

# The Importance of Regional Variation in Patterns of Involuntary Non-Standard Employment across Europe

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## Abstract

For the EU Labour Force Survey, microdata are available at different regional levels for different countries. The regional level at which microdata exist may even vary according to survey question. For instance, The Netherlands does not report any regional information within the microdata that it provides; Austria reports at NUTS 1 level (groups of states) for region of household but NUTS 2 level (individual states) for place of work; the UK reports NUTS 1 level regions throughout (so only England is divided with Northern Ireland, Scotland and Wales each being a NUTS 1 region). Several smaller countries report at the national level throughout because NUTS 1, NUTS 2 (and sometimes NUTS 3) levels equate to the whole country.

The aim of this research is to explore patterns of involuntary non-standard employment across regions and countries in Europe and the implications this has for the modelling of these data and labour force data more generally.

The data used consists of three measures of involuntary non-standard employment extracted from the EU Labour Force Survey microdata, as below.

- Not being able to find full-time work (from question FTPTREAS – “I would like to ask you why you took a part-time rather than a full-time job. Was it because...”).
- Not being able to find permanent work (from question TEMPREAS – “Did you take that type of job rather than a permanent job because...”).
- Having a fear of loss of current work (from question LOOKREAS – “Why were you looking for another job?”).

If an individual is in any one or more of these three categories then they are defined as being in involuntary non-standard employment.

For involuntary non-standard employment and for each of the three elements that collectively define it, rates are calculated for each available region within each available country. Maps are used to demonstrate that within some countries there is little difference between regions but in other countries there is considerable regional variation. It is suggested that for countries where information on regions is not available or only available at high levels of aggregation, true regional variation may be masked.

The fact that the variation at the regional level differs between groups of countries poses challenges for the modelling of such data and may affect the results of analyses. Traditional multilevel modelling approaches to allowing for clustering within datasets assume that variation between units at one level of the hierarchy is constant across higher level units. The findings from the exploration of regional variation in involuntary non-standard employment indicate that this is not the case and a more sophisticated approach to the modelling of the variation at each level should be taken.

The presentation will conclude by presenting a number of models for involuntary non-standard employment which make different assumptions about the variation between regions and countries. The extent to which the inferences drawn from these models are affected by the different assumptions will be highlighted and discussed. Implications for future EU Labour Force Survey microdata and whether countries should be encouraged to provide more regional information (whilst still maintaining sufficient confidentiality) are considered.