# PART-TIME WORK IN EU COUNTRIES

# LABOUR MARKET MOBILITY, ENTRY AND EXIT

by Hielke Buddelmeyer,
Gilles Mourre
and Melanie Ward-Warmedinger

# PART-TIME WORK IN EU COUNTRIES

# LABOUR MARKET MOBILITY, ENTRY AND EXIT [1]

by Hielke Buddelmeyer [2],
Gilles Mourre [3]
and Melanie Ward-Warmedinger [4]

# CONTENTS

**Abstract**

This paper looks at the role of part-time work in labour mobility for 11 European countries. We find some evidence of part-time work being used as a stepping stone into full-time employment, but for a small proportion of individuals (less than 5%). Part-time jobs are also found to be more frequently taken up as a means to enter the labour market than to leave it. Multinomial logit regression of the determinants of part-time work reveals household composition, past labour market history and country of residence as very important for both men and women in their decision to work part time. Random effects regression controlling for individual heterogeneity, and the comparison of results for Europe and the US, reveals that a significantly higher proportion of female workers in Europe prefer inactivity and a significantly lower percentage prefer full-time, over part-time employment, than in the US, with considerable variation across EU countries.

**Non-technical summary**

This paper analyses the characteristics of part-time employment in 11 European countries. We are interested in finding out more about individual's experiences of part-time work over the six year period between 1994 and 1999. Specifically we consider to what extent part-time jobs were taken up by men and women in these countries as an alternative to remaining out of the labour market, being registered as unemployed or working full time. Furthermore we consider to what extent individuals have used part time jobs as a means to both enter and leave the labour market, or to transition to another labour market state such as unemployment. Such analysis helps us to say more about how part-time work facilitates labour market flexibility in Europe and to what extent part-time work offers the opportunity for career progression as opposed to the risk of career stagnation.

The paper starts by presenting the broad stylised facts in the development of part-time employment over the 1983-2001 period by age group, gender, occupation and sector. Part-time workers are more likely to be women, with the female part-time employment rate at 34% and the male rate at 6.2% in 2001 in the EU. This pattern of a significantly higher rate of female part-time employment holds across time and for all EU-15 countries. Since the early 1990s, growth in part-time work has also generally been strongest amongst female workers. The opportunity to work part-time may therefore be particularly important for the supply of female labour and this motivates our separate consideration of men and women in our later analysis. The part-time employment share is also generally highest for young workers and within the service sector.

We turn to consideration of microeconomic data for the remainder of the paper. Our analysis of the flow of individuals confirms that overall, mobility between different labour market states within any two-year period was limited in Europe between 1994 and 1999. Around 85% of individuals did not move between inactivity, unemployment, part-time or full time work at all. Such state-stability is particularly high for men working full-time, and for women who are not working. This finding could therefore be interpreted as new evidence of labour immobility within European labour markets. We find that part-time work was used as a stepping stone into full-time employment for only a very small proportion of workers overall. However, this stepping stone effect, captured by the rate of transition from non-employment into part-time and then into full-time work, varied considerably by country, and was higher for women than men. Part-time work was also found to be more frequently undertaken in the transition from inactivity or unemployment into work, than the reverse. Comparison of our results with those from Blank (1998) reveals that both men and women stayed longer in a part-time positions in Europe than in the US and were significantly less likely to move to full-time work from a part-time job. Individual preferences for shorter hours, a lack of career development opportunities of part-time jobs or various incentives created by national policy work may offer possible explanations for this finding. Nevertheless, the fact that workers remained within part-time jobs and therefore maintained labour market attachment, and that part-time jobs were more likely to promote labour market entry rather than facilitate labour market exit, supports the idea that these forms of working contract help individuals who wish to work shorter hours into the labour market.

Regression analysis allows us to take a more in depth look at the determinants of an individual's decision to work part time, relative to other options. Here we consider the impact of previous work experience, family composition, country of residence, along with other factors such as determinants of an individual's eventual labour market state. We apply a similar methodology to the work of Blank (1998) in order to facilitate the comparison of our results with previous results from the US.

