

Labour Market Attachment of People Outside the Labour Force

An Explorative Analysis of the Hidden Labour Force in Europe

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Abstract

In addition to employed and unemployed persons, individuals outside the labour force also often enter gainful employment. Generally they are not taken into account in the determinations of a country's labour supply. This is mainly due to the difficulty of identifying this "hidden labour force".

Based on the European Community Household Panel (ECHP) in the years 1994, 1995 and 1996, this study takes an explorative look at the hidden labour force by comparing 12 member states of the European Union in both longitudinal and cross-sectional contexts. The group of the 'Attached' is developed to analyse both the extent and the behaviour of the labour supply not registered in statistics.

The usefulness of such an approach is confirmed by our results, which indicate a relatively high tendency of persons in this group of the Attached to enter into gainful employment compared to others outside the labour force. Nevertheless, this group does only account for a part of the hidden labour force. The importance of hidden labour overall appears in the longitudinal study of the transition into employment. Based on two year periods for the 12 European countries, the study indicates that unemployed persons do account for about only half of the persons who enter into gainful employment.

Comparisons of the EU countries confirmed the hypothesis of above-average inflow to the hidden labour force during periods of a tight labour market. But our investigation also cast doubt on simple macroeconomic explanations for the behaviour of persons in the group of the Attached. High unemployment was in some, but not all, countries associated with an above-average size of the Attached.

JEL Classification: J 2, J 4, J 6

1. Introduction¹

In determining labour supply, labour market statistics usually include only the employed and the unemployed. Observation of the actual dynamics

¹ The research was carried out as part of the work of the European Panel Analysis Group (EPAG) on the project "The Dynamics of Social Change in Europe" (CT-1999 –

in the labour market, however, makes clear that other persons are also relevant in the labour market. This is true, for instance, of school pupils and university students. Less visible, however, are others outside the labour force who get employment: the so-called hidden labour force. This group represents – in addition to the employed and the unemployed – the residual labour force of a country's labour supply in a stage of full employment.²

Among the European countries, Germany is an example where the hidden labour force is a substantial issue. It is estimated indirectly through a macro approach performed by the research institute of the Federal Employment Services (*Bundesanstalt für Arbeit*), the Institute of Employment Research (*Institut für Arbeitsmarkt- und Berufsforschung*, IAB) (cf. e.g. Thon and Bach 1998). This approach was adopted by Schmidt and Fuchs (1999) to estimate the Hidden Labour Force for other countries, such as the Netherlands and the United Kingdom.

However, in general the official European statistics take only “discouraged workers” into account. According to the definition of the International Labour Organisation (Husmanns et al. 1990: 107), these include all non-employed “who want a job and are currently available for work but who had given up any active search for work, because they believe that they cannot find it.” The interest in the group of the discouraged workers stems from the concern that they, like the unemployed, represent unutilised labour resources and that information on them is needed for a comprehensive measure of labour market situation (for an overview of the magnitude of discouraged workers in the EU, cf. the results of the Eurostat statistics based on the Labour Force Survey of the Community (AKE), e.g. Eurostat 1999b: 188 f.). Furthermore the official statistics of some European countries do report “broad unemployment rates” (cf. OECD 1996 and 1998). Rather than using subjective data from surveys about giving up the search for work to categorise discouraged workers, in this case all non-employed persons of working age who receive social security benefits and those who work in state subsidised employment are taken into account. Thus, persons in early retirement, recipients of retirement transition benefits, as well as the disabled and participants in work-creation programmes are included in addition to those registered as unemployed. Nonetheless, both approaches, the one to consider the discouraged workers and the other of a broad unemployment rate, are associated with problems of adequately describing the rele-

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² For a detailed discussion of the hidden labour force, see Holst (2000). To our knowledge there is no English written study with an equally extensive and systematic discussion of the hidden labour force.

vant potential labour force, because it is difficult to cover all relevant non-workers outside the labour force who want to work and would do so, if a job were available.

But as integration of the European Union (EU) economies progresses and the importance of a common labour market and employment policy increases³, it appears worthwhile to (further) develop and pursue approaches measuring the hidden potential for gainful employment at the European level. Our paper aims both to serve this interest and to supplement the as yet meagre initial steps toward this objective at the macro level. It presents a discussion about how the hidden labour force and its development might be interconnected empirically with trends in macroeconomic factors such as the growth of GDP and changes in the unemployment and the employment rates. It aims to determine the hidden labour force in the EU and in its individual member states directly – at least in part.

We begin in the second section with the introduction of the two main hypotheses on the hidden labour force. Section 3 portrays the basic economic conditions specific to each country which are related to the analysis of the hidden labour force in the European comparison. In section 4 we present both our data set and the methodological concept of our study. The results of our investigation, especially with regard to the hypotheses set out in section 3, are provided and discussed in the two following sections. This discussion is divided into a cross-sectional (section 5) and a longitudinal view (section 6). The contribution closes with conclusions and an outlook on future analyses that could build on this study.

2. Two Hypotheses on the Hidden Labour Force

Theoretical explanations for the phenomenon of the hidden labour force usually start with the discussion of the “*discouraged-worker hypothesis*” and the “*added-worker hypothesis*” during the business cycle (Hamermesh and Rees 1993: 36 ff.). According to the discouraged-worker hypothesis persons give up actively looking for work when faced with growing and / or persistent high unemployment during economic slowdown and, discouraged, withdraw from the labour market (status: outside the labour force). Furthermore, when the economic situation improves, they return, that is, they either become gainfully employed again or actively seek gainful employment. This market-sensitive behaviour is primarily ascribed to what is

³ The 1993 white paper “Growth, Competitiveness and Employment” prompted the first open discussion about a European employment policy; since the Amsterdam Treaty in 1999 at the latest, employment policy is no longer regarded as the responsibility of the member states alone, but rather as a “matter of mutual interest”.

known as “secondary workers” (i.e. those who earn “additional” or “second income”), who do not necessarily depend on their earnings or benefits to substitute for wages as the “primary workers” do, that is, the so-called breadwinners of households.

This development is counteracted in weaker phases of the business cycle by the “added-worker effect”, in which household members compensate for income deficits – for instance, those arising as a result of another household member becoming unemployed – by entering the labour market themselves. When the labour market recovers – and other household members gain employment (again), these workers withdraw from the labour market. Such behaviour is more likely to be attributed to secondary workers. Determining “added-worker effects” is particularly difficult because of women’s increasing orientation toward gainful employment. Generally it is assumed that the “discouragement effect” predominates.

Similar cyclical influences are presumed to explain the increase and decrease of the hidden labour force: the hidden labour force increases during periods of labour market weakness and decreases in periods of labour market expansion. According to these theories, during full employment the hidden labour force no longer exists.

3. Country-specific Labour Market Conditions

3.1 Unemployment

Usually the unemployment rate is the key indicator applied to characterise the general labour market situation.⁴

The unemployment rates – in those 12 EU countries relevant to our analyses – ranged in 1996 from 3.0% in Luxembourg to 22.2% in Spain (Table 1). Throughout the period 1994–1996 shown, the Netherlands and Portugal (as well as Luxembourg) are the countries characterised by an unemployment rate well below the EU average, while Spain, with unemployment of over 20%, is far above the EU average. But Spain also showed an above-average drop in unemployment between 1994 and 1996. The decrease of the unemployment rate was especially obvious in Denmark, the Netherlands and United Kingdom, while Italy (1994 to 1995), Greece (both periods), France and Germany (1995 to 1996) registered a rise in their unemployment rate.

