

## Crossing the Employer Threshold: Determinants of Firms Hiring Their First Employee

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### Purpose

Job creation is paramount to America's full economic recovery. How can job creation be encouraged? Since small businesses have historically created a disproportionately large share of new jobs, this research analyzes the factors that lead new businesses without employees to hire their first employee. This is a significant aspect of small business job creation. Given that about three in four small businesses do not have employees, these non-employer businesses present an important source of potential new jobs.

To date, there has been little research on the factors leading a non-employer to hire its first employee. This study uses two unique datasets to examine several aspects of this decision. First, what owner characteristics are associated with a business's decision to hire its first employee in the first several years of operation? Second, what business conditions are associated with the decision (for instance, assets, sales, or intellectual property)? Finally, does entrepreneurship training increase the likelihood that a non-employer will hire its first employee?

### Background

One of the major thresholds that small businesses encounter as they grow is whether to hire employees. The step from non-employer to employer entails registration and legal requirements, workers' compensation, unemployment insurance, and the ongoing burden of making payroll. But perhaps the most important consideration for an owner is whether current and projected revenues are enough to cover the extra expenses of having employees. Current uncertainty in the economy may complicate this decision.

The lack of relevant data has limited the analysis of this question. However, a report from the U.S. Census Bureau's Center for Economic Studies, indicates around 1 percent of non-employers become employers each year.<sup>1</sup> Figuring out which of the 20 million-plus non-employers are likely to cross the threshold would allow policymakers to better target business assistance.

This research builds upon previous research funded by the Office of Advocacy which found that financing and owners' human capital (such as education or multiple owners) led to the growth of startups.<sup>2</sup> While the labor market is improving, having more non-employers become employers would certainly speed up these positive trends.<sup>3</sup>

### Overall Findings

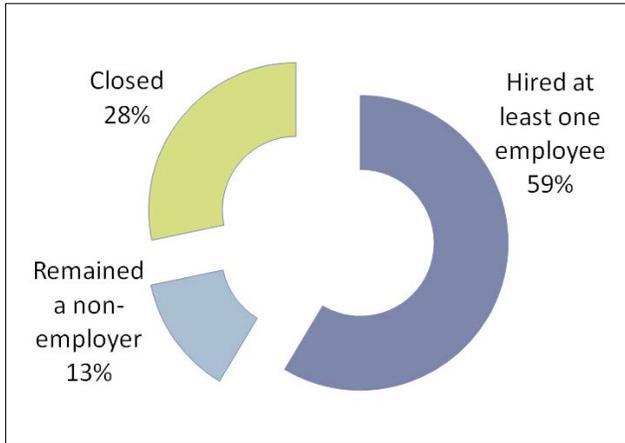
According to the study, over the seven-year period from 2004 to 2011, 59 percent of non-employers in the survey group hired their first employee, 13

1. *Measuring the Dynamics of Young and Small Businesses: Integrating the Employer and Non-employer Universes*, by Steven J. Davis et al. U.S. Census Bureau Center for Economic Studies discussion paper no. 06-04, February 2006. [www.census.gov/ces](http://www.census.gov/ces).

2. *Utilizing the Kauffman Firm Survey to Predict Growth in Venture Size and Scope among Small Firm Startups: 2004 Startups Tracked through 2008*, by Timothy Bates, Alicia Robb, and Simon Parker, [www.sba.gov/sites/default/files/files/rs405tot.pdf](http://www.sba.gov/sites/default/files/files/rs405tot.pdf).

3. Small Business Quarterly Employment Bulletin, Third Quarter 2013, [www.sba.gov/advocacy/10871](http://www.sba.gov/advocacy/10871).

**Figure 1: Non-employer Hiring Outcomes, 2004-2011**



Source: *Crossing the Employer Threshold: Determinants of Firms Hiring their First Employee*, by Robert W. Fairlie, U.S. Small Business Administration, Office of Advocacy, 2013.

percent did not hire anyone, and 28 percent ceased operations (Figure 1).

