

How do CEOs see their Roles?

Management Philosophies and Styles in Family and non-Family firms*

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Abstract

Using a survey of 800 Chief Executive Officers (CEOs) in 22 emerging economies, we show that CEOs' management styles and philosophies vary with the ownership and governance structure of their firms. Founders and CEOs of firms with greater family involvement display a greater stakeholder focus and feel more accountable to employees and banks than to shareholders. They also have a more hierarchical management approach, and see their role as maintaining the status quo rather than bringing about change. In contrast, CEOs of non-family firms emphasize shareholder-value-maximization. Finally, firm-level variation in ownership is as important in explaining management philosophies as cross-country or industry-level differences.

JEL Classification: G3, G32, J62, M5

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1. Introduction

The importance of leadership, and the extent to which CEOs contribute to company success are questions that have long been at the center of economic debate. A number of recent studies have shown that individual CEOs are key determinants of how companies are managed, and of how they perform; see, for example, Bertrand and Schoar (2003), Bennedsen et al. (2007), and Bandiera, Prat and Sadun (2013). These papers also show significant heterogeneity in the management styles, skills, and even the hours worked by CEOs. Moreover, there are important differences across countries in the governance structures of firms, and especially in the involvement of family members in top management. Following the seminal paper of La Porta et al. (1999), a large number of studies have reported that, in comparison to non-family firms, family firms tend to have weaker performance and worse governance structures, and Bloom et al. (2012a) show that they are slower to adopt managerial best practices.¹ These differences in turn might well be related to how CEOs perceive their roles, and the responsibilities they have at their firms.

However, we know very little about the business philosophies underlying CEOs' decisions, and how they see their roles and responsibilities. Freeman (1984) originally developed the idea of a stakeholder approach to management, in opposition to a shareholder-focused approach, and since then there has been extensive discussion of the degree to which CEOs adopt such a stakeholder focus, and how empowered they feel to be agents of change within the firm. One view is that the ownership structure of the firm — in particular, whether it is family controlled or widely held — might determine the objectives of both the CEO and the entire organization. For example, Whetten and Mackey (2002) propose that family members as CEOs might naturally adopt a stakeholder view, since they have a longer horizon and are not solely concerned with maximizing firm profits: they also safeguard the reputation of the family behind the firm. An alternative view is that greater emphasis on stakeholder welfare is an economy-wide outcome, often referred to as the “stakeholder society.” In societies where

¹See in particular Morck, Stangeland, and Yeung (2000); Claessens et al. (2002); Faccio and Lang (2002); Villalonga and Amit (2006); and Bertrand and Schoar (2006).

property rights are poorly defined and input markets such as labor markets are less efficient, a stakeholder approach can evolve in equilibrium to address some of the production externalities for which markets are missing. See, for example, Magill, Quinzii, and Rochet (2011) or Tirole (2001); see Morck and Yeung (2004) for some of the disadvantages of such a society.

In this paper we show that CEOs' business philosophies, management approaches, and personal backgrounds vary systematically with the firm's governance structure and the influence that the founding family has on the business. Founders and CEOs related to the firm's founder are more likely to embrace a stakeholder view of management and feel less responsibility towards their shareholders, instead prioritizing employees and creditors. These CEOs also adopt a more hierarchical organization structure, concentrate more power at the top, and see their role as preserving the structures and values of the firm rather than bringing about change. In contrast, professional CEOs are more likely to feel responsible to shareholders and rely more heavily on delegation and flatter management. They also perceive their mandate as bringing about strategic change within the firm.

We also document that the simple dichotomy between family and non-family firms that is often used in the literature masks more complex dynamics of how leadership structures differ across firms. Interestingly, we find that these differences at the level of firm-CEO pairings are more important in explaining the heterogeneity in CEOs' management philosophies than standard variables that are widely used to capture country-level variation. This result suggests that stakeholder-focused management may not arise as an economy-wide equilibrium outcome, but rather seems to depend on the governance and ownership structure of a given firm, despite wide variation in the cultural norms and in the financial and economic development of these countries.²

Our data come from a unique survey of over 800 CEOs of the largest public and private firms in 22 emerging market countries, which we undertook jointly with the World Bank.³ While survey data cannot establish causality conclusively, they provide information on dimen-

²We cannot make any statements about the welfare implications or optimality of one type of management philosophy over another; we simply report which types of firms are likely to adopt these approaches.

³The countries are: Argentina, Brazil, Chile, Colombia, Ecuador, Peru, Venezuela [S. America]; Costa Rica, El Salvador, Guatemala, Mexico [C. America]; Ghana, Kenya, Nigeria, South Africa, Zimbabwe [Sub-Saharan Africa]; Hong Kong (China), India, Malaysia, Singapore [E. Asia]; Egypt and Turkey.

sions of the CEO role that cannot otherwise be studied. These rich, CEO-level data provide insight into the heterogeneity across countries and industries in CEO beliefs, their objectives, and the way they manage and organize the firm.

We first show that firms broadly fall into four distinct categories that are directly associated with the characteristics of their CEOs: (1) firms run by the original founder, (2) family firms with a family member as CEO (referred to as a “related CEO” henceforth), (3) family firms with a (non-family) professional CEO, and (4) non-family firms run by professional CEOs. We refer to these four pairings of firms and CEOs as firm-CEO types or just CEO types henceforth. This firm-CEO type classification explains a substantial fraction of the variation in CEO survey responses, and is complementary to (and of comparable importance to) the part explained by country fixed effects. In particular, the average adjusted R^2 of all the survey response regressions in the paper rises from 9% when only industry (SIC) and country fixed effects are included, to 15.5% when the firm-CEO type indicators are added.⁴ Moreover, when only firm-CEO type and SIC fixed effects are included, the average adjusted R^2 is 10%. In short, the firm-CEO type variable is as important in explaining CEO thinking as are country-, region-, or industry-level differences.

Several overarching themes emerge from our analysis. First, *founder CEOs* are more likely to have much higher cash flow and control rights within their firms than all other types of firm-CEOs, especially compared to professional CEOs. Founder CEOs are also more likely to be on their company Board, to serve as the Chairman of the Board, and to name the directors. This centralization of control goes hand in hand with a more hierarchical management style and organization. When compared to the other firm-CEO types, founder CEOs have the fewest number of managers reporting directly to them: 45% have fewer than five — in contrast to the 80% of professional CEOs that have over five managers reporting to them — and this difference holds when controlling for industry, firm size, country, and other variables. Furthermore, founder CEOs are more likely than professional CEOs to see their main task as being to supervise and monitor decisions, so they place less weight on selecting and appraising

⁴Alternatively, the average (median) adjusted R^2 of the survey response regressions in the paper rises from 3% (1.7%) when only country-level variables such as per capita GDP, corruption, transparency, and legal origin variables are included as controls, to 11.2% (5.2%) when the firm-CEO type indicators are added.

managers.

Compared to other CEOs, founders are less likely to report that they feel accountable to shareholders or to consult large shareholders before major investment decisions. By contrast, they are more likely than professional CEOs to consult banks before major investment decisions and to feel accountable to banks. This suggests that founders retain most of the de facto control within the firm, and that the main constraints they face are from third parties such as their banks, rather than from shareholders. In addition, founder CEOs show much less concern for shareholder value: they are 22% more likely than professional CEOs to answer that they would prioritize stable employment over maintaining dividends for shareholders. This suggests that they have a broader set of stakeholders in mind, and since founders tend to be large shareholders in their firms, they themselves will be affected by forgoing dividends. Additionally, founder CEOs are 26% more likely than professional CEOs to see their leadership role as maintaining existing strategies and values, rather than bringing change to the firm.

Professional CEOs of non-family firms are at the other end of the spectrum of leadership approaches and appear to prioritize shareholder value maximization over stakeholder welfare. Although they are significantly less likely to own equity and to be on the Board than related CEOs, they are just as likely to be Chairman of the Board, indicating relatively high internal control rights. Interestingly, these professional CEOs view their role as generating change for their organizations rather than maintaining traditions and values, and they appear to have sufficient power to do so. Of all firm-CEO types, they are most likely to replace upper-level managers in their first two years as CEO. Professional CEOs of non-family firms report that the founders of their firms are less likely to have a role in naming directors, or advising on major investment decisions. Unlike founder CEOs (and to a lesser extent the other two firm-CEO types), professional CEOs of non-family firms view large shareholders as more important stakeholders than banks. The professional backgrounds of such professional CEOs also reflect a different career path: they are more likely to have been CEOs of other firms and to have held senior positions in finance than founders or related CEOs, and are around 14% less likely

than all other firm-CEO types to view specific industry knowledge as one of the two most important factors for success, which is suggestive of a generalist background.

Related CEOs and professional CEOs of family firms fall between these first two firm-CEO types. *Related CEOs* tend to be closer to founder CEOs in their responses, and they also maintain a high fraction of cash flow and control rights in the firm they run: they are almost as likely to own equity in the firm as founders (61% more likely for founders, and 52% for related CEOs in comparison to both types of professional CEO) and also to own over 5% of the firm (77% more likely for founders, and 62% for related CEOs). They are also the firm-CEO type most likely to be on the Board of their firm, although they are less likely to be the Chairman of the Board than founder CEOs.

However, related CEOs appear to be less empowered than founders and even than professional CEOs of non-family firms. They are more likely than other firm-CEO types to report that the founder is still involved before major investment decisions, and that the founder, rather than the Board, terminated the last CEO. The active presence of the founder might explain why related CEOs seem to resemble founder CEOs in their approach to governance and business philosophy. Like founder CEOs, related CEOs are more likely to feel accountable to banks. They are also more likely to favor maintaining the firm's values over bringing change, and are approximately 11% more likely to say they would choose to prioritize maintaining employment over paying dividends. The point estimates on all these dimensions are smaller than those for founder CEOs, but they are consistently and significantly different from the answers of professional CEOs, suggesting a systematic difference in business philosophy. Yet despite this similarity to founder CEOs in governance and business philosophy, the management style of related CEOs seems to be closer to that of professional CEOs. Related CEOs adopt a flatter reporting structure than founders: They are much more likely than founders to have more than five managers report to them, but less likely than professional CEOs. They are also substantially more likely than founder CEOs to view delegation to and the selection of senior managers as important.

