Statistics in focus

POPULATION AND SOCIAL CONDITIONS

THEME 3 – 17/1999

POPULATION AND LIVING CONDITIONS

# Dynamic Measures of Economic Activity and Unemployment:

## 1. Patterns and Transitions over Time

*Eric Marlier*

## Contents



The one-shot or static measures provided by most conventional sources are not sufficient to understand and monitor the greatly changed labour market situation. These need to be supplemented by more dynamic measures, which capture various aspects of *individuals' patterns of economic activity over time*. A variety of such measures can be constructed from the 'longitudinal' information collected in a panel survey such as the ECHP, which follows the same persons over time.

This report studies aspects such as the changes in activity status from one point in time to another, the stability or otherwise of the longitudinal pattern of economic activity, transition matrices of the longitudinal pattern itself from one time-period to another, and the persistence of the experience of unemployment. It is based on a research carried out on behalf of Eurostat by Vijay Verma, Professor at the University of Essex.

The results presented here are based on the only longitudinal data of this type available at the EU level, and are in this sense unique. Furthermore, the present analysis is also of considerable methodological interest: several new measures describing various aspects of individuals' economic activity have been developed. It should be noted, however, that the data used were collected in 1994/95, and therefore do not reflect the more recent changes in the labour market in the Member States.

**A few highlights ...**

*The status of being unemployed*
There is a tendency among older persons (and generally among women more than men) to regard themselves as unemployed, even though the conventional labour force concepts would exclude them as economically inactive.

*Longitudinal activity status*
Overall in the EU among persons in the working ages (18-64), 5% are subject to continuous unemployment throughout the year, and another 6% experience various combinations of employment, unemployment and economically inactive periods. These proportions are substantially higher among the young.

*The experience of unemployment*
Of those in continuous unemployment throughout a year, 72% were found to suffer from unemployment in the following year as well: made up of 51% who continued in constant unemployment, and 21% unemployed for a part of the year. The chances of being unemployed during a year are as high as 60% for those who have experienced unemployment in the preceding year; these are only 5% for those who have not experienced unemployment. The figures are even more striking for groups with lower socio-economic status. Unemployment therefore tends to persist.

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The conventional measures of activity status deal with the individual's state at a particular point in time. It is useful to supplement such "static" measures by "dynamic" measures that reflect the individual's pattern of economic activity over time. This report describes and presents such "longitudinal" measures of economic activity and unemployment based on the 1994 and 1995 waves of the European Community Household Panel (ECHP). Many other types of dynamic measures can be constructed on the basis of the ECHP, and some of these are presented in a separate study[1]. These dynamic measures of activity and unemployment are of great policy relevance, especially in times of high unemployment and insecure forms of employment.

## 1. Self-declared activity status in comparison with the conventional ILO concept

Dynamic analysis of the employment situation requires measures extending over time. This requires measures that are more stable and more directly enumerated than the conventional labour force survey measures defined with reference to a short reference period. The ECHP supplements such measures by the concept of self-declared activity status (see Box 1).

**Box 1: Activity status**

*Conventional ILO activity status:* In accordance with the recommendations of the International Labour Organisation (ILO), the conventional activity status is defined with reference to a short period such as one week, giving precedence to activity over inactivity, and to employment over unemployment. According to this classification, the **employed** comprise all persons above a certain age who, during a specified reference period, were in paid employment or self-employment, whether at work (for one hour or more during the period) or with a job or enterprise without actually being at work. The **unemployed** are persons who, during the same period, were without work, and were available for and seeking work. The **economically inactive** are persons not classified as employed or as unemployed.

*ECHP self-declared activity status:* This approach focuses on those engaged in work in a more substantial manner. The **employed** are persons classified as such according to the ILO framework, provided they normally work for at least 15 hours per week. In addition to employment and self-employment, paid apprenticeship, training under special schemes related to employment, and unpaid family work are explicitly included in this category For the remaining, the status is determined according to the respondent's own declaration, presumably on the basis of the most time spent. This includes those declaring themselves to be **unemployed**, and those **economically inactive** (in education or training, housework, retirement etc.). Persons normally working for fewer than 15 hours a week are also classified as economically inactive, unless they regard themselves as unemployed.

