EXAMINING FLEXIBLE LABOUR IN EUROPE
THE FIRST THREE WAVES OF THE ECHP

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Abstract

This paper uses the European Community Household Panel study (ECHP) to profile labour market experiences in the European Union. Cross-sectional snapshots of labour markets miss out on part of the range of transitions between employment and non-employment. Panel data allows a more accurate assessment of the degree to which experiences of unemployment and household work poverty are shared or concentrated among sections of national populations. Indeed, we find that the proportion of months which individuals and which all working age adult members of households spent in unemployment accounts for some variations in labour market experiences. This paper demonstrates the value of focussing on transitions between employment and non-employment (as opposed to tracking transitions in and out of unemployment) when examining the impact of the flexible labour market on earnings and poverty. We also examine the consistency of individual employment histories, and propose strategies for dealing with inconsistencies in information offered by respondents.

Non-Technical Summary

The paper uses data from the first three waves (1994-1996) of the European Community Household Panel study, which has asked people across the European Union a common set of questions about their living conditions, sources of income and experiences to determine the impact of not having a job for individuals of working age and for the households in which these individuals live. We find that it is important to look at the full range of experiences out of work rather than to take the more traditional approach of only looking at people who are officially defined as unemployed. Most people in the European Union experience a consistent economic activity status, that is most people who start the year in employment remain in employment, and those who are not working tend to remain in the same condition. A small but significant proportion of the population, however, experiences change. We found that to understand the impact of working or non-work experiences, one both needs to consider the proportion of months in which individuals or working age members of a household are in employment and the proportion when they are not working, but also the nature of the assistance a national government provides to people who are not working who experience financial hardship. Nevertheless, the welfare policies of national governments alone do not explain concentration of non-employment, that is, whether larger numbers of people experience short spells outside work or smaller numbers of people experience long periods without a job.

EXAMINING FLEXIBLE LABOUR IN EUROPE
THE FIRST THREE WAVES OF THE ECHP[1]

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While both politicians and academics have vested interests in understanding the dynamics of transitions into and out of work, conventional cross-sectional measures of economic activity status have tended to miss out significant dimensions of the factors which shape people's labour market experiences. Snapshot survey statistics capture more information about long-term statuses than short term transitions, as at any moment in time, people who have occupied a particular status for a long period are more likely to be sampled in that state than people whose experience with a particular condition is brief. The sample bias in favour of long stays in a particular state can be over come by administrative records for the study of some kinds of spells. Credit records indicate which people experience periods of difficulty paying bills and how these long people remain in debt; hospital records of emergency admissions reveal which groups of people experience which kinds of emergencies and the duration of their stays in hospital. Comparable records are not available in the case of labour market transitions. Official statistics only note who applied for unemployment-related public assistance. People who temporarily leave the labour market voluntarily (to improve skills/education, to undertake caring responsibilities, to start their own business, to enjoy a break from working), whose non-working spell is short, who have access to support and do not require public assistance, or who are not eligible for public assistance are unlikely to appear in such records.

A need to understand the full range of labour market transitions formed one of the rationales for the establishment of the European Community Household Panel study (ECHP), which annually has tracked the experiences of people initially selected through random samples of the populations of EU member states since 1994. Eurostat has now released the first three waves of the ECHP, in the form of a User's Database (UDB), for analysis. We first address issues that arise when working with the ECHP UDB. This paper then examines

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[1] This paper updates and expands on a portion of work done as part of the project "ECHP - Flexible Labour and Its Impact on Earnings and Poverty" (Eurostat call for tender 96/S 99-57617/ENLot25).

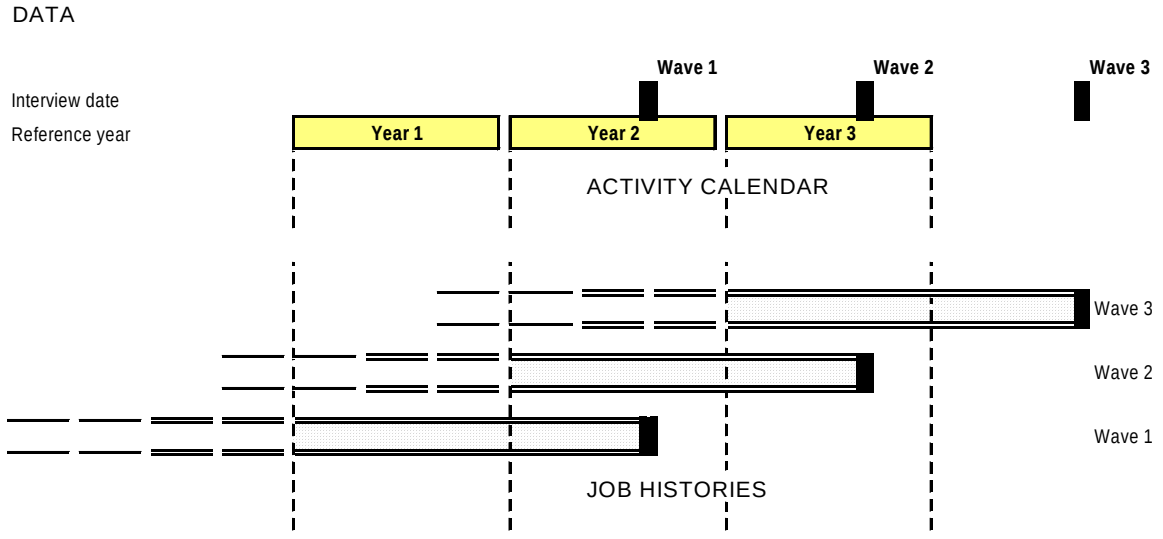
[2] Professor Verma was a member of the Eurostat team which originally designed and tested the ECHP methodology.

patterns of labour market transitions, looking at the experiences of individuals, households, and national societies as a whole. We find that to understand the impact of labour market transitions from the individual and the household level, it is important to both consider the proportion of months which working age individuals and members of households spend in employment as well as the welfare regime adopted by the national government. A more complex picture emerges when one compares the experiences of non-employment at the national level (that is, the average length of periods of non-employment and the proportion of the working age population which experiences a period of time without work).

