year of tenure with the firm. $TotalComp$ is includes salary, bonuses, restricted stock grants, and the Black-Scholes value of stock options grants. The dependent variable in columns (4) through (6) is total cash compensation ($TotCashComp$), which is the sum of salary and bonuses. The determinants of CEO compensation include firm size ($Assets$), firm performance (ROA & $StockRet$), growth opportunities (Q), stock market volatility ($StockVol$), governance control variables ($PctOutsideDir$ and $OutsideDirOwndum$), and a dummy variable that equals one if the hired CEO came from within the firm $InsideHire$. Definitions of these variables are found in the Appendix and in the previous tables. All firm accounting and governance variables measured in event time -1, where event time 0 is the fiscal year in which the hiring event takes place. The variable of interest in the regressions is $LocalCeo$, which is a dummy variable that equals one if the newly hired CEO is local. The definition of a "local" CEO is found in Table II. The table reports coefficients and standard errors (in parenthesis) for various models. Each model includes both year and industry (using 2-digit SIC codes) fixed effects (coefficient estimates and standard errors not reported). Also reported are the number of observations used in the estimation as well as the pseudo adjusted R^2. The table reports White (1980) heteroscedasticity-consistent standard errors, clustered at the industry-level. Significance levels are denoted by *, **, ***, which correspond to 10, 5, and 1 percent levels, respectively.

	log(1+$TotalComp$)			log(1+$TotalCashComp$)		
	(1)	(2)	(3)	(4)	(5)	(6)
$Intercept$	4.209***	4.231***	3.971***	4.678***	4.694***	4.243***
	(0.236)	(0.224)	(0.241)	(0.332)	(0.330)	(0.237)
$LocalCeo$	-0.198***	-0.498***	-0.608***	-0.242***	-0.417**	-0.323
	(0.055)	(0.109)	(0.206)	(0.080)	(0.172)	(0.252)
$LocalCeoXPctPop$		5.678***	8.042***		3.364	4.037
		(1.626)	(2.733)		(2.745)	(3.311)
$PctPop$		0.889	0.226		0.085	0.395
		(0.982)	(1.514)		(1.273)	(1.906)
$Assets$	0.402***	0.398***	0.413***	0.266***	0.264***	0.297***
	(0.018)	(0.018)	(0.021)	(0.036)	(0.036)	(0.032)
ROA	-0.366	-0.254	-0.334*	0.545	0.599	0.816
	(0.316)	(0.307)	(0.193)	(0.610)	(0.591)	(0.733)
$StockRet$	0.093*	0.087*	0.076	0.058	0.053	0.083
	(0.052)	(0.052)	(0.063)	(0.069)	(0.070)	(0.075)
Q	0.204***	0.199***	0.221***	0.012	0.011	0.011
	(0.021)	(0.023)	(0.023)	(0.034)	(0.035)	(0.045)
$StockVol$	-1.110	-1.601	1.750	-6.044*	-6.284*	-1.909
	(2.803)	(2.759)	(2.469)	(3.526)	(3.553)	(2.144)
$PctOutsideDir$	0.122	0.105	0.235*	0.037	0.026	0.193
	(0.156)	(0.145)	(0.126)	(0.200)	(0.196)	(0.180)
$OutsideDirOwnDum$	-0.119	-0.123	-0.232*	-0.045	-0.047	-0.074
	(0.095)	(0.099)	(0.131)	(0.081)	(0.081)	(0.077)
$InsideHire$			-0.164**			-0.190***
			(0.075)			(0.066)
$AdjR^2$	0.488	0.496	0.492	0.273	0.273	0.353
N	847	847	460	853	853	461

Table VIII:

Local Hires and Changes in CEO Compensation

This table examines changes in executive compensation between newly hired CEOs and their predecessor for the sample of 1,018 hiring decisions of non-financial S&P 1,500 firms between the years 1998 and 2007. The change in executive compensation is measured as the compensation of the newly hired CEO in his first full fiscal year of tenure minus the compensation of the previous CEO in his/her last full year of tenure. CEOs who do not hold office for at least one full fiscal year are excluded from the sample. In each column the natural logarithm of one plus the compensation of the predecessor, the successor, and the difference is reported. Panel A reports means and Panel B reports medians. Stars on statistics in the "Change" rows refer to significance levels of the two-tailed tests testing whether the changes in CEO successor and predecessor pay are statistically different from zero. In panel A the test utilized is a t-test and panel B uses a Wilcoxon-Mann-Whitney test. Two different measures of compensation are used, total compensation ($TotalComp$) and total cash compensation ($TotalCashComp$). These variables are defined in Table VII as well as in the appendix. Significance levels are denoted by *, **, ***, which correspond to 10, 5, and 1 percent levels, respectively. In column (1) statistics and test results are reported for the full sample of observations. Columns (2) and (3) split the sample by "local" and "non-local" successor CEOs. Columns (4) through (7) report results for specific transitions of predecessor to successor CEOs based on their local status.