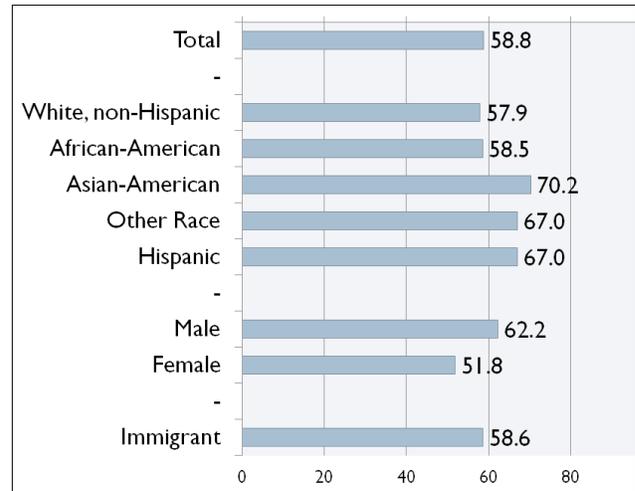
Those that hired their first employee were more likely to do so in the first three years after startup: 38.1 percent hired their first employee by one year after startup and 54 percent by three years after startup.

Non-employer startups owned by African-Americans and non-Hispanic whites had similar rates of hiring their first employee; Asian and Hispanic owners had higher rates (Figure 2). Related to these racial and ethnic patterns, immigrant owners had higher rates of hiring their first employee by the first two follow-up years than native-born owners, but their hiring rates were similar by the seventh year. Female-owned startups were roughly 10 percentage points less likely to hire their first employee by the first, second, and seventh years after startup.

Industry differences are important in determining which non-employer startups are likely to hire employees. Non-employer startups in wholesale trade have the highest rate of hiring employees, followed by the transportation, manufacturing and professional industries. In these industries, hiring employees may be important for capturing returns-to-scale for growth of businesses.

Two of the business characteristics that correlated with an increased likelihood of hiring a first employee were the availability of assets and incorporation. In addition, owning intellectual property (such as patents, copyrights and trademarks) was associated with a 7 percentage point increase in the annual

**Figure 2: Share of Non-employers Hiring a First Employee within Seven Years, 2004-2011 (percent)**



Source: *Crossing the Employer Threshold: Determinants of Firms Hiring their First Employee*, by Robert W. Fairlie, U.S. Small Business Administration, Office of Advocacy, 2013.

probability of hiring the first employee. These tangible and intangible assets give a company leverage needed to acquire capital and grow the business.

Non-employers who received entrepreneurial training were more likely to add a first employee than those who did not. Of those who received training, 21.5 percent hired an employee within five years compared with 17.3 percent of those who did not receive training. While the study shows that entrepreneurship training had a large and positive effect on hiring the first employee, the results are not statistically significant because of the small sample size. Although this rules out making definitive conclusions, the consistency of positive estimates across all specifications and time periods at least suggests this positive effect.

### Policy Implications

Policymakers have enacted legislation to support small businesses in recent years. The Small Business Jobs Act of 2010 and the Jumpstart Our Business Startups of 2012 both focus on increasing financing for small businesses, which is an important component of small businesses' ability to create jobs.

The report's conclusions indicate three policy directions. Policymakers interested in increasing employment should:

- Concentrate efforts on helping firms start as corporations

- Focus on younger non-employers, and
- Encourage reinvesting earnings into the company to purchase assets.

The results of providing entrepreneurial training were inconclusive in this report because of the limited sample size, but a positive direction was visible in the raw results.

## Scope and Methodology

Annual data from the Kauffman Firm Survey (KFS) was used to determine the characteristics of non-employers hiring their first employee. The survey tracked the growth pattern and characteristics of about 5,000 firms born in 2004 until their closure or 2011, when the KFS was discontinued. The author applied his econometric model to the KFS's approximately 2,500 non-employer data points. Non-employers in the KFS tended to be larger (such as having higher sales) than the average non-employer reported in Census data. Therefore, KFS would tend to overstate the share of non-employers becoming employers.

The author also examined firms with no employees that applied for the entrepreneurship training program, Growing America through Entrepreneurship (GATE), a pilot training program administered from

2003 to 2005 in several cities. Strong interest among potential participants necessitated a lottery be held among the applicants. Lottery losers were an excellent control group for proper comparisons. About five years after GATE efforts began, the outcomes of firms that did and did not receive training were compared. The possibility that firms could have received training outside of the GATE program was accounted for in the study methodology, however, it prevents these results from serving as a specific measure of the GATE program's effectiveness.

This report was peer reviewed consistent with Advocacy's data quality guidelines. More information on this process can be obtained by contacting the director of economic research at [advocacy@sba.gov](mailto:advocacy@sba.gov) or (202) 205-6533.

## Additional Information

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