Lastly we look at *professional CEOs of family firms*. Based on their business philosophies,

management strategies, and attitudes toward governance, they seem very similar to the other type of professional CEO: CEOs of non-family firms. In particular, they are more likely than founder CEOs to feel accountable to shareholders and to favor shareholder value maximization over maintaining employment. They are also more likely than founders to see their most important task as selecting top talent rather than monitoring managers. Moreover, like professional CEOs of non-family firms, and unlike both founder CEOs and related CEOs, they see their role as bringing about change in the business rather than maintaining established strategies. Finally, the number of managers reporting directly to them is the same as for professional CEOs of non-family firms.

However, the ambitions of professional CEOs to effect change appear to be harder to translate into action within a family firm: our results suggest that professional CEOs of family firms have fewer explicit or implicit control rights than other CEOs. They have lower ownership of their firm on average, and are less likely to sit on the Board; they are the firm-CEO type least likely to be the Board Chairman or to name directors. Furthermore, professional CEOs within family firms also appear to have fewer effective control rights: in comparison to professional CEOs of non-family firms they have less scope to replace the top management team when they come into the job. This suggests a discrepancy between the reported ambitions of professional CEOs and how empowered they are to actually implement them.

In the final part of the paper, we explore the family backgrounds of the CEOs in our sample. On average, the CEOs grew up in predominantly middle or higher income families, with only 14% describing their parental home as low income. The majority have fathers who were businessmen themselves (59%) and many had paternal grandfathers in business (39%). However, there is a sharp difference between the background of founders and professional CEOs of non-family firms on the one hand, and the more privileged background of related CEOs and professional CEOs of family firms on the other. Founders and professional CEOs of non-family firms are (i) more likely to come from low income families, and are (ii) less likely to have had fathers who were business managers. In contrast, family firms tend to hire

CEOs that come from a more privileged background, or to promote their own descendants into these positions (who by definition come from higher income classes). These results suggest that family firms tend to hire people through their social networks, while positions as founders and as CEOs of non-family firms provide opportunities for upward mobility in these economies.

An alternative interpretation of our findings would be that firms naturally have a life-cycle that requires changes in the type of their CEO, i.e., they move from an initial founder CEO, to a family CEO, and from there to a professional CEO. We believe that this view can, at best, provide only a partial explanation of the data. While firms led by the founders are naturally younger, the ages of the firms led by the other three firm-CEO types in the sample are statistically indistinguishable. Additionally, while non-family firms (which are run by professional CEOs by definition) have higher sales than the other firm types, firms with related CEOs and those family firms with professional CEOs have statistically indistinguishable median sales levels (see Table 1). These similarities in firm age and annual sales levels suggest that the results we report are not driven by a firm life-cycle process, but instead that the first transition—from the founder to the first CEO that succeeds him or her—presents firms with a decision point that appears to have lasting effects on how stakeholder-focused the firm is. Which direction is taken by the firm is, of course, endogenous, but it does not appear to correlate with the life-cycle of the firm.

This paper contributes to both the literature on family firms, and the literature on the impact of CEOs on firm performance. By examining the heterogeneity in governance arrangements across firms of different types and how it maps onto CEOs' business philosophies and management styles, this paper aims to shed some light on the determinants of the reported differences in firm performance associated with the CEO and with family firm status. The large sample size and wide regional coverage relative to existing CEO surveys make it possible to remove country- and industry-specific variation and to explore the relationship between firm governance structures and CEO business philosophies and management styles. Surprisingly, we show that the firm-CEO-level variation accounts for the most robust patterns in the

data, rather than traditional country-level variables such as GDP per capita, legal origin, corruption, and property rights measures, suggesting that the firm-CEO pairing is of first-order importance.

The rest of the paper is organized as follows. The related literature is reviewed in Section 2, while Section 3 describes the data, provides summary statistics, and describes the regressions. Section 4 discusses the results. Section 5 examines CEO backgrounds, and Section 6 concludes.

2. Related literature

A large literature has focused on differences between family and non-family firms, starting with the influential paper by La Porta et al. (1999). These studies document that family firms, on average, tend to be smaller than non-family firms, have lower performance, weaker governance structures, and are often concentrated in older, more regulated industries (e.g., Morck, Stangeland, and Yeung, 2000, Claessens et al., 2000, 2002; Faccio and Lang, 2002; Anderson and Reeb, 2003; Bertrand and Schoar, 2006). Attention has also focused on the importance to firm outcomes of the CEO position (e.g., Bennedsen et al., 2006, 2011) and on the individual characteristics and styles of CEOs (e.g., Bertrand and Schoar, 2003; Malmendier and Tate, 2008; Schoar and Zuo, 2011).

At the intersection of these literatures, a number of papers have studied the performance implications of leadership transitions within family firms: the reported lower average rates of return and stock market valuation of family firms seem to be associated with the passing of control from the founder to the heirs (e.g., Pérez-González, 2006; Bloom and Van Reenen, 2007; Bertrand et al., 2008).⁵ Moreover, firms led by founder CEOs appear to also perform better (Villalonga and Amit, 2006; Fahlenbrach, 2009), although Bloom et al. (2012a) report lower management practice scores. Furthermore, some studies have found that when management control within family firms is transferred to professional CEOs rather than a descendant of the founder, the decrease in performance is less pronounced, (see the important

⁵A few studies have argued that family firms, in fact, perform better than non-family firms: Khanna and Palepu (2000), Anderson and Reeb (2003), Sraer and Thesmar (2007), and Mehrotra et al. (2013).

contributions of Villalonga and Amit, 2006, and Bennedsen et al., 2007).

While survey-based data such as that used in this paper have some well-known limitations, most notably that causality is impossible to establish conclusively with such data, they also provide a window into the beliefs, attitudes, and governance environments of CEOs that are otherwise entirely inaccessible to researchers (see Graham and Harvey, 2001; Brav et al., 2005; and Graham, Harvey, and Puri, 2015, for short discussions). This is especially true for CEOs of leading firms in developing countries, which are often private. As such, our results are complementary to some of the work on differences in management practices across firms and countries (particularly, Bloom and Van Reenen, 2007; and Bloom et al., 2012a), and also with recent work by Bandiera, Prat, and Sadun (2013) on the time use of CEOs. Relatedly, Graham, Harvey, and Puri (2015) study the scope and determinants of delegation of CEO decisions by surveying executives in the US and across regions. Like them we find that CEOs of larger firms are more likely to delegate financial decisions. However, we do not find systematic differences in delegation across firm-CEO types and their associated governance structures, although our delegation questions are different and less granular than those in their survey. Bandiera et al. (2013) identify two distinct patterns of time use, and report that the least productive of the two is associated with family CEOs in their sample of Indian manufacturing firms. They also find systematic differences between the time use of family CEOs, and that of professional managers, and that family CEOs work shorter hours and are more likely to shirk when temptation arises. In our sample it is founder CEOs that are more likely to report working the most (over 60 hours per week), and we find some weak evidence (in unreported regressions) that related CEOs are more likely to work fewer hours.

The results in this paper are also directly relevant to research on the unique role of founder CEOs (Adams et al., 2005; Anderson et al., 2009), to the links between family firms and the political system (Morck and Yeung, 2004), and to the increasingly important issue of family management transitions as large cohorts of family firms mature, as highlighted in Tsoutsoura (2013). Relatedly, the patterns in our data point to many of the problems that firms face when evolving from a founder-run firm into either a more established family firm, or into a

non-family firm.

One possible interpretation of the results is that certain organization structures may be imprinted onto the firm from the beginning (Baron, Hannan, and Burton, 1999) and are hard to change. Founder-led firms appear to concentrate implicit and explicit power in the hands of the founder CEO. Such a hierarchical structure might perform well at the beginning of a firm's life or when it is run by an exceptional leader, but we find that this structure seems to persist when a family successor takes over the leadership of the firm. In contrast, firms that have transitioned to professional, outside management show a flatter and more participatory leadership structure, which seems more in line with modern management practices (e.g., Rajan and Wulf, 2006). This movement towards reduced centralization of managerial power might be a natural progression over the life of a firm, but it could also lead to distortions in the decision process if the family successor that takes over the firm is less exceptional than the founder (which will naturally occur on average if there is mean reversion in ability over generations). Alternatively, the fact that family CEOs maintain a more hierarchical structure might reflect that these CEOs see their role as maintaining the strategic direction of the firm, rather than bringing about change. As such, the structure might be a natural fit with the objectives and skills of the CEOs (see Eisfeldt and Kuhnen (2013) and Kaplan et al. (2012) on the importance of the match quality between CEO characteristics and the changing skill requirements of the firm).

3. Data and empirical strategy

Our survey covers leading CEOs in 24 emerging markets and was conducted in the first half of 2007 in association with the World Bank and the International Finance Corporation. Questionnaires were sent to the CEOs or Managing Directors of the largest one hundred companies in each country. These firms were selected using Dun & Bradstreet (D&B) International, Amadeus, and OneSource databases, stock market information, World Bank country directories, and local lists of incorporation; for firms in business groups we contacted the group holding company CEO rather than subsidiary CEOs.

The final survey contained eight sections: company information, personal information, educational background, prior work experience, the CEO's business approach, family background, country culture, and company structure. The survey is in the Appendix. We ran a pilot for Australia and South Africa in 2006, which served to refine the survey instrument and implementation.⁶ A team of MBA students conducted phone interviews with CEOs over a four-month period. All the firms in our sample were contacted by one of the callers to set up a time for a phone interview with the CEO. In almost all cases we reached the Assistant to the CEO. If the CEO was not available for a phone interview to obtain his or her verbal responses to each question in the survey, we asked the Assistant to give the CEO a copy of our survey to fill out, or to forward an online link to the survey. Those CEOs that did not answer were then sent a reminder email or fax ten days after the initial contact, and then subsequently called by a survey team of MBA students up to a maximum of three times.

Survey responses relating to firms' industries (at the two-digit SIC code level) and ownership of the firm by multinationals and the government were verified and augmented with information obtained from firms' websites and annual reports. Additionally, public listing of firms was obtained from OneSource and confirmed on firm websites and Bloomberg where possible; firms were assumed to be private if no listing information could be found.