				CEO Transition, From-To			
		New CEO		Local	Local	Non-local	Non-local
	All	Local	Non-local	Local	Non-local	Local	Non-local
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Panel A: Mean Compensation							
			log(1+ *TotalComp*)				
Predecessor	7.804	7.732	7.827	7.650	7.620	7.775	7.894
Successor	7.795	7.647	7.843	7.542	7.834	7.704	7.846
Change	0.008	-0.059	0.030	-0.054	0.243***	-0.061	-0.039
			log(1+ *TotalCashComp*)				
Predecessor	6.839	6.752	6.868	6.523	6.792	6.868	6.892
Successor	6.760	6.602	6.812	6.589	6.875	6.608	6.792
Change	-0.055	-0.101	-0.041	0.065	0.087	-0.185*	-0.081
Panel B: Median Compensation							
			log(1+ *TotalComp*)				
Predecessor	7.798	7.760	7.845	7.622	7.520	7.774	7.920
Successor	7.816	7.620	7.873	7.432	7.846	7.754	7.897
Change	-0.024	-0.066	-0.015	-0.054	0.158***	-0.088	-0.057
			log(1+ *TotalCashComp*)				
Predecessor	6.907	6.888	6.910	6.865	6.860	6.902	6.939
Successor	6.777	6.682	6.803	6.717	6.796	6.675	6.803
Change	-0.065***	-0.108**	-0.057***	-0.073	-0.035	-0.113**	-0.062***
N	1018	251	767	87	184	164	583

Table IX:

Changes in CEO Compensation

This table examines changes in executive compensation between newly hired CEOs and their predecessor in a multivariate setting for the sample of 1,018 hiring decisions of non-financial S&P 1,500 firms between the years 1998 and 2007 described in Table VIII. Control variables include changes in lagged variables described in table VII as well as the level of lagged assets (*Assets*) and the percentage of outside directors on the board in the year prior to the hiring decision (*PctOutsideDir*). The variable of interest is *LocalCeoChg*, which is equal to one if the new CEO is local and the previous CEO is non-local, is -1 if the new CEO is non-local and the previous CEO is local, and is zero otherwise. In addition, asymmetric effects on *LocalCeoChg* are isolated using the variables *NonLocToLoc*, which is a dummy variable that equals one if the previous CEO is non-local and the new CEO is local, and *LocToNonLoc*, which is a dummy variable that is equal to one if the previous CEO is local and the new CEO is non-local. The dependent variable is the change in one plus natural logarithm of the compensation of the new CEO minus the natural logarithm of the previous CEO. In columns (1) through (6) the measure of compensation is *TotalComp* and in columns (7) through (12) the measure utilized is *TotalCashComp*. Definitions of these variables are found in previous tables as well as in the appendix. The table reports coefficients and standard errors (in parenthesis) for twelve different models. Each model includes year fixed effects (estimates and standard errors not reported). Also reported are the number of observations used in the estimation as well as the adjusted R^2. The table reports White (1980) heteroscedasticity-consistent standard errors, clustered at the industry-level. Significance levels are denoted by *, **, ***, which correspond to 10, 5, and 1 percent levels, respectively.