Regression analysis reveals that household composition plays an important role in the probability of working part-time, for both males and females. Female part-time workers are more likely to be married, with a higher number of children under the age of 12 and higher non-labour household income. Male part-time workers are significantly less likely to be married and more likely to have children under the age of 3, although the probability of working part-time decreases with the total number of children. These results suggest that part-time positions provide an important opportunity for parents to combine their family responsibilities with working life.

A large proportion of the probability of working part time can also be linked with the country in which an individual lives. Findings of the regression analysis for females suggest that country specific arrangements strongly influence females' decisions to work part time. Such country effects may reflect cultural factors as well as national differences in labour market institutions. This is not the case for the male results, where the determinants of part-time work are found to not vary significantly by country.

Comparison of results with the US reveals that a significantly higher proportion of females in Europe seem to hold a preference for inactivity and a significantly lower percentage a preference for full-time work than in the US. Female workers with such a "preference" for inactivity are found to be significantly more likely, relative to the European average, to be working part-time in the Netherlands and UK, and significantly less likely to be working part-time in Italy, Greece, Spain or Portugal. Individuals with a preference for full time work are significantly more likely to be working full time in Denmark and less likely to be working full-time in the Netherlands, Spain and Ireland.

Finally, the effect of past labour market history is found to be strong and significant in its impact on the current labour market state for both men and women. Previous labour market experience of up to three years for men and five years for women has a significant impact on current labour supply, although the strength of past experience continues to decrease in its impact with each year gone by.

## 1. Introduction

Over the last twenty years, an increasing share of employment across EU countries has been made up of part time jobs. Thus, the growth in part-time employment stands out as a prominent feature of modern labour markets. However, there are still remarkable differences in the relative sizes of the part-time employment share by country within the European Union. For example, in 2001 Greece had a part-time employment rate of only 4%, 14 percentage points behind the average for the current 15 EU countries and 38 percentage points behind the rate of part-time work in the Netherlands.

In recent years, the issue of labour market flexibility has become prominent in the debate over labour market policy in Europe. The lack of dynamism in the flexibility of labour markets within EU countries, often characterised by a high share of long-term unemployment and stringent employment protection legislation, has frequently been blamed for the poor employment performance of the 1980s and 1990s. Against this background, atypical employment such as part-time work, self-employment and temporary employment may help to utilise untapped employment potential. A number of studies have considered the labour market flexibility in the context of Monetary Union (see for example Begg 1997, Saint-Paul and Bentolila 2000, Andersen, Haldrup and Sorensen 1999). A key feature of the literature in this area has been to argue that flexibility has beneficial effects on employment, output and prices, making economies less inflation prone and improving prospects for job creation. Studies have taken varied approaches towards the measurement of flexibility (see Fabiani and Rodriguez-Palenzuela 2001 for a summary), but the use of microeconomic panels at the firm or individual level of disaggregration has held arguable advantages in terms of the precision of estimated effects. Studies in this vein include, for example: Abowd and Kramarz (1997) who measure the extent of hiring and firing costs in France; Bover, Garcia-Perea and Portugal (1995) who consider the effect of employment protection legislation, unemployment benefits and wage flexibility on employment in Spain and Portugal; and Haskel, Kersley and Martin (1997) who measure the responsiveness of employment and hours to demand shocks in the UK. However, the lack of comparable data across countries has hindered the monitoring of changes in a large set of countries simultaneously and there is little emphasis in this literature regarding potential sources of cross-country divergence in labour market flexibility.

