Empowered Entrepreneurs? Some Evidence from Chile

Rodrigo Castro
Juan Pablo Couyoumdjian
Universidad del Desarrollo

Jan 10, 2011

Outline

- Motivation
- Theoretical Framework
- Data
- Methodology
- Econometric Results
- Final Remarks

Outline

- Motivation
- Theoretical Framework
- Data
- Methodology
- Econometric Results
- Final Remarks

Motivation

- Entrepreneurship and empowerment controlling for whether the agents are poor
- Empowering the poor throughout expansion of their assets and capabilities is key for social policy
- Informal micro-entrepreneurial activities $\Rightarrow$ reflect some underlying exclusion from the formal labor market
- But, entrepreneurship is key for economic development and generation of a sense of empowerment
- New data-set on the multidimensional nature of poverty in Chile
  - Contribution: relationship between entrepreneurship and poverty and nature of poverty in Chile

Outline

- Motivation
- Theoretical Framework
- Data
- Methodology
- Econometric Results
- Final Remarks

Theoretical Framework

- Multidimensional poverty
- Entrepreneurship and Economic Growth
- Entrepreneurship and Empowerment

Outline

- Motivation
- Theoretical Framework
- Data
- Methodology
- Econometric Results
- Final Remarks

Data

- OPHI survey includes a sample of 2,058 households that had been interviewed for the 2006 CASEN survey.
- 7,985 individuals who re-took the income, employment, healthcare, education, and housing modules, as well as answered the new questions on the missing dimensions of poverty.
- From this full sample we work with a sub-sample of 1,003 observations (corresponding to 673 households), which correspond to the observations where there is no missing data

Data

- Different criteria to measure poverty, entrepreneurship and empowerment:
  - **Poverty**: Mideplan and Larrain criteria
  - **Entrepreneurship**: Self-employment and a variable that filters the records on self-employment (agents who have psychological attributes typical of entrepreneurs).
  - **Empowerment**:
    - → **IFJV**: financial independence from the state when retiring from the job-market.
    - → **GCD**: agent's perceptions as having some control on his or her daily decision-making.
    - → **CC**: agent's perception about his or her ability to make a difference in society.
    - → **PLI**: agent's perception about his or her individual autonomy.

Table 1: Poverty and Indigence

Methodology	**Poverty Level**	**% subsample**
Mideplan	NIP	10.4%
	I	4.4%
	TP	14.8%
Larraín	NIP	20.0%
	I	7.8%
	TP	27.8%
Selfreported		8.5%

Note: NIP: Non indigent poor; I: Indigent; TP: Total Poor

Table 2: Entrepreneurship

Classification	**% sample**	**% subsample**
Entrepreneur (selfemployed)	26.9%	27.9%
Entrepreneur (psicological)	24.1%	23.4%

Outline

- Motivation
- Theoretical Framework
- Data
- Methodology
- Econometric Results
- Final Remarks

Methodology

- Consider if undertaking entrepreneurial activities has an effect on an agent's sense of empowerment.
- Probit model: where the dependent variable is being empowered, and the independent variable is being an entrepreneur:

$$y_i^* = x_i\beta + \varepsilon_i$$

where we assume that $\varepsilon_i \sim N(0, \sigma^2)$. Here y_i is a binary variable such that it takes 1 if empowered, 0 otherwise

Outline

- Motivation
- Theoretical Framework
- Data
- Methodology
- Econometric Results
- Final Remarks

Econometric Results

- Results should be interpreted as pointing to significant findings in terms of assessing the meaning and significance of separate proxies of entrepreneurship and empowerment.
- Results indicate to what degree an agent is more or less empowered when he is an entrepreneur as opposed to when he is not an entrepreneur:
  - IFJV has the wrong sign whatever definition of entrepreneurship we use.
  - Using PLI we find that an entrepreneur is 6.2% - 8.5% more empowered than a non-entrepreneur.
  - Using GCD, an entrepreneur (according to the psychological criteria) is 5% more empowered in this sense than a non-entrepreneur.

Econometric Results

- Controlling by sex and age; marginal effect of IFJV continues having the wrong sign in the equation for poor agents when Larraín's classification is used.
- PLI is significant among poor agents when we consider Mideplan's classification; the calculated marginal effect suggests that a poor entrepreneur is 10,6% more empowered than a poor non-entrepreneur (control variables are also statistically significant).