⁴ For technical reasons involving the data (see 4.1), we must limit our analyses to the years 1994 through 1996 and to 12 EU countries. Accordingly, these temporal and geographical limits were also implemented in the tables representing basic conditions. However, in this section the average values listed for the EU countries as a whole – in accordance with Eurostat data – refer to all 15 EU countries (i.e. including Finland, Sweden and Austria).

Table 1
Unemployment Rates in 1994, 1995 and 1996 and Annual Change in %

	1994	1995	1996	95 – 94	96 – 95
European Union (EU15)	11.1	10.7	10.8	- 3.6	1.0
Belgium	10.0	9.9	9.7	- 1.0	- 2.0
Denmark	8.2	7.2	6.8	- 12.2	- 4.9
Germany	8.4	8.2	8.9	- 2.4	8.5
Greece	8.9	9.2	9.6	3.4	4.3
Spain	24.1	22.9	22.2	- 5.0	- 3.1
France	12.3	11.7	12.4	- 4.1	6.0
Ireland	14.3	12.3	11.6	- 1.4	- 5.7
Italy	11.4	11.9	12.0	4.4	0.8
Luxembourg	3.2	2.9	3.0	- 9.4	3.5
Netherlands	7.1	6.9	6.3	-2.8	- 8.7
Portugal	7.0	7.3	7.3	4.3	0
United Kingdom	9.6	8.7	8.2	- 9.4	- 5.7

Source: European Commission (1999).

Excluding demographic developments and migration from our observations and all other things being equal, it might be expected that the hidden labour force would also be below average in countries with below-average rates of unemployment. Likewise, in countries with above-average unemployment, the size of the hidden labour force might be expected to reach above-average levels. More unemployed withdraw – discouraged – from the labour market. Furthermore, a strong reduction in unemployment in a country should – *ceteris paribus* – be accompanied by a decrease of the hidden labour force in that country. A relatively large increase in the number of unemployed should lead to growth of the hidden labour force.

These assumptions, obvious at first sight, must be tested, however, as previous studies have shown that Japan, for example, which enjoys one of the lowest conventional rates of unemployment, also had one of the largest shares of “discouraged workers” (Sorrentino 1993). Evidently other factors also play a role, such as basic conditions in the given society.

National unemployment regulations and transfer systems can influence the scale of unemployment as well. The diversity of such regulations among the different EU member states is still remarkable. For such regulations and a description of relevant transfer systems in Europe, see, for example, MIS-SOC (1999 and earlier issues), Schmid et al. (1997) and OECD (1999a). The

country-specific net replacement ratio (in respect to unemployment benefits) is, for example, in general lowest in countries such as Ireland and Italy, while it is relatively high in the Netherlands and the Scandinavian countries (cf. e.g. OECD, 1999a). Employment protection legislation (EPL) can also have an effect on labour market performance. In countries with relatively strict EPL (southern countries, France, Germany; regulation is least restrictive in United Kingdom) the number of stable jobs appears to expand, but unemployment spells tend to last longer (OECD 1999b); fewer workers experience unemployment, but those becoming unemployed have a greater probability of remaining unemployed for a year or longer. All these factors can affect the size and structure of the hidden labour force.

Furthermore, low (high) unemployment and a low (high) hidden labour force are only consistent with cyclical unemployment. If unemployment is caused by structural reasons and consists mostly of hard-to-place unemployed persons such as disabled people, low-skilled workers or workers with qualifications that are not (any longer) needed in the labour market, then high unemployment could be accompanied by a low hidden labour force. In this case, during economic recovery, unemployment could remain high while the hidden labour force decreases.

3.2 Employment

Another important labour market indicator is the size of employment and its change. When the total employment situation is considered (Table 2), it is striking that Germany had the lowest rate of growth. In contrast, relatively high increases over the observed period are apparent in Ireland and Spain, as well as in the Netherlands and Denmark.

The effect with respect to the hidden labour force is formulated in the following hypothesis: In countries with especially large increases in employment – *ceteris paribus* – increased flows from the hidden labour force into gainful employment are to be expected. Conversely, in countries with moderate increases in employment or even decreases in employment, the hidden labour force is presumed to grow.

3.3 Economic Growth

Beyond the employment picture, the connection between the economic situation and productivity growth is a significant basic condition influencing the size of the hidden labour force. Usually economic growth is calculated from the growth of GDP and from productivity per employee or, primarily, per hour of work. If the total employment situation is considered (Table 2),

Table 2
Total Employment in 1994, 1995 and 1996 (in 1000s) and Annual Change in the Number of Employed (in %)

	1994	1995	1996	Change 1995	Change 1996
EU15	146,742	147,717	148,222	0.7	0.3
Belgium	3,748	3,793	3,791	1.2	-0.1
Denmark	2,585	2,617	2,649	1.2	1.2
Germany	34,986	34,860	34,415	-0.4	-1.3
Greece	3,786	3,821	3,868	0.9	1.2
Spain	11,730	12,042	12,396	2.7	2.9
France	22,063	22,284	22,287	1.0	0.0
Ireland	1,207	1,262	1,308	4.6	3.6
Italy	20,024	19,943	20,037	-0.4	0.5
Luxembourg	208	214	219	2.6	2.5
Netherlands	6,594	6,703	6,846	1.7	2.1
Portugal	4,444	4,413	4,443	-0.7	0.7
United Kingdom	25,657	25,936	26,177	1.1	0.9

Source: European Commission (1999).

it is striking that the low rise in employment in Germany is reflected in low rates of GDP growth (Table 3). By contrast, Ireland, which shows high growth in employment, also exhibits the highest economic and productivity growth. The Netherlands and Denmark are also located in the above-average range for economic growth; however, the above-mentioned increases in employment were accompanied by below-average increases in productivity. The phenomenon is particularly drastic in Spain: the relatively strong increases in employment in Spain cannot be explained by economic growth. The growth in employment here was accompanied by reductions in productivity (calculated as GDP per worker and per hour worked).

Portugal, in contrast, was able to significantly improve its position in terms of economic growth: in 1994/95 it was tenth, but in 1995/96 it was able to achieve the second-highest growth rate and the second-highest productivity growth. Italy suffered the most negative economic development over the period observed: it achieved the third-highest growth rate among the 12 EU countries in the first period, but was the last in 1995/96; productivity followed a similar trend.

The hidden labour force – all things being equal – should fluctuate with economic growth. In countries with a combination of high growth and high productivity, it should decrease, as it should with a combination of high

growth and low productivity rates. In countries with low growth and high rates of productivity, on the other hand, the hidden labour force should grow. However, it must be noted that employment constitutes a lagging indicator of economic development; therefore, delayed reactions must be incorporated into the evaluation of such explanations.

Table 3
Economic Growth and Productivity in 1994, 1995 and 1996
(Annual Change in %)

	GDP growth		GDP per worker		GDP per hour worked	
	94 / 95	95 / 96	94 / 95	95 / 96	94 / 95	95 / 96
EU15	2.4	1.7	1.8	1.4	2.0	1.5
Belgium	2.1	1.5	0.9	1.5	0.3	2.3
Denmark	2.6	2.7	1.4	1.4	2.2	2.0
Germany	1.8	1.4	2.2	2.7	2.7	2.1
Greece	1.8	2.6	0.9	1.3	1.1	1.6
Spain	2.7	2.3	0.1	-0.6	0.3	-0.2
France	2.1	1.5	1.1	1.5	1.9	2.0
Ireland	11.1	8.6	6.3	4.8	6.8	4.5
Italy	2.9	0.7	3.4	0.2	3.6	-0.1
Luxembourg	3.8	3.0	1.1	0.5	1.6	1.3
Netherlands	2.3	3.3	0.6	1.1	0.6	1.4
Portugal	1.9	3.6	2.6	2.9	1.8	3.2
United Kingdom	2.8	2.3	1.6	1.4	1.4	1.9

Source: European Commission (1999).