1. USING ECHP DATA

The ECHP offers users a number of choices for the analysis of labour market transitions. The survey collects information about respondents' current economic activity status at the time of interview (defined by Labour Force Survey conventions, whereby people working for pay for at least 15 hours per week or enrolled in an employment-related training scheme or apprenticeship are defined as working), the respondents' self-defined usual activity status over the course of the survey year, and a month by month calendar of each respondent's self-defined main activity status during the reference year (defined as the calendar year prior to the year in which the interview was conducted, as illustrated in Figure 1).

Figure 1. Visualising Employment Information Collected By The ECHP



The survey collects dates when recent jobs and education or training courses began and ended[3] and dates when children were born, permitting the parallel construction of a less detailed month by month economic activity calendar. If the current job started in the reference year (the calendar year prior to the survey year) and the person had been interviewed before, no further information was sought.[4] First-time interviewees were asked for their age when they started their first job, whether they experienced any unemployment spell of one month or longer prior to their first job, and for the number of unemployment spells of any length which they experienced during the five years prior to the interview.

We sought to develop a consistent historical picture of economic activity from these data which identifies spells of employment and non-employment. The data in this paper covers the 12 countries which participated in all of the first three waves of the ECHP, though we also give some consideration to experiences in Austria (which joined at the second wave) and Finland (which joined from the third wave).[5] As we focus on labour market transitions, subsequent data refer to people aged between 16 and 64 (prime working age) for at least one month during the first three reference years of the ECHP (1993-1995).

1.1 Choosing Current Activity Or Main Activity Status

The first choice relates to whether one should proceed from the standard LFS definition (which prioritises any work or unemployment over inactivity, and any work as marking a

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[3] People currently working as their 'main activity' and who started their current job within the last 15 years prior to their first ECHP interview (1979 for the first ECHP survey year of 1994) are asked to identify the year when their current job started. Working respondents are also asked to indicate the number of months (if any) which they were unemployed prior to their current job, and the year in which their previous job (if any) ended (provided that the previous job ended no more than 15 years prior to the interview). If the current job started (or previous job ended) during the reference year (the calendar year prior to the year of interview) or survey year, respondents are also asked for the month in which the current job started (or the previous job ended). People not working at the time of interview who previously worked during the 15 years prior to their first interview are asked which year their last job ended (and also which month if the last job ended during either the reference year or the survey year).

[4] From Wave Four onwards, respondents are asked to supply their main job characteristics even if they have not changed job since the year of their last interview.

[5] For Austria and Finland, we used a smaller range of variables to define the activity calendar from January 1993 to December 1995; thus we fewer opportunities to cross-check the accuracy of the calendar or to the narrow the range in which transitions might have taken place than we had with data from the other 12 countries.

person as employed rather than unemployed), or from a respondent's own self-assessment of their status. Respondents may not agree with the LFS criteria. Moreover, the current status focus of the LFS definition obscures a number of significant issues for an individual's medium and long-term earnings potential, as a person who has been unemployed or inactive for multiple years who has just started a job is classed identically to a person who has worked consistently over the same period. Over 90% of respondents reported the same current and main activity status, as Table 1 shows (with results aggregated by country in proportion to population size). Age and sex effects appear where differences occur. Among women aged 16-24, a high percentage who perceive themselves as unemployed are classified as inactive. This percentage decreases with age. Men aged 16 to 24 who are classified as inactive are most likely to perceive themselves as unemployed, followed by men aged 55-64. A number of women of all ages as well as younger men (aged 16-24) perceive themselves as inactive when they are defined as working by the LFS definition. Women aged 25-39 who perceive themselves as inactive are also likely to be classified as unemployed by the LFS definition.

Table 1. Main Versus Current Activity Status By Sex and Age Group – Wave 3 (1996)

Main (self)	working	unemp	inactive	Total	unemp	unemp	Inactive	Inactive
Current (ILO)	working	unemp	inactive	Same Status	working	inactive	Working	Unemp
Men								
16-24	63.3	15.8	11.2	90.3	0.6	5.2	3.3	0.7
25-39	86.2	7.8	2.5	96.5	0.3	2.0	0.9	0.3
40-54	85.6	5.1	6.6	97.3	0.3	1.8	0.5	0.2
55-64	44.2	2.7	47.7	94.6	0.1	2.9	2.1	0.2
Women								
16-24	58.7	20.3	12.1	91.1	0.7	5.5	1.5	1.2
25-39	59.7	7.9	23.8	90.5	0.3	3.5	3.4	2.3
40-54	51.5	4.2	35.7	91.4	0.3	2.7	4.3	1.4
55-64	17.7	1.3	75.0	94.0	0.0	2.0	3.5	0.4
Total	49.9	5.2	39.6	94.7	0.2	2.2	2.1	0.7

Source: Eurostat (2000), The European Community Household Panel, Wave 3, 1996

Over all, the main status concept produces a higher unemployment rate, particularly for people aged 55 to 64 , followed closely by those aged 16 to 24 (as shown in Table 2). That the unemployment rates for the (self-defined) usual status over the year are lower than the self-defined main status suggests that many respondents perceive their periods in unemployment

as relatively short. In the production of this paper, we had to make use of a combination of the current and main activity definitions, for reasons which we discuss in the next subsection.