We keep observations from countries where we have at least 15 completed surveys, so our final sample is composed of 823 CEOs from 22 countries: 11 are in Latin America (covering virtually all the continent's GDP), six are in Africa, and the remainder in Asia (see the Appendix for observations by country). This is a large sample relative to the managerial surveys in the finance literature.⁷ The average response rate is 37.4% of the top one hundred CEOs in 22 countries and has no correlation with GDP (the Spearman's rank correlation is -0.15 with a p -value of 0.51). Our response rate compares favorably to those in other senior management survey studies that range from 9% (e.g., Graham and Harvey, 2001) to

⁶We did not investigate order effects by varying the order of choices and questions in the survey out of concern that CEOs would be unwilling to fully complete the (long) survey. To reduce the impact of such behavior we placed the most important and easiest to answer questions at the beginning of the survey. Ex post we found that CEOs were almost all willing to answer all questions conditional on answering some.

⁷Recent papers using surveys in the finance literature include Graham and Harvey (2001), Brav, Graham, Harvey, and Michaely (2005), and Graham, Harvey, and Puri (2015).

approximately 16% (e.g., Brav et al., 2005), and is large enough to mitigate concern about potential response biases.⁸

3.1. *Classifying firms and CEOs into types*

We group CEOs into four mutually exclusive categories based on both their relationship to the founding family, and on information about the firm’s ownership:

- (i) Founder CEOs (12.6% of the sample)
- (ii) Related CEOs (18%)
- (iii) Professional CEOs of family firms (21%)
- (iv) Professional CEOs of non-family firms (48.4%)

Founder CEOs (founders henceforth) are identified from a direct question as to whether the CEO is the founder of the firm. We classify a CEO as a *related CEO* if he or she answers in the survey that s/he is a relative either of the founder or of shareholders who own at least 20% of the firm. To classify a CEO as a *professional CEO* we require him or her to be neither the founder, nor related to the founder, and that his or her family does not own over 20% of the firm’s equity. We also separate firms into either family or non-family firms; those led by founders or by related CEOs are classified as family firms. Professional CEOs are classified as leading *family firms* if the founder or his family is one of the firm’s three largest shareholders. If this is not the case, we classify them as professional CEOs of *non-family firms*, which implies that we may be mistakenly classifying family firms as non-family if either the controlling family is unrelated to the founder, or if the CEO himself — but not his or her family — is the majority owner of the firm but is not the founder. This would reduce our ability to detect differences between family and non-family firms, leading to attenuation bias in our results because our baseline category for the analysis that follows is professional CEOs of non-family firms. We refer to these four pairings of firms and CEOs as *firm-CEO types* or just *CEO types* henceforth.

⁸For publicly listed firms for which a comparison sample of at least 50 firms is available from Bureau van Dijk’s Osiris database, a one-tailed *t*-test (that does not assume equal variances) cannot reject equality of mean sales between the surveyed firms and the comparison sample at conventional levels, which is reassuring in terms of representativeness. The same test indicates that the mean age of the firms in our sample is higher (42 versus 36 years). However, these mean comparison tests are only indicative, because less than a quarter of our sample is both publicly listed and from a country that has at least 50 firms in the comparison sample available to calculate the mean.

Two other papers use similar classification schemes for firm-CEO types: Anderson and Reeb (2003) and Sraer and Thesmar (2007).⁹ In comparison to both papers, our sample has more professional CEOs (of both family and non-family firms) and fewer founder-run firms. The firms in our sample are spread over a wide array of two-digit SIC code industries, but the top ten industries account for 60% of firms in our sample, while the top 20 account for 82%. The top five two-digit industries are: (1) food and kindred products; (2) chemicals and allied products; (3) depository institutions (i.e., banks); (4) general building contractors; and (5) electric, gas, and sanitary services.

3.2. *Summary statistics*

Panel A of Table 1 suggests that several important company characteristics covary directly with the type of CEO leading the firm. In unreported regressions we find that founder and related CEO firms are significantly smaller than non-family firms in terms of (survey-reported) sales, in line with the literature, which reports that family firms are smaller on average¹⁰ and may be willing to forgo growth to maintain control. The non-family firms in the sample are larger: both in terms of mean and median sales, we find that non-family firms are at least double the size of founder-run firms and are substantially larger than the remaining two firm types on average. Drawing data from Bloomberg for the subsample of firms that are publicly listed we find a similar pattern for mean revenue (suggesting that the self-reported sales data are broadly accurate), although there is no difference in mean market capitalization between family and non-family firms of any type. In addition, founder-run firms are substantially younger on average than all other types of firms, while non-family firms are more likely to be controlled by multinational parents (38%) than family firms (5% to 14%). Firms run by

⁹Bloom et al. (2012a) also make use of a similar classification, but focus on the organization's management practices rather than those of the CEO with regard to his/her top management team. Burkart et al. (2003) model managerial succession as the founder simultaneously choosing both how much equity to sell and, if she retains control, whether to appoint a related or a professional CEO. The choices faced by the founder in their model match the categories used in this paper.

¹⁰For example, Anderson and Reeb (2003), in a sample of US S&P 500 members, find that family firms are smaller than non-family firms. Villalonga and Amit (2006) find that family firms are smaller, but not significantly so, and report that they are younger. Sraer and Thesmar (2007) also report that family firms are smaller and slightly younger.

related CEOs and non-family firms are both more likely than the other two firm-CEO types to be publicly listed, either domestically or on a foreign exchange. Finally, we are slightly less likely to see family firms with a professional CEO in English legal origin countries; we defer the examination of the equity ownership of the largest three equity holders until Table 3.

In short, between generally younger, smaller, founder-run firms at one extreme, and larger, non-family firms at the other (which are often controlled by a foreign multinational), we have family firms run by either related or professional CEOs, which are harder to distinguish along the dimensions in the table.

Panel B of Table 1 displays individual CEO characteristics by firm-CEO type. In unreported regressions we find that founder CEOs are significantly different from the other types of CEOs on average: they are older, are (naturally) more likely to have been CEO from the start of their time at the firm, have much longer average and median tenures, and are much more likely to own more than 5% of the firm than all the other firm-CEO types. Moreover, founders are less likely to have undergraduate degrees.

Perhaps reflecting an apprenticeship period at the family business, related CEOs are much less likely than all other firm-CEO types to have begun their time at the firm as CEOs, but have both longer tenures and are more likely to own at least 5% of the firm's equity than the two professional firm-CEO types. They are also more likely than all other firm-CEO types to have a degree from a foreign country, potentially because they were groomed for a role at the family firm from an early age, and because of the economic advantages of being related to a successful founder CEO.

Clear and statistically significant differences emerge between founder and related CEOs on one hand, and the two professional firm-CEO types on the other. Founders and related CEOs are significantly less likely to have held a prior position as a CEO or in a financial field,¹¹ and have much longer tenures (the median is ten years or more in comparison to five or fewer), which is potentially related to their higher likelihood of owning over 5% of their

¹¹Survey respondents were asked to “list the three positions (*business and non-business related, academia, government, military, etc.*) you held the longest prior to becoming” CEOs of their firms. These were then classified into CEO positions (CEOs, Executive Chairman, etc.), Board positions (Director, Chairman, etc.), and Financial positions (Finance manager, Comptroller, Treasurer, VP(Finance), etc.) if it was possible to do so.

firms.

By contrast, professional CEOs (at both family and non-family firms) are statistically indistinguishable from each other on all dimensions in the table. Thus, the personal characteristics and professional experience of the two types of professional CEOs are very similar.

The characteristics of the different types of CEOs in our sample match those reported in the literature. As noted earlier, we find that most of the categories of family firms in our sample have lower sales on average than non-family firms, a standard result, and that founder-run firms are younger. We find that related CEOs themselves are also younger than the other CEO categories on average, and by approximately the same amount (eight years) as reported by Pérez-González (2006) at the time of CEO transition. Related CEOs in the sample tend to have significantly longer tenures than professional managers, as also noted by Sraer and Thesmar (2007) who report differences of similar magnitudes, and we find CEO personal shareholdings are positively correlated with tenure.

3.3. *Description of regressions*

A linear probability model (LPM) is used to describe the correlations of the survey responses with explanatory variables. We code the responses as indicator variables which take a value of one if the respondent is in agreement with the question or chooses a specific answer from a list of potential answers, and zero otherwise. We generate a separate indicator variable for each response, e.g., a variable equal to one for all those who choose the answer “Shareholders,” and zero otherwise. Each indicator variable is then used as a dependent variable in a LPM regression structured as follows,¹²

$$\text{Survey response}_{jics} = \alpha + \Gamma \times \text{CEOtype}_j + \beta \times \text{Controls}_{ics} + \varepsilon_{jics},$$

where j indexes firm-CEO types, i indexes individual CEO-firm pairs, c indexes the country of the firm’s headquarters, and s indexes the firm’s two-digit SIC code. The firm-CEO type vari-

¹²Two survey responses are estimated by ordered probit because of the ordinal nature of the responses; these are identified in the regression tables.

ables are binary indicators for three firm-CEO types: founders, related CEOs and professional CEOs of family firms. The omitted CEO category is professional CEOs of non-family firms (48.4% of the sample). Taking the question: “Do you feel accountable to shareholders?” as an example, the estimated coefficient on the firm-CEO type indicator ($\hat{\gamma}$) should be interpreted as the additional likelihood of the specific firm-CEO type answering “I feel accountable to shareholders,” in comparison to the likelihood of such an answer from the omitted firm-CEO type: *professional* CEOs of *non-family* firms.

The Controls vector contains several sets of variables. Firstly, there are four controls for the overall development of the country of each firm. These are the natural logarithm of GDP per capita from the International Monetary Fund (IMF) World Economic Outlook, the average score on the Transparency International Corruption Index over 2003—2007 (the scale runs from zero (most corrupt) to ten (least corrupt)), the Property Rights Index from the Heritage Foundation’s 2004 Index of Economic Freedom (a higher score means more secure property rights), and an indicator variable denoting either English (1) or French (0) legal origin. In the Internet Appendix we reproduce all estimates in the paper using region fixed effects instead of the four country-level controls used as our main specification: results are very similar. The Controls vector also contains (i) a fixed effect for each two-digit SIC industry, (ii) an indicator for whether the firm is publicly listed, (iii) the natural logarithm of firm sales in 2006 (winsorized at 5% and 95% to protect against data coding errors), and (iv) an indicator variable for missing sales information.¹³ For observations missing sales (18%), we replace sales with a zero and add a missing sales indicator variable. It is important to control for firm size, since the descriptive statistics show that non-family firms are substantially larger than the other firm-CEO types, although including observations with missing sales values instead of dropping them from the sample does not materially affect our results.