In relation to activity status at the time of the interview, the ECHP covers both the ILO and self-declared concepts. Retrospective information on job histories and the activity calendar is obtained in relation to the self-declared activity concept (see Box 2). The self-declared approach is more suited for measurement in a longitudinal enquiry, which aims at tracing significant changes over time, and relates better to other variables such as income which are normally measured with reference to a long period such as a whole year.

Table 1 shows the percentage distribution of interviewed persons according to ECHP self-declared activity status and its comparison with the conventional ILO status, for the 1995 wave. Overall, for persons in the working ages (18-64), 61% are in employment or self-employment, while 8% see themselves as unemployed (corresponding to an unemployment rate of 11%, i.e. [8/(61+8)*100]).

There are marked and expected differentials by sex and age. For instance, around 50% of men and 80% of women aged 55-64 are economically inactive, while the unemployment rate is about 20% among young men and 25% among young women aged 18-24. There are also striking national differences in the distribution by activity status. In Greece, Spain, Italy and Luxembourg, the overall proportion inactive is almost 40%, while it is below 20% in Denmark. (This arises mainly from differences in female participation rates). Spain is notable for its exceptionally high unemployment rate, while the rates are much lower for the United Kingdom, and especially Luxembourg.

[1] *"Dynamic Measures of Economic Activity: (2) Status in terms of the amount of time spent": Eurostat - Statistics in Focus No. 18/1999, Theme 3 "Population and social conditions"*

The second part of the table provides an indication of the difference in classification according to the two concepts. Overall, 6% of the individuals have different status according to the concept used (col. 4): the figure is as low as 2% for Greece. The discrepancy between the two measures is larger for young persons (18-24), and generally for females.

In terms of unemployment rates, the two concepts give close results, except for the older group (55-64) where individuals are more likely to see themselves as unemployed though not meeting the ILO criteria for being so classified. This pattern probably reflects differences among groups in the 'degree of attachment' to the labour market. Across countries, the self-declared unemployment rate is substantially higher than the corresponding ILO rate in Belgium and Denmark, but the difference is in the opposite direction in Italy and the UK. (The figures shown for the Netherlands appear somewhat implausible, and may have resulted from some problem with the activity status variables in the data file.)

*Table 1*

**Distribution according to self-declared activity status and its comparison with ILO status**
**1995 survey, EU-12, persons aged 18-64**