Table 2. Current, Main And Usual Activity Status Unemployment Rates – Wave 3

Sex and Age Group	Current Status	Main Status	Usual Status
Men			
16-24	11.1	20.1	10.2
25-39	7.4	9.0	7.8
40-54	4.4	6.0	5.2
55-64	2.9	5.7	5.2
Women			
16-24	13.7	26.1	10.9
25-39	9.3	10.4	9.0
40-54	5.0	6.3	4.8
55-64	1.7	3.4	3.0
Total	6.9	9.0	7.0

Source: Eurostat (2000), The European Community Household Panel, Wave 2, 1995

1.2 Addressing Inconsistencies In The Data

The month by month calendar data should reinforce the information collected through the employment starting and stopping dates, months of reported unemployment prior to entry into the current job, and dates of education. In practice, a high number of respondents in all countries supplied conflicting information. In addition, the retrospective labour market experience dates show large 'seam effects' - disproportionately frequent changes reported at the boundary between one year and the next, with a smaller seam effect at the intervening six month intervals. The seam effects appear at each twelve month interval out to 15 years of employment history! This finding is not entirely unexpected. Research comparing the hours of work people recorded in simultaneous time diaries with the hours they reported working on the same day one week later indicates that most people have great difficulty remembering how long they worked, even after only a week has elapsed (Robinson and Godbey, 1997, Robinson and Gershuny, 1994). Indeed, other research into people’s recollection of their working experiences in Asia has found that people had generally poor memories about their economic activity in the last month, and that the accuracy of their recall dropped considerably after a year (Binswanger, 1980). As the ECHP requests month by month recall over a period longer

than a year (as surveys go into the field between March and September in the survey year for each country), the inconsistency in the ECHP data is not surprising.

To deal with this problem, we started with the information available on the starting date of the current job, duration of unemployment before the job, and the date of termination of the most recent job, if any, which was recorded in the interview closest to the event. Where the information available is incomplete (such as only the year but not the month of the event is specified), we constructed the possible *interval* (as distinct from a single point in time) during which the event must have occurred. We also sought to determine if reported events (such as a job or education course ending) refer to the *same* event in different waves, or to *different* events. We then applied further logical checks of given dates against each other and against the interview date.[6] As a last resort, we used the month by month activity calendar to resolve remaining inconsistencies.

1.3 Weighting

In the computation of measures such as the activity rate and the longitudinal employment measure, we modified the individual 'base weights' provided in the ECHP User's Database in proportion to the *time spent in working-ages* (taken here as 16-64) during the interval of interest; hence older individuals and time spent outside this age-range by individuals who entered or exited working age during the reference interval are excluded. In the computation of unemployment measures, individuals are weighted in proportion to their *economically active time* (spent working or in unemployment during the working-ages); hence months of economic inactivity are excluded. All measures are defined in terms of the time spent in the relevant state, rather than simply in terms of counts of persons. In pooling the results over countries, the samples are weighted in proportion to the size of the national population aged 16 and over.

[6] Data from Germany is an exception. The German government places restrictions on the release of social science data collected in that country, which includes not releasing the month and year of interview. Therefore, we had to estimate the month and year of the German interviews.

1.4 Grouping Countries For Analysis

Comparative research into the labour market should take account of the evidence that demographic and economic conditions at the country level and also the cross-national institutional differences reflected in labour market policies and social security designs of countries influence fluctuations in employment status. Nevertheless, as we have already noted, relatively small proportions of the population in each country experienced economic activity status transitions. Further, the populations and corresponding ECHP sample sizes in Belgium, Greece, Ireland, Luxembourg, and The Netherlands are comparatively small, hence the number of transitions in the ECHP over three years was too small to permit the scope of analysis we would have wished to undertake. To facilitate theoretically underpinned assessment of those transitions which we did identify, we grouped the countries by their social welfare regime.

Though each EU country maintains many unique elements in its labour market policies, the general welfare regimes of these countries cluster into four sets of regimes. Three of these regimes, the liberal regimes (Ireland[7] and the UK), the social democratic regimes (Denmark, Finland and The Netherlands), and the corporatist regimes (Austria, Belgium, France, Germany, and Luxembourg), represent different 'worlds of welfare capitalism' identified by Esping-Andersen (1990), and each regime is differentiated from the others (Goodin et. al. 1999).[8] The fourth, the Southern regime (Greece, Italy, Portugal and Spain), is marked by its reliance on family structures and its selective social security system which offers minimal provision of income support and makes no minimum benefit level guarantees (Arts and

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[7] Esping-Andersen classifies both Ireland and the UK as ideal-type cases of liberal welfare states (1990, 1999). Ireland, however, does not neatly fit into Esping-Anderson's category, as this country only shares certain features with the UK, notably a low level of unemployment-related protection. Ireland has a "bread-winner" culture and low female employment rate, as can be observed in the corporatist states. In common with the Southern welfare regimes, families in Ireland play a prominent role in supporting non-working members. Ireland, therefore, is more properly considered a *hybrid* state which does not fit neatly into a welfare regime category. In order to avoid analysing the UK and Ireland as separate countries (which raises problems both as the other countries are grouped and as we have too few transitions for analysis at the individual country level), we retained Esping-Andersen's grouping of these two countries when examining the first three waves of the ECHP.

[8] We will not elaborate on this issue too much here since the data limitations confine us in the level of detail we can adopt in our analysis.

Gelissen 1999; Goodwin et. al. 1999). Moreover, the Southern labour markets differ from the rest of Europe in many respects, including levels of unemployment, share of flexible labour, and share of the informal economy.

2 ECONOMIC ACTIVITY EXPERIENCES OF INDIVIDUALS

Assessing the proportion of months people spend in employment or unemployment provides a picture of individuals' attachment to the labour market (see Table 3). We compare two ways to make this assessment. One approach, the *actual employment definition*, classifies those people who are working during all months of the reference period as in secure employment. Those spending less than 100% but more than 49% of their time in employment are considered as insecure. People can be considered partially or fully excluded from the labour market when their proportion of time in employment is less than 50% but greater than 0% and 0% respectively. According to this *actual employment definition*, people not working are considered unemployed whether or not they are seeking work. Alternatively, one can adopt a longitudinal *official unemployment definition* which relates the number of months spent in unemployment to the number of months spent in economic activity (time working or seeking work). This *official unemployment definition* differs from the previous definition because the months of inactivity are not considered.