3.4 Gender-specific Aspects

The responsiveness of labour market participation to business cycles is greatest among those groups whose participation rates are lowest on average (Hamermesh and Rees 1993: 39). This applies, for example, to women, youths, older persons and those who are less educated. International studies show that women are over-represented among discouraged workers (Sorrentino 1993 and Eurostat 1999b: 188 ff.). Current studies of Germany, for example, on the basis of the German Socio-Economic Panel (GSOEP), find similar results for the hidden labour force (cf. Holst and Schupp).⁵ These re-

⁵ This is true for the hidden labour force determined directly. For the indirectly determined hidden labour force according to the IAB concept, the share of women in

sults suggest a discussion of gender-specific labour market indicators as well.

An overview of the rates of employment for women can be found in Table 4.⁶ The highest participation in the labour force (1994–1996) is found in Denmark, followed by United Kingdom and Portugal. Germany and France are also above the EU average. Especially low rates of female employment are found in Italy (lowest), Spain and Greece; women in Belgium, Luxembourg and Ireland also participate in the workforce at rates below the European average. In the Netherlands the employment rate for women reached 58.1% in 1996, placing it above the EU average for the first time in the period of observation.

At the same time (Eurostat 1994, 1995, 1996), women's part-time rate increased by 2.5 percentage points up to 68.5%. Starting from a significantly lower level, only Belgium (1996: 30.5%, +2.2 percentage points), France (30.9%, +1.7 percentage points) and Spain (1996: 17.0%, +1.8 percentage points) were showing an increase of more than one percentage point from 1994 to 1996. United Kingdom, which has the second-highest part-time rate of women (1996: 44.9%), gained only 0.4 percentage points. Women's rising labour force participation is mostly – but not necessarily – accompanied by a huge increase in part-time work. In Ireland, for example, the part-time rate gained only 0.4 percentage points (1996: 22.1%).

The analysis indicated that women are catching up in countries with low rates of employment: in the EU countries as a whole, the increase in employment among women was above that of men. In the countries that experienced a decrease in employment overall, women's employment fell less or not at all. In countries with below-average female participation, the trend was especially positive: Ireland, Spain and the Netherlands experienced above-average growth in the female labour force (Table 4). If this rise in women's participation rates is interpreted as a general increase in their labour market orientation, it could be presumed that the female hidden labour force did not decrease sufficiently. Among the non-employed in the EU countries, Eurostat data show for 1996 that around 6.6% of women outside the labour force wish to work – 0.8% more than two years before (Eurostat

the Federal Republic of Germany is estimated at 50%. The difference can be attributed to the (mostly male) early retirees accounted for in the indirect concept. The high share of men can be traced back primarily to the inclusion of early retirees (cf. Thon and Bach 1998). These persons usually expressed no desire to work anymore and thus are not included in the direct determination of the hidden labour force.

⁶ Our brief overview does not distinguish between the different forms of employment, such as permanent work versus fixed-term work. This is done, for example, by Kaiser (2001), who showed that in all EU countries the percentage of non-standard employed persons is much higher among women than men. This supports the hypothesis of a higher responsiveness of women to the business cycle than men.

1995, 1996, 1997). The rate was especially high in the Netherlands, United Kingdom, Ireland and Denmark – i.e. in those countries that experienced quite encouraging labour market trends over the period observed. A reduction of this percentage over the course of the investigation was observed only for Ireland and the Netherlands. By contrast, rather few females expressed the desire for gainful employment in France, Germany and Greece, i.e. in countries with a quite tight labour market.

Table 4

Rates of Employment in 1994, 1995 and 1996 and Annual Change in Number of Employed Women (in % of the population of employable age)

	1994 All	1994 Wo- men	1995 All	1995 Wo- men	1996 All	1996 Wo- men	Change 94/95 In Number Women	Change 95/96 In Number Women
EU15	67.6	56.8	67.6	57.1	67.6	57.4	1.0	1.0
Belgium	62.3	51.7	62.8	52.4	62.7	52.5	1.6	0.2
Denmark	80.9	76.0	80.8	75.6	81.0	75.7	0.3	1.1
Germany	69.7	60.4	69.5	60.3	68.8	60.0	0.3	-0.1
Greece	61.4	44.3	62.1	45.5	63.0	46.9	2.6	2.2
Spain	60.0	44.7	60.2	45.6	60.6	46.2	4.1	4.2
France	68.5	61.2	68.4	61.3	68.8	61.7	1.2	0.3
Ireland	63.0	47.2	63.3	47.9	63.7	49.2	5.6	5.7
Italy	58.3	42.7	58.1	43.0	58.4	43.7	0.1	1.7
Luxembourg	62.7	47.6	60.1	44.2	61.6	45.9	-1.7	5.3
Netherlands	68.2	55.7	68.7	56.6	69.6	58.1	2.0	3.1
Portugal	70.8	60.7	70.6	61.5	71.2	62.1	0.3	0.6
United Kingdom	76.2	67.0	76.0	66.9	76.0	67.5	0.7	1.5

Source: European Commission (1999).

4. Data Set, Definitions and Empirical Results

Because indirect measures of the hidden labour force, such as the IAB approach, have limitations such as the impossibility of a dynamic perspective at the micro level, a direct approach is needed. Holst (2000), for example, uses such an approach for measuring the hidden labour force in Germany, based on the German Socio-Economic Panel (GSOEP). Her concept builds on the desire to work of persons outside the labour force. In measuring the hidden labour force directly, it is important to keep in mind that potentially all working-age individuals outside the labour force can take on gainful em-

ployment. Therefore, longitudinal analyses are necessary to investigate their proximity to the labour market in comparison to those directly identified as the hidden labour force.

Measuring the hidden labour force in a European comparison and at the EU level based on such a concept requires a set of European data containing as large a number of persons in EU countries as possible, which measures the *wish* to work and the intention to realise this desire, along with additional factors relevant to the labour market in a longitudinal form. The Labour Force Survey by Eurostat on the one hand would be an appropriate data set for such an analysis as it contains the information on whether persons outside the labour force would like to be gainfully employed (cf. e.g. Eurostat 1996). Yet the Labour Force Survey is not a longitudinal data set. Thus, the actual labour market attachment of the people who desire gainful employment cannot be tested empirically. On the other hand, the User Database of the European Community Household Panel (ECHP), as the only panel data set for the whole of the European Union, does allow such an analysis. However, the ECHP does not ask all non-employed respondents if they desire gainful employment; rather, it asks people if they are looking for a job. The latter is a more restrictive question than the one on the desire for gainful employment, but it nevertheless allows one to measure at least parts of the hidden labour force.

Given these advantages, we use the ECHP as the data set for our analysis, which – as a longitudinal study – aims to determine which non-employed people outside the labour force can be regarded as especially attached to the labour market. Their employment behaviour has to be compared with that of the unemployed and of other groups outside the labour force.