| | | Self-declared status (% distribution) | | | X | Unemployment rate | | Self-declared status=U ILO status (% distribution): | | | Self-declared status=I ILO status (% distribution): | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | E | U | I | % | self-declared status | ILO status | U | I | E | I | U | E |
| | | [1] | [2] | [3] | [4] | [5] | [6] | [7] | [8] | [9] | [10] | [11] | [12] |
| ALL | 18-64 | 61 | 8 | 32 | 6 | 11 | 11 | 68 | 27 | 5 | 88 | 5 | 7 |
| male | 18-64 | 74 | 8 | 19 | 4 | 9 | 8 | 70 | 25 | 5 | 90 | 4 | 6 |
| | 18-24 | 50 | 13 | 36 | 9 | 21 | 20 | 77 | 19 | 4 | 85 | 5 | 10 |
| | 25-39 | 87 | 7 | 5 | 3 | 8 | 7 | 76 | 18 | 6 | 79 | 11 | 10 |
| | 40-54 | 87 | 6 | 7 | 2 | 6 | 6 | 72 | 23 | 5 | 90 | 6 | 4 |
| | 55-64 | 42 | 6 | 52 | 6 | 12 | 8 | 39 | 58 | 3 | 96 | 1 | 4 |
| female | 18-64 | 48 | 8 | 44 | 8 | 14 | 14 | 66 | 29 | 5 | 87 | 6 | 7 |
| | 18-24 | 42 | 15 | 43 | 11 | 26 | 27 | 76 | 21 | 3 | 82 | 10 | 8 |
| | 25-39 | 60 | 9 | 32 | 9 | 13 | 14 | 67 | 27 | 6 | 79 | 10 | 11 |
| | 40-54 | 55 | 6 | 39 | 8 | 10 | 10 | 59 | 33 | 8 | 86 | 5 | 8 |
| | 55-64 | 18 | 3 | 79 | 5 | 14 | 10 | 39 | 59 | 2 | 96 | 1 | 4 |
| Country | (18-64) | | | | | | | | | | | | |
| | B | 60 | 8 | 32 | 7 | 12 | 7 | 39 | 57 | 4 | 92 | 2 | 6 |
| | DK | 73 | 8 | 18 | 8 | 10 | 7 | 53 | 44 | 3 | 80 | 4 | 16 |
| | D | 65 | 6 | 30 | 7 | 8 | 7 | 65 | 28 | 7 | 83 | 3 | 13 |
| | EL | 55 | 8 | 37 | 2 | 12 | 11 | 85 | 13 | 3 | 98 | 0 | 2 |
| | E | 49 | 13 | 38 | 7 | 21 | 22 | 80 | 17 | 3 | 88 | 7 | 5 |
| | F | 63 | 8 | 29 | 4 | 11 | 10 | 70 | 29 | 1 | 94 | 5 | 1 |
| | IRL | 57 | 9 | 34 | 7 | 14 | 13 | 64 | 30 | 6 | 88 | 4 | 8 |
| | I | 53 | 8 | 39 | 6 | 13 | 16 | 67 | 28 | 5 | 92 | 7 | 1 |
| | L | 60 | 3 | 37 | 5 | 4 | 3 | (57) | (29) | (14) | 90 | 2 | 8 |
| | NL | 61 | 11 | 28 | 14 | 15 | 4 | 25 | 56 | 19 | 78 | 2 | 20 |
| | P | 66 | 6 | 28 | 5 | 8 | 7 | 57 | 38 | 5 | 92 | 3 | 6 |
| | UK | 69 | 5 | 26 | 5 | 7 | 9 | 83 | 12 | 5 | 83 | 6 | 12 |

*Key: E=employed; U=unemployed; I=economically inactive; X=% for which self-defined status differs from ILO status.*
*N.B.1: Despite some doubt about the figures from the Netherlands (see text), these have been included in the EU-12 averages above.*

*N.B.2: Employment rate=E; activity rate, A=E+U; unemployment rate=100U/A.*

*Unemployment rates in col.[6] are* ***as measured in the ECHP*** *using the standard labour force concepts. These may differ from the rates from the Labour Force Survey, which is the official EU source of such data.*

*( .. ) small sample size (n<50)*

The last two parts of the table support this view. These show the distribution of the self-declared unemployed and the inactive, respectively, according to their ILO status. Overall, a third of self-declared unemployed are classified differently according to the ILO concept, mainly as 'inactive'. This figure is as high as 61% among those aged 55-64, equally among men and women. Among countries, note the sharp contrast between Belgium on the one hand, and Greece, Spain and the United Kingdom on the other.

By contrast, among the self-declared inactive, the tendency to be economically active (in employment or unemployment) according to the ILO concept is higher among younger persons (18-39) than that among the older.

## 2. Micro-level changes in activity status over time

Table 2 indicates the extent of movement of persons from one activity status to another over time. This is shown in the form of a transition matrix of the status measured at two points in time, one year apart, for the same set of individuals. In terms of self-declared status, over 90% of those in employment and 85% of those inactive at the time of the first interview are reported to be in the same status at the second interview. It is important to note that this, of course, does not preclude compensating movements during the intervening period (see section 3 below).

