

The Incidence of Long-term Unemployment in Greece: Evidence Before and During the Recession

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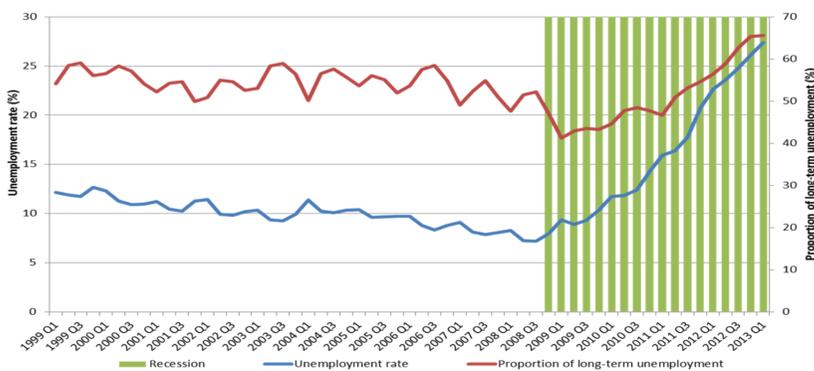
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Introduction

Unemployment and Long-term Unemployment in Greece (1999-2013)



Source: Labour Force Survey (1999Q1-2013Q2), Hellenic Statistical Authority (EL.STAT).

Long-term unemployment (LTU): the number of people who have been unemployed for 12 months or more.

Proportion of Long-term Unemployment (PLTU): the proportion of unemployed people who are long-term unemployed.

Objectives

- We investigate the trends & the structure of LTU between the pre-crisis & during-the-crisis periods.
- We explore the determinants of LTU & analyze the significant changes that occurred during the crisis period

Data - Preliminary Analysis

- We use micro-data for the unemployed individuals from the Greek Labour Force Survey (EL.STAT) for the period 1999Q1-2013Q2.

Preliminary analysis reveals that:

- 66% of the LTU were females in the pre-crisis period but the share fell to 54% during the crisis period.
- 62% of the LTU were young people in the pre-crisis period while the share reduced to 48% during the crisis period.
- Singles and secondary-educated unemployed make up 50% of the LTU for both periods. The share of tertiary-educated unemployed increased from 16% to 21% during the crisis period.
- During the crisis period, 71% of the LTU have previous employment experience.

Econometric Methodology

- We apply the typical logit technique and estimate the **probability of becoming long-term unemployed** vs the probability of being short-term unemployed.
- The sample is split into the pre-crisis period (1999Q1-2008Q3) & during the crisis period (2008Q4-2013Q2).

Empirical Results

Results of Logistic Regression, Long-term Unemployment

	Pre-crisis period (1999Q1-2008Q3)	During-crisis period (2008Q4-2013Q2)
Independent variables	Odds Ratio	Odds Ratio
Gender (ref.cat. Male)		
Female	1.408 (0.002) ^a	1.230 (0.002) ^a
Age (ref.cat. 35-44)		
15-24	0.436 (0.001) ^a	0.438 (0.001) ^a
25-34	0.779 (0.001) ^a	0.791 (0.001) ^a
45-54	1.162 (0.003) ^a	1.094 (0.002) ^a
Above55	1.392 (0.004) ^a	1.344 (0.004) ^a
Marital status (ref.cat. Married)		
Single	1.154 (0.002) ^a	1.361 (0.002) ^a
Widowed/Separated	1.006 (0.003) ^b	1.242 (0.003) ^a
Education (ref.cat. Primary)		
Tertiary	0.843 (0.002) ^a	0.831 (0.002) ^a
Post-secondary	1.045 (0.003) ^a	0.947 (0.002) ^a
Secondary	1.138 (0.002) ^a	0.948 (0.002) ^a
Nationality (ref.cat. Greek)		
Foreign	0.499 (0.002) ^a	0.584 (0.001) ^a
Urbanization (ref.cat. Urban)		
Rural	0.711 (0.002) ^a	0.894 (0.002) ^a
Semi-urban	0.861 (0.002) ^a	0.925 (0.002) ^a
Local labor market conditions		
Regional Separation rate	0.780 (0.001) ^a	0.924 (0.001) ^a
Regional Job-finding rate	1.003 (0.000) ^a	1.014 (0.000) ^a
Industry of previous employment (ref. cat. Construction; Manufacturing)		
Agriculture; Forestry; Fishing	0.883 (0.004) ^a	1.121 (0.005) ^a
Electricity; Water supply; Public Administration; Social Security	1.096 (0.003) ^a	1.006 (0.003) ^b
Transportation; Communication; Entertainment	0.843 (0.002) ^a	0.819 (0.001) ^a
Financial-Insurance, Real Estate, Administrative & Other Services	0.891 (0.002) ^a	0.998 (0.002) ^a
Professional, Scientific, Technical Activ.	1.010 (0.003) ^a	1.036 (0.003)
Education; Human health; Social Work Activ.	1.105 (0.004) ^a	0.855 (0.003) ^a
Craft&trade workers; Accommodation-Food	1.083 (0.003) ^a	0.939 (0.003) ^a
Reason for unemployment (ref.cat. Other Reasons)		
Lay-off	0.662 (0.001) ^a	0.822 (0.002) ^a
Contract termination	0.430 (0.001) ^a	0.560 (0.001) ^a
Resignation	0.879 (0.002) ^a	1.321 (0.005) ^a
Number of obs	66,599	60,136
LR chi2	1020201.11	1112430.59
Prob>chi2	0.0000	0.0000
Pseudo R2	0.0761	0.0720
Log likelihood	-6194028.5	-7172375.5

Source: Labour Force Survey. Hellenic Statistical Authority (EL.STAT).

Notes: All models include region of residence, year and quarter dummies. The estimate of the constant term is not reported. ^a, ^b and ^c denote statistical significance at 1%, 5% and 10% levels, respectively.

Conclusions

- The rising unemployment rate has been accompanied by a prolongation of unemployment spells which led the PLTU to peak at 66.8% in 2013.
- Females, the elderly, the less educated people, singles, residents in urban areas, agricultural workers & unemployed who resigned have a higher probability of becoming long-term unemployed.
- Regional job-finding & job-separation rates are significant determinants of the LTU.
- Policy interventions regarding labor market flows (higher inflows and outflows) are necessary in the Greek labour market.