

Immigrant Entrepreneurship, Job Creation, and Innovation

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Abstract

Do immigrant entrepreneurs account for a disproportionate share of job creation and innovation among start-up firms? The received wisdom that immigrants create hugely successful and innovative companies has been influential in many popular discussions, and it is easily illustrated with particular anecdotes, but as yet there has been relatively little evidence from systematic analysis of large, representative data sets. A number of studies have examined immigrant self-employment, but few have studied job creation, and as far as we know none have studied innovation.¹ This paper aims to contribute to the emerging literature on the impact of immigrant entrepreneurship on the U.S. economy.

We focus on the founders of new businesses during their initial “entrepreneurial phase.” The outcome variables we analyze include initial employment, subsequent employment growth, and innovation activities. Because of the high skewness in firm performance outcomes, however, our main focus is on the top end of the distributions, the high growth “gazelles” and the biggest innovators. We measure high growth among entrants as the top x percent of the employment distribution at various ages. For innovation, we measure not only the incidence of various product and process changes, R&D, and patenting, but also the degree to which the type of innovation involves exploration vs. exploitation.

In estimating differences in these job creation and innovation outcomes between immigrant-owned and native-owned start-ups, we are able to control for a wide variety of founder characteristics, including gender, age, education, etc. Data on race/ethnicity permit some disaggregation of immigrant country of origin. For firms with multiple founders, we also examine immigrant participation in founding teams, and the impact of diversity on this dimension for firm performance. We are also able to examine immigrant-native differences in the roles played by a number of factors that may be jointly determined with job creation and innovation outcomes, including start-up capital, choice of industry, region, legal form (including franchising), and founder roles in the new company. Finally, we use self-reported motivations for founding the business to distinguish growth-oriented from “lifestyle” entrepreneurship. For all of these variables, we are interested both in characterizing immigrant relative to native entrepreneurs and in measuring how they influence or mediate the immigrant-native entrepreneur differences in job creation and innovation performance.

Our analysis draws together several databases, all of which we are already actively using for this and related projects. The LBD, ILBD, and SBO are surely familiar to most readers. More unusual are quarterly Business Register (BR) data, from which we obtain precise start-up date and employment of all entrants, and the Annual Survey of Entrepreneurs (ASE), for measuring innovation and examining the extent to which different motivations may account for immigrant entrepreneurship outcomes. Immigrants are

¹ As far as we can determine, there are two published studies of job creation by immigrant entrepreneurs using broad, representative samples: Fairlie and Lofstrom (2014) and Kerr and Kerr (2017). We build on this work and provide some comparisons with our approach below. A few other studies focus on particular industries, regions, or immigrant ethnicities.

identified as non-native-born in the ASE and in the 2007 and 2012 SBOs, as well as the 1992 CBO, which we will lend a longer historical perspective (the 1997 and 2002 surveys do not have an immigrant question).

Our approach differs from Fairlie and Lofstrom (FL, 2014) and Kerr and Kerr (KK, 2017) in several ways. Like KK, but unlike FL, we focus on founders of start-up firms, with comparisons across firms at the same age, and we link to the LBD (and BR) to study the evolution of employment after founding. FL study owners of all firms, regardless of age, although owners of older firms are less likely to be the founder entrepreneurs, and they report total employment among immigrant-owned firms but do not run regressions controlling for other characteristics. We estimate regressions, like KK, but we are able to control for many more characteristics. Our regression approach differs substantially from KK, however, in that we do not estimate growth taking the initial employment as the base level, nor do we control for initial employment, but instead we count the initial employment in the start-up year as part of the job creation attributed to the entrepreneur; our working paper (2017) using the BR indicates that initial employment is a substantial part of firm employment in subsequent years. Like FL, but unlike KK, our data identify owner-founders directly rather than relying on the top three earners in the LEHD for the firm, who as they point out, may not be the founders.² Finally, our paper is the first to use nationally representative data to examine innovation outcomes of immigrant entrepreneurship.

Our preliminary results include only tiny and statistically insignificant differences between immigrant and native entrepreneurs in the probability that the business is in the top 5 percent of job creators, with or without extensive regression controls. Mixed immigrant-native teams have a higher probability than non-diverse teams, but the difference disappears when team size is controlled for. On the other hand, we find stronger innovation performance among immigrant-founded than U.S.-founded start-ups. This result holds for 11 out of 12 product and process innovations, with one exception for “new products that are new to this business but not the market” – suggesting immigrants are less likely to imitate. We also find that immigrant entrepreneurs have a greater propensity to conduct R&D and to patent (except for trademarks and copyrights). When we control for start-up capital and industry, the estimated immigrant coefficient is smaller, but is still significant.

References

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² Kerr and Kerr’s (2017) analysis has other advantages, including a large sample size (although limited to 11 U.S. states) and information on all employees, which enables an analysis of workforce composition. We focus on topics for which our data are particularly appropriate.