*Table 2*

**Transition matrix of activity status: 1994 survey to 1995 survey**
**EU-12, persons aged 18-64**

**Self-declared activity status**

| | 1995 survey (%) | | | | 1994 |
|---|---|---|---|---|---|
| 1994 survey | employed | unemployed | inactive | total | % distribution |
| employed | **92** | 3 | 4 | 100 | 60 |
| unemployed | 30 | **52** | 18 | 100 | 8 |
| inactive | 8 | 5 | **86** | 100 | 32 |
| 1995 distribution | 61 | 8 | 32 | 100 | 100 |
| % in same status in the two surveys= | | | | **87** | |

**ILO activity status**

| | 1995 survey (%) | | | | 1994 |
|---|---|---|---|---|---|
| 1994 survey | employed | unemployed | inactive | total | % distribution |
| employed | **92** | 3 | 5 | 100 | 62 |
| unemployed | 32 | **43** | 25 | 100 | 9 |
| inactive | 10 | 7 | **83** | 100 | 29 |
| 1995 distribution | 63 | 8 | 29 | 100 | 100 |
| % in same status in the two surveys= | | | | **85** | |

Over 50% of the unemployed are also unemployed a year later according to self-declared status. This status provides a somewhat more persistent measure than the ILO status, especially in relation to unemployment as seen from the second part of the table.

Of special interest is the movement of the unemployed over time (Table 3). It is remarkable that the proportion of the unemployed remaining in the same state is practically the same (at around 50%) for all sex-age groups. However, among the unemployed who do change their status, older persons (55-64), and also women in general, are much more likely to move to inactivity than to find employment.

*Table 3*

**Of persons unemployed at 1994 survey (self-declared status), distribution according to status one year later**
**EU-12, persons aged 18-64**

| | | 1994 survey unemp. rate | 1994 unemployed: status at 1995 survey (%) E | U | I | total |
|---|---|---|---|---|---|---|
| ALL | 18-64 | 12 | 30 | 52 | 18 | 100 |
| male | 18-64 | 10 | 34 | 52 | 14 | 100 |
| | 18-24 | 23 | 34 | 50 | 15 | 100 |
| | 25-39 | 9 | 43 | 49 | 8 | 100 |
| | 40-54 | 6 | 32 | 59 | 9 | 100 |
| | 55-64 | 13 | 15 | 51 | 34 | 100 |
| female | 18-64 | 14 | 25 | 52 | 23 | 100 |
| | 18-24 | 27 | 33 | 49 | 18 | 100 |
| | 25-39 | 13 | 27 | 52 | 22 | 100 |
| | 40-54 | 10 | 20 | 55 | 25 | 100 |
| | 55-64 | 15 | 9 | 52 | 38 | 100 |
| Country | (18-64) | | | | | |
| | B | 12 | 16 | 71 | 13 | 100 |
| | DK | 12 | 35 | 48 | 17 | 100 |
| | D | 8 | 32 | 50 | 18 | 100 |
| | EL | 13 | 34 | 41 | 25 | 100 |
| | E | 20 | 31 | 52 | 17 | 100 |
| | F | 13 | 29 | 60 | 11 | 100 |
| | IRL | 16 | 30 | 62 | 8 | 100 |
| | I | 14 | 24 | 51 | 25 | 100 |
| | L | 4 | (33) | (50) | (17) | 100 |
| | NL | 14 | 24 | 51 | 24 | 100 |
| | P | 9 | 34 | 45 | 21 | 100 |
| | UK | 8 | 38 | 45 | 17 | 100 |

*Key: E=employed; U=unemployed; I=economically inactive.*
*( .. ) small sample size (n<50)*

There are significant national differences in the proportions of the unemployed persisting in that state, from the high of 71% in Belgium and around 60% in France and Ireland, to the low of 41% in Greece. However, these differences do not appear to be related to national differences in the overall unemployment rates.

## 3. Pattern of activity: the longitudinal activity status

On the basis of the ECHP Activity Status Calendar, a *longitudinal activity status* can be constructed to describe the *pattern of activity* during the reference period, such as one or more years (see Box 2)[2].