Table 3: Independent variable: selfemployed

	dF/dx	SE	z	P>z	$\bar{x}$	95% CI	
IFJV	-0.14	0.026	-5.85	0.000	0.29	-0.19	-0.088
GCD	0.026	0.021	1.17	0.241	0.33	-0.16	-0.069
CC	-0.008	0.025	-0.32	0.752	0.33	-0.058	0.042
PLI	0.062	0.020	2.91	0.004	0.33	0.022	0.102

Table 4: Independent variable: entrepreneur

	dF/dx	SE	z	P>z	$\bar{x}$	95% CI	
IFJV	-0.090	0.027	-3.62	0.000	0.24	-0.140	-0.037
GCD	0.050	0.022	2.13	0.033	0.27	0.006	0.094
CC	0.038	0.026	1.40	0.161	0.26	-0.014	0.090
PLI	0.084	0.020	3.74	0.000	0.27	0.044	0.124

Table 5: Poverty (Larrain), non poor, independent variable: entrepreneur

	dF/dx	SE	z	P>z	$\bar{x}$	95% CI	
IFJV	-0.130	0.094	-1.68	0.093	0.0605	-0.316	0.054
GCD	0.096	0.067	1.13	0.260	0.0608	-0.036	0.228
CC	-0.060	0.083	-0.66	0.508	0.0600	-0.223	0.102
PLI	0.084	0.075	1.15	0.250	0.0536	-0.063	0.232

Table 6: Poverty (Mideplan), non poor, independent variable: entrepreneur

	dF/dx	SE	z	P>z	$\bar{x}$	95% CI	
IFJV	-0.0766	0.068	-1.26	0.207	0.0736	-0.209	0.056
GCD	0.1231	0.052	1.84	0.066	0.0760	0.020	0.225
CC	-0.0015	0.068	-0.02	0.982	0.0734	-0.136	0.132
PLI	0.0574	0.054	1.08	0.282	0.0714	-0.049	0.164

Table 7: Poverty (Larrain), poor, independent variable: entrepreneur

	dF/dx	SE	z	P>z	$\bar{x}$	95% CI	
IFJV	-0.211	0.061	-3.67	0.000	0.1789	-0.331	-0.091
GCD	0.060	0.048	1.17	0.244	0.1880	-0.035	0.155
CC	0.053	0.055	1.02	0.308	0.1893	-0.053	0.161
PLI	0.108	0.042	2.64	0.008	0.1636	0.026	0.190

Table 8: Poverty (Mideplan), poor, independent variable: entrepreneur

	dF/dx	SE	z	P>z	$\bar{x}$	95% CI	
IFJV	-0.265	0.072	-3.76	0.000	0.232	-0.407	-0.123
GCD	-0.008	0.058	-0.14	0.887	0.242	-0.122	0.106
CC	0.026	0.064	0.41	0.679	0.246	-0.100	0.153
PLI	0.149	0.049	3.08	0.002	0.195	0.052	0.246

Outline

- Motivation
- Theoretical Framework
- Data
- Methodology
- Econometric Results
- Final Remarks

Final Remarks

- Main focus on empowerment and its relationship with entrepreneurship focusing on poor agents.
- Entrepreneurship has important effects on empowerment as an additional dimension of human development.
- PLI is the proxy of empowerment that yields the expected results and better captures the concept of empowerment.
- Results provide evidence that there are non-traditional social policies that can empower the poor.
- Key is that we value micro-entrepreneurship not because its effects on the process of creative destruction and aggregate economic growth, but because of its wider effects on economic development.