Standard errors are clustered at the country level, resulting in 22 clusters, a number low enough to warrant concern that our standard errors are biased downwards (see Cameron,

¹³Firm sales are the best measure of firm size available to us, because earnings measures are distorted by international differences in accounting and stock markets are underdeveloped in many of the countries under consideration (a majority of the sample firms are not publicly listed), ruling out the use of market values. Results are almost identical if we winsorize sales at the 1% or 2% level.

Gelbach, and Miller (2008) and the references therein). To allay this concern we re-ran all regressions clustering by country*SIC code, an economically meaningful unit which results in around 350 clusters, and we also separately re-ran all regressions using non-parametric block bootstrap by country. Both sets of estimates provide the same or smaller standard errors, so to be conservative we retain the method that produces the largest standard errors: clustering by country.

Finally, to assess the robustness of our results to the regression specification, we estimated the regressions using country fixed effects or region fixed effects instead of country controls (in addition to SIC code fixed effects — see the Internet Appendix for regression tables with region fixed effects), and also separately estimated them using a probit specification instead of the LPM. We obtain very similar results, confirming that the results are not sensitive to the inclusion of country/region fixed effects, or to the linearity assumption of the LPM.

4. CEO governance structures, management approaches, and business philosophies

4.1. *Confirming firm classifications: the appointment process of the CEO*

To confirm that our firm-CEO type classification is picking up real differences between the categories, we first look at the appointment process of the CEO and how the current CEO sees the influence of the founder and family relationships. To that end we run regressions on a set of survey questions that were not used to generate the categories, but that should predictably vary between the different CEO categories as well as on firm-CEO type indicator variables and our set of control variables. These are reported in Table 2, while a visual representation of the differences between firm-CEO types is provided in Fig. 1, which graphs the means of regression residuals by firm-CEO type.

The first column focuses on the question: “*Who appointed you as the CEO of «Company-Name»?*” Professional CEOs of family firms are 7% more likely to answer, “*the Founder or his/her relatives*” than the omitted category, professional CEOs at non-family firms. This is

to be expected, since the founder probably retired long ago at most non-family firms. Additionally, in column 2 we confirm the status of family firms for those firms run by founders and related CEOs: they are (47% and 77% respectively) more likely to answer affirmatively to the question “*Were any of your relatives ever employed in an upper-level management position at your firm?*” than professional CEOs of either type.

CEOs were asked, “*Who appoints the board members in your company?*” In column 3 we see that the founder is 17% more likely to appoint directors at family firms with professional CEOs compared to non-family firms. These results lend support to our differentiating professional CEOs by the category of firm they run: family versus non-family firms. Firms run by related CEOs are also 16% more likely to report that directors are appointed by the founder than professional CEOs of non-family firms, which is consistent with our classification of firms as “family firms” when they are run by either related CEOs or what we have called professional CEOs of family firms.

A survey response reported in the Internet Appendix also provides support for the CEO-firm classification scheme. The question is: “*In many countries around the world, mutual support of family members in business transactions is essential for efficient business operations. In your view, how important are family relationships for conducting successful business in your country?*” Both professional CEOs of family firms and related CEOs are 14% to 16% more likely to answer that family background and contacts are important compared to the excluded category, professional CEOs of non-family firms, and also to founder CEOs.

Another dimension that lends support to our classification is whether the founder of the firm is alive, (irrespective of whether he/she is CEO). While we did not ask this explicitly, we can infer it from certain questions, albeit with error. Founders are alive at 51% of related CEO firms, at 44% of family firms with professional CEOs, and at only 23% of non-family firms with professional CEOs. In sum, the results in this section suggest that the four categories of firm-CEO types that we use throughout correspond to real differences in the internal organization of the firms.

4.2. Ownership and governance

We now turn to how governance arrangements vary across firm-CEO types. Founder and related CEOs have significantly higher equity ownership, which also translates into substantially more power at the Board level. At the other extreme, professional CEOs that lead family firms seem to have less implicit and explicit control, which might affect their ability to independently manage their firms. Fig. 2 presents a visual representation of the differences between firm-CEO types (after controls) along these dimensions.

In the first column of Panel A of Table 3, we consider responses to the question: “*As the CEO of «CompanyName» do you hold equity in the firm (stock options)?*” We generate an indicator variable equal to one if CEOs answer in the affirmative, with either “*Yes, I hold more than 5% of the company’s stock*”, or “*Yes, I hold less than 5% of the company’s stock*”. Founders and related CEOs have much higher propensities than both types of professional CEOs to own equity (61% and 52%, respectively). In the second column we focus exclusively on CEO responses of “*Yes, I hold more than 5% of the company’s stock.*” Again, founders and related CEOs have much higher propensities to own over 5% of their firms (77% and 62%, respectively), in line with Table 2.

We then regress whether CEOs answer “*Yes, I receive stock and stock options as part of my compensation*” on our standard explanatory variables. Column 3 suggests that founder and related CEOs are less likely to receive stock or options as part of their compensation, perhaps because their holdings are already large on average. However, this effect disappears when we control for firms with a foreign multinational parent corporation in an unreported regression, suggesting that it is driven by firms with multinational parents—which are overwhelmingly non-family firms—choosing equity-linked compensation (for their disproportionately professional CEOs) rather than by differences between firm-CEO types along this dimension.

The number of different classes of blockholders present in each firm is obtained from the question: “*Please indicate if any of the three largest equity holders is/are: The founder or relatives of the founder/ Foreign investors/ Foreign corporations/ Domestic corporations/ The government.*” Note that the question does not provide the number of blockholders; if more

than one exists in the same category, they are counted as a single blockholder. Because the responses are ordinal (0,1,2,3+), ordered probit is used instead of LPM regression for this question. We also obtain the total equity holding (as a percentage) of the largest three shareholders from the following question: “*How concentrated is the ownership of your company? That is, what fraction of equity in your company is held by the three largest shareholders?*”

The marginal effect for the response “two blockholder types” is shown in the table because it is representative of the other responses, but all estimated marginal effects are reported in the Internet Appendix. Interestingly, for family firms run by both related and professional CEOs, we observe a higher number of blockholder types, while the total equity holdings of the top three shareholders are 12% lower for firms run by related CEOs. This suggests equity dispersion may be part of the explanation for why some firms move from founder-run to family firm structures in this sample (instead of to non-family firms), perhaps due to the impact of inheritance taxes or the natural dispersion of ownership from a single founder to more numerous descendants.

Panel B of Table 3 reports regression coefficients from additional questions on firm governance. The first column reports coefficients from the question “*Do you sit on your company’s Board of directors?*” while the following column focuses on the question “*Are you the Chairman of the Board?*” Founder and related CEO equity ownership is reflected in their high propensities to be on the Board of directors (9% more likely for founders, 13% for related CEOs), and to be Chairman of the Board (23% more likely for founders). The survey also includes the question: “*Who appoints the Board members in your company? Please choose up to three alternatives.*” We generate an indicator variable equal to one if the respondent answers, “*I select most of the Board members*” and this is the dependent variable for the following two regressions in the table. The high average equity ownership of founders and related CEOs is also reflected in their propensity to answer that they select most of the Board members, which is 16% more likely for founders and 7% more likely for related CEOs than for both types of professional CEOs. Thus, the governance structure of founder and related CEO firms appears to differ markedly from those of firms with professional CEOs.

These regressions also suggest that professional CEOs of family firms are relatively disempowered in comparison to the other firm-CEO types. They are the least likely firm-CEO type to be Chairman of the Board (21% less likely), and to name directors (5% less likely). By contrast, non-family firm professional CEOs are as likely as related CEOs to be Chairman of the Board, despite having lower equity holdings on average, as reported in Panel A.

The results also suggest that related CEOs are often monitored by a powerful founder figure. Consider the results in Table 2: related CEOs are the most likely to have been appointed by the founder (over 30% more likely than all other firm-CEO types), and at such firms with a related CEO, founders are over 16% more likely to appoint directors than at non-family firms run by professional CEOs. Moreover, founders are just as likely to appoint directors if a relative or a professional is CEO as they are when they themselves are CEO. Returning to Panel B of Table 3, the previous CEO was more likely to have been terminated by the founder: we report the results of regressions of an indicator variable equal to one if respondents answer, “*Company founder terminated his appointment*” to the question “*Why did the previous CEO leave «CompanyName»?*” Related CEOs are 10% more likely to answer this than the omitted category, professional CEOs of family firms.

In addition to this increased ability to hire and fire the CEO and name directors, company founders are also more influential in major business decisions at family firms with related CEOs than at firms with other firm-CEO types. We ask CEOs: “*Which of the company’s stakeholders are you most likely to involve before deciding to undertake a large-scale investment project, such as the acquisition of a plant or a company? Please select up to two*” and make an indicator variable for when CEOs answer “Founder.” Related CEOs are 13% more likely to consult the founder before major investment decisions than other firm-CEO types. All the other answers (except for major shareholders and banks, which are discussed later) show no significant differences between firm-CEO types.¹⁴ Thus, related CEOs appear more likely to be directly supervised by the company founder, and consequently appear to be less empowered than professional CEOs at non-family firms and, naturally, founder CEOs.

¹⁴The other available answers were the parent company CEO, the government, members of the board, or other top executives in the company.

4.3. CEO management approaches

Panel A of Table 4 and Fig. 3 illustrate differences in management approaches between the four firm-CEO types concerning their reporting structure, most important tasks, and responsibilities. In comparison to other firm-CEO types, founders appear to disproportionately favor direct management over delegation when asked the question: “*As the CEO of «CompanyName», what do you perceive as your most important operational tasks?*” Founders are 9% more likely to answer that their most important operational task is “*Supervising operational, strategic, and financial planning decisions*” and 14% less likely to answer “*Selecting and appraising other top managers in the company.*” Moreover, they design their organizations to have fewer subordinates directly reporting to them than any other firm-CEO types—the most hierarchical structure. They are 15% more likely than all other firm-CEO types to have fewer than five managers reporting directly to them in response to the question “*How many managers in your company report directly to you?*”

Our results are in line with some recent findings for the US. Like Rajan and Wulf (2006) who exclusively examine public firms, we find that professional CEOs in both widely held firms and in family firms manage flatter organizations and have more managers reporting directly to them. By contrast, founder CEOs have the most hierarchical reporting structures. Guadalupe and Wulf (2010) and Bloom et al. (2010, 2012b) provide evidence that increased competition leads firms to decentralize decisions and to improve management practices. Moving the founder out of the CEO position, with an attendant change in internal organization, may be the response of family firms to competitive pressure (or a response to other factors such as the age of the founder). As in Bloom et al. (2012a) we find that founder-run firms appear to have the weakest organizational management practices of all firm types in the sample, which may reflect a reliance on idiosyncratic management structures put in place by the founder.