4.1 Data Set

Since 1994 the living and working conditions of the populations in the EU member states have been collected in the ECHP. The project is performed on behalf of the European Commission by Eurostat, the Statistical Office of the European Communities, and the national statistical offices (cf. European Commission 1998, Eurostat 1999a and the contribution of Wirtz and Mejer in the data watch section of this special issue). In the first year of collection, around 60,500 nationally representative households were surveyed in 12 member states, comprising about 130,000 adults. The first three waves of the ECHP User Database are the basis of our analyses.

The ECHP includes data for the countries Belgium, Denmark, Germany, Greece, Spain, France, Ireland, Italy, Luxembourg, the Netherlands, Portugal and United Kingdom. This group of countries is referred to in the fol-

lowing as the EU12 countries. Austria joined the ECHP in 1995, Finland in 1996 and Sweden in 1997. This means that all EU member states have participated in the ECHP since 1997.⁷

Our analyses consider only the population of employable age (16–59 years); this group is designated in the following as the “study population”. Not included in the analysis are persons who claimed to be performing their military service or a substitute social service. The upper age limit was selected to restrict the influence of varying retirement regulations. This is particularly important for longitudinal observations.

All results in the following sections are weighted using the weighting factors provided by Eurostat.

4.2 Definitions

For our analyses we have selected four main groups relevant to the labour market. The groups are differentiated by their attachment to the labour market.

Work

The *Work* category comprises persons with at least one hour of gainful employment in the past seven days. The corresponding question in the ECHP reads: “Have you done any work in a job or business during the past 7 days even if this was only for one or a few hours?”

Unemployed

The Unemployed group designates persons who carried out no gainful employment in the past seven days and who could be assigned to either group (a) or (b) defined below.

(a) Persons who were seeking gainful employment at the time of the survey and were in a position to enter gainful employment within the next two weeks (availability) and

(a1) were registered unemployed at the time of the survey, or

(a2) have taken active steps to find gainful employment within the last four weeks, or

(a3) have received a job offer during the last four weeks.

⁷ When we started our analysis only the first three waves of the ECHP User Database were available. As we are using a longitudinal approach as well, we had to restrict our analysis to the 12 countries which joined the ECHP from the very beginning.

(b) Persons who were not seeking gainful employment at the time of the survey because they had already found gainful employment that would start later or expected a job offer from previous applications.

Attached

The Attached category designates non-employed persons who did not pursue gainful employment in the past seven days and

(a) were seeking gainful employment at the time of the survey but did not belong to the group of the Unemployed according to the above definition, for example because they were not able to enter gainful employment within the next two weeks and had not taken any active steps to find gainful employment in the past four weeks or were not registered unemployed, or

(b) were not seeking gainful employment at the time of the survey because they did not believe that any adequate positions were available (discouraged worker).

It is to be expected that these persons (a and b) are closer to the labour market than other non-employed persons who did not indicate that they were seeking work or did not belong to the group of discouraged workers. The Attached group is designed to include at least part of the hidden labour force in the EU.

Others Outside the Labour Force (OOLF)

The other non-employed belong to the remaining population outside the labour force (OOLF). This group is subdivided into three categories.

Education

To the question of why they were not seeking gainful employment, these non-employed responded that they were active in other pursuits, such as courses of study or training programmes.

Home

These are persons who indicated that they were not seeking gainful employment because they had to perform housework or to take care of another person (e.g. children or parents requiring care). This group is particularly interesting because significant changes in its participation in the labour force have been observed in the past in countries such as the Netherlands, (western) Germany and United Kingdom.⁸ Therefore, the proximity of this group to the labour market is to be tested as well.

⁸ On the development of women's participation in the labour force in Europe since the beginning of the 1980s, cf. e.g. Rubery et al. (1998).

Other

All other persons outside the labour force are included in the *Other* category.

In the following, both cross-sectional and longitudinal analyses are performed in order to analyse the scale and composition of, and the labour market trends for, the groups defined above, both as a whole and divided by gender. This is done from 1994 to 1995 and from 1995 to 1996. Our cross-sectional analysis is focused on the significance of the different groups in the various countries. The longitudinal analysis consists of a transition analysis. Outflow and inflow analyses were done for the EU as a whole and by country. Particular focus was given to the size and the transition of the Attached group, because this is the group of which – at least in part – the hidden labour force is composed.

5. Cross-sectional Results

We shall first present our cross-sectional results on the EU level.

5.1 EU12 Countries as a Whole

As expected, the group of Attached was smaller than the group of non-employed who desire gainful employment according to Eurostat's Labour Force Survey by, because the question – on which our concept is based – is more restricted. In the period observed the share of the Attached (EU12 country average) was around 2% (Table 5), corresponding to 1,756 cases (1994 wave), while in the same year the percentage of the population of employable age which desires gainful employment came to 5.6% (cf. Eurostat 1994). Similar results apply to 1995 and 1996. Among women, the Attached comprised around 3%; among men the share was around half this level.⁹ The shares among women were higher both in the Attached category and for the unemployed.

The traditionally gender-specific employment patterns already are apparent in the averages presented in Table 5: three-fourths of the men were employed as opposed to around half of the women. Among women the share of the non-employed was approximately 40%; among men, by contrast, it was only about 15%. More than one-fifth of women were not employed because of work at home; hardly any men offered this explanation. About 8% of the

⁹ This is different if we consider the results based on the Labor Force Survey. In 1994 the share of persons who desire gainful employment was 5.8% for women and 5.3% for men, which is no significant difference (cf. Eurostat 1994).

non-employed women and men were pursuing university, school or vocational training. Among these were 1% each of women and men 25 years of age or older.

For each person in the Attached group in 1994, there were around five unemployed (1.9% to 9.6%). The ratio later sank to 1:3.5. Among women this ratio was around 1:4 in 1994; two years later the ratio decreased to around 1:3. Among men the Attached played a less important role; for each one Attached male in 1994 there were almost eight unemployed. This ratio also decreased over the course of time, however; in 1996 it was 1:4.5. It must be noted here that the percentage of unemployed among men also decreased at a greater rate than among women (Table 5).

Table 5

Importance of Individual Groups Relevant to the Labour Market in a Cross-section of the EU12 countries in 1994, 1995 and 1996 – in % (weighted) (column percentages)

	1994			1995			1996		
	All	Women	Men	All	Women	Men	All	Women	Men
Work	63.3	51.3	75.3	63.2	50.3	76.4	62.4	50.1	75.1
Unemployed	9.6	9.9	9.3	7.5	8.3	6.8	7.9	8.2	7.5
Attached	1.9	2.6	1.2	2.1	2.8	1.5	2.2	2.9	1.6
OOLF	25.2	36.1	14.1	27.1	38.5	15.3	27.4	38.6	15.7
Education	7.9	8.1	7.7	8.3	8.5	8.3	8.6	8.9	8.4
Home	10.4	20.5	0.2	11.3	22.0	0.3	11.0	21.5	0.2
Other	6.9	7.5	6.2	7.5	8.0	6.8	7.7	8.3	7.2

Source: ECHP 1994 / 1995 / 1996, own calculations.

