Founders’ Prior Affiliations, Human Capital Sourcing, and Firm Performance

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Motivation

New venture founders are vital to firms as they leave lasting imprints on their organizations that remain long after they leave (Eisenhardt & Schoonhaven, 1990). The demographics and prior experience of the founding team have been found specifically to have meaningful effects on some of the most crucial organizational outcomes, including venture capital financing and speed to initial public offering (Beckman, Burton, & O’Reilly, 2007), innovation and strategy (Burton, Sørensen, & Beckman, 2002), survival and sales (Delmar & Shane, 2006), and firm ambidexterity (Beckman, 2006).

The staffing of top management teams has also been shown to be a reflection of the founding members’ background, in turn predicting key firm outcomes (Beckman & Burton, 2008). The human capital of the founding team provides a basis for how the organization is designed and structured, and this founding team imprint influences future resource acquisition due to the path dependency inherent in such decisions (Garbuio, King, and Lovallo, 2011). Extending this logic, a founding team’s imprint will partially determine how a firm orchestrates the accumulation of one of its most critical resources – its human capital. Such understanding of founding teams could serve to enlighten scholars on the reasons behind human capital resources being persistently and remarkably differentiated between firms (Armstrong & Shimizu, 2007; Crook et al., 2011; Ployhart, 2004; Ployhart, Nyberg, Reilly, & Maltarich, 2014).

However, research to date has not considered the effect of founding team characteristics on staffing strategies specifically. Similar to other studies’ findings, we contend that the founding team’s prior affiliations to previous firms and education institutions may be particularly salient to lasting staffing practices (Beckman, 2006; Beckman & Burton, 2008; Rocha, Carneiro, & Varum, 2016; Wellborne & Cyr, 1999; cf. Bidwell et al., 2015). We argue these prior organization imprints drive homophilic tendencies within the firm, determining both the organizational design and the sourcing of human capital over time (see Oyer & Schaefer, 2016; Schneider, 1987). Founding teams with shared (employment or educational) affiliations are more likely to have a common language and culture, and to have tacit understandings of work processes (Beckman, 2006), and thus, we theorize that such firms would have less functionally-specific organizational designs and be more inclined towards founder pipeline hiring strategies, i.e. repeated hiring from founders’ employment and educational sources, and subsequently higher firm performance (Brymer, Molloy & Gilbert, 2014; Brymer, Chadwick, Hill & Molloy, 2017). We develop two-fold theoretical hypotheses:

H1(a/b): The degree of prior shared (employment/educational) affiliations of founders is positively associated with (employment/educational) pipeline hiring.

H2(a/b): New ventures hiring from (employment/educational) pipelines achieve better performance (survival, profitability, and productivity) than otherwise similar firms.
Data and Methods

We test our theory and hypotheses with a sample of startups established in Denmark between 2001 and 2004, within general services (wholesale and retail trade, and restaurants), specialized services (computer programming, accounting and law, and business consulting), and manufacturing industries, hiring at least five employees at entry or in later stages. These startups are identified, together with their main founder, in Entrepreneurship Database, and matched with the Integrated Database for Labor Market Research (IDA), a linked employer-employee dataset maintained by Statistics Denmark, available for the period 1980-2012. This allows identifying co-founders and all the employees hired over firm lifecycle, as well as tracing the previous labor market history and (employment and educational) affiliations of each founder and employee. Our final sample comprises about 11,800 founders and over 151,000 employees in 8,312 startups, which we follow since their entry until their exit, or until the last year of available information (2012).

We conduct a three-fold analysis. First, we investigate the relationship between founders’ prior shared affiliations and their propensity towards founder pipeline hiring strategies, i.e. whether or not they hire employees who had shared (employment or educational) affiliations with themselves. Since this decision is conditional on hiring at least one employee, we address potential self-selection bias by using the multi-equation method developed by Roodman (2011). Employee turnover caused by maternity and sick leaves is used as exogenous variation for firm-level decisions to hire new employees over time.

The second part of our analysis investigates the relationship between pipeline hiring and firm performance. We estimate how new venture survival, profitability, and productivity (ratio between firm sales and total employment) is influenced by the relative importance of founder pipeline hires in the total workforce, i.e., the share of workers coming from similar (employment/educational) sources as the founder(s). We acknowledge that workforce composition may be endogenous and therefore apply the multi-equation method of Roodman (2011), where we extend the first stage equation with three variables that influence founder pipeline hiring decisions, but not firm performance (a measure of regional diversity of employment/education sources founders can hire from, a proxy for the scarcity of skills sourced among new hires in the industry, and a proxy for the expansion of digital social networks).

Finally, we conduct post-hoc analyses to investigate potential factors moderating the influence of founder pipeline hiring on new venture performance and underlying explanations for the main results.

Main Results and Conclusions

We find robust evidence confirming our first set of hypotheses: new ventures with shared employment (educational) affiliations in the founding team are about 7% (30%) more likely to hire from founder pipelines, after addressing self-selection in hiring new employees.

We also find evidence supporting Hypothesis 2a – even though the effects of employment pipeline hiring on new venture performance become smaller in magnitude
once we address endogeneity bias, the effects are still significant and economically meaningful, especially for firm profitability and productivity. We furthermore impose a two-year lag between changes in workforce composition and venture performance to reduce biases possibly driven by reverse causality. A one-standard deviation increase in the share of workers coming from founders’ employment pipelines (standard deviation = 0.228) is estimated to improve subsequent firm profitability and productivity by 6% and 5%, respectively. Additional analyses reveal this staffing strategy is positively correlated with the average quality of the source firms founders hire from. However, the results remain consistent when we control for the average quality of the sources used by new ventures to recruit their human capital.

Regarding educational pipeline hiring strategies, the performance bonus found in baseline estimations vanishes once we address endogeneity bias. However, further analyses reveal that the relationship between worker-founder shared educational affiliations and future firm performance vary with the type of educational institution shared. A significant performance bonus is identified only when employees and founders have shared a tertiary educational affiliation – particularly a vocational (post-secondary) institution. Vocational institutions might endow individuals with relatively more specific and/or scarcer human capital, in which case shared affiliations with future employers might possibly create stronger competitive advantage and less-imitable resources for startups.

In post-hoc analyses we investigate how the degree of shared affiliations in the founding team moderates the effects of founder pipeline hiring on firm performance. We find a negative moderating effect (though weakly significant), which suggests that the performance benefits of founder pipeline hiring become less evident when founders share prior affiliations to a higher extent. In other words, the benefit of hiring employees from sources similar to those where founders come from is greater when there is a lower (or no) degree of shared affiliations in the founding team.

Finally, additional analyses at the employee-level reveal that new hires coming from founders’ employment or educational pipelines i) are more likely to fill-in a top position in the new venture (management or leading role); ii) are less likely to leave the firm; iii) receive higher hourly wages (even after controlling for several individual and job characteristics, including occupation, part-time job, and firm fixed effects). These results suggest that employees hired from founder pipelines might be of relatively better quality and be better matches for relevant positions in the firm. This highlights the value of founders’ prior affiliations in helping them identify key human resources for their future ventures at a relatively low cost.

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1 As a proxy for the quality of the firms new ventures hire from, we consider their relative position in the industry distribution of sales, i.e., whether they belong to the 1st, 2nd, 3rd, 4th, or 5th quintile of the yearly distribution of sales in the 3-digit industry.
References