This measure aggregates the individual's experience over a whole period, rather than simply recording it at some arbitrarily chosen point in time. The categories can be defined in terms of the presence or otherwise of various states (disregarding their actual duration): whether during the reference period the individual spent any time in employment (E), in unemployment (U), and in economic inactivity (I). The possible combinations of these states define various longitudinal patterns, which may be grouped to highlight particular aspects, such as stability of the pattern, continuity of activity, the experience of unemployment, etc.

[2] *Data are "EU-11" data – namely the Twelve minus the Netherlands for which the required data are not available.*

The following have been arranged according to unemployment:

1) Continuous unemployment: U
2) Some experience of unemployment
   - *Unemployment and employment – no inactivity:* U+E
   - *Unemployment, employment and inactivity:* U+E+I
   - *Unemployment and inactivity:* U+I
3) Some employment, but no unemployment
   - *Continuous employment:* E
   - *Employment with inactivity:* E+I
4) Continuous inactivity I

Table 4 shows the distribution according to the 7 possible patterns as defined above, grouped into the 4 main ones in terms of the experience of unemployment. Note that category [2] represents mainly a mixture of unemployment and employment (U+E) while [3] concerns mainly continuous employment (E).

**Box 2: Temporal information on economic activity in ECHP**

Retrospective information on economic activity is obtained in ECHP in two complementary forms: (i) *job histories*, providing information on characteristics and the dates of beginning and termination of most recent job; and (ii) a month-by-month *activity status calendar* covering the calendar year prior to the interview ("reference year"). This system makes it possible to construct the individuals' recent activity history in detail, the time-span of which can be extended as data from different waves of the survey are linked for the same individuals.

Apart from current activity status and job profile obtained at the time of the interview, the information utilised in this report comes largely from the activity status calendar. The calendar records self-declared activity status of the individual for each month of the preceding calendar year, i.e. 1993 and 1994, respectively, for the surveys conducted during 1994 and 1995. The activity status calendar has not been included in the Netherlands survey.

*Table 4*

**Longitudinal activity status: calendar year 1994 (detailed classification)**
**% EU-11, persons aged 18-64**

| | [1] Unemployed whole year | [2] Some unemployment (but not whole year) | | | [3] No unemployment (but some employment) | | [4] Inactive whole year | total | [5] Unchanging status |
|---|---|---|---|---|---|---|---|---|---|
| | U | U+E | U+E+I | U+I | E | E+I | I | | (U, E or I) |
| Total | 5 | 5 | 0 | 1 | 56 | 3 | 30 | 100 | 91 |
| male | 5 | 6 | 1 | 1 | 68 | 3 | 17 | 100 | 90 |
| female | 5 | 4 | 0 | 1 | 44 | 3 | 42 | 100 | 91 |

*Key: E=employed; U=unemployed; I=economically inactive.* *N.B.: No data available for the Netherlands.*

Overall, and equally among men and women, 90% remain in the same status throughout the year, be it continuous employment, unemployment or inactivity. Women are much more likely to be in the state of continuous economic inactivity. Among persons who *are* active at some time during the year, women are more likely to experience unemployment than men, especially continuous unemployment (9% versus 6%, i.e. [(5/58)*100] versus [(5/83)*100]).

The experience of unemployment, whether continuous (col. 1) or at some time during the year (col. 2), is more common among the young (18-24). This group is also less likely to be in an unchanging state (col. 5), despite the fact that an above average proportion among them are in continuous inactivity (col. 6), especially among women. Among older persons (55-64), again among women in particular, large proportions are in state of continuous economic inactivity through the year. (See Table 5.) Of course, this age group includes persons taking early retirement, whether voluntarily or involuntarily.