In contrast to founders’ autonomy in structuring their management teams, professional CEOs of family firms appear to have more limited freedom to fire top executives in their initial years as CEO. In response to the question “*How many of the upper-level managers*

did you replace in the first two years after you took office as the CEO of «CompanyName»?» we generate an indicator variable equal to zero if the answer was “None” and one for the other answers (All/More than half/Less than half). Professional CEOs of family firms are 8% less likely to report dismissing any senior managers in the first two years of their tenure. This suggests constraints on professional CEOs’ ability to bring their professional expertise to bear on firms originally structured by the founding CEO, potentially due to organizational imprinting (Baron, Hannan, and Burton, 1999).

Founder CEOs are less likely to report having fired any top executives in their first two years (a largely mechanical result as they are likely to have hired all the executives themselves), but interestingly, related CEOs are also less likely to report firing top managers, albeit only at the 10% level of statistical significance. This again suggests limits on their ability to effect changes to the structure they inherit from the founder.

Finally, professional CEOs of non-family firms appear to have a more generalist focus than the other types of firm-CEO. In response to the question “*Which do you consider to be the most important factors to being a successful CEO in your country?*” they are 12% to 14% less likely than all other firm-CEO types to answer “*specific industry knowledge.*”

4.4. *CEO business philosophies*

Panel B of Table 4 and Figure 3 report responses to questions about each CEO’s business philosophy and strategic focus. CEOs were asked “*Which of the following alternatives best describes your strategic focus for «CompanyName» in the next five years? Please select one: Diversify into new industries/ Expand into international markets/ Strengthen focus in core businesses.*” Founder CEOs are 17% more likely than other firm-CEO types to express a preference for international expansion over the alternatives, which may reflect the firms they run being at an earlier stage in the life-cycle—recall that founder-run firms are the youngest firm type in the sample. When asked whether executives should “*Maintain payments to shareholders, even if they must lay off a number of employees*” or should instead choose to “*Maintain stable employment, even if they must reduce payments to shareholders,*” founders

(and related CEOs) come out strongly in favor of maintaining stable employment: they are 22% (11%) more likely to do so than the other firm-CEO types. This fits with the result in Sraer and Thesmar (2007) that heir-managed family firms in France smooth the effects of industry sales shocks on labor demand, although here the result is present at founder-run firms also. It is also in line with the idea in Shleifer and Summers (1988) that family control makes possible implicit or relational contracts with a firm's workforce, and Mueller and Philippon's (2011) argument for the beneficial effect on firms' labor relations of family control.

However, on other dimensions founder CEOs have similar views to related CEOs, and both differ in their responses from professional CEOs of either type. In particular, both founders and related CEOs are more likely to see their leadership role at the firm as "*Guaranteeing the stability of the company's traditions and values*" rather than "*Bringing about changes in the way the company is run,*" unlike professional CEOs of both types. This view is more pronounced for founders (for whom it is 26% more likely versus 14% for related CEOs), which is to be expected from the individual who likely created these traditions and instilled the values. However, it may also be a symptom of the monitoring performed by a powerful founder (as discussed in the ownership and governance section). Related CEOs' freedom of action may be limited by this monitoring, and so they may see their mandate to be administering the firm as they received it from the founder. By contrast, professional CEOs of family firms, as "outsiders," are more inclined to make changes, which are likely essential to their ability to contribute to the firm, and may be why they were initially appointed. Professional CEOs of non-family firms also see their leadership role in terms of making changes rather than maintaining values and traditions.

Turning to CEOs' views on accountability, banks (rather than shareholders) appear to be viewed as the key stakeholders by both founders and, to a lesser extent, related CEOs. In response to the question "*As the CEO of «CompanyName», who do you feel the most accountable to?*" founders and related CEOs are more likely to report feeling accountable to banks than professional CEOs (10% and 6%, respectively). Moreover, both founder and related CEO types are more likely to report involving banks before major investment decisions

(12% and 8%, respectively) in response to the question: “*Which of the company’s stakeholders are you most likely to involve before deciding to undertake a large-scale investment project, such as the acquisition of a plant or a company?*” This may reflect the smaller size of their firms (as measured by average sales) and consequently more limited access to capital, or perhaps a closer working relationship.

In contrast to their attitude towards banks, founders—but not related CEOs—are 12% less likely than other firm-CEO types to feel accountable to shareholders.¹⁵ Moreover, they are 18% less likely to report involving large shareholders before major investment decisions than other firm-CEO types. Thus, founder CEOs are particularly likely to view banks, not shareholders in general (or even large shareholders), as their most important external stakeholders, perhaps because founders themselves are large or controlling equity holders. Related CEOs appear to share founder CEOs’ concern for banks.

5. CEO family ties and origins

5.1. *Politics and family ties*

A final group of survey questions considers CEOs’ perceptions of the links between politics and firms in their country as a whole (as opposed to their own behavior as CEO), and are reported in the Internet Appendix for brevity. Interpreting such questions involves the difficulty that CEOs respond based on their perceptions of general practice in their countries, which may be less accurate than questions about the respondent’s own behavior. Survey respondents were asked “*How would you describe the relationship between major companies and political parties in your country?*” Related CEOs are 22% more likely to answer “*most business leaders try to maintain close relationships with all political parties and candidates*” (as opposed to only one or none at all) than all other firm-CEO types. They are also 18% less likely than the other firm-CEO types to answer that “*most business leaders do not have close*

¹⁵For this regression we control for firms being owned by a parent corporation and by a multinational corporation, as accountability to shareholders will likely be lower if the CEO is insulated from them by a parent corporation in another country. The inclusion of these controls is immaterial to the coefficient estimates of all other regressions in the paper.

relationships with any political party or candidate.” That related CEOs in particular should see contacts with politicians across the political spectrum as central to the role of business leader is consistent with the Morck and Yeung (2004) hypothesis that family-controlled firms are best suited to the role of counterparties in rent-seeking games with long-serving officials in government, due to the prospect of repeated games and the many points of contact between these firms and the government.

In a similar vein, both professional CEOs of family firms and related CEOs are 14% to 16% more likely to answer that family background and contacts are important for conducting successful business compared to both professional CEOs of non-family firms, and to founders. Moreover, related CEOs are also more likely than other CEOs to say that family relationships facilitate access to business information in their country, in response to the question “*In your view, which of following transactions are most commonly facilitated through family relationships in your country?*” This is unsurprising if, as is probable, their families are wealthier and thus better connected than those of other firm-CEO types. There are no differences between firm-CEO types on any of the other available alternative answers: access to credit, relationship with the government and regulators, hiring, sale and purchase of assets, or supplier and customer relationships. In sum, the results in this section lend support to the view that family firms (but not founder-run firms) see political interaction and family contacts as a key factor for success.

5.2. *The family backgrounds of CEOs*

The survey also allows us to examine the differences in family backgrounds by firm-CEO type in the sample. We regress responses regarding CEOs’ parental income and occupation on firm-CEO type indicator variables and our standard set of control variables (regression coefficients are reported in the Internet Appendix for brevity). The question “*How would you classify the income level of your parents when you were growing up (compared to other families in your country of residence)? Please select one (lower, middle, upper)*” shows that related CEOs are over 16% less likely to have been brought up in a low income household (and

are over 30% more likely than all other firm-CEO types to be brought up in a high income household in unreported regressions). Thus, related CEOs appear to have more privileged backgrounds, which is not surprising given that they are related to the founder of a firm that was one of the one hundred largest firms in their country at the time of the survey.

Additionally, professional CEOs of family firms are also less likely (7%) to have been brought up in low income households than either founder CEOs or professional CEOs of non-family firms, although unlike related CEOs they are no more likely to be brought up in high income households.

Fathers' occupation is an alternative measure of CEO family background. CEOs were asked "*What is/was your father's main occupation?*" which we classify into three broad occupation categories: business people, blue-collar workers, and professionals. CEOs whose fathers were medical doctors, judges, engineers, teachers, high or middle income government officials, or other clearly identifiable professionals were grouped into the professional category. Those whose fathers were business owners or managers—whether of large (>100 employees) or small firms—or high or middle income farmers were categorized as being in business, while fathers who were salesmen, clerks, manual workers, or artisans were categorized as blue-collar workers, along with low income farmers or low income government officials (combinations of the answer to this question and the previous question). Indicator variables for each of these three categories were regressed on the firm-CEO type indicator variables and standard controls.

Related CEOs' fathers, unsurprisingly, are 19% less likely to have been blue-collar workers than the other firm-CEO types' fathers and are approximately 40% more likely to have been in business (in unreported regressions). Further, we see that both founders and related CEOs are, respectively, 14% and 23% less likely than professional CEOs to have had a professional father (although for different reasons).

We then focus on a smaller grouping of responses to the question "*What is/was your father's main occupation?*" In particular, we look at the likelihood of responding either "*Large business manager (>100 employees)*" or "*Small business manager (<100 employees)*" and

group them into an indicator variable for business managers. We do the same for the business owner variable with the responses “*Large business owner (>100 employees)*” or “*Small business owner (<100 employees)*.”

Professional CEOs of family firms were 8% more likely to have had a father who was a business *manager* than either professional CEOs of non-family firms or founders. However, there are no statistically significant differences for such CEOs in the likelihood of having fathers who were business *owners*. There is a mechanical effect for related CEOs, while founder CEOs are 17% more likely to have had a father who owned a business at the 10% significance level, which fits with the entrepreneurship literature’s finding that a major determinant of self-employment is parental self-employment (e.g., Sørensen, 2007).

Thus, the firm-CEO types appear to fall into two groups with regard to family backgrounds: less privileged founders and professional CEOs of non-family firms, in contrast to more privileged related CEOs and professional CEOs of family firms, both of which are more likely to have had fathers who were business managers (and owners in the case of related CEOs). These results suggest that positions as founders and as CEOs of non-family firms provide opportunities for upward mobility in these countries. In contrast, family firms promote their own descendants into these positions or hire professional CEOs that come from higher income classes.

