# Becoming an Entrepreneur: The Role of Employment History and Risk

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# Introduction

According to Global Entrepreneurship Monitor in 2017:

- There are currently about 27 million Americans starting or running their own businesses (almost 14%)
- 51% of working Americans believe that starting their own business would provide good opportunities
- 20% of entrepreneurs plan to employ 20 or more workers in the next 5 years

# Introduction

Why some choose to become self-employed is a difficult question to answer

- The returns to self-employment could potentially be higher than wage employment
- However, self-employment is financially risky
- Does being unemployed for an extended period of time influence an individuals decision to enter self-employment?
- In this study, I investigate the probability of entering self-employment based on one's employment history and attitude towards risk

# Data

- My data comes from the 1979 National Longitudinal Survey of Youth (NLSY79) which is a survey data set that tracks the same individuals over time from 1979 to 2012
  - I applied for access to the NLSY79 Geodata set to control for the unemployment rates in the respondent's residence
- The initial round of the survey included 12,686 individuals between the ages of 14 and 22
- To measure risk tolerance, I use the "gambling" questions included in the survey for the years 1993, 2002, 2004, 2006, 2010, and 2012

# Data

- Every participant will be asked a total of 2 “gambling” questions:

**Question 1:**

Suppose that you are the only income earner in the family, and you have a good job guaranteed to give you your current (family) income every year for life. You are given the opportunity to take a new and equally good job, with a 50-50 chance that it will double your (family) income and a 50-50 chance that it will cut your (family) income by a third. Would you take the new job?

Yes

**Question 2**

Suppose the chances were 50-50 that it would double your (family) income and 50-50 that it would cut it in half. Would you still take the new job?

No

**Question3**

Suppose the chances were 50-50 that it would double your (family) income and 50-50 that it would cut it by 20%. Would you still take the new job?

| Q1 | Q2 | Q3 | Risk category |
|---|---|---|---|
| No | - | No | 1 (least risk tolerant) |
| No | - | Yes | 2 |
| Yes | No | - | 3 |
| Yes | Yes | | 4 (most risk tolerant) |

# Data

**Table 1. Summary Statistics**

| | Men | | | | Women | | | |
|---|---|---|---|---|---|---|---|---|
| Variable | Mean | Std. Dev. | Min | Max | Mean | Std. Dev. | Min | Max |
| Risk Category 1 | 0.522 | 0.499 | 0 | 1 | 0.562 | 0.495 | 0 | 1 |
| Risk Category 2 | 0.150 | 0.357 | 0 | 1 | 0.149 | 0.357 | 0 | 1 |
| Risk Category 3 | 0.151 | 0.358 | 0 | 1 | 0.139 | 0.346 | 0 | 1 |
| Risk Category 4 | 0.177 | 0.382 | 0 | 1 | 0.144 | 0.351 | 0 | 1 |
| Number of Observations | | 7,127 | | | | 8,438 | | |

# Data

- For my dependent variable, I calculate the number of transitions from either wage employment to self-employment or from unemployment to self-employment
- Specifically, I generate an indicator variable with a value of "1" if an individual was wage/unemployed employed in the current year but transitioned to self-employment in the following 2 years

**Table 1. Summary Statistics**

| | Men | | | | Women | | | |
|---|---|---|---|---|---|---|---|---|
| Variable | Mean | Std. Dev. | Min | Max | Mean | Std. Dev. | Min | Max |
| Transition to Self-employment | 0.022 | 0.148 | 0 | 1 | 0.015 | 0.123 | 0 | 1 |
| Number of Observations | | 7,127 | | | | 8,438 | | |

# Empirical Methodology

To estimate the effect of risk tolerance and unemployment duration on the probability of entering self-employment, I estimate a Probit model of the transition to self-employment $S_{it}$

$$\Pr(S_{it} = 1|\boldsymbol{X}) = \Phi(\beta_0 + \boldsymbol{\beta\rho} + \beta_2\omega_{it} + \gamma_1 X_{it} + \alpha_t + u_{it})$$

