From Employee to Entrepreneur: The Role of Unemployment Risk

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Abstract

Using the relaxation of last-in-first-out (LIFO) seniority rule in Sweden as an exogenous shock to unemployment risks, we show that employees facing increased unemployment risks are more likely to become entrepreneurs. The effect is more pronounced for employees with longer tenure and for male employees. Individuals whose partners are ex- posed to greater unemployment risks are more likely to become entrepreneurs. When we examine entrepreneurs' financial outcomes and the performance of their ventures, we find the entrepreneurs who were exposed to more unemployment risks are better-off financially in the long-term and their businesses survive longer. Our results provide some of the first empirical evidence on how unemployment risks affect salaried employees' decision to become entrepreneurs.

Introduction

Although entrepreneurs can be very successful and admirable, entrepreneurship remains one of the most risky activities and can result in significant wealth losses (e.g. Hall and Woodward, 2010). A large literature has studied *who* becomes an entrepreneur and various explanations have been offered. Lucas Jr. (1978) argues that individuals with greater managerial skills will sort into entrepreneurship because their return from managing a firm exceeds the salaries they can earn as employees. Moreover, given that returns to entrepreneurship are inherently riskier than returns to employment, the more risk-tolerant individuals will become entrepreneurs while the more risk-averse individuals will remain as employees (Kihlstrom and Laffont, 1979). A natural question that arises is what prompts a salaried employee's decision to become an entrepreneur? Parker (1996) in his canonical study models an individual's decision between entrepreneurship and employment as determined by the expected utility offered by these options.

However, there is little to no empirical evidence related to the model. Empirical identification of the impact of unemployment risk is often challenging due to lack of measurement of employees' ex-ante exposure to unemployment risk. We overcome this challenge and exploit a shock that greatly increases unemployment risk for employees at certain firms in Sweden, thanks to the detailed administrative data provided by Statistic Sweden (SCB).

A seniority rule named the "last-in-first-out" (LIFO) principle is a cornerstone in Sweden's labor protection laws. Simply put, this principle stipulates that the last person hired is the first to be fired in the case of redundancy. A major reform that relaxes this rigid principle took place in 2000. After the reform in 2001, firms with ten or fewer employees are allowed to exempt two workers from layoff according to the original LIFO principle. We use this quasi-natural experiment to examine how unemployment risk affects entrepreneurship using Swedish administrative data. This approach enables us to identify the impact of shocks to unemployment risk without requiring explicit measures of individual employees' risk exposure to unemployment. See Figure 1 to the right for an illustration and Lindbeck et al. (2006) for more details about the LIFO reform.

Identification Strategy

In our baseline estimation, we follow a classical Difference-in-Differences (DiD) model to exploit our quasi-natural experiment setting:

$$Y_{it} = \alpha + \theta Treat_{it} + \delta Post_t + \beta Treat_{it} \times Post_t + \gamma X_{it} + \varepsilon_{it}$$

where the dependent variable is a dummy indicating whether an employee chose to become an entrepreneur in the following one or three years. *Treat* dummy equals 1 if the individual worked for a firm with no more than 10 employees, *Post* dummy equals 1 if the observation is in 2001 or after. A list of individual socio-economics features are controlled for, including gender, age, education background, total income and marital status. We also control for different fixed effects across model specifications.

Results

We identify a positively significant causal relation between unemployment risk and probability of entrepreneurship among employees working for firms with the employment size of 2-15. In the one-(three-)year span, the employees in the treatment group are **1.6(3.2) percentage point more likely** to become entrepreneurs. The effects are sizable given that the benchmark probabilities for the treatment group during pre-reform period are **only 1.7(5.3) percentage**.

To sharpen our identification, we further narrow the firm size range to 8-12, which leads to higher similarity in terms of individual-level and firm-level characteristics. Our findings are robust to the narrowed range – the treated employees are 0.2 percentage point more likely to enter entrepreneurship in the following one year, and 0.5 percentage point higher in the three-year span.

Other things equal, longer-tenured employees are more adversely affected by this reform. Despite that we do not have accurate information on employees' relative seniority within the firm, we proxy seniority by using a dummy for employees working in the same firm for over 3 years. With the triple-DiD model, we identify the positive relation between longer tenure and probability of entrepreneurship.

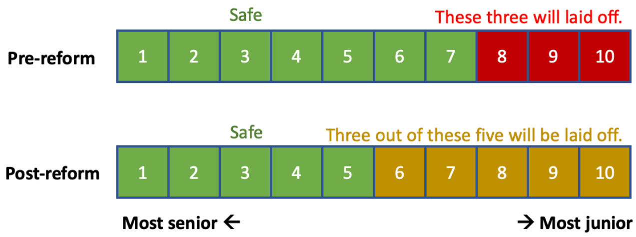

Figure 1. Illustration on the policy reform:
a example of 10-employee firm laying off 3 employees

Discussion: Ex-post outcomes

Individual financial well-beings
Since treated employees are "nudged" into entrepreneurship, it is worth asking whether they are financially better off after the transition. We find that the treated employees end up getting higher total income and higher income growth rates in their entrepreneurial venture, compared to the counterparts from the control group. This advantage seems to last even in a 10-year span.

Firm operational performance
How well do the new firms perform? Do firms that were established by treated employees underperform their counterparts? Our answer is they performed better, at least not worse, than other firms. The firms started by treated employees survive longer, generate similar revenue, but grow in size just slightly slower.

Conclusions

Our first-hand empirical evidence shows that higher unemployment risk leads to higher probability of becoming entrepreneurs. Individuals who are nudged into entrepreneurship do not seem worse off financially, and their businesses usually perform well. This indicates that unemployment risk does have a bright side and could spur beneficial entrepreneurial activities, which carries positive policy implication for future labor protection law-making.

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