Table 9: Poverty (Larrain), non-poor, independent variable: entrepreneur, control: sex and age

		dF/dx	SE	z	P>z	$\bar{x}$	95% CI	
IFJV	entrep	-0.13	0.09	-1.70	0.08	0.06	-0.31	0.05
	sex	0.70	0.03	-2.09	0.03	1.38	-0.13	-0.00
	age	0.00	0.00	0.70	0.48	43.6	-0.00	0.00
GCD	entrep	0.06	0.07	0.71	0.47	0.06	-0.08	0.21
	sex	0.25	0.04	5.09	0.00	1.38	0.16	0.34
	age	-0.00	0.00	-0.46	0.64	43.6	-0.00	0.00
CC	entrep	-0.06	0.08	-0.69	0.49	0.06	-0.22	0.09
	sex	0.01	0.04	0.40	0.68	1.38	-0.07	0.10
	age	0.00	0.00	0.11	0.91	43.6	-0.00	0.00
PLI	entrep	0.01	0.07	0.21	0.83	0.05	-0.13	0.16
	sex	0.05	0.03	1.70	0.08	1.37	-0.00	0.12
	age	0.00	0.00	7.01	0.00	39.6	0.00	0.01

Table 10: Poverty (Mideplan), non-poor, independent variable: entrepreneur, control: sex and age

		dF/dx	SE	z	P>z	$\bar{x}$	95% CI	
IFJV	entrep	-0.06	0.06	-1.17	0.24	0.07	-0.20	0.06
	sex	-0.08	0.03	-2.17	0.00	1.37	-0.14	-0.02
	age	0.00	0.00	1.24	0.21	43.4	-0.00	0.00
GCD	entrep	0.09	0.05	1.35	0.17	0.07	-0.01	0.20
	sex	0.27	0.03	6.42	0.00	1.38	0.19	0.35
	age	-0..00	0.00	-0.93	0.35	43.3	-0.00	0.00
CC	entrep	-0.00	0.06	-0.02	0.98	0.07	-0.13	0.13
	sex	0.00	0.03	0.13	0.89	1.38	-0.06	0.07
	age	-0.00	0.00	-0.74	0.46	43.4	-0.00	0.00
PLI	entrep	-0.00	0.05	-0.05	0.96	0.07	-0.10	0.10
	sex	0.06	0.02	2.36	0.01	1.36	0.01	0.12
	age	0.00	0.00	8.44	0.00	39.6	0.00	0.01

Table 11: Poverty (Larrain), poor, independent variable: entrepreneur, control: sex and age

		dF/dx	SE	z	P>z	$\bar{x}$	95% CI	
IFJV	entrep	-0.23	0.06	-3.98	0.00	0.17	-0.36	-0.11
	sex	-0.09	0.04	-2.19	0.02	1.42	-0.18	-0.00
	age	0.00	0.00	1.43	0.15	44.2	-0.00	0.00
GCD	entrep	0.07	0.04	1.53	0.12	0.18	-0.01	0.16
	sex	0.25	0.04	5.89	0.00	1.43	0.17	0.33
	age	0.00	0.00	0.24	0.80	44.2	-0.00	0.00
CC	entrep	0.05	0.05	1.04	0.29	0.18	-0.05	0.16
	sex	-0.01	0.04	-0.40	0.68	1.42	-0.10	0.06
	age	-0.00	0.00	-0.56	0.57	44.1	-0.00	0.00
PLI	entrep	0.05	0.04	1.40	0.16	0.16	-0.02	0.14
	sex	0.08	0.03	2.65	1.38	1.38	0.02	0.14
	age	0.00	0.00	7.59	40.2	40.2	0.00	0.01

Table 12: Poverty (Mideplan), poor, independent variable: entrepreneur, control: sex and age

		dF/dx	SE	z	P>z	$\bar{x}$	95% CI	
IFJV	entrep	-0.30	0.07	-4.15	0.00	0.23	-0.45	-0.16
	sex	-0.08	0.06	-1.43	0.15	1.46	-0.20	0.03
	age	0.00	0.00	1.43	0.15	45.1	-0.00	0.00
GCD	entrep	0.01	0.05	0.33	0.74	0.24	-0.08	0.12
	sex	0.20	0.04	4.01	0.00	1.46	0.10	0.30
	age	0.00	0.00	1.08	0.27	45.2	-0.00	0.00
CC	entrep	0.01	0.06	0.26	0.79	0.24	-0.11	0.14
	sex	-0.02	0.05	-0.49	0.62	1.46	-0.14	0.08
	age	0.00	0.00	0.19	0.85	44.9	-0.00	0.00
PLI	entrep	0.10	0.05	2.13	0.00	0.19	0.00	0.20
	sex	0.08	0.03	2.25	0.02	1.39	0.01	0.16
	age	0.00	0.00	6.04	0.00	40.5	0.00	0.01