A growing literature has analysed the effects of labour market flexibility through working time, including part-time work (Euwals 2001). Whilst an increase in the rate of part-time work has been generally perceived as a positive development, allowing employers to adjust hours worked to cyclical conditions more easily, facilitating adjustment of production and labour costs and drawing people into the labour market that were previously unwilling or unable to work, the dramatic increase in part-time work in recent years has also drawn its critics. Some studies have found that part-time workers earn less than their full time counterparts, may be less likely to receive fringe benefits and face reduced chances for promotion (Blank 1990, OECD 1999). For employers, part-time work may be connected with higher fixed costs, such as recruitment and training costs.

The aim of this paper is threefold. First, it extends previous literature on the flexibility of labour markets through a consideration of labour mobility flow for 11 EU countries, between four labour market states:

out of the labour force[2], unemployment, part-time work and full-time work. Second, the paper assesses the role of part-time work in facilitating labour market entry and exit for these 11 EU countries with a comparison to results from previous studies for the US. The purpose of this analysis is to find out to what extent part-time jobs are used as intermediate states or stepping-stones to full-time positions in Europe. Finally, the paper considers the determinants of part-time work, with special attention given to the role of past employment history in determining both current and future labour market status and in explaining cross-country variation in the rate of part-time work. We draw on work by Blank (1998), applying a similar methodology to our European data, in order to facilitate the comparison of our results with previous results from the US.

Regarding the consideration of part-time work as a transitory labour market state, Blank (1998) finds that between 1976 and 1989 around 20 percent of US females, but only 1 percent of males use part-time work as a stepping stone into full-time employment. Studies by McCall (1997) and Farber (1999) suggest that involuntary part-time positions in Canada and the US are used by both male and female job-losers in the transitional process into regular full-time employment, although to a larger extent for women. For Europe, O'Reilly and Bothfeld (2002) show that over the period 1990-95, 2.7% of German females and 4.1% of British females transitioned from non-employment, through part-time into full-time employment. On the determinants of part time work a number of single country studies find personal characteristics such as the number of children, particularly young children, and higher levels of non-labour income to increase the probability of working part-time (O'Reilly and Bothfeld 2002). Results in Blank (1998), using 14 years of the US PSID, indicate that past work experience is a very important predictor of current labour supply.

Our analysis finds that that the mobility between employment states within any two-year period is limited, with around 85% of individuals remaining in the same labour market state. The greatest state-stability for men is found to be full-time employment, and for women, inactivity. Nearly 26% of females are found to be inactive for the whole 6-year period from 1994 to 1999 representing a vast reserve of potential labour resources, currently untapped within EU labour markets. Some evidence of part-time work as a stepping stone into full-time employment is revealed, but the proportion of individuals affected is tiny, at less than 5% of individuals moving labour market state within the 6 year period considered. The rate of transitional from inactivity to full-time work exhibits considerable cross-country variation but is higher for women than men - reaching nearly 6% for Irish females. Part-time work is also found to be more frequently undertaken in the transition from inactivity or unemployment into work, than the reverse. Regarding the determinants of part-time work, multinomial logit regressions results reveal that first, household composition plays an important role in the probability of working part-time, for both males and females. Second, large marginal effects associated with the country dummy variables in the female regression results suggest that country specific arrangements may strongly influence individual decisions to work part time. Third, the effect of past labour market history is found to be strong and significant in

---

[2] Throughout the paper we sometimes refer to the state 'out of the labour force' as 'inactivity'.

its impact on the current labour market state for both men and women. Previous labour market experience of up to three years for men and five years for women has a significant impact on current labour supply, although the strength of past experience continues to decrease in its impact with each successive year gone by.

The remainder of the paper is organised as follows. The next section introduces the main stylised facts regarding part-time work in EU countries. Section 3 describes the principal characteristics of the dataset we use in this paper. Section 4 presents some simple measures of labour market flexibility and considers to what extent part-time work is used as a stepping stone to other labour market states. Section 5 describes the empirical methodology for the analysis of the determinants of part-time work and presents the main findings of this analysis. Section 6 concludes.