Table 3. Longitudinal Definitions Of Employment And Unemployment

Time spent in the state	Actual employment definition - time in employment	Official unemployment definition - economically active time in unemployment
0%	Fully Excluded	Secure
1-49%	Partially Excluded	Insecure
50-99%	Insecure	Partially Excluded
100%	Secure	Fully Excluded

2.1 The Value Of Examining Actual Employment

Table 4 displays the longitudinal employment profiles using *the official unemployment definition*, whereas Table 5 uses the *actual employment definition*. The numbers in secure employment differ across both definitions because a person having spent zero months in official unemployment has not necessarily worked for the full 36 months. The ratio is defined as the number of months worked divided by the number of months not working. Those who

have worked for 17 months but neither worked nor sought work for 19 months, for example, are considered to be in 100% secure employment according to the official unemployment definition. The actual employment definition, which only looks at the number of months actually worked, defines these same people as partially excluded (worked less than 50% of the total time). The numbers of insecure and partially excluded people are therefore much higher when the *actual employment* figures are used.

Using the official unemployment definition, about 77% of working-age people are in secure employment (Table 4), but only 44% of the working age population is securely employed according to the actual employment definition (Table 5). Correspondingly, according to the official unemployment definition, only 18% of the working age population is insecure or excluded; while 26% of the population falls into one of these two classifications according to the actual employment definition. About 4% of the working age population is fully excluded according to the official unemployment definition (sought work but found none for 36 months). A little less than a third of the working age population is found to be fully excluded according to the actual employment definition, though this percentage also includes the inactive (25% of the working age population is not in the labour force).

Table 4. Distribution Of Employment Profiles By Country, According To The Official Unemployment Definition, 1993-1995 (in %)

Official unemployment definition	Secure	Insecure	Partially Excluded	Fully Excluded	Total
Liberal (IR, UK)	80.1	12.5	4.0	3.3	100
Social-Democratic (DK, FI, NL)	79.2	12.3	5.5	3.0	100
Corporatist (AU, BE, D, FR, LU)	80.7	11.1	5.1	3.1	100
Southern (GR, IT, PR, SP)	70.5	12.6	9.6	7.3	100
Total	77.5	11.9	6.2	4.4	100

Source: Eurostat (2000), The European Community Household Panel, Waves 1-3, 1994-1996

Table 5. Distribution Of Employment Profiles By Country, According To The Actual Employment Definition, 1993-1995 (in %)

Actual employment definition	Secure	Insecure	Partially Excluded	Fully Excluded	Total

Liberal (IR, UK)	47.1	17.5	11.8	23.6	100
Social-Democratic (DK, FI, NL)	47.7	16.8	12.9	22.6	100
Corporatist (AU, BE, D, FR, LU)	48.7	14.6	10.4	26.3	100
Southern (GR, IT, PR, SP)	35.9	11.4	12.1	40.6	100
Total	44.2	14.2	11.4	30.2	100

Source: Eurostat (2000), The European Community Household Panel, Waves 1-3, 1994-1996

We might expect the longitudinal attachment to the labour market to be weaker in the Southern countries as these countries have high levels of unemployment compared to the rest of Europe. The ECHP confirm this expectation: the numbers of people unemployed for a consecutive period of 36 months is much higher (7.3%) in the Southern region against around 3% elsewhere in Europe. According to the actual employment definition, the differences are also large, 36% in secure employment in the South in contrast to 47% to 49% in the rest of the EU; though, nevertheless, larger proportions of people in liberal and social democratic countries are found in insecure employment than in the Southern countries. On the other hand, we find (1) that full employment over time is *more stable* in the North than in the South, and, (2) that full exclusion from the labour market, due to lack of employment, is *more prevalent* in Southern countries.

That the number of people with a weak attachment to the labour market (insecure employment according to the actual employment definition) is even lower in the Southern countries does not mean that the labour market performs better there. People do not necessarily stay unemployed for shorter periods in these regimes, nor do they have more chances to escape from marginal employment. Due to the lower economic and employment growth in the South, the opportunities to move up the job ladder into permanent employment is probably worse than in the rest of the ECHP participating countries.

2.2 Upward And Downward Mobility[9]

[9] For the remainder of this section and Section Three, we define longitudinal employment status in terms of the actual employment definition.

The distribution of longitudinal employment statuses across countries only tells us the story about how insecure and unstable employment is. It does not tell us to what extent the *employment regime* is capable of guaranteeing that people might escape from instances of insecure and marginal employment and move to secure employment. In Table 6, we examine the transition rates from one labour market state in t (1993) into another in t+2 (1995).

Most of the people in secure employment stayed in secure employment (86.8% - see Table 6) between 1993 and 1995. This is important evidence for policymakers because when regimes get people from insecure jobs into secure jobs, the likelihood that the intervention will remain successful in the long run is quite high. Nevertheless, secure people have chances to become insecure or excluded (with chances of moving to insecurity highest in the liberal and social-democratic states and lowest in the South – as Table 7 shows). Even so, the chance of moving from secure employment to total exclusion is highest in the Southern countries.

Table 6. Transitions Between Employment Statuses From 1993 To 1995 (%)

Employment Status	Secure	Insecure	Partially Excluded	Fully Excluded	Total
Secure	86.8	4.3	1.7	7.2	100
Insecure	50.4	14.8	6.3	28.5	100
Partially Excluded	41.3	14.6	11.8	32.3	100
Fully Excluded	10.5	3.7	4.8	81.1	100

Source: Eurostat (2000), The European Community Household Panel, Waves 1-3, 1994-1996

On the other hand, the fully excluded enjoy the best prospects for finding secure employment in the liberal states. Overall, we might conclude that there is a large proportion of the labour market for which employment opportunities are rather good, even when people have a an inconsistent working history; though a small segment of people face steadily worsening conditions. There is a good deal of mobility from unstable jobs into stable jobs. This conclusion is important also from a policy perspective, as it challenges the perception that the labour market is segregated between tracks of stable, secure employment and tracks of unstable, insecure employment. Table 7 details the extent to which upward and downward mobility differ across the four welfare regimes.