*Table 5*

**Longitudinal activity status: calendar year 1994**
**% EU-11, persons aged 18-64**

| | | [1] | [2] | [3] | [4] | total | [5] |
|---|---|---|---|---|---|---|---|
| ALL | 18-64 | 5 | 6 | 59 | 30 | 100 | 91 |
| male | 18-64 | 5 | 7 | 71 | 17 | 100 | 90 |
| | 18-24 | 8 | 13 | 44 | 35 | 100 | 80 |
| | 25-39 | 5 | 9 | 82 | 5 | 100 | 90 |
| | 40-54 | 4 | 5 | 85 | 6 | 100 | 94 |
| | 55-64 | 4 | 3 | 48 | 45 | 100 | 92 |
| female | 18-64 | 5 | 5 | 48 | 42 | 100 | 91 |
| | 18-24 | 9 | 11 | 36 | 44 | 100 | 83 |
| | 25-39 | 5 | 7 | 59 | 30 | 100 | 89 |
| | 40-54 | 4 | 4 | 56 | 37 | 100 | 94 |
| | 55-64 | 2 | 1 | 23 | 73 | 100 | 96 |
| Country | (18-64) | | | | | | |
| | B | 7 | 5 | 58 | 31 | 100 | 92 |
| | DK | 5 | 12 | 69 | 14 | 100 | 83 |
| | D | 4 | 5 | 65 | 27 | 100 | 93 |
| | EL | 4 | 5 | 55 | 36 | 100 | 93 |
| | E | 9 | 11 | 45 | 36 | 100 | 86 |
| | F | 4 | 9 | 61 | 26 | 100 | 88 |
| | IRL | 7 | 7 | 54 | 32 | 100 | 88 |
| | I | 6 | 4 | 53 | 37 | 100 | 94 |
| | L | 0 | 2 | 61 | 37 | 100 | 95 |
| | P | 4 | 5 | 65 | 27 | 100 | 93 |
| | UK | 3 | 5 | 66 | 25 | 100 | 89 |

*Key: [1]-[5] : see Table 4.* *N.B.: No data available for the Netherlands.*

Some interesting national differences emerge from comparison across countries. High proportions report experiencing continuous unemployment in Belgium, Ireland and Italy. This picture contrasts with that in Denmark and France, where some (but not continuous) unemployment is more common. In Spain (with its high unemployment rate), both proportions are well above the average.

In Greece, Spain, Italy and Luxembourg, high proportions report continuous inactivity through the year, in contrast to the much lower proportion in Denmark. This reflects closely – actually even more strongly - the pattern in Table 1 for current status measured at the time of the interview. Both arise mainly from national differences in female participation rates.

## 4. Transitions in the longitudinal activity status

Data can be put together over time (waves of the survey) to study longitudinal variations in activity status in more detail.

Firstly, there is the issue of the choice of the reference period. Since longitudinal activity status is defined over a specified period of time such as one year, somewhat different results would be obtained for data aggregated over different lengths of time. For instance, with 2 years as the reference period instead of 1 year, lower proportions are expected to be in unchanging states. Nevertheless, analysis (not shown here) indicated the pattern over 2 years to be generally similar to that for a single year shown above.

A clearer picture is provided by cross tabulation of individuals' longitudinal activity status defined over consecutive years in the form of a transition matrix. It indicates the movement of persons from one *pattern* to another over time. Overall, 84% of persons retain the same pattern (mixture) of activity from one year to the next – from calendar year 1993 to 1994 in Table 6. The percentage remaining in the same state is about 85% among those inactive during 1993, and 90% for those with employment but no unemployment during that year. Of particular interest is the continued experience of those subject to unemployment in the preceding year. Of those in continuous unemployment throughout 1993, 72% were subject to unemployment in the following year as well: 51% to continued constant unemployment and another 21% to unemployment at some (but not all) of the time.

Table 7 analyses longitudinal experience of unemployment in more detail. Does previous experience of unemployment indicate also a higher risk of being subject to unemployment in the future? Or alternatively, to what extent do the same individuals tend to suffer from repeated bouts of unemployment? These are important policy issues. The results indicate the answer to be 'to a great extent'. Of those subject to unemployment during the preceding year, as many as 60% also experienced unemployment in the following year. This figure is only 5% for those not subject to unemployment during the previous year.

