The impact of a European unemployment benefit scheme on labour supply and income distribution

Mathieu Lefebvre[1] and Agathe Simon[*1]

[1]Université de Strasbourg, Université de Lorraine, CNRS, BETA UMR 7522, F-67000,Strasbourg, France

Submission: 7th European User Conference for EU-Microdata, GESIS

Abstract

This paper investigates the potential effects of a European unemployment insurance (EMU-UI) for the Eurozone countries in terms of labour supply response. The project of a common benefit system for the Eurozone has been extensively discussed after the Sovereign debt crisis. The current COVID-19 crisis and the ensuing Temporary Support to mitigate Unemployment Risks in an Emergency (SURE) plan has revived the debate. While there is considerable literature on the budgetary and stabilization effect of an EMU-UI, the impact regarding the behavioural response to this project has never been studied. More broadly, there is limited work on the labour supply effects of out-of-work benefits such as unemployment benefits. We tackle this question by simulating the introduction of an EMU-UI using two different scenarios. We implement an EMU-UI which would partially replace national systems as it can be topped-up by national UI systems when more generous. We also consider an alternative scenario characterised by a complete replacement of national UI systems by a common unemployment benefit

---
*Corresponding author: `agathesimon@unistra.fr`

system. Using the European tax-benefit microsimulation model EUROMOD (EUROMOD version 11.0+) with representative microdata (EUROMOD data based on EU-SILC cross-sectional data from 2016) for the 19 Eurozone countries, we run the counterfactual scenario on policy year 2018. We estimate a discrete choice labour supply model and compare labour supply elasticities of wages and non-labour income for all countries. We emphasis the change in terms of hours worked in response to the implementation of the EMU-UI, intensive and extensive margin are both covered. We estimate a structural labour supply model using a mixed logit modelling to account for unobserved heterogeneity with random taste variation. Preferences are allowed to vary between households according to socio-economic variables such as age, presence of children and presence of elderly.

We show that the labour supply response to the reform differs substantially across countries. The strongest labour supply reaction to the reform are found in Italy, Portugal, Latvia and Lithuania. We find higher disincentive effects for women in couple and single men. For most countries, the reform would lead to lower hours worked for single individuals. We find that this reform has a positive, but very weak, effect on labour supply for women in couple in some countries. Our results show high labour elasticities in Belgium, Malta, Luxembourg, Portugal and Italy, especially for women in couple and single men. The negative labour supply effect in some countries is in line with those results. We can expect from this policy to have a quite strong disincentive effect on countries with high elasticities and for which national systems are less generous. In countries as Matla, Ireland or Spain, for which the EMU-UI increases substantially disposable income under unemployment, there is no disincentive to work as labour supply is not very sensitive to income. We can expect that this architecture of a common unemployment insurance system for the Eurozone could have significant effects in terms of labour supply on Italy, Portugal, Latvia and Lithuania, for which national UI systems are not characterised as generous and the sensibility of hours worked to income is very high.

Keywords: Unemployment insurance, structural labour supply, discrete choice, microsimulation, EUROMOD.

JEL Codes: C25, C81, J22, H55, I38