5.2 Country-specific Aspects

In this subsection, we differentiate the results on the individual country level. Table 6 shows that the Attached group, especially in Denmark, Italy and Ireland, is of above-average importance in the EU.¹⁰ Striking are the relatively high shares of this group in Denmark in 1994, at 2.9%; and in Italy, at 4.0% and 4.8% in the years 1995 and 1996, respectively. Relating these figures to the Unemployed, it is apparent that in Denmark for each one person in the Attached group, around three were unemployed, while in the subsequent period in Italy, there were around two unemployed for each person

¹⁰ Due to low case numbers of the Attached in some countries, the differences may not be significant. The next step of our research on this topic, which will be based on multivariate regression analysis, will take this into account. It also will be able to control for socio-economic factors on the individual level.

in the Attached group. The Attached group comprises a comparatively low percentage in the Netherlands and in Greece. In 1994, for each one person in the Attached group in the Netherlands there were four unemployed, while the same ratio in 1995 and 1996 in Greece was at just about 1:9. For a comparison of the Attached with the significance of other groups (e.g. Work, Home and Education), see Tables A2 to A5 in Holst and Spiess (2001).

An additional differentiation by gender (Table 6) shows that Italy also lies far above the EU12 average with respect to the number of female Attached, while Ireland exhibits an above-average share of males in the Attached group. Ireland is also the only country in which the group of Attached is larger for men than for women in all three years.

Thus, certain indications can be found to support the hypothesis set out in section 3, namely, that in countries with above-average rates of unemployment, the hidden labour force is also of above-average size. Both Italy and Ireland have above-average rates of unemployment and shares of Attached non-employed, while countries like the Netherlands and even Greece show below-average rates of unemployment and below-average shares of Attached persons.

Table 6

Importance of the Attached Group in the Individual EU12 countries in 1994, 1995 and 1996 – in % of the “Study Population” (weighted)

	1994			1995			1996		
	All	Women	Men	All	Women	Men	All	Women	Men
EU12	1.9	2.6	1.2	2.1	2.8	1.5	2.2	2.9	1.6
Belgium	1.4	1.6	1.2*	2.8	3.6	2.1	2.7	3.3	2.1
Denmark	2.9	3.8	2.1	3.8	5.1	2.6	2.8	3.9	1.7*
Germany	1.6	2.0	1.2	1.1	1.3	0.8*	1.4	1.8	0.9*
Greece	2.2	3.7	0.6*	0.8	1.3	/	0.8	1.3	/
Spain	1.5	2.1	0.9	2.3	3.0	1.5	2.5	3.3	1.7
France	1.7	2.5	0.9	1.6	2.1	1.1	1.6	2.4	0.8
Ireland	2.8	2.8	2.9	2.8	2.0	3.7	2.7	1.9	3.5
Italy	2.6	3.8	1.4	4.0	5.7	2.3	4.8	6.0	3.4
Luxembourg	1.1*	1.6*	/	1.0*	/	/	/	/	/
Netherlands	1.2	1.9	0.5*	1.2	1.8	0.6*	1.3	1.7	0.8*
Portugal	1.5	1.9	1.0	1.6	2.3	0.9	2.1	2.6	1.6
United Kingdom	1.4	1.8	0.9	1.1	1.6	0.7*	1.2	1.5	0.9*
Cases	1,756	1,263	493	1,908	1,299	609	1,732	1,159	573

Note: (/) ten or fewer cases; (*) 11 – 30 cases

Source: ECHP 1994 / 1995 / 1996, own calculations.

However, there are also countries whose empirical evidence does not speak for the hypothesis set out in section 3. Spain, with a very high rate of unemployment, exhibited a share of Attached which was only slightly higher than the EU average in 1995 and 1996. Denmark, in contrast, exhibited very low unemployment accompanied by a higher share of Attached than the EU average, which presumably can be explained through special institutional conditions – in particular, special work-exemption regulations in Denmark.¹¹

6. Longitudinal Results – Outflow Analysis

In general, longitudinal analyses make evident that cross-sectional analyses substantially underestimate the dynamics of the labour market. Longitudinal results identify transition rates and show each group's relevance to the labour market.

6.1 EU12 Countries as a Whole

On the EU12 average, the gainfully employed (Work) were the most stable group (Table 7). About 92% of the employed were still employed in the following year. The least stability was exhibited by the group of the Attached, at 16% and 21% between 1994 and 1995, and between 1995 and 1996, respectively. Of each ten Unemployed, after one year about four were still unemployed. Among those outside the labour force (OOLF), the housewives and househusbands, in particular, persisted in their status, followed by those who had other reasons for non-employment (*Other*). As expected, the stability of those in education was the lowest (no table).

Almost one fourth of the Attached were gainfully employed one year later (EU average). The Unemployed exhibited a somewhat higher transition rate of one third. Men's stronger orientation toward gainful employment, or their "more successful" transition to gainful employment, is also evident: they exhibited higher transition rates than women. This can be explained to no small degree by gender-specific role patterns, according to which men in many parts of the European Community still occupy the role of the sole or main breadwinner of the family (Lewis 2001).

¹¹ We would like to thank Mette Deding, Copenhagen, for this insight.

Table 7: Comparison of Transitions from and into Different Groups Relevant to the Labour Market for the Observation Periods 1994/1995 and 1995/1996 in the EU (EU12 Country Average) by Gender – in % of Study Population (weighted) (row percentages)

	Work			Unemployed			Attached			OOLF		
	All	Women	Men	All	Women	Men	All	Women	Men	All	Women	Men
1995												
1994												
Work	92.4	89.4	94.5	3.1	3.5	2.9	0.6	0.9	0.4	3.9	6.3	2.2
Unemployed	34.2	28.2	41.3	40.0	39.8	40.3	8.1	9.0	7.1	17.6	23.1	11.3
Attached	23.0	20.1	30.6	21.9	20.5	25.5	16.0	15.4	17.4	39.0	44.0	26.4
OOLF	12.3	10.9	16.0	6.2	6.2	6.4	2.6	2.7	2.4	78.9	80.3	75.2
Education	15.7	14.5	17.0	9.8	12.0	7.3	2.9	3.3	2.4	71.7	70.2	73.3
Home	9.3	9.3	17.2	4.6	4.5	18.7	2.3	2.3	3.5	83.8	83.9	60.6
Other	12.8	11.4	14.6	4.4	4.1	4.7	2.7	3.0	2.4	80.1	81.5	78.3
1996												
1995												
Work	92.6	89.7	94.5	3.1	3.3	3.0	0.5	0.8	0.3	3.7	6.1	2.1
Unemployed	32.5	28.2	38.0	41.7	40.0	44.0	8.3	9.0	7.4	17.5	22.8	10.6
Attached	22.1	19.4	28.1	27.1	25.5	30.6	20.6	20.4	21.0	30.2	34.8	20.4
OOLF	10.8	9.5	14.4	6.1	5.8	7.0	2.6	2.5	2.8	80.5	82.2	75.8
Education	15.2	13.6	17.1	10.0	11.2	8.6	2.7	2.6	2.7	72.1	72.6	71.7
Home	8.2	8.0	23.4	4.3	4.1	17.9	2.5	2.4	11.9	85.0	85.5	46.8
Other	9.5	8.9	10.3	4.6	4.6	4.5	2.7	2.8	2.5	83.3	93.8	82.6

Note: (//) ten or fewer cases; (*) 11 – 30 cases
Source: ECHP 1994/1995/1996, own calculations.

6.2 Country-specific Aspects

Just as in the averages for the EU as a whole, the results regarding the low stability of the Attached group are also confirmed in the individual countries (Table 8): this group exhibits the highest fluctuation. Italy, Ireland and Portugal have what is still the largest proportion of persons who were assigned to the Attached category in both the first and the final year of the relevant observation periods (around one fifth, in Ireland and Portugal in part substantially higher).