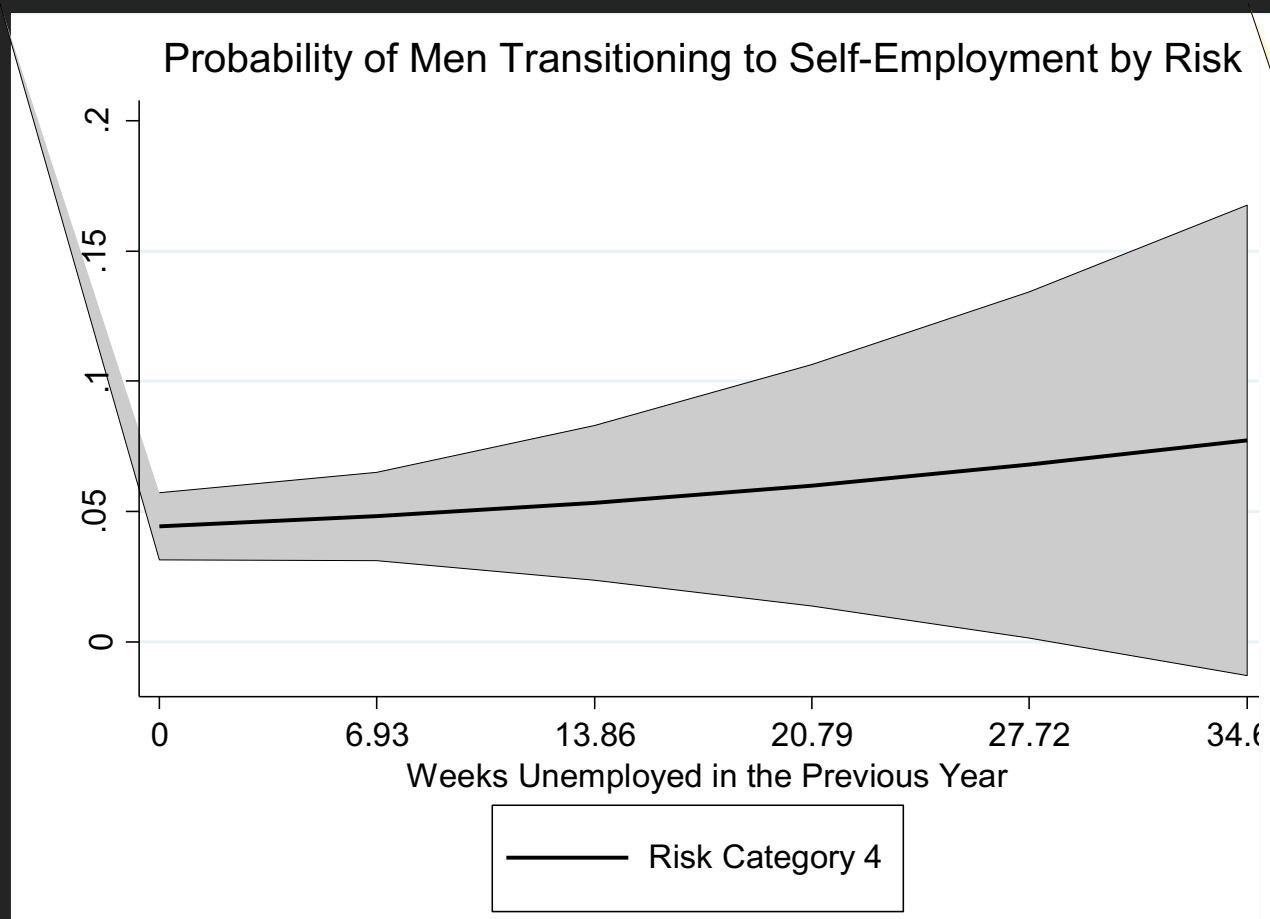
- $\boldsymbol{\rho}$ represents the 3 risk categories (category 1 is omitted)
- $\omega_{it}$ is a variable for the number of weeks unemployed last year
- $X_{it}$ is a set of controls that includes, family net worth, education, marital status, age of youngest child in the household, hourly pay rate, number of hours worked in the previous year, total tenure in weeks at current employer, industry of employment, and local unemployment rates
- $\alpha_t$ represents time fixed-effects