The data allow us to examine the family backgrounds of the CEOs in our sample in even greater detail. A large literature focuses on intergenerational social mobility and the resulting income distribution (see Solon, 2002, for a review of the economic literature on intergenerational earnings mobility). CEOs’ pay levels and their position atop the income distribution have also generated a large literature (e.g., Piketty and Saez, 2003). We analyze the socioeconomic backgrounds of CEOs by examining their fathers’ and paternal grandfathers’ occupations, which are key proxies for the social status of the CEO’s family, and perhaps the most reliable measure available in countries lacking comprehensive longitudinal data series.¹⁶

¹⁶The sociology literature has a long history of examining intergenerational mobility as measured by occupational categories; see Erikson and Goldthorpe (2002) for a sociological perspective. We are aware that by focusing on fathers and grandfathers we exclude the intergenerational linkages due to mothers and grandmothers, but our data make this inevitable.

The survey also contains a broad measure of CEOs' paternal income when the CEO was growing up (as mentioned earlier), which is an additional measure of their parents' economic status. Parental economic standings are directly relevant to CEOs' social origins, as the intergenerational mobility literature finds them to be a significant source of advantage (e.g., Erikson and Goldthorpe, 2002; Solon, 2002).

Table 5 shows that the CEOs in this sample come overwhelmingly from middle (52%) or high income (34%) families, suggesting important limits to intergenerational mobility for this selected sample of successful and likely talented managers. However, there are economically important and statistically significant differences between the firm-CEO types. Firstly, and perhaps unsurprisingly, related CEOs are more likely to have grown up in a high income household (63%) and less likely to be from middle income households compared to the other firm-CEO types. More interestingly, founder CEOs and professional CEOs of *non-family* firms are significantly more likely to have grown up in low income households in comparison to the other two firm-CEO types (related CEOs and professional CEOs of *family* firms), as noted earlier. These results suggest that the entrance of CEOs either as founders or the heads of *non-family* firms allows talented individuals from less privileged backgrounds to become involved in the management of the largest firms within a country. If we believe that there is regression to the mean in managerial abilities, allowing a transition of managerial power to people outside the narrow circle of family members is likely to be a net improvement, since the firm can draw from the full talent distribution in the country.

These results find broad support when we turn to the occupational backgrounds of the CEOs' parents and grandparents. Table 5 also separates the fathers of CEOs into three broad occupation categories: business people, blue-collar workers, and professionals. CEOs whose fathers were medical doctors, judges, engineers, teachers, high or middle income government officials, or other clearly identifiable professionals were grouped into the professional category. Those whose fathers were business owners or managers—whether of large (>100 employees) or small firms—or high or middle income farmers were categorized as being in business, while fathers who were salesmen, clerks, manual workers, or artisans were categorized as blue-collar

workers, along with low income farmers or low income government officials. We then repeat the same classification for the CEOs' grandfathers. But in addition we separate out the categories "government worker" and "farmer" for the paternal grandfathers because of their high frequency and because we have no measure of income for grandfathers.¹⁷

The fathers of the CEOs in our sample were principally business managers or owners (59%), again suggesting it may be harder to make the occupational leap from a non-business family environment to top CEO status in a single generation. In addition, related CEOs are less likely to have a blue-collar father and are (mechanically) more likely to have a father in business (71% are either sons/daughters or grandsons/granddaughters of founders) than all other firm-CEO types. Further discussion of the socioeconomic backgrounds of the CEOs in the sample is presented in the Internet Appendix.

6. Conclusion

This paper shows that CEOs' management approaches and philosophies vary with the allocation of control rights and the governance structure of the firm. Family firms, especially those run by the original founder or a close relative, seem to hold a stakeholder view of management, favoring employees and creditors over shareholders. In contrast, professional CEOs, both in widely held firms and in family firms, advocate a more textbook, shareholder maximization approach. Our results suggest that family firms differ from widely held firms not only in their explicit governance structures, but also in terms of the softer factors that affect management effectiveness.

Surprisingly, we also find that these differences in firm-CEO types are at least as important in explaining variation in CEO philosophies as country-level differences or even country fixed effects. In fact, the firm-CEO type variable accounts for the most robust patterns in the data, and is largely orthogonal to country characteristics. Since the differences in business

¹⁷Long and Ferrie (2007) use a similar four-category classification scheme with (much older) British and US census data from 1860 to 1900. These are (1) white collar (professional and technical workers, as well as retail and clerical workers); (2) farm owners; (3) skilled and semi-skilled workers (craftsmen and factory operatives); and (4) unskilled workers (including farm laborers). They note that using more categories alters none of their substantive findings.

approach across firm-CEO types are stable across economic environments, they are unlikely to be an endogenous outcome of country conditions. In other words, CEOs of family firms adopt a different management philosophy from those of widely held firms independent of whether they are in, for example, a high or a low growth country; firm-CEO types appear to be fundamental to explaining firm outcomes. This could be the outcome of a selection process whereby managers with, for example, stakeholder preferences either self-select or are more likely to be selected to lead family firms. Alternatively, the mandate, incentives, and culture prevailing in family- or founder-led organizations might affect the beliefs and business philosophy of managers.

The explanatory power of the firm-CEO type variable across countries also suggests that stakeholder-focused management may not arise as an economy-wide equilibrium resulting from differences in cultural norms and in financial and economic development, but rather may depend on the governance and ownership structure of each firm. Of course, it is also possible that economic conditions differentially affect the survival rates of different types of firms, or even the rate of entry of family versus non-family firms. This paper is only a first step towards an understanding of how management philosophies differ among CEOs, and the role these play in economic outcomes. Future research should aim to shed light on how firms transition from one firm-CEO type to another, and on how this affects the approach that managers take. In addition, much more work is needed to understand how internal family dynamics affect the speed and likelihood of these transitions. Finally, we would like to know if these internal firm dynamics have some effect on aggregate economic outcomes such as GDP growth or productivity.

References

- Adams, R.B., Almeida, H., Ferreira, D., 2005. Powerful CEOs and their impact on corporate performance. *Review of Financial Studies* 18, 1403–1432.
- Anderson, R. C., Duru, A., Reeb, D. M., 2009. Founders, heirs, and corporate opacity in the United States. *Journal of Financial Economics* 92, 205–222.
- Anderson, R. C., Reeb, D. M., 2003. Founding-family ownership and firm performance: evidence from the S&P 500. *Journal of Finance* 58, 1301–1328.
- Bandiera, O., Prat, A., Sadun, R., 2013. Managing the family firm: evidence from CEOs at work. NBER Working Paper No. 19722.
- Baron, J. N., Hannan, M. T., Burton, D. M., 1999. Building the iron cage: determinants of managerial intensity in the early years of organizations. *American Sociological Review* 64, 527–547.
- Bennedsen, M., Neilsen, K. M., Pérez-González, F., Wolfenzon, D., 2007. Inside the family firm: the role of families in succession decisions and performance. *Quarterly Journal of Economics* 122, 647–691.
- Bennedsen, M., Pérez-González, F., Wolfenzon, D., 2006. Do CEOs matter? Unpublished working paper. INSEAD, Stanford University and Columbia Business School.
- Bennedsen, M., Pérez-González, F., Wolfenzon, D., 2011. Estimating the value of the boss: evidence from CEO hospitalization events. Unpublished working paper. INSEAD, Stanford University and Columbia Business School.
- Bertrand, M., Johnson, S., Samphantharak, K., Schoar, A., 2008. Mixing family with business: a study of Thai business groups and the families behind them. *Journal of Financial Economics* 88, 466–498.
- Bertrand, M., Schoar, A., 2003. Managing with Style: The effect of managers on firm policies. *Quarterly Journal of Economics* 118, 1169–1208.
- Bertrand, M., Schoar, A., 2006. The role of family in family firms. *Journal of Economic Perspectives* 20, 73–96.

- Bloom, N., Genakos, C., Sadun, R., Van Reenen, J., 2012a. Management practices across firms and countries. *Academy of Management Perspectives*, February, 12–33.
- Bloom, N., Van Reenen, J., 2007. Measuring and explaining management practices across firms and countries. *Quarterly Journal of Economics* 122, 1351–1408.
- Bloom, N., Sadun, R., Van Reenen, J., 2010. Does product market competition lead firms to decentralize? *American Economic Review: Papers & Proceedings* 100, 434–438.
- Bloom, N., Sadun, R., Van Reenen, J., 2012b. Management as a technology? Unpublished working paper. Stanford University, Harvard Business School, and London School of Economics.
- Brav, A., Graham, J., Harvey, C. R., Michaely, R., 2005. Payout policy in the 21st century. *Journal of Financial Economics* 77, 483–528.
- Burkart, M., Panunzi, F., Shleifer, A., 2003. Family firms. *Journal of Finance* 58, 2167–2202.
- Cameron, A. C., Gelbach, J. B., Miller, D. L., 2008. Bootstrap-based improvements for inference with clustered errors. *Review of Economics and Statistics* 90, 414–427.
- Claessens, S., Djankov, S., Fan, J. P. H., Lang, L. H. P., 2002. Disentangling the incentive and entrenchment effects of large shareholdings. *Journal of Finance* 57, 2741–2771.
- Claessens, S., Djankov, S., Lang, L. H. P., 2000. The separation of ownership and control in East Asian corporations. *Journal of Financial Economics* 58, 81–112.
- Eisfeldt, A. L., Kuhnen, C.M., 2013. CEO turnover in a competitive assignment framework. *Journal of Financial Economics* 109, 351–372.
- Erikson, R., Goldthorpe, J. H., 2002. Intergenerational inequality: a sociological perspective. *Journal of Economic Perspectives* 16, 31–44.
- Faccio, M., Lang, L. H. P., 2002. The ultimate ownership of Western European corporations. *Journal of Financial Economics* 65, 365–395.
- Fahlenbrach, R., 2009. Founder-CEOs, investment decisions, and stock market performance. *Journal of Financial and Quantitative Analysis* 44, 439–466.
- Freeman, R. E., 1984. *Strategic Management: A Stakeholder Approach*. Pitman, Boston, MA.