## 2. International trends in part-time work

The growth in part-time employment stands out as a prominent feature of the labour markets of a number of industrialised countries over the past two decades. Figure 1 shows a significant increase in the share of part-time employment in total employment in the EU, Japan and Canada during the late 1980s and 1990s, while the US experienced a slight fall in the part-time employment share. In the EU, the part-time employment rate increased from 13% in 1983 to 18% in 2001. However, there are still remarkable differences in the relative sizes of the part-time employment share by country within the European Union (see Figure 2). The Netherlands currently exhibits the highest rate of part-time work, with 42% of its workers working part-time. A second group of EU countries, i.e. Denmark, Belgium, France, Germany, Ireland, Austria, Sweden and the UK, currently have relatively high part-time employment shares of between 16 and 25%. Relatively low rates of part-time work are found in Finland, Luxembourg and Portugal at around 11%, Italy and Spain at 8%, and in particular in Greece at 4.5%. All countries have experienced an upward trend in part-time employment over the last two decades, with the exception of Denmark and Greece.

Analysis of the development of part-time employment over the 1983-2001 period by age group, gender, occupation and sector reveals the following broad stylised facts:

- Part-time workers are more likely to be women, with the female part-time employment rate at 34% and the male rate at 6.2% in 2001 in the EU. This pattern of a significantly higher rate of female part-time employment holds across time and for all EU countries. Since the early 1990s, growth in part-time work has also generally been strongest amongst female workers, although Denmark, Sweden, and more recently France, have experienced declining female part-time employment rates. The opportunity to work part-time may therefore be particularly important for the supply of female labour and motivates our separate consideration of men and women in the analysis of the determinants of part-time work in section 5.

- The part-time employment share is highest for 15-24 year olds, at nearly 23% on average within the EU in 2001, and lowest for prime age workers (i.e. those aged 25-49), at just over 16%. Older

workers have a part time employment share of 21%. This pattern of a high part-time employment rate for the young, relative to prime-age and older workers holds across countries, with the exception of Austria, Germany and Portugal which exhibit low rates of part-time work among the young relative to other age groups, and Luxembourg, where the share of part-time employment is similar across age groups. Young workers also experienced the fastest rate of growth in part-time work during the 1990s within the EU as a whole, although the growth rate has flattened out more recently. These stylised facts suggest that consideration of age in the analysis undertaken in sections 4 and 5 will also be important.

- The part-time employment share for the EU-15 is highest for elementary occupations, mainly concentrated in the service sector. The rate of part-time work for service workers and shop and sales workers stands at around 34%, and at 24.3% for clerks. Part-time employment is strongly concentrated in wholesale and retail trade, in hotels and restaurant and in non-market related services (education, health and social work, private households with employed persons). This motivates a control for concentration of employment by industry in our analysis of the determinants of part-time work in section 5.

- The part time employment rate for high-skilled occupations such as legislators, professionals and technicians and associate professionals is below the average across all occupations, whilst it is significantly higher for low-skilled service occupations (clerks, services workers and elementary occupations). Skill or educational level may well be negatively correlated with the part-time employment share.

## 3. Data

The data used in the remainder of this paper are taken from the European Community Household Panel (ECHP) which covers the period 1994 to 1999. This panel data set offers a comprehensive source of individual level information on employment, income, education, demographics and living conditions in the EU-15 and is collected using standardised methodology and procedures, yielding comparable information across countries[3]. Included in our sample are men and women between the ages of 16 and 65 in 1994. Explicitly dropped are those individuals for which we do not have full information over time. Hence we are left with a balanced panel of 50,877 observations for 11 EU countries: Belgium, Denmark, France, Germany, Greece, Ireland, Italy, Portugal, Spain, the Netherlands and the United Kingdom[4].

