Estimates on flows and motives to explain changes in unemployment

Martijn Souren and Bart Loog, Statistics Netherlands LFS Workshop, May 2013

Introduction

Labour markets with identical indicators can be subject to different dynamics.¹ In order to understand changes in the level of unemployment one has to take into account the flows into and out of the unemployed labour force. The estimated magnitudes of these flows turn out to be strikingly large: Over half of the unemployed in a given quarter are in this position for less than three months. These individuals entered unemployment either after job loss, or after joining the labour force. Flows into the opposite direction are usually comparable in magnitude, resulting in relatively small changes in unemployment compared to the underlying dynamics.

In order to explain changes in labour market positions one has to take into account the underlying motivations driving these changes (e.g. 'why did an individual stop looking for work?'). These motives could provide useful information for interpreting changes in the level of unemployment. In this paper we present an idea for publishing flow estimates with this purpose. To that end we also developed a set of respondent-friendly questions.

Interpreting unemployment by flow estimates

The potential labour force can be subdivided into the labour market positions employed (E), unemployed (U) and inactive (I). In the Netherlands the flows between these groups are published quarterly, describing labour market dynamics. However, these estimates are not yet used to their full potential in order to support users by interpreting changes in the unemployment level.



Figure 1. Net flows into unemployment (U) from employment (E) and inactivity (I)

¹ See the comparison of the Portuguese and U.S. labour markets presented by Blanchard and Portugal (2001).

Figure 1 shows an example of how estimates of labour market flows could be presented to facilitate visualization of the underlying dynamics. It presents the change in the unemployment level (green line) and breaks down this change into net contributions from either the employed (blue bar) or the inactive (red bar).

It shows that about 50 per cent of the increase in unemployment in the last six months can be contributed to the fact that more people lost their jobs, than that people found a job (that is the flow from $E \rightarrow U$ minus $U \rightarrow E$ is larger than zero). The other half can be contributed to the net flow of people entering the labour market, relative to leaving the labour market (that is the flow from $I \rightarrow U$ minus $U \rightarrow I$ is larger than zero as well). In the Netherlands, the latter net flow is nearly always larger than zero and thus contributing to unemployment in a structural manner. Yet, its impact was relatively strong during the last year and a half, while in the second half of 2010its contribution was relatively small. Together with the net effect of more people finding jobs than losing jobs, this resulted in decreasing unemployment for that period.

This example shows that flow estimates can be used to describe changes in unemployment in more detail. However, these analyses automatically invite posing questions on the reasons behind a change in labour market status. For this purpose we are currently developing a framework that enables us to identify "motives" for changes in labour market positions.

Interpreting changes in flows by motives

In order to make quarterly estimates of motives, it is necessary to gather information on motives in each wave. For the labour market status at least nine flows can be identified and you could identify motives for the status in the start and end of the period. This operation sounds burdensome, but it can be simplified: We could argue that it is only interesting to collect information on motives for being in a certain labour market position at the end of a period and, moreover, only ask for these motives when an individual is unemployed or inactive. We revisited our questions on "motives" with the purpose of filling up the relevant cells in Table 1:



Table 1. Motives/reasons for being in unemployment (U) or inactivity (I)

1.

Ideally you would like to ask why a respondent switches from labour market status but this type of dependent interviewing is not recommended for all switches. The switch from employment to unemployment is suitable for dependent interviewing, since we already ask whether the person has the same job/work as during the previous interview. This questioning can help identify reason for changes in the flow from employment to unemployment (or inactivity). Because the latter flow moves with the economic cycle and the flow from unemployment to employment is relatively stable, it tends to dominate the net flow from employment to unemployment. These reasons can thus be used to explain changes in the net flow related to employment.

2.

For those inactive, we already collect information that can be used to explain flows. We identified two groups: Fully retreated (not wanting, not searching, not available) and partially retreated (of which by far the largest: want to work, available but not searching). Their reasons for being inactive can be found from answers on "Want(not)reas" and "seak(not)reas". From economic theory one specifically interesting group of those partially retreated can be identified: discouraged workers.

3.

The fully retreated and those who are only not searching constitute the vast majority of those switching between inactivity and unemployment in both directions. While we have information on why individuals do not belong to the labour force, we do not have this information on why individuals belong to the unemployed. Especially for those moving into unemployment from inactivity we do not yet collect any information on the motives behind this switch. We have to think of posing additional questions.

We could just ask all unemployed, what reasons they have for searching paid work. For many respondents this could be perceived as a strange question (because I want a job!) and results are therefore difficult to interpret. Moreover, we are building up to a framework that has a low response burden and facilitates straightforward interpretation of the results. We therefore focussed on large groups which are relevant based on labour market theory, e.g. students and "added workers". For example, students can be temporarily retreated from the labour market as they can continue studying when facing bad labour market prospects. Housewives or housemen can enter the labour market when their partner (is expected to) lose his or her job. While asking the questions concerning an individual's labour market status we do not yet know whether the respondent is a student or has an employed partner. Therefore we used the variable "mainstat" in order to identify students or housewives/men. Indeed these two groups are contributing for more than half of all flows from inactivity to unemployment. We propose to ask these respondents their motives for searching a job, even though they classify themselves as being (primarily) a student or housewife/man. Answering categories can be: Finished studying, looking for a side-job or financially necessary, re-entering, partner lost/may lose job. Routing can take place on the variable mainstat, such that the question can be geared towards the various subpopulations (students; housewives/men). In this way we expect to be provided with results that can more easily be interpreted. The question can be placed just after mainstat and will therefore stimulate a natural course of the conversation and does not disturb the module on 'looking for work'.

Again, changes in the magnitude of certain reasons for entering (and/or leaving) the labour market, can help interpret the net flow between unemployment and inactivity.

Conclusion

Users of unemployment data are interested in deeper interpretation of the changes therein: strong increases, and unanticipated decreases or increases. There is always something to explain in further detail. Flow estimates foster the understanding of the concepts and the mechanisms behind changes in the number of unemployed, but not of the underlying reasons for the changes. In this paper we present a publishing framework together with a set of questions that can easily be integrated in LFS questionnaires at limited costs.

References

Blanchard, Olivier and Pedro Portugal (2001). What hides behind an unemployment rate: Comparing Portuguese and U.S. labor markets. *American Economic Review*, 91, p. 187-207.