Table 7. Transitions Between Employment Statuses Between 1993 And 1995 By (%)

Regime/Status	Secure	Insecure	Partially Excluded	Fully Excluded
Liberal				
Secure	86.6	5.4	1.8	6.2

Insecure	58.9	9.9	3.8	27.4
Partially Excluded	46.5	16.3	7.9	29.4
Fully Excluded	13.2	5.5	6.1	75.2
Total	47.1	17.5	11.8	23.6
Social-Democratic				
Secure	87.6	5.1	2.2	5.1
Insecure	45.7	24.9	8.7	20.7
Partially Excluded	40.5	17.5	13.6	28.4
Fully Excluded	12.1	6.2	7.2	74.5
Total	47.7	16.8	12.9	22.6
Corporatist				
Secure	87.9	4.0	1.6	6.5
Insecure	52.1	14.4	6.1	27.5
Partially Excluded	47.8	14.4	7.9	30.0
Fully Excluded	12.0	4.0	5.0	79.1
Total	48.7	14.6	10.4	26.3
Southern				
Secure	85.0	3.7	1.7	9.6
Insecure	41.6	16.6	8.1	33.6
Partially Excluded	28.4	13.0	19.6	39.0
Fully Excluded	8.0	2.5	3.8	85.7
Total	35.9	11.4	12.1	40.6

Source: Eurostat (2000), The European Community Household Panel, Waves 1-3, 1994-1996

2.3 Effects Of Labour Market Transitions On Income

In Table 8, we compare respondent's personal incomes with the median incomes of the continuously employed. Insecure workers have personal incomes more than 30% below the median income of secure people. These results indicate that if we compare the personal incomes at the end of the three-year period, the people excluded from the labour market over this 36 months have incomes below 60% of the incomes of the continuously employed.

Table 8. Mean Personal Income In 1995 For Various Longitudinal Employment Statuses By Welfare Regime In % Of Mean Income Of Those in Secure Employment From 1993-1995

Regime Type	Secure	Insecure	Partially Excluded	Fully Excluded
Liberal	100	69	39	34
Social-Democratic	100	66	42	32
Corporatist	100	66	41	30
Southern	100	59	32	17

Source: Eurostat (2000), The European Community Household Panel, Waves 1-3, 1994-1996

The marginally employed might have lower incomes because they don't get job offers which allow them to raise their personal income, or because they choose to have a lower income in exchange for more time for leisure or the ability to deal with unpaid responsibilities. Hence, these figures do not reveal whether it is lack of employment opportunities, a lack of opportunities to meet household needs (such a care of the disabled or children) while working, or a free choice for leisure that underlies this finding. Whatever the reasons, there are still strong financial "incentives-to-work" from a longitudinal perspective. The incentives appear stronger than cross-sectional figures normally suggest, maybe because during the time of an unemployment or "out-of-the labour force" spell (e.g. disability), benefits tend to fall as entitlement conditions change when people move from short-term into long-term benefits. Cross-sectional figures cannot account for this duration effect.

The results across countries show that labour income follows the same pattern across longitudinal employment statuses in all four welfare regimes, though, on average, the mean incomes in the South are lowest in all statuses. The highest incomes by longitudinal employment status are found in the North, except for the fully excluded. The fully excluded in the South have labour incomes which, at the end of the three-year period, are 17% of the mean income of the continuously employed, compared to 34% in the liberal welfare regimes. The incentives-to-work are therefore rather strong. It is plausible that the worse labour market situation in Southern countries may be attributed to a lower economic growth rate and therewith a lower employment rate on the one hand, and a more regulated labour market on the other.

The longitudinal analyses as presented here can provide better insight into the real incentive effects of a social protection system. If the incentives are as strong as they appear to be, one might conclude that other factors account for long-term under-employment. As these analyses are preliminary, more detailed assessment of replacement rates for non-working people in various types of situations and receiving various packages of benefits will be needed to fully resolve this question..

Table 9. Transitions Between Longitudinal Employment Statuses Between 1993 And 1995 And Their Effect On Equivalent Personal Income (% Change)

Regime Type	S->FE	FE->S	FE->I	PE->S	PE->I	I->S	I->FE
Liberal	-46	117	72	80	67	7	-37

Social-Democratic	-32	128	65	50	26	17	-20
Corporatist	-28	138	122	93	32	14	-29
Southern	-43	306	291	139	74	19	-40

S = secure employment; I = insecure employment; PE = partially excluded; FE = full exclusion

Source: Eurostat (2000), The European Community Household Panel, Waves 1-3, 1994-1996

The results so far suggest that there is considerable mobility in the labour market in terms of movement from one status into the other. These transitions also bring about changes in personal income. What really matters for people when they change jobs and employment statuses is the extent to which these transitions change their personal and household income situation. The "incentives-to-work" issue is therefore narrowly related to the income mobility patterns arising out of these changes in longitudinal employment patterns, and the importance of "incentives-to-work" for employment policy may need rethinking.

In Table 9, we examine the changes in personal income if people move from one longitudinal employment status into the other. The results again show that across the range of welfare regimes, the incentives to move to secure jobs are quite strong. When people move from full exclusion into secure employment, their equivalent income rises of over 100% on average, with the effect three times as strong in the Southern countries as elsewhere. On the other hand, it appears that a move from secure employment into full exclusion leads to a fall in equivalent income of 35%. Households seem capable of helping individuals to compensate for the fall in earnings by raising earnings from other sources, either through working in small jobs (<15 hours per week), through working in the informal economy, or through intra-household transfers. In either case, the role of the service economy can not be neglected. Across the regimes, we find no clear pattern, although the drops in earnings are stronger in Liberal and Southern countries.