	Δ log(1+*TotalComp*)						Δ log(1+*TotalCashComp*)					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
Intercept	0.207**	0.995***	1.599***	0.162	0.922***	1.442***	-0.119**	0.350	-0.099	-0.123**	0.389	-0.076
	(0.096)	(0.214)	(0.430)	(0.099)	(0.222)	(0.435)	(0.052)	(0.228)	(0.393)	(0.057)	(0.245)	(0.418)
LocalCeoChg	-0.162***	-0.191***	-0.184**				-0.148*	-0.153*	-0.048			
	(0.051)	(0.049)	(0.087)				(0.077)	(0.086)	(0.091)			
NonLocToLoc				-0.029	-0.078	-0.028				-0.137	-0.214*	-0.071
				(0.090)	(0.081)	(0.146)				(0.117)	(0.115)	(0.164)
LocToNonLoc				0.283***	0.296***	0.348**				0.158*	0.097	0.023
				(0.074)	(0.077)	(0.134)				(0.091)	(0.107)	(0.146)
AssetsChg		0.244	0.507		0.236	0.508		-0.018	-0.073		-0.014	-0.074
		(0.164)	(0.343)		(0.165)	(0.341)		(0.115)	(0.204)		(0.114)	(0.204)
ROAChg		-0.083	-0.019		-0.069	-0.041		0.117	0.319		0.107	0.322
		(0.459)	(0.856)		(0.458)	(0.858)		(0.433)	(0.838)		(0.435)	(0.832)
StockReturnChg		0.039	0.076		0.042	0.080		0.011	0.026		0.009	0.026
		(0.051)	(0.087)		(0.051)	(0.088)		(0.039)	(0.052)		(0.039)	(0.052)
QChg		0.030	0.038		0.029	0.033		-0.012	-0.033		-0.011	-0.033
		(0.043)	(0.068)		(0.043)	(0.067)		(0.041)	(0.070)		(0.041)	(0.070)
StockVolChg		-8.307*	-0.065		-8.114*	0.519		-11.057	1.132		-11.144	1.045
		(4.564)	(5.685)		(4.576)	(5.663)		(7.083)	(6.592)		(7.091)	(6.784)
PctOutsideDir		-0.482***	-0.304		-0.451**	-0.244		-0.417*	0.013		-0.432*	0.004
		(0.184)	(0.293)		(0.185)	(0.294)		(0.220)	(0.272)		(0.224)	(0.264)
Assets		-0.063***	-0.107***		-0.062***	-0.101***		-0.023	0.007		-0.024	0.006
		(0.022)	(0.038)		(0.022)	(0.038)		(0.023)	(0.042)		(0.024)	(0.043)
InsideHireChg			-0.050			-0.055			-0.101			-0.101
			(0.097)			(0.098)			(0.062)			(0.062)
$AdjR^2$	0.024	0.053	0.022	0.027	0.055	0.025	0.007	0.019	-0.027	0.006	0.018	-0.031
N	956	810	273	956	810	273	967	817	273	967	817	273

Table X:

Local Hires and CEO Turnover

This table reports probit regression results for 10,920 firm-year observations for non-financial S&P 1,500 firms covered by the Execucomp database between 1998 and 2007. The dependent variable is a dummy variable that is equal to one in year t if the firm's CEO is different from the CEO in year $t-1$. The table reports coefficients and standard errors (in parenthesis) for eight different models. *CeoLocal* is a dummy variable that equals one if the CEO at time $t-1$ is from the same state as the firm's headquarters. *MktRet* is the buy-and-hold return on the CRSP value weighted index over fiscal year $t-1$. *IndExRet* is the difference between the fiscal year buy-and-hold return of the equal-weighted industry portfolio for which the firm is a member (by 2 digit SIC code) minus *MktRet* in $t-1$. *FirmExRet* is the fiscal year buy-and-hold return on the firm's stock minus the return on the equal weighted industry portfolio for the industry to which the firm belongs in year $t-1$. *Age60Dum* is a dummy variable that equals one if the firm's CEO in year $t-1$ is greater than 59 years of age. *PctOutsideDir* is the percentage of outsiders on the board at time $t-1$. *CeoBlockholder* is a dummy variable that is equal to one if the CEO at time $t-1$ owns 5% or more of the firm. *Founder* is a dummy variable that equals one if the CEO at time $t-1$ is a founder of the firm. Also reported are the number of observations used in the estimation as well as the pseudo adjusted R^2. The table reports White (1980) heteroscedasticity-consistent standard errors, clustered at the firm-level. Significance levels are denoted by *, **, ***, which correspond to 10, 5, and 1 percent levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
CeoLocal	-0.025***	-0.025***	-0.024***	-0.024***	-0.024***	-0.021***	-0.021***	-0.022***
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.008)
CeoLocalX MktRet		0.006						
		(0.033)						
CeoLocalX IndExRet			-0.041*					
			(0.023)					
CeoLocalX FirmExRet				-0.011				
				(0.013)				
MktRet	-0.014	-0.016	-0.014	-0.014	-0.018	-0.009	-0.009	0.002
	(0.016)	(0.019)	(0.016)	(0.016)	(0.018)	(0.016)	(0.016)	(0.021)
IndExRet	-0.007	-0.007	0.004	-0.008	-0.017	-0.006	-0.006	0.007
	(0.011)	(0.011)	(0.013)	(0.011)	(0.012)	(0.011)	(0.011)	(0.014)
FirmExRet	-0.024***	-0.024***	-0.024***	-0.022***	-0.034***	-0.025***	-0.025***	-0.015**
	(0.006)	(0.006)	(0.006)	(0.007)	(0.008)	(0.006)	(0.006)	(0.008)
Age60Dum	0.106***	0.106***	0.106***	0.106***	0.114***	0.106***	0.107***	0.118***
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.009)
PctOutsideDir					-0.006			
					(0.017)			
CeoBlockholder						-0.021**	-0.019**	-0.013
						(0.008)	(0.008)	(0.010)
Founder							-0.006	
							(0.010)	
InsideHire								0.009
								(0.007)
Pseudo AdjR^2	0.044	0.044	0.044	0.044	0.050	0.048	0.048	0.059
N	10,920	10,920	10,920	10,920	9,051	10,567	10,567	5,682