---

[3] In fact to our knowledge the ECHP is the only microeconomic panel dataset containing information on employment, income, education and past working experience for all EU-15 countries. The direct comparability of information across countries offers considerable advantages over the analysis of individual country datasets, where there may be considerable variation in the type, level and coding of information available. Furthermore, for some countries such as Spain, an alternative, national level, microeconomic panel dataset is not available. The ECHP is run through a series of National Data Collection Units. In the UK, the fieldwork for the survey is carried out simultaneously with the British Household Panel Survey (BHPS), for Germany it is carried out with the German Socio-Economic Panel (GSOEP) and the data is analysed using variables set by Eurostat.

[4] Finland, Sweden, Luxembourg and Austria are dropped from our sample since information is not available for all 6 years.

The ILO legal definition of part time work is "an employed person whose hours of work are less than those of comparable full-time workers". The concept of a "comparable" worker is mentioned since the number of hours worked per week for full-time employees may vary considerably by profession. For the purpose of cross-country comparison, this definition is problematic however, since the phrase "whose normal hours of work are less than those of comparable full-time workers" is interpreted differently, according to national law in each country. Furthermore, it is difficult to establish an exact distinction between part-time and full-time work due to variations in branches of industry between countries. A study by Lemaitre, Marianna and Van Bastelaer (1997) on the definition of part-time work for the purpose of international comparison suggests adopting a 30-hour threshold for defining part-time work. This is the approach followed within this paper. A part-time worker is therefore someone who reports that he or she is working less than 30 hours, but more than 5 hours per week[5] and a full-time worker is someone working 30 hours or more per week. This is combined with information on reported current activity to further categorise individuals working less than 5 hours as unemployed or out of the labour force.

## 4. Summary Statistics

### Simple measures of labour market mobility across labour market states

Information on dynamic labour market choices within EU countries is rare. This section therefore considers individuals' job to job mobility within the raw data. First, we are interested in knowing to what extent workers in European labour markets move between full-time work, part-time work, unemployment and inactivity. Second, we are interested in finding out if part-time jobs are used as intermediate states or stepping stones into more permanent positions. This analysis is particularly interesting from a policy perspective in helping to evaluate if part-time work encourages people to move from inactivity or unemployment into work, or from part-time to full-time work.

Table 1 presents the two-year transition matrix for adult men and women between our four labour market states - inactivity, unemployment, part-time employment and full-time employment for an unweighted average of our 11 EU countries. Results are generated for each of the possible 2-year transition periods between 1994 and 1999, and then the mean for this six-year period is presented[6]. Interesting results include, first, that the mobility between states within any two-year period is limited. 82% of women and 87% of men on average exhibit no state-mobility, remaining in the same labour market state, over any two-year period (the sum of the sample on the diagonal of the transition matrix). For men, the greatest

---

[5] We use exclude those working less than six hours from our sample of part-time workers for two reasons. First, because the characteristics of labour supply for workers working less than five hours per week are arguably very different to other part-time workers. Second, given that in some countries it is possible to work a few hours a week and still be registered as unemployed, we wish to ensure we are using the same definition of being unemployed across countries.

[6] Analysis of these results year by year reveals a very similar matrix for each t to t+1 transition over our 6 year period, with a slight increase in the state-stability for men and women between 1994 and 1999.

state-stability is found amongst those who are working full-time. For women, however, the greatest state-stability is found within inactivity[7].

Second, table 1 reveals that part-time work is a significantly more transitional labour market state than either full time work or inactivity for men and women, and even than unemployment for women. Whilst 86% of women (93% of men) working full-time in year t are still found to be working full-time in year t+1, only 72% of female part-timers (49% of men) in year t remain as part-timers in year t+1. 14% of female workers (34% of men) working part-time in period t move to full-time work in period t+1, 3% (6% of men) become unemployed and 11% (11% for men) leave the labour market.

Third, males are significantly more likely to work full-time than females. For our male sample, movements from full-time employment in year t are more likely to result in inactivity or unemployment in year t+1, than part-time employment.