*Table 6*

**Transition matrix of longitudinal activity status: year 1993 to year 1994**
**% EU-11, persons in the age range 18-64 throughout**

| | year 1994 | | | | | 1993 |
|---|---|---|---|---|---|---|
| year 1993 | [1] | [2] | [3] | [4] | total | distribution |
| [1] Unemployed throughout | **51** | 21 | 13 | 15 | 100 | 5 |
| [2] Some unemployment | 16 | **38** | 39 | 7 | 100 | 6 |
| [3] No unemployment, some employment | 1 | 4 | **91** | 4 | 100 | 60 |
| [4] Inactive throughout | 3 | 2 | 9 | **86** | 100 | 29 |
| 1994 distribution | 5 | 6 | 60 | 29 | 100 | 100 |
| % in same status in the two years = | | | | | **84** | |

*N.B. : No data available for the Netherlands.*

These results apply across different sex-age groups and countries, and also across many other socio-economic groups (not shown in the table). Among those subject to unemployment during the preceding year, there is little systematic variation by sex or age around the overall mean of 60% experiencing unemployment in the following year as well. There is a considerable variation by country, however. As many as 70-75% of those unemployed at some time during the previous year also experience that in the following year in France, Ireland and Belgium; this applies to only 45% in the case of Greece.

Among those subject to no unemployment during one year, the proportion experiencing unemployment in the following year is twice as high among the young (18-24) compared with the overall average of 5%. To make these figures more comparable across population groups, the last column in the table shows this rate re-computed by excluding those in constant state of inactivity from the denominator. This refinement further sharpens the above noted differentials by age.

*Table 7*

**The experience of unemployment during calendar year 1993 and 1994 - % EU-11, persons in the age range 18-64 throughout**

| | | Economically active at some time during 1993-94 | | | | Inactive throughout 1993-94 | Total | Probability of unemployment in 1994 | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | some unemp. during 1993 | no unemployment during 1993 | |
| | | Unemployed during 1993: | | | | | | | | |
| | | yes | yes | no | no | | | | | |
| | | Unemployed during 1994: | | | | | | | | |
| | | yes | no | yes | no | | | [1]/([1+2]) | [3]/[3+4+5] | [3]/[3+4] |
| | | [1] | [2] | [3] | [4] | [5] | | [6] | [7] | [8] |
| ALL | 18-64 | 6 | 4 | 4 | 60 | 26 | 100 | 60 | 5 | 7 |
| male | 18-64 | 7 | 4 | 4 | 70 | 14 | 100 | 60 | 5 | 6 |
| | 18-24 | 10 | 6 | 9 | 43 | 32 | 100 | 62 | 11 | 17 |
| | 25-39 | 8 | 6 | 5 | 78 | 4 | 100 | 57 | 5 | 6 |
| | 40-54 | 5 | 3 | 3 | 84 | 5 | 100 | 67 | 3 | 3 |
| | 55-64 | 4 | 4 | 3 | 53 | 36 | 100 | 54 | 3 | 6 |
| female | 18-64 | 5 | 4 | 4 | 49 | 38 | 100 | 60 | 4 | 7 |
| | 18-24 | 9 | 6 | 9 | 37 | 40 | 100 | 63 | 10 | 19 |
| | 25-39 | 7 | 5 | 5 | 59 | 25 | 100 | 57 | 5 | 7 |
| | 40-54 | 4 | 3 | 3 | 57 | 33 | 100 | 62 | 3 | 5 |
| | 55-64 | 2 | 1 | 1 | 28 | 68 | 100 | 59 | 1 | 5 |
| Country | (18-64) | | | | | | | | | |
| | B | 7 | 3 | 3 | 59 | 28 | 100 | 68 | 4 | 5 |
| | DK | 11 | 7 | 4 | 68 | 11 | 100 | 62 | 5 | 6 |
| | D | 4 | 4 | 3 | 66 | 23 | 100 | 53 | 4 | 5 |
| | EL | 4 | 5 | 4 | 55 | 31 | 100 | 46 | 5 | 8 |
| | E | 11 | 7 | 7 | 43 | 32 | 100 | 62 | 9 | 14 |
| | F | 8 | 2 | 4 | 61 | 24 | 100 | 76 | 5 | 7 |
| | IRL | 9 | 3 | 4 | 54 | 30 | 100 | 73 | 5 | 7 |
| | I | 6 | 4 | 4 | 54 | 33 | 100 | 59 | 5 | 7 |
| | L | 1 | 1 | 1 | 64 | 33 | 100 | (33) | 2 | 2 |
| | P | 4 | 3 | 4 | 66 | 23 | 100 | 56 | 4 | 6 |
| | UK | 4 | 4 | 3 | 67 | 21 | 100 | 49 | 4 | 5 |

