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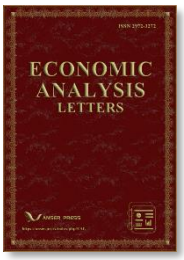

Does 'Being Your Own Boss' raise your chance of becoming someone else's Boss?

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ABSTRACT

Self-employment is often associated with entrepreneurship and regarded as a driver of innovation, job creation and economic growth. As such, many countries have policies to promote and support self-employment. One mechanism for self-employment to drive job growth is for sole traders to become an employer through hiring employees. However, there are few studies that investigate if solo self-employment helps the transitions into employership. Using the Understanding Society data, this study shows that in the UK labour market solo self-employment does not work as a 'steppingstone' to employership. This raises the question why self-employment should be promoted through public policy as in the UK and many other developed countries.

KEYWORDS

Solo self-employment; Employership; Steppingstone effects

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1. Introduction

Self-employment is promoted not only because it helps reduce unemployment, but more importantly, it is often associated with entrepreneurship and regarded as a driver of innovation, job creation and economic growth (OECD/European Union 2014; Baumol 1990). As such, many countries have publicly funded initiatives to support people to start their own business and/or remain in self-employment (OECD 2000). Nonetheless, among the self-employed, sole traders (i.e., solo self-employment) often comprise a much higher proportion than self-employed workers with an employee (i.e., employership). Also, the vast majority of the self-employed often start as a sole trader. Then a question whether solo self-employment acts as a steppingstone to employership becomes important from policy makers' points of views. If solo self-employment is a steppingstone to employership, public spending to support self-employment is justified as more jobs can be expected to be created by the self-employed in the future. Otherwise, the policy is questionable.

Despite the policy relevance of the steppingstone effect of self-employment to employership, few studies have directly examined the issue. Two exceptions are Lechmann and Wunder (2017) and Cowling and Wooden (2021). By estimating a dynamic multinominal logit model, Lechmann and Wunder (2017) find that for the solo self-employed in Germany, while the steppingstone effect estimates are statistically significant, the size of the effects is small. The authors then conclude that the steppingstone effects are negligible particularly in terms of the implications for a longer period than one year. Cowling and Wooden (2021) estimate the same econometric model using Australian data. For the steppingstone effect of solo self-employment, they obtain remarkably similar estimates to that in Lechmann and Wunder (2017) and consequently draw a similar conclusion. In the UK context Henley (2019) estimates a range of models to find that increases in elapsed years in self-employment raise the probability of being an employer. However, the size of the estimated effect is very small (0.2 percentage point a year). Using a competing risk model, Millan et al. (2014) do not find previous experience of solo self-employment has an impact on the probability of transitions from solo self-employment to employership.

Therefore, the existing evidence to support a steppingstone effect of solo self-employment to employership is not only weak, but also limited. Given the relevance of the evidence to policy makers, more research and evidence from different countries is warranted. To add to the evidence base, this study examines the issues for UK workers using the Understanding Society survey data. Also, to facilitate comparison with Cowling and Wooden (2021) and Lechmann and Wunder (2017), this study uses the same econometric model.

2. Econometric model

Following the two earlier studies, this study models transitions between four labour market states: nonemployment, solo self-employment, employership, and paid employment (i.e., employees), denoted by k =1,2,3,4. The probability of individual i occupying a state k at time t, $P_{i,k,t}$, is assumed to be determined by the previous labour market state $(L_{i,t-1})$ and other observed $(x_{i,t})$ and unobserved $(\mu_{i,k})$ individual characteristics,

$$P_{i,k,t}(\mu_{i,j}, j = 1,2,3,4) = \frac{\exp(L_{i,t-1}\alpha_k + x_{i,t}\beta_{\mathrm{k}} + \mu_{i,k})}{\sum_{j=1}^{4}\exp(L_{i,t-1}\alpha_j + x_{i,t}\beta_{\mathrm{j}} + \mu_{i,j})}; k = 1,2,3,4;\ t = 1, \dots, T \quad (1)$$

The estimates on $L_{i,t-1}$ will allow us to infer how past labour market states affect future ones.

To address the initial condition problem arising from including the lagged dependent variable (Heckman 1981), and to allow the unobserved heterogeneity to be correlated with observed variables, following Wooldridge (2005) and Mundlak's (1978), for unobserved individual heterogeneity we specify,

$$\mu_{i,j} = L_{i,0}\lambda_j + \bar{z}_i\theta_j + \nu_{i,j}, j = 1,2,3,4 \quad (2)$$

where $\bar{z}_i$ is a vector containing the means (over time for the same individual i) of the exogenous variables ($z_{i,t}$). $z_{i,t}$ is typically a subset of the time varying variables in $x_{i,t}$. $\nu_{i,1}, \nu_{i,2}$, $\nu_{i,3}$ and $\nu_{i,4}$ represent the random effects independent of any observed explanatory variables and are assumed to follow a multivariate normal distribution with mean zero and a covariance matrix Σ_ν. The parameters in Σ_ν are to be estimated along with all the coefficient parameters in the model.

3. Data and model specification

The study uses data from the first 10 waves of the Understanding Society: the UK Household Longitudinal Study. Understanding Society is a panel survey of UK households with yearly interviews. For a detailed description of the survey, see Knies (2018). The sample used for this study is restricted to those individuals aged between 21 and 64 (inclusive) years. Full-time students are excluded from the analysis. Observations with missing values in either the dependent or explanatory variables are excluded. The first wave for each individual is used to define the lagged dependent variable and the initial condition variable, and therefore are excluded from model estimation. Since the model uses panel data methods, each individual needs to have at least two observations to be included in the modelling sample. After these exclusions, the male (female) sample has 92,099 (111,589) observations, representing 17,133 (20,414) individuals.