- Graham, J., Harvey, C. R., 2001. The theory and practice of corporate finance: evidence from the field. *Journal of Financial Economics* 60, 187–243.
- Graham, J.R., Harvey, C. R., Puri, M., 2015. Capital allocation and delegation of decision-making authority within firms. *Journal of Financial Economics*, forthcoming.
- Guadalupe, M., Wulf, J., 2010. The flattening firm and product market competition: the effect of trade liberalization on corporate hierarchies. *American Economic Journal: Applied Economics*, 2, 105–27.
- Kaplan, S. N., Klebanov, M. M., Sorensen, M., 2012. Which CEO characteristics and abilities matter? *Journal of Finance* 67, 973–1007.
- Khanna, T., Palepu, K., 2000. Is group affiliation profitable in emerging markets? An analysis of diversified Indian business groups. *Journal of Finance*, 55, 867–91.
- La Porta, R., Lopez-de-Silanes, F., Shleifer, A., 1999. Corporate ownership around the world. *Journal of Finance* 54, 471–517.
- Long, J., Ferrie, J., 2007. The path to convergence: intergenerational occupational mobility in Britain and the U.S. in three eras. *The Economic Journal* 117, C61–C71.
- Magill, M., Quinzii, M., Rochet, J-C., 2011. A theoretical foundation for the stakeholder corporation. Unpublished working paper. University of Southern California, University of California, Davis, and Swiss Finance Institute.
- Malmendier, U., Tate, G., 2008. Who makes acquisitions? CEO overconfidence and the market’s reaction. *Journal of Financial Economics* 89, 20–43.
- Mehrotra, V., Morck, R., Shim, J., Wiwattanakantang, Y., 2013. Adoptive expectations: rising sons in Japanese family firms. *Journal of Financial Economics* 108, 840–854.
- Morck, R. K., Yeung, B., 2004. Family control and the rent-seeking society. *Entrepreneurship: Theory and Practice* 28, 391–409.
- Morck, R. K., Stangeland, D. A., Yeung, B., 2000. Inherited wealth, corporate control and economic growth: the Canadian disease. In: Morck, R.K. (Ed.), *Concentrated Corporate Ownership*. University of Chicago Press, Chicago, IL, pp. 319–372.
- Mueller, H.M., Philippon, T., 2011. Family firms and labor relations. *American Economic*

- Journal: *Macroeconomics* 3, 218–245.
- Pérez-González, F., 2006. Inherited control and firm performance. *American Economic Review* 96, 1559–1588.
- Piketty, T., Saez, E., 2003. Income inequality in the United States 1913–1998. *Quarterly Journal of Economics* 118, 1–39.
- Rajan, R. G., Wulf, J. M., 2006. The flattening firm: evidence from panel data on the changing nature of corporate hierarchies. *Review of Economics and Statistics* 88, 759–73.
- Schoar, A., Zuo, L., 2011. Shaped by booms and busts: how the economy impacts CEO careers and management styles. NBER Working Paper No. 17590.
- Shleifer, A., Summers, L. H., 1988. Breach of trust in hostile takeovers. In: Auerbach, A.J. (Ed.), *Corporate Takeovers: Causes and Consequences*. University of Chicago Press, pp. 33–68.
- Solon, G., 2002. Cross-country differences in intergenerational earnings mobility. *Journal of Economic Perspectives* 16, 59–66.
- Sørensen, J. B., 2007. Closure and exposure: mechanisms in the intergenerational transmission of self-employment. *Research in the Sociology of Organizations* 25, 83–124.
- Sraer, D., Thesmar, D., 2007. Performance and behavior of family firms: evidence from the French stock market. *Journal of the European Economic Association* 5, 709–751.
- Tirole, J., 2001. Corporate governance. *Econometrica* 69, 1–35.
- Tsoutsoura, M., 2013. The effect of succession taxes on family firm investment: evidence from a natural experiment. *Journal of Finance*, forthcoming.
- Villalonga, B., Amit, R., 2006. How do family ownership, control, and management affect firm value? *Journal of Financial Economics* 80, 385–417.
- Whetten, D.A., Mackey, A., 2002. A social actor conception of organizational identity and its implications for the study of organizational reputation. *Business and Society* 41, 393–414.

Table 1**Summary statistics**

The sample covers leading CEOs in 24 emerging markets in 2007. A team of MBA students attempted to conduct phone interviews with the CEOs of the largest one hundred companies in each country; the response rate was 37%. See text for further details. The table below provides descriptive statistics. Sales are winsorized at 5% and 95%. Sales statistics are in million USD (2006). Firm and CEO ages, as well as tenure statistics, are in years. Firm age is winsorized at 5% to reduce the impact of respondent recall errors (i.e., date of founding versus incorporation versus public listing). Results are virtually identical without winsorizing.

<i>Panel A: Firms</i>	Whole sample	Founder CEO	Related CEO	Prof. CEO of family firm	Prof. CEO of non-family firm	# Of obs in calculation
% Of each firm-CEO type		12.6%	18.0%	21.0%	48.4%	823
Firm age	38	22	42	38	42	756
Sales (mean)	386	202	288	373	474	671
Sales (median)	116	42	100	100	148	671
Publicly listed firms	26%	17%	30%	20%	29%	823
% Ownership of top 3 equity holders	78%	78%	70%	78%	81%	656
Firms with a parent company	45%	30%	20%	46%	59%	793
Firms owned by a multinational	23%	10%	5%	14%	38%	823
% English legal origin	32%	33%	28%	22%	37%	823
<i>Panel B: CEOs</i>						
CEO age	52	56	50	51	52	816
% Men	98%	97%	97%	96%	98%	822
CEO education:						
Undergrad. %	91%	82%	90%	92%	93%	819
MBA or grad. degree %	46%	35%	46%	50%	48%	823
International educ. %	50%	41%	62%	46%	50%	807
Prior position						
On a Board of Directors	14%	19%	15%	14%	12%	823
As a CEO	33%	21%	22%	41%	37%	823
In financial field	15%	6%	8%	20%	18%	823
1st Job at current firm was as CEO	42%	63%	17%	42%	47%	732
Tenure (mean)	8	15	12	6	5	738
CEO owns >5% of firm	26%	80%	67%	7%	3%	766

Table 2

Confirming firm classifications

Regressions of survey responses on a constant, three firm-CEO type indicator variables (the omitted category is professional CEO of a non-family firm), four country-level variables, two-digit SIC code fixed effects, an indicator for whether the firm is publicly listed, the natural logarithm of firm sales in 2006, and an indicator for missing value of firm sales. The country-level variables are: the natural logarithm of per capita GDP, the Transparency International Corruption Index (higher values indicate low corruption), the Heritage Foundation Property Rights Index (higher scores indicate more secure property rights), and an indicator variable for English or French legal origin (1 denotes English). All dependent variables are indicator variables, taking a value of one if the respondent is in agreement with the question or answers in the affirmative, and a zero otherwise. Regressions are estimated using the linear probability model. *t*-statistics are in brackets below each coefficient. *, **, and *** denote coefficients significant at 10%, 5%, and 1% respectively. Standard errors are clustered by country. See Internet Appendix for reporting of alternate specifications, and Table 1 for sample description.

	CEO appointed by founder or his/her relatives	Were any of your relatives ever in the upper management of large firms?	Founder names directors
Founder CEO	0.23*** [6.348]	0.47*** [6.563]	0.16*** [3.297]
Related CEO	0.31*** [5.621]	0.77*** [18.935]	0.16*** [3.071]
Prof. CEO of Family firm	0.07*** [3.082]	-0.03 [-1.096]	0.17*** [6.192]
Country-level controls	Y	Y	Y
Sales & public listing controls	Y	Y	Y
SIC code fixed effects	Y	Y	Y
Observations	802	733	786
Adjusted R ²	0.19	0.57	0.11

Table 3
Ownership and Governance

Regressions of survey responses on a constant, three firm-CEO type indicator variables (the omitted category is professional CEO of a non-family firm), four country-level variables, two-digit SIC code fixed effects, an indicator for whether the firm is publicly listed, the natural logarithm of firm sales in 2006, and an indicator for missing value of firm sales. The country level variables are: the natural logarithm of per capita GDP, the Transparency International Corruption Index (higher values indicate low corruption), the Heritage Foundation Property Rights Index (higher scores indicate more secure property rights), and an indicator variable for English or French legal origin (1 denotes English). All dependent variables are indicator variables, taking a value of one if the respondent is in agreement with the question or answers in the affirmative, and zero otherwise; regressions are estimated using the linear probability model. The exception to this is the Number of blockholder types regression in Panel A, which is estimated via ordered probit, and is the predicted value for 2 blockholder types (all predicted values are in the Internet Appendix). *t*-statistics are in brackets below each coefficient. *, **, and *** denote coefficients significant at 10%, 5%, and 1% respectively. Standard errors are clustered by country. See Internet Appendix for reporting of alternate specifications, and Table 1 for sample description.

		Panel A: <i>Ownership</i>			Does CEO receive stock/options in compensation?		Number of blockholder types(2)		Equity % of 3 largest shareholders	
		Does CEO own equity in firm?	Does CEO own >5% of firm?	Does CEO own stock/options in compensation?	Does CEO receive stock/options in compensation?	blockholder types(2)	blockholder types(2)	blockholder types(2)	Equity % of 3 largest shareholders	
Founder CEO		0.61*** [11.653]	0.77*** [16.006]	-0.20*** [-3.107]	0.07*** [3.45]				-6.93** [-2.295]	
Related CEO		0.52*** [9.403]	0.62*** [18.292]	-0.18** [-2.680]	0.10*** [5.51]				-11.58*** [-4.216]	
Prof. CEO of Family firm		0.07 [1.425]	0.02 [0.840]	-0.10* [-2.025]	0.14*** [7.71]				-5.72* [-1.967]	
Country-level controls		Y	Y	Y	Y				Y	
Sales & public listing controls		Y	Y	Y	Y				Y	
SIC code fixed effects		Y	Y	Y	Y				Y	
Observations		821	765	577	750				655	
Adjusted R ²		0.31	0.54	0.14					0.18	
		Panel B: <i>Governance</i>								
		Is CEO also on board?'	Is CEO also chairman?'	Does CEO name most directors?'	Was previous CEO terminated by the founder?'	Is Founder involved in major investment decisions?'				
Founder CEO		0.09*** [3.635]	0.23*** [3.906]	0.16*** [3.578]	0.04 [1.114]				0.03 [0.623]	
Related CEO		0.13*** [3.445]	0.08 [1.410]	0.07* [1.772]	0.10*** [3.490]				0.13** [2.750]	
Prof. CEO of Family firm		-0.01 [-0.370]	-0.21*** [-5.377]	-0.05*** [-2.613]	0.03** [2.363]				0.04 [0.686]	
Country-level controls		Y	Y	Y	Y				Y	
Sales & public listing controls		Y	Y	Y	Y				Y	
SIC code fixed effects		Y	Y	Y	Y				Y	
Observations		806	804	786	706				718	
Adjusted R ²		0.15	0.14	0.06	0.05				0.21	

Table 5

CEO Parental Income

This table presents response statistics of the CEOs in our survey when asked about their father's and grandfather's occupation and income. The first column reports the results for the whole sample, the next four columns break out the results for the subgroups of founder CEOs, related CEOs of family firms, professional CEOs of family firms, and professional CEOs of non-family firms. See Table 1 for more information about the sample.