Comparison of these results with those derived from Blank (1998) for the US[8] over the period 1976 to 1989 reveals a similar pattern of state-to-state transition, despite the older US data, with most men working full-time and women showing a greater degree of diversity in their labour supply choices than men, both at one point in time and over time. The proportion of individuals moving from full time work to part-time work, or from inactivity or unemployment into part-time work, is also about the same in our European sample in comparison with Blank's US results, for men and women.

Table 3 presents the aggregate labour supply patterns for the whole 6-year period from 1994 to 1999. First, part 1 reveals that 53% of adult women and 66% of men in the 11 EU countries did not change labour market state over the six-year period. As with the case of the two-year transitions, most of these male non-movers are full-time workers and most of the female non-movers are inactive. The high proportion of women in the sample that remain out of the labour force for this extended period therefore represents a vast reserve of potential labour resources, currently untapped within EU labour markets. Furthermore, there are remarkable differences in the extent of such a reserve by country. For example nearly 39% of females remain inactive over the six-year period in Italy, compared to 1% in the Netherlands. For men, 11.5% remained inactive between 1994 and 1999 in France[9], compared with 1.4% in the UK.

---

[7] Analysis of table 1 by age (for brevity, not presented here) reveals that state persistence increases with each successive age group for women. For men, overall state persistence is highest for the 25 to 49 age group, with 90% of men in EU countries remaining in the same labour market state over any two-year period. Among 50 to 65 year olds, however, 95% of those inactive in year t are inactive one year later. The proportion of both men and women remaining in either part-time or full-time employment is significantly lower for the young (16-24) and old (50-65) age groups in comparison with the prime age group of 25 to 49 year olds. So too are the transitions from inactivity and unemployment into part-time work and from part-time work to full time work between two consecutive years. Consideration of these percentages reveals part-time work to be a more transitional category for relatively young and old age groups of women and prime age males.

[8] Blank (1998) considers only three labour market states. Her category "Out of Labor Market" contains those we classify as "UE" or "Inactive". It is a synonym for non-employment.

[9] See Laroque and Salanié (2003) for a consideration of this group.

Second, the proportion of men and women remaining continuously attached to part-time work is very small within the EU at only 6% for women and 0.5% for men[10]. There is considerable cross-country variation in this proportion from 18% for Dutch females to close to 0% for Spanish males, consistent with the strong preference of Dutch females for part-time work and the high incidence of involuntary part-time work in Spain[11].

Part 2 of table 3 presents the proportion of the sample that has ever spent at least one year in one of the four labour market states. Well over half of EU women (and one quarter of the men) have spent at least one year out of the labour force. Some proportion of these experiences will include parental breaks or (early) retirement of older workers. This table confirms our earlier finding that the opportunity to work part-time is taken up to a far greater extent by women than men with one third of women but only just over one tenth of men working part time for at least one year. In contrast, over a half of women and nearly 88% of men have worked full-time for at least one year, revealing full-time work as a predominantly male labour market state. Considerable variation in these results across country reveals far higher proportions of men and women in the Netherlands and the UK ever having worked part-time than in other EU countries.

**Part-time work as a stepping-stone state.**

This section collects together preliminary evidence for the use of part-time work as a stepping stone to other labour market states in EU countries. Here we define a stepping stone as an opportunity for those initially inactive or unemployed to gain a full-time position following a period of part time work. We will consider two dimensions of the stepping stone effect. Firstly, we investigate leaving non-employment (i.e. inactivity or unemployment) by taking up a part-time job. Secondly, we investigate moving from part time employment to a full-time job[12]. Results in table 1 have shown that the use of part-time work as a way to get out of inactivity or unemployment and into work over any two year period is small – concerning 3% and 5% of the inactive and unemployed males and 4% and 10% of the inactive and unemployed females, respectively, which represents only 4% of the total working-age population at any one point in time in the EU. For men and women in our sample, transitions away from unemployment (and inactivity for men) in year t are more likely to result in full time-employment in t+1 than part-time work. Moreover, table 1 indicates that only 14% of part-time females move to full-time employment from one year to another, which represents only 2% of the working-age female population. Conversely, this rate is much higher for men (34%), in line with the fact that the proportion of involuntary part-time

---

[10] Splitting the sample by age group reveals that the 16 to 24 year old age group are significantly more mobile across labour market states, and the 50 to 64 age group less mobile, than the prime age group.