3.1. Model specification

In addition to the lagged and initial labour market status variables, the following explanatory variables are included as controls: education, age, marital status, health conditions, the numbers of children under 16 years by age, the number of working age people in a household, own non-labour income, and local unemployment rates. Furthermore, wave dummies are included to control for the effects of time and macroeconomic conditions and policy settings. For the mean variables to account for correlated random effects, the means of the time varying variables, education, marital status, health conditions, the numbers of children by age, own non-labour income, and the number of working age people in the household are included in the model.[1]

3.2. Transitions of labour market states

Table 1 presents the year-on-year transitions of the labour market states by pooling all the 10 waves of the data.

All the labour market states show a high level of persistence from one year to the next. For both genders, transitions from solo self-employment to employership are very low: only 4 and 3 per cent for males and females, respectively. Nonetheless, they are higher than the rate of transitions to employership from either nonemployment or employees, suggesting steppingstone effects might be present. However, these descriptive results may be driven by observed and/or unobserved differences in individual characteristics. The model estimation controls for these differences and thus allows for more accurate inferences.

[1] The summary statistics of the sample can be found in Appendix Tables a1 and a2.

Table 1. Observed transitions of labour market states (row %).

Labour market	Labour market state at *t*				Number of
state at *t-1*	*Nonemploy*	*Solo_se*	*Employer*	*Employee*	observations
			Males		
Nonemploy	83.97	2.78	0.38	12.87	15,662
Solo_se	3.63	80.57	4.46	11.34	9,868
Employer	2.03	15.16	59.78	23.03	3,344
Employee	3.81	1.96	1.43	92.80	63,225
All	17.36	11.00	3.70	67.95	92,099
			Females		
Nonemploy	88.52	1.46	0.16	9.86	32,199
Solo_se	6.44	78.35	3.06	12.14	5,418
Employer	3.83	15.40	53.14	27.63	1,513
Employee	5.05	1.01	0.74	93.20	72,459
All	29.18	5.09	1.39	64.33	111,589

4. Result

The coefficient estimates in a multinomial logit model cannot be interpretated as marginal effects (Green 2000). To facilitate interpretation, we use the estimated model to compute the predicted probabilities of the labour market states at time *t*, conditional on the labour market states at *t-1*, keeping the other control variables and unobserved heterogeneity constant. Table 2 presents the results.[2]

Table 2. Model predicted probabilities of labour market state transitions.

Labour market	Labour market state at *t*			
state at *t-1*	*Nonemploy*	*Solo_se*	*Employer*	*Employee*
		Males		
Nonemploy	0.389***	0.104***	0.024***	0.483***
Solo_se	0.151***	0.221***	0.038***	0.589***
Employer	0.102***	0.125***	0.088***	0.684***
Employee	0.106***	0.069***	0.035***	0.790***
		Females		
Nonemploy	0.553***	0.051***	0.007***	0.390***
Solo_se	0.282***	0.179***	0.014***	0.524***
Employer	0.168***	0.067***	0.073***	0.692***
Employee	0.160***	0.025***	0.014***	0.801***

*Notes: ***, **, * significant at 1%, 5% and 10%, respectively.*

From Table 2, after observed and unobserved individual heterogeneity is controlled for, the probability of transitions to employership from solo self-employment is 3.8 and 1.4 per cent for males and females, respectively. These figures are smaller than the observed transition probabilities in Table 1. This confirms that the chance of becoming an employer from solo self-employment is very low after observed and unobserved individual heterogeneity is accounted for. These estimates are also much lower than those estimated for Australia and Germany. For Australian males, 9 per cent of the solo self-employed are estimated to transition to employership from one year to the next; it is 4 per cent for females. For German males, the transition rate is the same as that for Australian males; it is 3 per cent for German females.

The steppingstone effect of solo self- employment to employership is measured as the difference of the probabilities of transitions to employership between from solo self-employment and from the other labour market

[2] The coefficient estimates for the model are presented in Appendix Tables a3 and a3 for males and females, respectively.

states. To help with inferences, Table 3 presents the differences, together with their standard errors.

Table 3. Estimated steppingstone effects of solo self-employment to employership.

Labour market state at *t-1*	Males	Females
Nonemploy	0.014***	0.008***
Employee	0.003	0.000

*Notes: ***, **, * significant at 1%, 5% and 10%, respectively.*

Compared with those who were not employed in the previous year, those who were in solo self-employment have a probability of transitions to employership that is only 1.4 percentage points higher for males and 0.8 percentage point higher for females. When compared with employees, the differences are even smaller, 0.3 and 0 percentage point for males and females, respectively. From these estimates we can only conclude that there is no evidence to support that solo self-employment acts as a steppingstone to employership for UK workers, a conclusion consistent with Lechmann and Wunder (2017) and Cowling and Wooden (2021). However, like the probability of transitions to employership from solo self-employment, the steppingstone effect estimates are much smaller for UK workers than for Australians and Germans. For Australian workers, the steppingstone effect is estimated to be 6 and 2 percentage points for males and females, respectively. For German workers, they are 5 and 2 percentage points. It is out of the scope of this study to investigate why there are the differences, but this highlights the importance of examining the issue for different countries.

5. Conclusion

The evidence on the steppingstone effect of solo self-employment to employership is limited despite the importance of the evidence for policy makers in designing self-employment policy. Using the Understanding Society data, this study finds that no such steppingstone effect exists for UK workers, which is consistent with what is concluded by Cowling and Wooden (2021) and Lechmann and Wunder (2017). These findings suggest that public spending on self-employment policies could be of better value for money if it is targeted at workers who are more likely to grow into an employer.

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Conflict of interest

The author claims that the manuscript is completely original. The author also declares no conflict of interest.

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