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Understanding the relationship between founder–CEOs and firm performance ☆

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ABSTRACT

We use instrumental variables methods to disentangle the effect of founder–CEOs on performance from the effect of performance on founder–CEO status. Our instruments for founder–CEO status are the proportion of the firm's founders that are dead and the number of people who founded the company. We find strong evidence that founder–CEO status is endogenous in performance regressions and that good performance makes it less likely that the founder retains the CEO title. After factoring out the effect of performance on founder–CEO status, we identify a positive causal effect of founder–CEOs on firm performance that is quantitatively larger than the effect estimated through standard OLS regressions. We also find that founder–CEOs are more likely to relinquish the CEO post after periods of either unusually low or unusually high operating performances. All in all, the results in this paper are consistent with a largely positive view of founder control in large US corporations.

1. Introduction

In this paper we try to understand the nature of the relationship between founder–CEOs and firm performance. Unlike most of the previous literature, we take the endogenous nature of the founder's status as CEO seriously. We propose an instrumental variables approach to disentangle the effect of founder–CEOs on performance from the effect of performance on founder–CEO status. Our analysis suggests that founder–CEOs improve market valuations and operating performances of their firms and that the status of the founder as CEO is endogenous in performance regressions. Furthermore, our evidence shows that not taking the endogeneity of founder–CEO status into account leads one to underestimate its effect on performance. A likely explanation for this finding is that the average effect of performance on founder–CEO status is negative. In order to investigate this possibility further, we estimate the effect of past operating and market performance on changes in founder–CEO status. We find that founder–CEOs are more likely to relinquish the CEO post after periods of unusually high operating performances. In addition, unusually low operating performance also makes it more likely that the founder steps out, suggesting that founders are not inexorably entrenched.

Earlier research on the effects of founder–CEOs on operating performances and market valuations has produced mixed findings. Johnson et al. (1985) find a positive stock price reaction following the sudden death of a corporate founder. Morck et al. (1988) find a negative effect of founding family control on market valuations, but only for older firms. For the younger firms in their sample, the market value effect of having a member of the founding family as one of the top two executives is positive. Morck et al. (1998) find a negative correlation between heir control in Canadian firms and firm performance. Anderson and Reeb (2003) provide evidence consistent with family firms having higher market valuations and better accounting performances than non-family firms. Recently,

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a new wave of research on the topic has arisen, with a focus on refining the evidence from the previous studies. One strand of this new generation of papers focuses on inherited control. The evidence from the US (Pérez-González, 2006) and Denmark (Bennedsen et al., 2007) is consistent with the original findings by Morck et al. (1998): inherited control by a family member is associated with a decline in firm performance. In contrast, Sraer and Thesmar (2007) find not only that family control is positively related to performance, but also that even heir-controlled family firms have better performances in France.

Another strand of this recent literature focuses on the effects of founder control on performance. In research contemporaneous to this paper, Fahlenbrach (in press), Palia et al. (in press), and Villalonga and Amit (2006) all find a positive relation between founder–CEOs and firm performance. While a natural process of mutual influence has produced some ideas and findings that are shared by all papers on this topic, our paper differs from these mainly in our identification strategy. Thus, our main contribution to this literature is our focus on the importance of endogeneity. We believe that this contribution has already had a positive effect on these contemporaneous papers. We also present some unique findings, especially with respect to the effect of firm performance on founder–CEO turnover.

In regressions of market valuations and return on assets on founder–CEO status and other controls, we propose two instruments for the founder–CEO status variable. The first is the proportion of the firm's founders who are dead. The second is the number of people who founded the company. We argue that these instruments plausibly satisfy the exclusion restriction for valid instruments, that is, they are unlikely to be related to performance other than through channels that we can control for in our empirical analysis. We estimate an endogenous dummy variable model of performance that takes into account the fact that the founder–CEO variable is binary. In this framework, we also provide evidence that our chosen instruments are significantly correlated with founder–CEO status.

Our primary sample consists of data on Fortune 500 firms over the 1992–1999 period, for which we could gather data on the proposed instruments. We find strong evidence that founder–CEO status is endogenous in performance regressions, which implies that the effect of founder–CEOs cannot be correctly estimated using ordinary least squares methods. After instrumenting for founder–CEO status, we find evidence consistent with a positive causal effect of founder–CEOs on firm performance. In addition, the endogenous dummy variable model allows us to provide evidence on the most likely direction of the effect of performance on founder–CEO status. Our evidence suggests that good performance *reduces* the likelihood that a founder retains the CEO title. This direction of reverse causality is compatible with the true effect of founder–CEOs on performance being larger than that estimated through OLS procedures.

Our finding that good performance makes it more likely that the founder is not in control is somewhat surprising in light of previous arguments concerning the endogeneity of founder–CEO status. Because the correlation between founder–CEOs and performance is positive in OLS regressions, the previous literature has emphasized endogeneity stories that could explain away this correlation. For example, Anderson and Reeb (2003) suggest that founder–CEOs could have superior inside information about the prospects of their firms. This could enable them to plan their departure from the firm when performance is likely to fall. This hypothesis is inconsistent with our findings.

In the last part of the paper we discuss alternative stories that can explain the negative effect of performance on founder–CEO status. The effect of good performance on founder–CEO departures might be due to a “controlled-succession” effect (Morck et al., 1989), whereby founders who wish to transfer control to their heirs can accomplish this more easily following good performance, or more simply to the fact that founders leave their companies only when they are in good shape (Wasserman's (2003) “paradox of entrepreneurial success”). Both these stories predict that founder–CEOs will step out after some period of consistently good performance. In addition, such a relationship might be linked to wealth effects: if CEOs want to retire when rich, they should be more willing to retire following good performance. Finally, it is possible that the effect of performance on founder–CEO status is driven by firms that perform badly, if for some reason founders are *more* likely to retain the CEO title in such firms. Such a relationship can be generated by bad governance, if firms with bad governance both perform poorly and are more likely to have a founder who is entrenched as the CEO.

To help differentiate among these stories, we examine the effect of past extreme performances on the likelihood that founders retain the CEO title. We find that unusually good past performance does increase the probability that founders step down. In addition, we find that unusually bad past performance also generates founder–CEO turnover. This finding helps reject the bad governance hypothesis. We find no support for the importance of wealth effects. These findings imply that the hypotheses that are most consistent with our evidence are the “controlled-succession” and the “paradox of entrepreneurial success” hypotheses.

We start in Section 2 by defining our problem formally. In Section 3 we describe our sample, which we use in Section 4 to examine OLS regressions of performance on founder–CEO status. In Section 5, we address the endogeneity of founder–CEO status. Section 6 provides further evidence on the relationship from performance to founder–CEO status, and Section 7 concludes the paper.

2. The endogenous dummy variable model

We start by formally defining our question. Suppose that we have a linear model in the population:

$$y = \alpha + \gamma f + \boldsymbol{\beta}\mathbf{x} + u, \tag{1}$$

where the random variable y is a measure of firm performance, f is a binary random variable that takes the value of 1 if the CEO is one of the founders and zero otherwise, $\mathbf{x}$ is a k-dimensional random vector of covariates, and α, γ and $\boldsymbol{\beta}$ are population