[11] The argument here is that those individual working part time involuntarily would, by definition, prefer to shift to another labour market state such as full-time work. They will therefore tend not to stay in part-time work continuously for long periods. Buddelmeyer, Mourre and Ward (2005) find evidence of a relatively high incidence of involuntary part time work for Spanish males.

[12] A successful stepping stone may also be characterised as entailing a low probability of labour market exit following part-time employment.

employment is relatively high for men (20%) compared with women (13%)[13], as shown by Buddelmeyer, Mourre and Ward (2005).

Comparison of results with the US from Blank (1998) highlight an interesting difference - both men and women in our European sample who work part-time in year t are more likely to stay in part time work in year t+1[14] and significantly less likely to move to full-time work than in the US[15]. One explanation for this finding may be that part-time jobs within Europe offer limited opportunity for advancement and training (OECD 1999). Alternatively, Europeans may simply hold a stronger preference for leisure[16]. Labour market institutions and policies may also provide stronger incentives to work part-time in Europe. Results also suggest, importantly, that movements from part-time work into unemployment or inactivity across any two year period are comparable across the two datasets. Hence, experience within a part-time job in the EU countries is not more likely to result in the disintegration of a labour market attachment than in the US.

Tables 2a to k present the two year transition matrix broken down by country. Important differences emerge from a comparison of these tables with those for our unweighted EU average in table 1. First, in some countries a significantly higher proportion of individuals move into part-time employment from unemployment and inactivity. This pattern is particularly striking for the UK and Ireland, but also for Dutch females and Danish, Greek and German males. Second, the transition from unemployment or inactivity into part-time work is relatively infrequent for another group of countries: Belgium, France, Italy and Portugal. There is also considerable cross-country variation in the frequency of transition out of part-time work to other labour market states. Greek, Portuguese and Spanish females, for example, are significantly less likely to remain in part-time work for more than one year and significantly more likely to move from part-time employment to either full time work or inactivity, in comparison with the EU average. The Netherlands experiences a far higher proportion of men and women that remain in part-time employment for longer than one period, relative to the EU average and transitions from part-time work to either full-time work or inactivity are less common. On the other hand, a significantly higher proportion of females in the Netherlands move from full-time work in year t to part-time employment in year t+1 – which may suggest a high preference for part-time work.

Part 3 of table 3 presents the share of men and women who have ever moved from inactivity or unemployment to part-time work and then to full-time work. The reverse stepping-stone from full time work to part-time and from part-time work to unemployment or inactivity is also considered. Results worthy of note include: first, we find some evidence of part-time work as a stepping stone from inactivity into full-time employment, but the proportion of individuals affected is tiny at less than 3% of individuals who have ever moved labour market state overall. This figure is below 2% when considering the

---

[13] This finding should however not be over-interpreted as the transition from part-time to full-time employment for men involved only 1% of the working-age male population, given the low proportion of men working part-time.

[14] 72% in our data, versus 66% in Blank (1998) for women, 49% in our data, versus 42% in Blank (1998) for men.

[15] 14% in our sample, versus 20% in Blank (1998) for women, 34% in our sample versus 54% in Blank (1998) for men.

[16] This hypothesis has been put forward by e.g Blanchard (2004).

transition from unemployment into full-time employment. Second, the rate of transition from non-employment to full-time work exhibits considerable cross-country variation (ranging from 3% in Belgium, France, Germany and Italy to 7% in Ireland) and is highest for women. Third, for both men and women, part-time work has been more frequently used in the transition from inactivity or unemployment into work, than the reverse. Furthermore, for the female adults in our sample, part-time work has been used twice as frequently in transition from inactivity to full time work as in the transition from unemployment to full time work. Finally, transitions through part-time to full-time work exhibit considerable cross-country variation. State mobility from unemployment into work is significantly more common in Ireland and the UK and transitions from inactivity into work for Ireland, Spain and Denmark.

