Calculating Unemployment Rates

Goal

The definition of the unemployment rate is quite standard: the percentage of the unemployed population over the active population at a given point in time. The active population includes both the employed and the unemployed, but not the non-employed. The definition of the unemployed population, however, varies considerably. The main difficulty in calculating unemployment rates lies in determining the identity of the unemployed.

The most widely recognised measure of unemployment is that of International Labour Organisation (ILO). According to the ILO, the employed are those who had at least one paid hour of work (or were temporarily absent from work) during a given reference week. The unemployed are those who were not employed during the reference week, were actively searching for a job during the previous 4 weeks, and were available to start a new job in the following 2 weeks.

However, unemployment can be measured in a variety of ways, and this is reflected in the surveys used by LIS. Criteria range from registration at the unemployment office, receipt of unemployment benefits, self-declared unemployment, or job search. Unfortunately not all concepts are available for all datasets, so it is important to read the documentation very carefully when attempting to compare the unemployment rates in two different datasets.

In this exercise, we will use the ILO definition of unemployment to calculate unemployment rates.

Activity

For the UK in 1999 and Germany 2000 calculate unemployment rates (percentage of unemployed persons over the active population) with the ILO definition of unemployment (***pclfs* 210-219**).

Consider those individuals 25 to 60 years of age to be in the working-aged population. Exclude those currently in the military.

Guidelines

- Identify the LIS variable to be used for the calculation of the unemployment rates. All of the different concepts of unemployment are all included in one LIS variable only.
- Create a dummy variable for unemployed following the definition given above. When defining the dummy, be very careful how you define the unemployed as well as how you define the "active population". (The universe depends on your definition!)
- Please note that all ILO unemployed are grouped in the semi-standardised codes 210-219. The registered unemployed, who are not ILO unemployed, are coded as 220-229. (Note, however, that it is possible to be both registered and ILO unemployed (or unknown ILO), so be careful when coding if you are only interested in the registered unemployed.)
- In the UK:
  - There are many programs that combine unemployment benefits with work and/or training (values 910s). For this exercise, they should be considered registered unemployed (as well as included in the "all unemployed" categories), but not ILO unemployed.
  - The potentially unemployed are those in the 400 category.
- Military personnel (whether at work or on leave) are always coded from 180 to 189 in ***pclfs***.
- Tabulate the variables to get the unemployment rate (remember to weight the results).

Program

```
di "** LABOUR MARKET - Exercise 17 **"

foreach file in $uk99p $de00p {
  display "`file'"
  use pweight page pclfs if inrange(page,25,60) using `file', clear

  recode pclfs (100/179 190/199=0) (210/219=1) (*=.), gen(unemp)
  label variable unemp "ILO unemployment"

  tab unemp [aw=pweight]
}
```

Results

Unemployment rate, at present	***UK99***	***DE00***
ILO unemployed	*4.55*	*4.51*

Comments

- The broadest unemployment definition (including those who may potentially be unemployed) may vary considerably from dataset to dataset. In Germany, it includes discouraged workers and those with some vague intent of working in the future, as well as those who were previously unemployed, but were receiving sickness or maternity benefits during the reference week. In the UK, it includes discouraged workers and those in work or training through the employment service.
- When comparing LM variables across datasets with the use of the semi-standardised codes, look very carefully at the country-specific documentation in order to interpret the results.