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## **Entrepreneurship: Results from Sibling Correlation Models**

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### **Abstract**

“Equal Opportunity in Entrepreneurship: Results from Sibling Correlation Models”, Theodor Vladasel, Copenhagen Business School, INO; enrolment: October 1, 2014; expected graduation: September 30, 2018; e-mail: tv.l.ino@cbs.dk. Research gap: Can anyone become a successful entrepreneur? Can both the son of the IKEA empire founder and the son of a farmer from Swedish Lapland excel as entrepreneurs? Entrepreneurship has been widely proposed as an instrument for achieving social mobility given equality of opportunity, yet little research has confirmed this fundamental assumption. We shed light on the degree of predetermination in entrepreneurial entry and success, contributing to the policy debate regarding the merits of entrepreneurship. State of the art: Previous literature has not checked whether the playing field is actually level, focusing instead on determinants of entrepreneurship (Parker, 2009). While we know parents play a substantial role in shaping individuals’ preferences (Lindquist et al., 2015), no paper has attempted to put this influence into perspective and to assess the freedom to choose entrepreneurship. The method outlined below represents a first foray into

the analysis of entrepreneurial variance, rather than simple intergenerational associations. Theoretical arguments: The literature on family background has shown a large scope for influences of parental education, income, entrepreneurship and associated preferences on individual entrepreneurship. We expect to find a large degree of similarity between siblings, explained through parental observables, neighborhood effects, genes and peer effects. We also expect to find significant birth order effects (Black et al., 2005) and differential treatment by gender (Bennedsen et al, 2007). Data and Method: Our data comes from the Swedish Multigenerational Register, with detailed information on individuals' and parents' socio-economic characteristics and business ownership, from which we create a wide set of extensive and intensive margin entrepreneurship and incorporation outcomes. We apply multilevel mixed effects models, often used in labor economics as sibling correlation models (Solon, 1999), which exploit clustering of individuals in families to decompose the total variance of specific outcomes into between-family (shared by siblings) and within-family (unique to each sibling) variance. The proportion of total variance explained by shared factors represents the sibling correlation, or the similarity in outcomes between siblings generated by common family and community background over which individuals have little control. This is taken as an inverse measure of opportunity: if the sibling correlation is low, individuals are free to choose their occupation and there is equal opportunity. We extend this framework to disentangle sources of sibling similarity: neighborhood effects, observable parental characteristics, shared genes, sibling peer effects, and differential treatment by gender and birth order. Results: Our preliminary results indicate that around 20 percent of entrepreneurial variation is explained by shared background, and these shares rise slightly when accounting for differential birth order and gender treatment; sibling correlations in incorporation appear larger, but those in entrepreneurial income are lower. Parental education, entrepreneurship and income explain around 20 percent of sibling correlations, a further 10 percent is explained by neighborhood effects, and the remainder by shared genetic factors and inter-sibling peer effects (analysis not yet completed). Bennedsen, M., Nielsen, K.M., Perez-Gonzalez, F., and Wolfenzon, D., 2007. Inside the Family Firm: The Role of Families in Succession Decisions and Performance, *Quarterly Journal of Economics*, 122(2): 647-691. Black, S.E., Devereux, P.J., and Salvanes, K.G., 2005. The More the Merrier? The Effect of Family Size and Birth Order on Children's Education. *Quarterly Journal of Economics*, 130(2): 669-700. Lindquist, M.J., Sol, J., and van Praag, C.M., 2015. Why Do Entrepreneurial Parents Have Entrepreneurial Children? *Journal of Labor Economics*, 33(2): 269-296. Parker, S., 2009. *Economics of Entrepreneurship*. Cambridge University Press, Cambridge, UK. Solon, G., 1999. Intergenerational Mobility in the Labor Market. In Ashenfelter, O. and Card, D., editors, *Handbook of Labor Economics*, 3A, 1761-1800. Elsevier, N.V., Amsterdam.