Table XI:

Local Hires and Changes in Operating Performance

This table examines changes in operating performance around CEO hiring decisions for various transitions between local and non-local predecessor and successor CEOs. The difference in operating performance is measured as the average of operating performance in event years 1, 2, and 3 minus the average operating performance of event years -2 and -3, where event year zero is the year of the hiring decision. The newly hired CEO is required to be in office for event years zero through three. This reduces sample period to hires between 1997 and 2005, which reduces the number of observations to 585 non-regulated S&P 1,500 hiring decisions. Four measures of operating performance are analyzed, Unadjusted ROA, industry-adjusted ROA, industry, size-adjusted ROA, and industry, size, and prior performance-adjusted ROA. For the latter three performance measures, the firm's unadjusted ROA is reduced by the ROA of a control firm in each event year prior to calculating the means for pre- and post-hire event performance. For industry-adjusted ROA the control firm is the firm with the median unadjusted ROA with the same two-digit SIC code. For industry and size-adjusted ROA the control firm is the median firm in each event year from the universe of firms in the same two-digit SIC code and whose book value of assets is within +/- 30% of the firm. For industry, size, and prior performance adjusted ROA, the control firm in each event period must have ROA in event time -2 within +/- 10% of the firms ROA in event time -2. If no firms exist in the same size and prior performance categories then the inclusion tolerance for size and prior performance are expanded in a systematic manner until at least one control firm is identified. Panel A reports means and Panel B reports medians. Stars on reported statistics refer to significance levels of the two-tailed tests testing whether these statistics are significantly different from zero. In panel A the test utilized is a *t*-test and panel B uses a Wilcoxon-Mann-Whitney test. Significance levels are denoted by *, **, ***, which correspond to 10, 5, and 1 percent levels, respectively. In column (1) statistics and test results are reported for the full sample of observations. Columns (2) and (3) split the sample by "local" and "non-local" successor CEOs. Column (4) tests for differences between the samples in columns (2) and (3). Columns (5) through (8) report results for specific transitions of predecessor to successor CEOs based on their local status.

