

# **A comparative analysis on the relationship between benefits generosity, search requirements and unemployment duration**

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## **ABSTRACT**

Income support schemes for unemployed are an important labour market institution that is present in almost all developed countries. This institution has attracted the attention of numerous scholars and economic theory suggests that unemployment benefits affect unemployment duration while empirical evidence confirming, mildly, this assertion. In particular, job search theory suggests that, at a basic level, benefits induce longer unemployment duration. This relationship is obtained through the reservation wage, which is increasing in benefits, and through the search effort, which is decreasing in benefits. Clearly, higher reservation wages reduce the number of acceptable job offers while lower search effort reduces the rate of arrival of the offers: these mechanisms determine the positive relationship between benefits and duration. In any case, search theory has acknowledged that UI schemes are, in reality, more complex than this. In fact, actual UI schemes introduce some eligibility criteria that are necessary to receive income support as they usually require to actively search for a job and to devise a plan (together with employment centres or similar institutions) that determines which steps are to be taken to search more effectively. Therefore, benefits schemes also give incentive to search more actively and more effectively for jobs and might succeed in increasing re-employment probabilities.

Even from an empirical perspective, the relationship between benefits and unemployment duration does not appear to be so clean cut: in fact the evidence is mixed and, all things considered, benefits might affect positively unemployment duration but their effect is, at most, feeble.

While a large number of studies on this topic exist, only a few of them address this issue from a comparative perspective. That is, differences in the UI schemes between different countries have not been extensively studied nor these differences have been exploited to understand how specific characteristics of the schemes may affect unemployment duration. In particular, schemes differ across countries in terms of generosity, maximum duration, employment counseling and job search requirement and all these aspects are likely to affect significantly the unemployment duration of the recipients.

Our paper tries to develop a comparative analysis for a large group of European countries: Austria, Czech Republic, Hungary, Ireland, Italy, Netherlands, Spain, Sweden and UK. Our aim is to relate the specific characteristics of the schemes in these countries to the effect that the participation to the income support has on re-employment probability and unemployment duration. Through the comparison of different countries and schemes, we aim at understand whether more generous benefits effectively increase duration and whether this detrimental effect can be off-set by strict search requirement and well-

developed employment counseling. From a terminology point of view, we will refer henceforth to the “participation to income support program” to indicate those unemployed workers that are: 1) currently receiving unemployment benefits, 2) are subject to the entitlement requirements and 3) receiving employment counseling. All these three components are simultaneous components of the participation to the program and the participation identifies, in causality-analysis terms, the treated groups whereas the unemployed individuals that are not part of these programs make up the non-treated group.

Our investigation use data for the year 2007 from the EU-SILC survey. To obtain a more homogenous group of observations, we focus only on workers that have just become unemployed so that the duration of unemployment before the period of observation is the same (being equal to zero) for all the individuals. Initially, we perform a survival analysis for this kind of unemployed workers (where the non-survival condition is actually finding a job) and we use Cox hazard models to estimate the determinants of duration of unemployment allowing for country specific effect in terms of the baseline hazard. Within this analysis the participation to income support program is represented by a dummy which we include both directly and as an interaction term with time. These two components allow us to capture the immediate effect of the participation to the income support program and also the effect that participation has during later stages of the unemployment spell. This analysis is able to capture how employment probabilities vary depending on the participation to income support program but it may be conditioned by self-selection issues. In practice, while this duration analysis certainly captures the variation in re-employment probabilities between receiving or not receiving benefits and the employment services, it may not be able to distinguish whether that particular variation is due to the participation to the program or to have been selected to participate to the program. In fact, it is possible that the characteristics that induce individuals to participate to the program also have a direct effect on the re-employment probability. To account for this possibility we also develop an analysis using the propensity score matching (PSM) methodology. The basic idea behind this methodology is first to compute a measure of how similar are individuals in terms of the likelihood to participate to the program and then to compare the outcomes of participants in terms of re-employment with the outcomes of observationally similar nonparticipants, allowing thus an unbiased estimation of the effect of the treatment.

The results we obtain are interesting both in regards of the effects related to generosity and those related to the degree of strictness and employment services. In particular the effect of being a recipient of benefits does not remain constant through the unemployment spells and the actual evolution through time is related to very design of the UI scheme.