Table 8

Comparison of Stability of Individual Groups Relevant to the Labour Market at Two Observation Times in 1994/1995 and 1995/1996 – in % of the Given Initial Category in 1994 and 1995, Respectively (weighted)

	Work		Unemployed		Attached		Home	
	94/95	95/96	94/95	95/96	94/95	95/96	94/95	95/96
EU12	92.4	92.6	40.0	41.7	16.0	20.6	77.1	77.8
Belgium	93.7	94.7	30.4	41.9	/	28.1	76.1	72.4
Denmark	93.2	92.1	29.9	28.5	27.4	13.1*	47.3	56.5*
Germany	93.6	93.5	37.1	36.5	/	/	80.3	77.1
Greece	89.5	92.2	35.2	46.1	/	/	78.4	84.3
Spain	87.9	86.9	45.3	46.7	11.9*	17.1	79.0	83.4
France	93.9	93.8	45.6	44.9	/	19.1*	72.0	74.9
Ireland	90.6	90.9	39.7	39.7	22.7*	32.7*	84.3	82.7
Italy	92.3	93.6	45.5	46.0	20.8	23.0	77.7	80.7
Luxembourg	96.1	93.7	/	/	/	/	87.1	85.6
Netherlands	94.5	95.0	22.6	33.6	/	12.2	59.9	58.4
Portugal	94.7	93.3	30.2	21.8	21.3	19.6	69.8	60.2
United Kingdom	92.7	93.0	39.9	32.9	/	/	69.6	63.2

Note: (/) ten or fewer cases; (*) 11 – 30 cases

Source: ECHP 1994/1995/1996, own calculations.

The highest stability in all EU countries was of course achieved by the employed (Work), where Belgium, the Netherlands and Portugal occupied the first positions. The share of “long-term” unemployed – persons who were unemployed at both consecutive observation points in an observation period – was highest in Spain, France and Italy – that is, in countries with relatively tight economic situations. Particularly low was the share of “long-term” unemployed in Denmark, the Netherlands, Portugal and Germany – that is, in countries with rates of unemployment lower than the EU average.

Individuals who did not seek gainful employment because of work in the family (Home) were, as expected, usually still outside the labour force one year later, although substantial differences can be discerned between the individual countries. For instance, the countries with relatively high female participation in the labour force, such as Denmark, the Netherlands, Portugal and United Kingdom, had comparatively low levels of stability in this category (in Denmark, for instance, about one half of the initial population). This means that the number of women who claimed a different status one year later was especially high. Countries with relatively low female employment, on the other hand, such as Ireland, Luxembourg and Greece, achieved the highest levels of “persistence” in the Home status (over 80% in most cases).

To which new status did the non-employed switch? Our results indicate that for all countries the Attached group exhibited closer ties to the labour market than the OOLF group (no table). This percentage of the Attached who enter into the Work category is around 14 percentage points higher on the EU average than the respective percentage for the Home category (Table 9). Their transition rates into gainful employment were usually lower than those of the unemployed (around 10 percentage points lower on the EU12 country average). In countries with above-average rates of employment for women, such as Denmark, United Kingdom, Portugal, France, Germany and the Netherlands, the Attached group was particularly “successful”; this result can also be carried over to the Unemployed. Among the non-employed housewives/househusbands (Home), the “success rates” were especially high in Portugal, United Kingdom, and Germany, countries in which women were already integrated in the labour market to an above-average degree.

As far as the hypotheses from section 3 are concerned, the results of the outflow analyses also provide indications that a great reduction in unemployment, like that experienced in Denmark, the Netherlands and United Kingdom, is linked with a comparatively high share of the hidden labour force switching into gainful employment. Thus, in this case, the population outside the labour force oriented toward gainful employment can profit from a positive trend in the labour market. All three countries mentioned, in particular Denmark, exhibit an above-average high share of persons in the Attached group in 1995 who are in the Work category in 1996. For other countries that experienced high growth in employment (Ireland, Spain), however, no indications can be found that a comparatively high inflow from the hidden labour force into employment occurred.

Hardly any indications could be found to support the hypothesis that countries with high rates of economic growth and productivity growth (such as Ireland) experience a high number of transitions from the Attached into

Table 9

Comparison of Transitions to Gainful Employment (Work) at Two Observation Times in 1994/1995 and 1995/1996 – in % of the Given Initial Category in 1994 and 1995, Respectively (weighted)

In initial year	Unemployed		Attached		Home	
Period	94/95	95/96	94/95	95/96	94/95	95/96
	In Work in next year					
EU12	34.2	32.5	23.0	22.1	9.4	8.2
Belgium	33.0	33.6	/	11.0*	6.6*	8.5*
Denmark	46.2	49.0	/	41.5	/	/
Germany	41.5	39.1	38.7	30.9*	13.4	14.3
Greece	33.5	31.7	17.3*	/	12.3	6.4
Spain	33.3	29.5	18.3	13.7	7.3	4.1
France	34.2	31.0	27.7	31.2	4.3*	4.7*
Ireland	33.2	30.5	18.8	23.0*	9.2	11.0
Italy	23.6	23.9	17.9	17.4	5.4	4.8
Luxembourg	43.0*	54.1*	/	/	7.2*	9.5*
Netherlands	50.6	39.9	32.3*	31.0*	7.6	8.6*
Portugal	41.7	43.4	32.4	27.9	17.5	17.7
United Kingdom	40.7	47.8	39.2	30.5*	16.0	15.5

Note: (/) ten or fewer cases; (*) 11 – 30 cases

Source: ECHP 1994/1995/1996, own calculations.

the Work group. In Ireland, the number of transitions to Work by both the unemployed and the Attached lay at the EU average or below. In countries with high growth and low rates of productivity (i.e. the Netherlands and Denmark), by contrast, the expected above-average transitions to gainful employment occurred. However, this phenomenon was also evident in countries in which the labour market development was far from positive. In Germany, for instance, a country with low rates of growth and high productivity, substantially more individuals from the Attached group switched to gainful employment than on the EU average. On the other hand, a country like Italy, with comparatively low rates of economic and productivity growth, showed far fewer than the average number of persons switching from Attached to Work, as predicted.

A detailed country-specific analysis for women and men separately met with the problem of an insufficient numbers of cases, especially for men outside the labour force. Nevertheless, a generally higher “rate of success” for men was clearly apparent in further calculations: on average for the EU12 countries, transitions into gainful employment among men (in all

groups defined) lay around 10 percentage points higher than among women. But even within the group of women, different “success rates” were evident in different countries, for both the Attached and the Unemployed (Holst and Spiess 2001).

7. Longitudinal Results – Inflow Analysis

Our inflow analysis is used to demonstrate the importance of the individual groups of non-employed in the labour market. Moreover, it illustrates the composition of the Attached, as compared to other groups such as the Unemployed, in the one year by means of inflows from the year before.

7.1 EU12 Countries as a Whole

In the observation period, at least 0.5% of all employed persons in the EU12 countries were in the Attached group in the previous year, at least 4% of the employed were previously unemployed, and a good 4% more were in the other non-employed category (which also includes individuals participating in Education) (Table 10). Thus, according to ECHP data, it becomes clear that fewer unemployed took on gainful employment than did other non-employed (Attached and OOLF together).