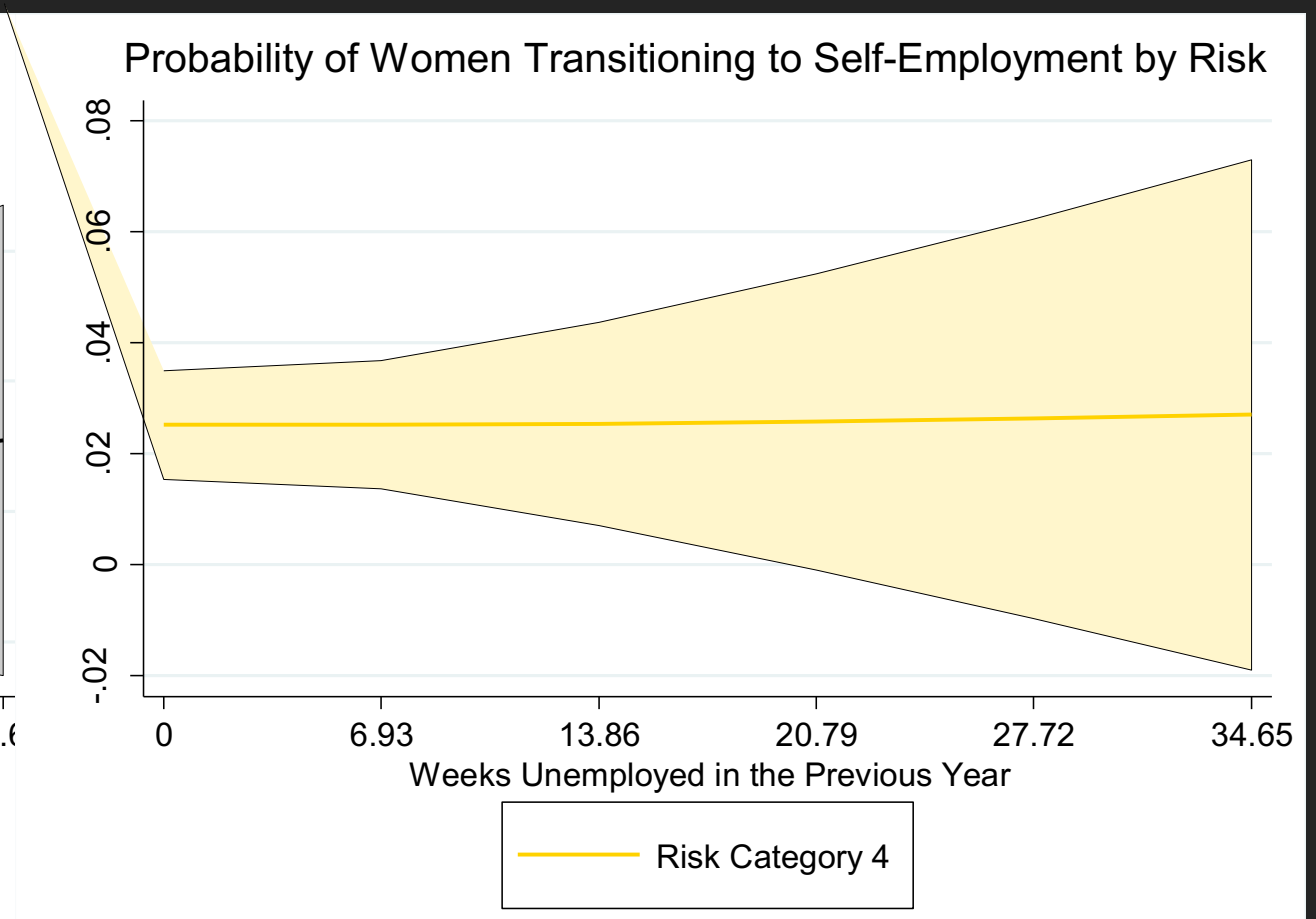
# Results

Table 2. Probit Estimation of the Likelihood of Entering Self-employment from Wage Employment

- Includes all control variables in estimation
- Standard errors are clustered at the individual level

| Dependent Variable: Indicator Variable for Making the Transition from Wage to Self-employment | | |
|---|---|---|
| | Men | Women |
| | Marginal Effects | Marginal Effects |
| Independent Variables | (1) | (2) |
| Risk Category 2 | 0.00336 | -0.00437 |
| | (0.00589) | (0.00349) |
| Risk Category 3 | 0.0212*** | 0.0176*** |
| | (0.00722) | (0.00564) |
| Risk Category 4 | 0.0264*** | 0.0116** |
| | (0.00676) | (0.00508) |
| Observations | 7,127 | 8,438 |


Probability of Men Transitioning to Self-Employment by Risk
0
.05
.1
.15
.2
0
6.93
13.86
20.79
27.72
34.6
Weeks Unemployed in the Previous Year
Risk Category 4


Probability of Women Transitioning to Self-Employment by Risk
-.02
0
.02
.04
.06
.08
0
6.93
13.86
20.79
27.72
34.65
Weeks Unemployed in the Previous Year
Risk Category 4

# Conclusions

Risk Tolerance and the Decision to Enter Self-employment

- Higher levels of risk tolerance are associated with an increase in the probability of self-employment

Unemployment Duration and the Decision to Enter Self-employment

- As unemployment duration increases, men become more likely to enter self-employment

# Policy Implications

- To lower unemployment rates, governments could provide financial assistance programs to individuals looking to enter self-employment to ease the financial risks

# Thank you.