	Whole sample	Founder CEO	Related CEO	Prof. CEO of family firm	Prof. CEO of non-family firm
<i>CEO's parents' income</i>					
% Low	14%	23%	3%	9%	18%
% Middle	52%	49%	34%	61%	57%
% High	34%	28%	63%	30%	25%
<i>Father's occupation</i>					
Bluecollar worker (%)	15%	19%	1%	15%	19%
Professional (%)	26%	17%	8%	31%	34%
In business (%)	59%	65%	92%	54%	46%
<i>Paternal grandfather's occupation</i>					
Bluecollar worker (%)	11%	11%	8%	10%	13%
Professional (%)	13%	11%	6%	15%	14%
In business (%)	39%	39%	65%	38%	29%
In government (%)	8%	4%	5%	9%	9%
Farmer (%)	29%	34%	16%	28%	35%

Fig. 1. Confirming firm classifications. The charts below present a graphical representation of the results in Table 2. Bars are means of regression residuals by the following firm-CEO types: 1: CEO Founder; 2: Related CEO; 3: Professional CEO of a Family Firm; 4: Professional CEO of a Non-Family firm. Bars of darker colors denote significant differences from the baseline i.e., firm-CEO type #4. Significance levels are reported in Table 2. The X-axis reflects the effect of each firm-CEO type on the probability of answering in the affirmative. See Table 1 for a description of the sample.

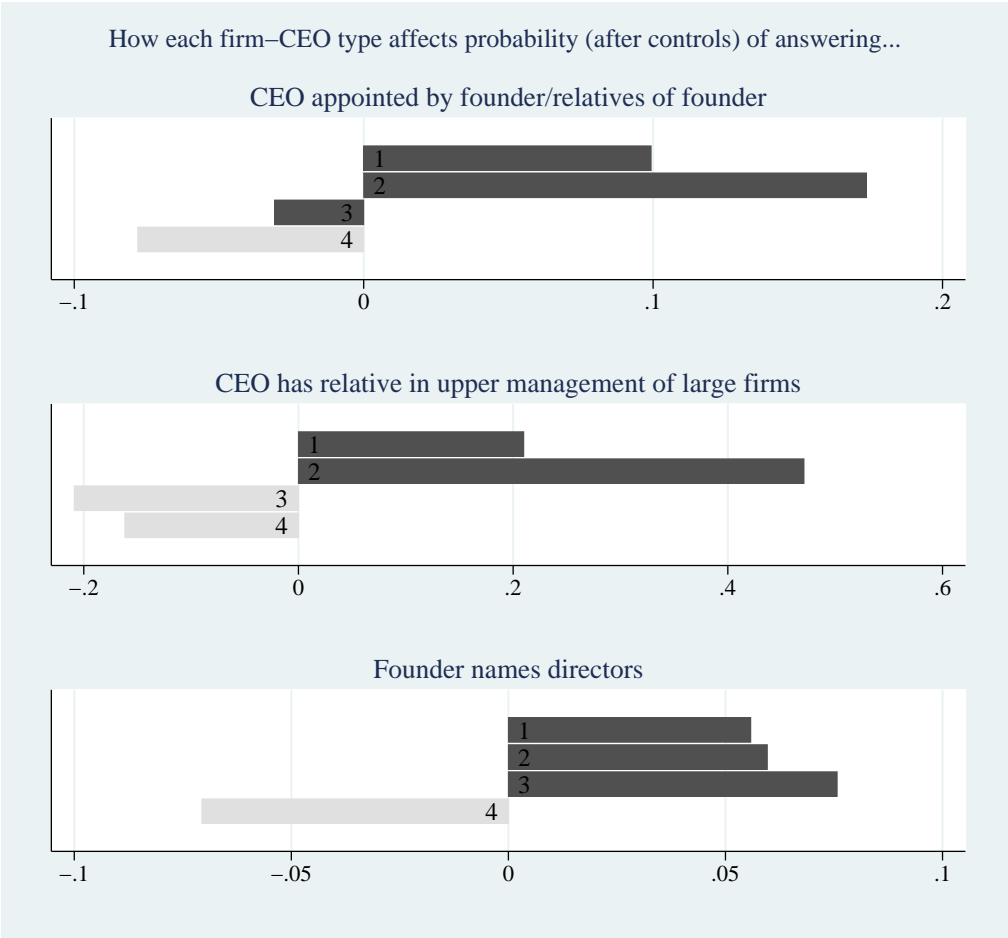


Fig. 2. Ownership (left column) and Governance (right column). The charts below present a graphical representation of the results in Table 3. Bars are means of regression residuals by the following firm-CEO types: 1: CEO Founder; 2: Related CEO; 3: Professional CEO of a Family Firm; 4: Professional CEO of a Non-Family firm. Bars of darker colors denote significant differences from the baseline i.e., firm-CEO type #4. Significance levels are reported in Table 3. The X-axis reflects the effect of each firm-CEO type on the probability of answering in the affirmative. See Table 1 for a description of the sample.

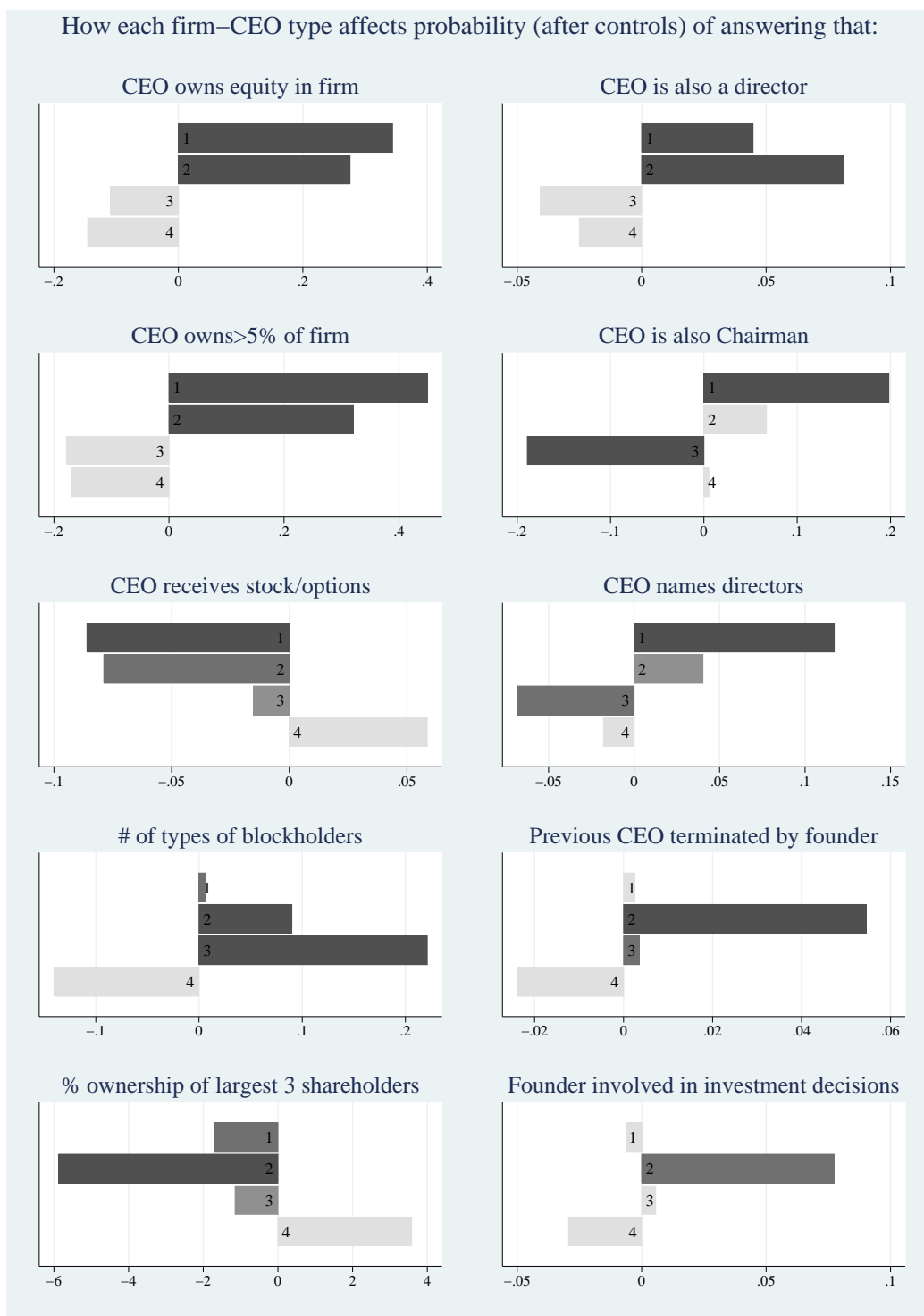


Fig. 3. Management approach (left column) and Business philosophy (right column). The charts below present a graphical representation of the results in Table 4. Bars are means of regression residuals by the following firm-CEO types: 1: CEO Founder; 2: Related CEO; 3: Professional CEO of a Family Firm; 4: Professional CEO of a Non-Family firm. Bars of darker colors denote significant differences from the baseline i.e., firm-CEO type #4. Significance levels are reported in Table 4. The X-axis reflects the effect of each firm-CEO type on the probability of answering in the affirmative. See Table 1 for a description of the sample.