Previous work and unemployment history affects the likelihood of membership of the flexible workforce. The people in the 36 months prior to the interview in 1996 having an unstable work history are more likely to belong to the flexible workforce in 1996 than people with a stable work history. This situation is not the result of a random walk but is clearly affected by what happened before the observation date. We therefore assume that there is a *selection effect* for which we need some correction procedure. In Table 10, we include the variables that might explain the different positions as of 1996. We also included a life satisfaction score, since we assume that general contentment is partly the result of the current living situation and partly the result of what happened in the past. The variable is meant to

capture part of the selection effect, though we could assume that the satisfaction score is a personal trait, and that holding a more positive attitude towards life provides better chances in the labour market. The inclusion of age and age squared should measure the labour market opportunities by age as well as the declining labour force participation at higher ages. The human capital variables also take account of the differences in labour market opportunities by education level. The dummy variables for having capital or social transfer income are incorporated in the model to capture the "incentives-to-work" effect. We include region variables to account for the effect of differences in employment policies or welfare regimes.

People with higher levels of education and who are married have better chances of moving from partial exclusion to secure employment. The odds of such a transition decrease as a person has more children or if they live in a country with a social democratic or Southern welfare regime. Living in the South and having more children also impairs movement from partial exclusion to insecurity. Women face a greater risk of dropping from partial to full exclusion, while older workers and people living in countries with a social democratic welfare regime are less likely to make this transition. Better life satisfaction favours transitions towards secure employment. The effect of having social security income is ambiguous, since it significantly reduces the probability of finding secure employment (disincentive effect), but it also decreases the probability of sliding down towards full exclusion (incentive to maintain some degree of employment).

Table 10. Multinomial Model For Transitions Out Of Marginal Employment Between Wave 1 And Wave 3 (Reference Group: Stayers PE→PE)

	PE→S	PE→I	PE→FE
Male	Reference	Reference	Reference
Female	0.032	0.204	0.553**
Age	0.018	-0.013	-0.241**
Age squared	-0.001	0.000	0.004**
Low education level	-0.036	0.012	-0.170
Average education	Reference	Reference	Reference
High education level	0.649**	0.409*	-0.241
Number of children	-0.248**	-0.208*	-0.046
Household size	-0.104	-0.041	0.041
Single	Reference	Reference	Reference
Couple no child	0.263	0.657	0.148
Couple with child(ren)	-0.035	0.237	0.116
Lone parent	-0.008	0.873	0.913*
Other	0.382	0.744*	-0.540
Never married	Reference	Reference	Reference
Married	0.801**	0.502*	0.112
Separated	0.596	0.114	0.203
Widow(er)	2.773	1.079**	1.135
Life satisfaction	0.052**	-0.006	-0.007
No capital income	Reference	Reference	Reference
Capital income	-0.152	-0.080	0.014
No social transfer inc	Reference	Reference	Reference
Social transfer income	-0.693**	-0.302*	-0.306*
Liberal	Reference	Reference	Reference
Social democratic	-0.852**	-0.458	-0.641**
Corporatist	-0.104	-0.212	-0.068
Southern	-1.520**	-1.236**	-0.405*
Changes Wave 1 to 2			
No change	Reference	Reference	Reference
Married	0.680**	0.121	0.342
Separated	0.001	0.846	1.165**
More children	-0.208	-0.114	0.125
Less children	-0.475	-0.721*	-0.636*
More adults	0.580*	0.811**	0.302
Less adults	-0.121	-0.090	-0.203
Constant	1.613*	0.825	4.712**
R^2	0.112		N 2928

S = secure employment; I = insecure employment; PE = partial exclusion; FE = full exclusion
* significant at the 10% level; ** significant at the 5% level
Source: Eurostat (2000), The European Community Household Panel, Waves 1-3, 1994-96.

3. LABOUR MARKET EXPERIENCES OF HOUSEHOLDS

In the previous sections, we paid no attention to the interactions between the working status of whole households and the longitudinal activity statuses of individuals. To complement the previous analyses, we now look at marginal employment in terms of the *work potential* of the household – that is, the number of months in which working age adult members could have worked during which these members did work.

3.1 The Use Of Work Potential By The Household

The households are classified according to the degree of utilisation of their work potential. This measure ranges between zero, where no member of working age holds a job, and 100%, when the household members work as much as they can and utilise their full work potential. Table 11 shows the four categories of household work potential employed in later analysis. Given that the time available for work at the household level will change over time due to changes in household composition in the last wave, but considering the (potential) number of months worked by the adults over the past 36 months. As household size is likely to affect the use of work potential directly,[10] the results presented in this section make a distinction between households according to the number of adult members.

Table 11. Definition Of The Degree Of Utilisation Of Household Work Potential

Proportion of time spent in employment	Employment profile of the household
0% (no working age person working)	Work-less household [WL]
Between 1% and 49%	Work-poor household [WP]
Between 50% and 99%	Working household [W]
100% (all members always working)	Work-rich household [WR]

As Table 12 shows, no adult member works at all over the 36 months in about 11% of all households in the 14 European countries, while all working age adults worked for the full 36 months in nearly double that percent (21%) of households. Southern countries have only half the percentage of work rich households (12%) as countries in the other three welfare

[10] It is less likely that all household members are found to be working in larger households than in smaller households, and therefore the proportion of work-rich households is expected to be lower among larger households than among smaller households.

regimes (around 26%). This difference is large, but, remarkably, the differences between the regime groups disappear when one looks at the percentage of work-less households.