					CEO Transition, From-To			
		New CEO			Local	Local	Non-local	Non-local
	All	Local	Non-local	(2) - (3)	Local	Non-local	Local	Non-local
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel A: Mean ROA								
Unadjusted ROA								
Before	0.1726***	0.1830***	0.1689***	0.0142	0.1918***	0.1842***	0.1781***	0.1638***
After	0.1433***	0.1451***	0.1427***	0.0024	0.1695***	0.1576***	0.1314***	0.1378***
Change	-0.0292***	-0.0379***	-0.0261***	-0.0118	-0.0223	-0.0266**	-0.0467***	-0.0260***
Industry-adjusted ROA								
Before	0.0965***	0.1071***	0.0928***	0.0143	0.1021***	0.0995***	0.1099***	0.0906***
After	0.0799***	0.0845***	0.0782***	0.0063	0.0962***	0.0835***	0.0779***	0.0765***
Change	-0.0167***	-0.0226**	-0.0146**	-0.0080	-0.0060	-0.0160	-0.0319***	-0.0141**
Industry, size-adjusted ROA								
Before	0.0258***	0.0355***	0.0224***	0.0131	0.0420**	0.0284**	0.0319***	0.0204***
After	0.0164***	0.0133	0.0174***	-0.0041	0.0357*	0.0293**	0.0007	0.0135**
Change	-0.0095*	-0.0222**	-0.0050	-0.0173	-0.0063	0.0010	-0.0311***	-0.0069
Industry, size, performance-adjusted ROA								
Before	-0.0041	0.0016	-0.0061	0.0076	0.0215**	0.0107	-0.0096	-0.0116**
After	0.0081	-0.0024	0.0118	-0.0142	0.0284*	0.0275***	-0.0198**	0.0066
Change	0.0121*	-0.0040	0.0179**	-0.0219*	0.0070	0.0168*	-0.0102	0.0182

Table XI continued on the next page.

Table XI continued from the previous page.

		New CEO			CEO Transition, From-To			
	All	Local	Non-local	(2) - (3)	Local Local	Local Non-local	Non-local Local	Non-local Non-local
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Panel B: Median ROA								
Unadjusted ROA								
Before	0.1668***	0.1709***	0.1646***	0.0063	0.1726***	0.1645***	0.1699***	0.1648***
After	0.1398***	0.1437***	0.1388***	0.0049	0.1478***	0.1422***	0.1386***	0.1382***
Change	-0.0195***	-0.0278***	-0.0178***	-0.0100	-0.0173*	-0.0172**	-0.0291***	-0.0178***
Industry-adjusted ROA								
Before	0.0717***	0.0820***	0.0669***	0.0151	0.0644***	0.0632***	0.0949***	0.0694***
After	0.0475***	0.0433***	0.0517***	-0.0084	0.0472***	0.0521***	0.0400***	0.0515***
Change	-0.0086***	-0.0102**	-0.0077***	-0.0024	-0.0025	-0.0043	-0.0226**	-0.0083**
Industry, size-adjusted ROA								
Before	0.0226***	0.0311***	0.0175***	0.0136	0.0218*	0.0025	0.0311***	0.0227***
After	0.0077***	0.0086	0.0065***	0.0020	0.0170*	0.0041**	0.0009	0.0083**
Change	-0.0076*	-0.0107**	-0.0058	-0.0049	-0.0013	-0.0003	-0.0159**	-0.0077
Industry, size, performance-adjusted ROA								
Before	0.0003	0.0022	-0.0001	0.0023	0.0104**	0.0059*	0.0002	-0.0018
After	0.0012	0.0012	0.0013	-0.0001	0.0058	0.0164***	-0.0001	-0.0042
Change	0.0051*	-0.0003	0.0067**	-0.0070	-0.0070	0.0069**	0.0011	0.0064
N	585	153	432		55	107	98	325

Table XII:

Changes in Operating Performance

This table examines changes in operating performance around CEO hiring decisions for various transitions between local and non-local predecessor and successor CEOs. The dependent variable in columns (1) through (6) is the change in industry and size-adjusted ROA and in columns (7) through (12) the dependent variable is industry, size, and prior performance-adjusted ROA. The details of constructing these measures are found in Table XI. Control variables follow those used in Fahlenbrach et al. (2008) and are measured as the average of these variables in event years -2 and -3. *FirmAge* is measured in event year -1 and is constructed using data from Loughran and Ritter (2004) and Fahlenbrach (2008). *PrevCeoFounder* is a dummy variable if the CEO at time -1 is a founder of the company. Founder data are from Fahlenbrach (2008). The table reports coefficient estimates and standard errors (in parenthesis) from OLS regressions for fourteen regression models. Each of the models includes year fixed effects (coefficient estimates and standard errors not reported). Also reported are the number of observations used in the estimation as well as the adjusted R^2. The table reports White (1980) heteroscedasticity-consistent standard errors, clustered at the firm-level. Significance levels are denoted by *, **, ***, which correspond to 10, 5, and 1 percent levels, respectively.