In the years 1995 and 1996 the Attached group mainly comprised the formerly unemployed and other non-employed (OOLF) (about a third each). While women primarily entered the Attached group from non-employment, the predominant transition for men was from unemployment.

As expected, the Unemployed in the years 1995 and 1996 consisted by a good quarter of formerly employed (Work), but other persons who did not belong to the labour force one year before (OOLF and Attached) also provided a substantial share (together more than a quarter). Here gender-specific differences could be determined corresponding to the tendency discussed above: entrants from employment were predominant among men, as were entrants from non-employment among women (Table 10).

7.2 Country-specific Aspects

The thesis derived from section 2 is that the hidden labour force shrinks during periods of labour market recovery and increases during periods of a tight labour market. It follows from this that new entrants to the hidden labour force from the group of Unemployed should be especially high in those countries whose unemployment is high or has increased. As explained in

Table 10: Composition of the Individual Groups Relevant to the Labour Market in 1995/1996 – Inflows from 1994/1995 – in % (weighted) (row percentages)

	Work			Unemployed			Attached			OOLF		
	All	Women	Men	All	Women	Men	All	Women	Men	All	Women	Men
1995												
1994												
Work	90.0	86.5	92.3	4.9	5.2	4.6	0.6	1.0	0.4	4.6	7.2	2.7
Unemployed	26.0	21.1	32.1	48.8	46.7	51.5	5.3	6.3	3.9	20.0	25.8	12.4
Attached	18.5	16.6	22.1	36.6	33.1	43.1	14.2	15.0	12.7	30.8	35.3	22.1
OOLF	10.3	9.4	13.1	6.8	6.5	7.5	3.0	3.3	2.3	80.0	81.0	77.2
Education	7.5	7.0	8.1	6.2	6.1	6.2	1.7	1.8	1.7	84.6	85.1	84.0
Home	8.4	8.3	24.5	6.7	6.5	23.5	3.7	3.7	7.0	81.2	81.5	45.1
Other	15.8	13.9	18.2	7.6	6.9	8.5	3.0	3.4	2.5	73.6	75.8	70.9
1996												
Work	91.2	87.6	93.7	3.7	4.5	3.2	0.7	1.1	0.5	4.3	6.9	2.6
Unemployed	27.5	21.4	35.2	42.4	41.6	43.4	7.9	9.1	6.3	22.2	27.9	15.1
Attached	16.7	15.8	18.5	29.7	27.5	33.9	20.9	21.4	19.9	32.7	35.3	27.7
OOLF	9.4	8.4	12.3	5.1	5.05	5.2	2.5	2.7	2.1	83.0	82.2	80.5
Education	7.1	6.2	8.0	4.7	5.3	4.0	1.7	2.3	1.1	86.6	86.2	86.9
Home	7.9	7.8	28.4	5.1	5.02	13.2	2.6	2.6	2.3	84.5	84.7	56.2
Other	13.8	12.0	16.0	5.5	5.0	6.1	3.2	3.2	3.0	77.6	79.8	74.9

Note: (//) ten or fewer cases; (*) 11 – 30 cases

Source: ECHP 1994/1995/1996, own calculations.

subsection 3.1, Spain exhibited the highest rates of unemployment over the period observed; those in France, Ireland and Italy were slightly above the EU average. In these countries unemployment decreased during the period observed. Only Italy experienced rates of unemployment that were both slightly above average and increasing at the same time.

As Table 11 shows, in all of the countries mentioned (Spain, France, Ireland and Italy) an above-average rate of Attached were unemployed one year before. Also striking is the high relevance of the former unemployed for the Attached in Germany in the second period (1995 / 1996), which went along with the relatively strong increase in the unemployment rate during these years. By contrast, in countries with an unemployment rate below the EU average, such as Portugal and Denmark, the relevance of the unemployed is comparatively low for the Attached. To this extent the hypotheses from section 2 can be confirmed.

Table 11

Relevance of the former Unemployed for the Individual Groups Relevant to the Labour Market in 1995 / 1996 – Inflows from 1994 / 1995 – in % (weighted) (row percentages)

In next year	Work		Attached		Home	
	94 / 95	95 / 96	94 / 95	95 / 96	94 / 95	95 / 96
Unemployed in initial year						
EU12	4.9	3.7	36.6	29.7	6.7	5.1
Belgium	3.1	2.2	43.6	20.1*	5.8*	3.7*
Denmark	4.5	3.3	25.4	19.1*	/	/
Germany	3.6	2.8	32.1*	37.5	3.9*	2.6*
Greece	5.9	4.0	29.4*	27.7*	9.0	5.3
Spain	10.2	8.1	45.2	35.1	8.5	9.4
France	4.3	3.2	38.3	34.8	4.5*	4.8*
Ireland	6.0	4.0	45.1	36.2	4.3	3.9*
Italy	4.7	3.8	39.5	31.6	7.7	4.5
Netherlands	3.5	1.8	/	14.6*	/	/
Portugal	3.2	2.5	29.0	25.4	7.5	3.4*
United Kingdom	3.7	4.5	21.9*	/	6.7	4.7*

Note: (/) ten or fewer cases; (*) 11 – 30 cases. Results for Luxembourg are not listed because the number of cases was too low.

Source: ECHP 1994 / 1995 / 1996, own calculations.

As far as transitions from employment into the group Attached are concerned, Table 12 shows that the countries which experienced employment

successes over the period observed, such as Ireland and Spain the employed group had substantially lower than average relevance for the Attached. In a surprising contrast, in Denmark, which also enjoyed employment gains (and below-average rates of unemployment), an above-average share of the employed in the year 1994/1995 entered the Attached group in the year 1995/1996. This result indicates that a country's labour market regulations – as discussed in section 3 – can influence the dynamics in the labour market as well. In countries with a decrease in employment, such as Germany and Portugal, the Attached group received an above-average inflow from the Work group. The above-average relevance of formerly employed persons for the group of non-employed busy with home duties (Home), particularly in Germany, is also striking.

Table 12

Relevance of the former Employed (Work) for the Individual Groups Relevant to the Labour Market in 1995/1996 – Inflows from 1994/1995 – in % (weighted) (row percentages)

In next year	Work		Attached		Home	
	94 / 95	95 / 96	94 / 95	95 / 96	94 / 95	95 / 96
In Work in initial year						
<i>EU12</i>	26.0	27.5	18.5	16.7	8.4	7.9
Belgium	26.5	25.4	17.9*	12.8*	8.2*	6.1*
Denmark	35.0	42.1	35.0	35.6	/	/
Germany	35.0	37.5	26.0*	22.3*	14.3	12.9
Greece	29.8	25.1	22.7*	/	11.8	7.5
Spain	25.8	28.6	14.1	17.6	7.1	7.5
France	19.0	28.2	26.0	20.7	4.9*	7.9
Ireland	21.9	31.1	11.3*	12.7*	6.6	6.4
Italy	18.3	16.3	11.3	8.5	6.6	5.4
Netherlands	23.8	25.1	25.8*	14.5*	8.1	7.1*
Portugal	34.0	40.0	25.8*	26.7	8.3	12.4
United Kingdom	41.0	37.6	24.2*	29.9*	13.5	14.4

Note: (/) ten or fewer cases; (*) 11 – 30 cases. Results for Luxembourg are not listed because the number of cases was too low.

Source: ECHP 1994 / 1995 / 1996, own calculations.