*N.B.1: Columns [1]-[4] show the distribution of those economically active (employed or unemployed) at some time during the two-year period 1993-94, according to whether or not they experienced unemployment in each of the two years; col [5] shows the remainder.*

*N.B.2: No data available for the Netherlands.* *(..) small sample size (n<50)*

## ➢ METHODS AND CONCEPTS

- The **European Community Household Panel (ECHP)** is a survey based on a standardised questionnaire that involves annual interviewing of a representative panel of households and individuals in each country, covering a wide range of topics: income (including the various social transfers) health, education, housing, demographics and employment characteristics, etc. The longitudinal structure of the ECHP makes it possible to follow up and interview the same households and individuals over several consecutive years. The first wave of the ECHP was conducted in 1994 in the then 12 EU Member States. The survey was based on a sample of some 60 500 households (about 170 000 individuals). Since then, Austria and Finland have joined the project. Sweden does not take part.

  Those interested in other findings yielded by the ECHP should refer to the first **ECHP large-scale publication**: "*European Community Household Panel (ECHP): Selected indicators from the 1995 wave*" (OPOCE, Luxembourg, 1999).

- The **results** presented in this study were calculated from the ECHP "**users' database**", which includes longitudinal micro-data on households and persons standardised and linked across waves of the survey. For more details on direct access to ECHP micro-data, see: "*EC Household Panel Newsletter 3/99*" (OPOCE, Luxembourg, 1999).

  The analysis is confined to the subset of individuals aged 18-64 who were successfully interviewed in both the 1994 and 1995 waves. This amounts to a linked sample of over 90,000 persons in EU-12, with national sample sizes ranging from around 1,650 for Luxembourg and 4,200 for Denmark at the lower end, and over 12,000 for Spain and 14,000 for Italy at the upper end. The analysis of longitudinal activity status (Tables 4-7) is based on the linked sample of around 84,000 persons for EU-11, excluding the Netherlands because of non-availability of the required data.

  The results presented in this study are estimates, whose precision - all other things being equal - depends on the size of the sample and the percentage.

- Essentially, the data analysed have been **weighted** according to the 'base weights' provided in the ECHP Users' Data Base for the 1995 survey. These weights are defined for the so-called 'sample persons', i.e. for persons successfully interviewed in 1995 who came from the original ECHP 1994 sample. The matched sample analysed is close to, but somewhat smaller than, the above set. It was re-weighted to minimise this difference as follows. The given 1995 'base weights' were adjusted such that the marginal distributions in the matched sample by country, sex, age-groups and self-declared activity status conformed to those distributions in the 1995 wave sample of interviewed 'sample persons'.

  In computing statistics at the EU level, the country samples have been weighted in proportion to the size of the national population aged 16 and over.

- **Classification by age group** is defined in terms of the person's age at the end of 1994, i.e. the end of the reference year for the 1995 survey.

# *Further information:*

➢ **Reference publications**

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