	Industry, size-adjusted *ROA* Changes					Industry, size, performance-adjusted *ROA* Changes				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Intercept	-0.0201	-0.0181	-0.0206	-0.1517***	-0.0253	0.0824	0.0864	0.0860	0.0089	0.0812
	(0.0434)	(0.0437)	(0.0445)	(0.0529)	(0.0436)	(0.0553)	(0.0570)	(0.0569)	(0.0554)	(0.0582)
LocalCeoChg	-0.0156**		-0.0156*	-0.0139	-0.0159**	-0.0190**		-0.0199**	-0.0270**	-0.0191**
	(0.0076)		(0.0080)	(0.0119)	(0.0076)	(0.0083)		(0.0083)	(0.0122)	(0.0083)
NonLocToLoc		-0.0228*					-0.0336**			
		(0.0120)					(0.0167)			
LocToNonLoc		0.0089					0.0052			
		(0.0124)					(0.0128)			
Assets	0.0052	0.0051	0.0053	0.0123**	0.0052	-0.0034	-0.0036	-0.0040	-0.0085	-0.0034
	(0.0037)	(0.0037)	(0.0038)	(0.0056)	(0.0037)	(0.0039)	(0.0040)	(0.0040)	(0.0062)	(0.0039)
FirmAge	0.0019	0.0021	0.0018	0.0155	0.0028	-0.0127	-0.0122	-0.0121	0.0153*	-0.0124
	(0.0046)	(0.0047)	(0.0047)	(0.0096)	(0.0047)	(0.0141)	(0.0139)	(0.0140)	(0.0087)	(0.0148)
DividendDum	0.0007	0.0009	0.0006	-0.0021	0.0010	-0.0019	-0.0015	-0.0014	-0.0085	-0.0019
	(0.0108)	(0.0108)	(0.0108)	(0.0194)	(0.0108)	(0.0127)	(0.0126)	(0.0126)	(0.0214)	(0.0129)
RD	0.1178	0.1164	0.1181	0.3664	0.1216	-0.0841	-0.0868	-0.0875	0.1377	-0.0832
	(0.1641)	(0.1633)	(0.1636)	(0.2240)	(0.1643)	(0.1813)	(0.1809)	(0.1812)	(0.2334)	(0.1826)
Capex	-0.0159	-0.0127	-0.0162	0.0902	-0.0169	-0.1820*	-0.1754	-0.1805*	-0.1383	-0.1822*
	(0.1049)	(0.1051)	(0.1045)	(0.1347)	(0.1051)	(0.1087)	(0.1088)	(0.1090)	(0.1810)	(0.1086)
CapIntense	0.0183	0.0180	0.0182	0.0406***	0.0189	0.0132	0.0126	0.0136	0.0443***	0.0134
	(0.0125)	(0.0125)	(0.0126)	(0.0143)	(0.0126)	(0.0143)	(0.0145)	(0.0144)	(0.0163)	(0.0146)
SalesGrwth	-0.0032	-0.0031	-0.0032	-0.0090	-0.0024	0.0385	0.0386	0.0388	0.0138	0.0387
	(0.0232)	(0.0232)	(0.0231)	(0.0181)	(0.0232)	(0.0303)	(0.0304)	(0.0304)	(0.0222)	(0.0298)
StockRet	-0.0264*	-0.0266**	-0.0263*	-0.0154	-0.0263*	-0.0400**	-0.0405**	-0.0404**	-0.0233	-0.0400**
	(0.0135)	(0.0135)	(0.0135)	(0.0169)	(0.0135)	(0.0161)	(0.0163)	(0.0163)	(0.0174)	(0.0162)
Q	-0.0107***	-0.0107***	-0.0107***	-0.0171***	-0.0110***	-0.0013	-0.0012	-0.0012	-0.0006	-0.0014
	(0.0038)	(0.0038)	(0.0038)	(0.0052)	(0.0039)	(0.0055)	(0.0055)	(0.0055)	(0.0071)	(0.0054)
OutsideDirOwnDum			0.0023					-0.0155		
			(0.0165)					(0.0144)		
OutsideDirOwnDumXLocalCeoChg			0.0013					-0.0033		
			(0.0258)					(0.0253)		
InsideHireChg				0.0105					0.0164	
				(0.0129)					(0.0132)	
PrevCeoFounder					0.0157					0.0038
					(0.0154)					(0.0190)
$AdjR^2$	0.0733	0.0724	0.0699	0.1583	0.0731	0.0259	0.0257	0.0230	0.0281	0.0241
N	556	556	556	186	556	556	556	556	186	556