8. Conclusions

The results of our explorative analyses on the basis of the ECHP 1994, 1995 and 1996 show in a longitudinal perspective that a much greater pro-

portion of the Attached group switches to gainful employment than from other sub-groups of the population outside the labour force. In some countries the Attached moved into gainful employment almost as frequently as the Unemployed. But, due to their small numbers, they of course account for only a fraction of the newly employed. The high fluctuation of the Attached is also notable; they have the lowest stability of all labour-market groups. This is true not only on average for the EU12, but also at the country level.

Differences in the hidden labour force (i.e. the Attached) could be explained in part through differences in the basic conditions of the countries, especially the differences in labour market performance. The hypotheses from section 2 were confirmed in longitudinal approaches: in countries with high unemployment rates the Attached showed mostly an above-average inflow from persons who were unemployed one year before. In countries with an unemployment rate below the EU average the unemployed had a comparatively low relevance for the Attached group. On the other hand, high unemployment was in some, but not all, countries associated with an above-average size of the Attached.

Gender-specific analyses indicated for countries with above-average rates of female employment, such as Denmark, United Kingdom, Portugal, France and Germany, that the Attached group was particularly “successful” at moving into work; this result could also be carried over to the unemployed. Countries with lower than average rates of employment for women, on the other hand – in spite of positive labour market developments, as in Ireland – experienced comparatively few transitions to gainful employment during the period observed. Even among the non-employed housewives and househusbands, the “success rates” were especially high in those countries in which women were already integrated in the labour market to an above-average degree. For other countries that experienced high growth in employment (such as Ireland and Spain), however, no indications can be found that a comparatively high inflow from the Attached into employment occurred. Hardly any indications could be found to support the hypothesis that countries with high rates of economic and productivity growth experience a high number of transitions from the hidden labour force into gainful employment. As far as transitions from employment into the Attached group are concerned, our analysis shows that the countries which experienced employment successes over the period observed had substantially fewer than average entrants from the employed group.

However, all these indications are based on tabular analyses only, which therefore do not control for the influence of multiple explanatory factors. This is true with respect to both the macro and the micro levels. On the

macro level it may be presumed that individual connections between the basic conditions of labour market policy and other (initially unclear) conditions relevant to the labour market, as well as the movements in the hidden labour force in Europe, can be explained by controlling for other influential factors at the country level. The theses presented in this paper can find confirmation in some countries, but not all. Therefore, in a subsequent study, multivariate analyses are to be performed to further explain the movements in the hidden labour force on the macro level. First results of regressions on the size of the group of the Attached show that indicators reflecting the economic growth of a country are the most promising ones in terms of significant influence.

Furthermore, at the micro level a multivariate analysis seems to offer additional promising insight into the explanation of the behaviour of the hidden labour force. Especially in view of gender-specific peculiarities, the basic conditions are to be investigated at both the national level and the level of the individual household – including how they influence women's labour market participation. For example, maternity leave regulations, child day-care capacities and support from family members play an important role.

Finally, measures of the hidden labour force can hardly be comprehensive. For instance, there are always cases of non-employed people entering the labour market who did not reveal any intention of finding employment, for example by claiming in the survey that they have no desire at all to start working (cf. Holst 2000). Conversely, persons in whom a strong orientation toward gainful employment can be identified may not necessarily take on a position. The results show that the concept of identifying non-employed outside the labour force who are especially close to the labour market appears to be valuable with regard to the objective of measuring at least part of the hidden labour force. Nevertheless, further studies are necessary.

References

- European Commission* (Europäische Kommission) (1999): Beschäftigung in Europa 1998. Luxemburg: Europäische Kommission.
- Eurostat* (1999a): European Community Household Panel (ECHP): Selected Indicators from the 1995 wave. Luxembourg: European Commission.
- (1999b): Erhebung über Arbeitskräfte. Ergebnisse 1998. Luxemburg: Europäische Kommission.
- (1998): ECHP UDB European Community Household Panel Longitudinal User's Database. Waves 1 and 2. Manual. Luxembourg: European Commission.

- (1995): Labour Force Survey: Results 1994. Luxembourg: Office for Official Publications of the European Communities.
- (1996): Labour Force Survey: Results 1995. Luxembourg: Office for Official Publications of the European Communities.
- (1997): Labour Force Survey: Results 1996. Luxembourg: Office for Official Publications of the European Communities.

Hamermesh, Daniel S. / Rees, Albert (1993): *The Economics of Work and Pay*. New York, NY: Harper Collins College Publishers.

Holst, Elke (2000): *Die Stille Reserve am Arbeitsmarkt. Größe – Zusammensetzung – Verhalten*. Berlin: edition sigma.

Holst, Elke / Schupp, Jürgen (2000): Hidden Labour Force in Germany, in: *Economic Bulletin*, Vol. 37, No. 9, pp. 285–292.

Holst, Elke / Spiess, C. Katharina (2001): Labor Market Attachment of 'Not Economically Active Persons' – New Aspects of Hidden Labour Force in Europe. EPAG (European Panel Analysis Group) Working Paper Nr. 24, Essex University, Colchester.

Husmanns, Ralf / Mehran, Farhad / Verma, Vijay (1990): Survey of economically active population, employment, unemployment and underemployment: An ILO manual on concepts and methods. Genf: International Labour Office. (Second impression 1992).

Kaiser, Lutz C. (2001): Permanent Full-Time Employment Still Most Important Labour Market Enrolment in Europe, in: *Economic Bulletin*, Vol. 38, No. 4, Berlin, pp. 119–124.

Lewis, Jane (2001): The Decline of the Male Bread-Winner Model: the Implications for Work and Care, in: *Social Politics*, Vol. 8, No. 2, pp. 152–170.

MISSOC (Mutual Information System on Social Protection in the Member States of the European Union) (1999): Social protection in the Member States of the European Union. Situation on 1 January 1998 and evolution. European Commission: Luxembourg.

OECD (1999a): *Benefit Systems and Work Incentives*. Paris: OECD.

– (1999b): Employment protection and labour market performance, in: *OECD Employment Outlook*, June 1999, pp. 47–132, Paris: OECD.

– (1998): *OECD Economic Surveys. Netherlands 1997–1998*. Paris: OECD.

– (1996): *OECD Economic Surveys. Netherlands 1995–1996*. Paris: OECD.

– (1994): *Women and Structural Change. New Perspectives*. Paris: OECD.

Rubery, Jill / Smith, Mark / Fagan, Colette / Grimshaw, Damian (1998): *Women and European Employment*. London and New York: Routledge.

Schmid, Günther / O'Reilly, Jacqueline / Schoenmann, Klaus (1997): *International Handbook of Labour Market Policy and Evaluation*. Cheltenham/UK and Northampton, MA/USA: Edward Elgar.

Schmidt, Detlef / Fuchs, Johann (1999): Stille Reserve in den Niederlanden und im Vereinigten Königreich – Ein Beitrag zur Messung von Unterbeschäftigung, in: *IAB Werkstattbericht*, No. 10.

Sorrentino, Constance (1993): International comparisons of unemployment indicators, in: *Monthly Labor Review*, Vol. 116, No. 3, pp. S-24.

Thon, Manfred / *Bach*, Hans-Uwe (1998): Die Schätzung von Potential-Erwerbsquoten, Stiller Reserve und Erwerbspersonenpotential für die alten Bundesländer 1970 – 1995, in: IAB Werkstattbericht, No. 8.