Table 12. Household Employment Profiles 1993 to 1995 By Number Of Adults In The Household (Household In 1996) In % By Welfare Regime Type

	Work-less	Work-poor	Working	Work-rich	Total
All Countries					
1 Adult	39.8	14.3	11.3	34.6	100
2 Adults	29.3	48.9	12.2	9.7	100
3+ Adults	3.4	49.3	43.7	3.6	100
Total	21.1	44.2	23.7	10.9	100
Liberal					
1 Adult	30.5	15.0	13.4	41.2	100
2 Adults	32.8	48.2	11.3	7.8	100
3+ Adults	8.1	62.7	25.6	3.6	100
Total	25.7	46.7	15.5	12.1	100
Social Dem					
1 Adult	36.8	17.4	16.6	29.3	100
2 Adults	31.6	50.2	10.7	7.6	100
3+ Adults	2.9	61.1	33.8	2.3	100
Total	26.0	46.3	17.1	10.6	100
Corporatist					
1 Adult	45.0	15.0	10.5	29.5	100
2 Adults	31.3	47.8	10.8	10.1	100
3+ Adults	4.1	61.2	33.0	1.8	100
Total	25.7	46.0	17.2	11.1	100
Southern					
1 Adult	35.7	9.9	8.7	45.7	100
2 Adults	22.0	51.1	16.1	10.9	100
3+ Adults	1.7	36.7	56.6	5.0	100
Total	11.8	40.1	38.0	10.2	100

Source: Eurostat (2000), The European Community Household Panel, Waves 1-3, 1994-1996

Differences again occur among the intermediate categories. More households in the South have a weak attachment to the labour market than in the other regime types (nearly 80% against 65%), though this difference only emerges among larger households. On the contrary, few single adult households experience marginal employment (working or work poor), but

more of these households are fully excluded from the labour market in the South. Generally, it appears that Southern households use less of their work potential than households in other regime types. This finding may reflect the higher reliance in the South on single household breadwinners and on the large numbers of people in this region who experience temporary or long term breaks from work.

3.2 Use Of Work Potential And Poverty

The previous sections give some indication of how the four employment regimes influence labour market outcomes. Employment protection is a significant indicator of the poverty relief provided by welfare states. There is ample evidence that exclusion from the labour market increases the likelihood of entering poverty (Goodwin et. al. 1999).The longer people have no job, the more likely they are to stay in poverty and the less likely they are to escape poverty (Goodwin et. al. 1999). Keeping people in work, therefore, is an efficient way to avert some entries into poverty. This section examines the association between poverty and the longitudinal household employment profiles. The poverty line used here is the half median equivalent net household income threshold that has been used in much research commissioned by the European Commission in the framework of their anti-policy programmes.[11] The association of the incidence of poverty with the distinct longitudinal employment profiles appears rather strong, as shown in Table 13.

Approximately one in five households across the EU where no adult member worked during the three-year period lived in relative poverty irrespective of whether they lived in smaller or larger households, as Table 13 shows. Work-less households fare poorly in corporatist regimes across the household sizes. One and two adult work-less households also experienced high levels of poverty in the liberal regimes; however three or more adult work-less households fared best under the liberal regimes. At the other end of the scale, work-rich households fared best in the liberal countries, and smaller work-richer households also faced minimal poverty risks in the social-democratic countries. Work-rich households in corporatist regimes, and work-rich households with three or more adults in the social-democratic countries experienced relatively high poverty risks.

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[11] The modified OECD equivalence scale, which accounts for differences in household size and composition, has been used to standardise household incomes.

Table 13. Percentage Of Poor Adults In 1995 By The Longitudinal Employment Profile Of The Household By The Number Of Adults In The Household

	Work-less	Work-poor	Working	Work-rich	Total
1 Adults Households					
EU 14	4.6	17.1	35.6	24.7	16.8
Liberal	2.6	19.7	33.7	30.6	20.8
Social-Dem	4.1	18.2	40.8	18.4	16.7
Corporatist	5.4	16.3	37.5	26.3	16.4
Southern	3.9	15.9	26.6	17.0	13.0
2 Adults Households					
EU 14	2.7	6.0	21.4	16.8	7.9
Liberal	1.4	4.1	24.2	24.7	7.0
Social-Dem	0.8	3.3	11.6	10.7	4.0
Corporatist	3.7	6.2	18.6	14.5	7.6
Southern	2.5	8.0	25.4	17.7	10.6
3 Adults Households					
EU 14	5.7	4.8	15.2	32.7	10.3
Liberal	2.5	1.8	11.1	29.4	5.2
Social-Dem	9.0	2.0	9.7	39.5	5.6
Corporatist	3.5	4.7	13.8	34.8	8.2
Southern	12.6	6.6	16.5	32.5	13.6

Source: Eurostat (2000), The European Community Household Panel, Waves 1-3, 1994-1996

The stronger the longitudinal attachment to the labour market, the lower the likelihood of household poverty. Households experienced the greatest risks in the Southern countries, and fared only slightly better in the corporatist countries. Households in the social-democratic countries fared best, while those in the liberal regimes fell between the other regimes in terms of relative risk of poverty.

These remarkable differences across countries and welfare regimes might be explained by the tighter means testing and lower levels of family support in the liberal and social democratic countries, as well as by the common need to supplement low incomes with additional sources of earnings, through flexible jobs throughout most of Europe, and through the informal economy in the Southern European countries. Indeed, in the absence of a guaranteed minimum benefit in Greece, Italy and Portugal (in the period from 1994 to 1996), the need to earn supplementary income was particularly acute. Again, these findings support the view that the Southern welfare regimes constitute a distinct system type from those identified by Esping-Andersen.

4. SHARING AND CONCENTRATION OF UNEMPLOYMENT IN COUNTRIES

Once again we will return to the concept of the official unemployment definition to address an issue of concern to national governments – economic activity at the national level. Cumulating the distribution of the degree of attachment to the labour market (number of months spent in employment out of the total months in the prime working age range over a set period) and dividing by the prevailing unemployment rate (proportion of economically active time spent in unemployment), gives indices of how the given quantum of unemployment is shared or concentrated in the population. Thus the *index of sharing* of unemployment is the ratio of the proportion of the population experiencing any unemployment during a reference period, to the unemployment rate. This index is in the range 1 (when the experience of unemployment is entirely concentrated, i.e. the same set of persons is unemployed for all their economically active time throughout the reference period, and no other persons experience any unemployment), to 1/U (corresponding to the experience of unemployment being fully shared, that is each person being unemployed for exactly the same proportion U of the economically active time, where U is the unemployment rate). Similarly, the index of full unemployment is the proportion unemployed throughout the reference period to the unemployment rate.

To summarise this distribution, we propose an *index of concentration* – which is the centre of gravity of the distribution of the time spent in unemployment against the degree of unemployment, normalised to equal 0 when the unemployment is fully shared (index of sharing =1/U), and to equal 1.0 when the unemployment is fully concentrated (index of sharing =1). It may be noted that the value 0.67 for this index corresponds to a uniform distribution of observed unemployment durations (censored within the observation period), and 0.75 to a linear distribution starting from zero.

The quantum and distribution of the unemployment experience, observed during a certain reference period for a population group, is thus described in terms of three indicators, measured in terms of the time spent as defined above: (i) the unemployment rate, (ii) the index of sharing, and (iii) the index of concentration. Individual level experience is described by the degree of unemployment and some suitable classification based on it.

Table 14. Distribution By Intensity Of Unemployment By Sex, Age Group And Country Across the First Two Waves Of The ECHP (1994-1995)

Sex, Age, Country	Activity Rate	Unemployment Rate	Experienced Some Unemp	Sharing Index	Concentration Index
Men					
20-24	62.7	23.2	40.4	1.74	0.71
25-39	92.8	9.5	19.2	2.03	0.68
40-54	93.5	6.3	11.5	1.83	0.76
55-64	57.8	10.8	16.8	1.56	0.79
Women					
20-24	54.5	26.4	42.4	1.60	0.74
25-39	67.0	12.3	21.4	1.74	0.74
40-54	61.7	8.3	13.7	1.66	0.78
55-64	27.7	10.7	14.2	1.33	0.86
Liberal Welfare Regimes					
Ireland	65.3	15.2	23.1	1.52	0.82
UK	73.4	7.5	15.5	2.06	0.74
Social-Democratic Welfare Regime					
Denmark	84.6	12.6	25.3	2.01	0.67
Corporatist Welfare Regimes					
Belgium	69.6	12.2	18.2	1.48	0.85
Germany	72.0	7.7	14.8	1.92	0.73
France	72.7	9.9	17.9	1.82	0.71
Luxembourg	63.5	2.1	5.5	2.67	0.61
Southern Welfare Regimes					
Greece	64.3	9.3	18.4	1.99	0.65
Italy	63.6	12.5	18.5	1.48	0.81
Portugal	74.4	7.9	14.6	1.83	0.72
Spain	63.1	21.4	35.3	1.65	0.72
Total	69.7	10.6	18.6	1.76	0.75

Source: Eurostat (2000), The European Community Household Panel, Waves 1-2, 1994-1995

Among different demographic and socio-economic groups, there is clearly a negative correlation between the unemployment and participation rates: persons with higher educational, occupational or job status, for instance, have lower unemployment rates and higher participation rates than those with lower status. The same applies to those in the middle ages (25-54) compared to the young and the old, and to a lesser extent, to men compared with women. The rate of unemployment also relates negatively to the extent to which the given quantum of unemployment is shared. These associations compound the negative effect of high unemployment: among groups suffering from higher unemployment, it also tends to be more

concentrated in the form of long-term unemployment, and furthermore, higher proportions tend to be economically inactive.

The pattern across countries and the welfare regimes is less uniform. An association of the above type does exist, as for example in Ireland with relatively high rate of unemployment, low index of sharing and high index of concentration, and Luxembourg with the opposite pattern. However, there are some significant departures. Denmark, and, to a lesser extent, Spain, have a high degree of (egalitarian) sharing despite high rates of unemployment; Belgium has a high degree of concentration (prevalence of long-term unemployment) for its unemployment rate; and in the UK, by exception, the picture seems to be rather polarised, with low rate of unemployment and high index of sharing on the one hand, but also with an above-average degree of concentration on the other. A most interesting observation is that for diverse population groups and across countries, the proportion experiencing 'prolonged unemployment' i.e. for 50% or more of the time almost exactly equals the prevailing unemployment rate: the ratio of these measures is mostly in the range 0.95-1.05. This mixed picture suggests that the welfare regime, while clearly a valuable explanatory variable for examining individual and household level activity status transitions, does not neatly account for experiences of unemployment at the national level.

5 CONCLUDING REMARKS

Our experience using the first three waves of the ECHP Users Database to examine labour market transitions in Europe points toward a number of conclusions. First, the construction of month by month calendars to track changes in economic activity status reveals a great complexity of transitions which are not collected by standard cross-sectional surveys. The missing complexity is particularly acute for older and younger workers. Nevertheless, the accuracy of information included in these calendars is enhanced by collecting the information as close to the event as possible and in the sequence of events which happened to respondents over the year between surveys, rather than by asking respondents to reflect back on what they had been doing during the previous complete calendar year.

We have found quite large movements between secure, insecure, partially excluded, and fully excluded employment experiences, at least taking into account that our observation period was only 36 months. There is little reason to assume that the labour market is like a *layer cake* where the working people stay working all the time, the fully excluded people stay

forever excluded and the insecure or marginally employed stay marginally attached to the labour market. Although there is much more stability at both ends of the distribution than in the middle of the scale, there are rather large movements from insecure employment or exclusion into secure employment, from unstable into stable jobs, from work-poor households into work-rich households etc. Our tests confirm the simultaneous occurrence of stability and considerable change in the labour markets of a number of European countries. A less clear picture emerges when one compares the degree to which non-employment is shared at a national level. Across Europe, individuals and households have strong financial incentives to seek out secure employment. These incentives are more of a carrot than a stick, as an improvement in security produces larger changes in income (for the better) than a corresponding fall in status. Increased use of work potential at the household level turns out to be a good way to prevent poverty.

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