## 5. Determinants of the supply of part-time work

### Methodology

This section turns to the factors influencing individuals' decisions to work part-time. In order to allow a comparison of our results for Europe with those existing for the US, we follow an approach that is as close as possible to that undertaken by Blank (1998). The methodology described in this sub-section is therefore based on this paper, with two extensions – first our analysis will be undertaken for both men and women. Second, we consider four labour market states: inactivity, unemployment, part-time work and full-time work, whereas Blank considers only three – non-work, part time work and full-time work.

The field of methodology followed by Blank and this paper is motivated through consideration of a simple model of static labour supply, which is a function of hours worked (H) such as:

$$H = f(C, Y, D, X) \tag{1}$$

where C represents a vector of human capital characteristics which affect an individual's earned income, Y is a vector of other household income, D is a vector of labour demand conditions and X is a vector of demographic characteristics and household composition.

The estimation of an equation such as that presented in (1) can be argued to be sufficient if an individual's labour market choices in each time period are independent of his or her past choices. There are a number of reasons why this may not be the case. For example, life cycle models of labour supply present labour supply choices as a function of both past and future expectations of labour supply and future expectations are often proxied by information on past experience. Furthermore, the literature on human capital investment considers investment to depend on past labour market experience, which in turn affects current labour supply, implying that C in equation (1) should include accumulated past experience. Other factors such as networks and knowledge of a particular labour market, which are unrelated to wage, may also imply that past experience increases an individual's probability of working. The argument can also be made that in the absence of data on individual preferences, past labour supply provides information on heterogeneity in individuals' labour/leisure trade-off decisions.

As a result of the caveats of model (1), many labour supply models have considered labour supply as time dependent. Following Blank (1998), we prefer not to impose a specific model of intertemporal labour supply on the data or make the assumption that wages are not affected by labour supply choices (an assumption proved to be incorrect in the existing literature on part-time wages). One possible approach for our investigation is therefore to estimate a more general dynamic version of equation (1), making the assumption that the choice of labour market state is correlated over time and estimating the determinants of the sequential set of labour market choices. Individuals' labour market choices are described through a series of probabilistic equations, evolving over time, and given by:

$$\Pr ob(H_1 = h_1 | C_1, Y_1, D_1, X_1) \tag{2a}$$

$$\Pr ob(H_2 = h_2 | h_1, C_2, Y_2, D_2, X_2) \tag{2b}$$

$$\Pr ob(H_\tau = h_\tau | h_{\tau-1}, h_{\tau-2}, ..., h_i, C_\tau, Y_\tau, D_\tau, X_\tau) \tag{2c}$$

where an individual enters the labour market in period 1, choosing to work $h_1$ hours. The choice of hours in each period is assumed to be the result of all past optimised labour supply choices by that individual.

A problem with this approach is that as T becomes very large, unrestricted estimates of equation 2c are impossible to compute. One simplification is therefore to represent the continuous hours of work variable through the use of a series of discrete labour market states. In this case, the probability that an individual is observed in one of the possible labour market states is re-written as:

$$\Pr ob(LMS_t = I_t) = f(X_t, g(LMS_{t-1}, LMS_{t-2}, .....LMS_{t-j})), I = 1,2,3,4 \tag{3}$$

An individual's labour market state at any point in time is described by four discrete categories: (1) inactive (IA), (2) unemployed (UE), (3) working part-time (PT) and (4) working full-time (FT). Correspondingly, $LMS_t$ takes on the following four values:

(IA)    $I_t = 1$ if $Hours_t = 0 < Hours_t \leq 5$ and worker is not actively seeking work

(UE)    $I_t = 2$ if $Hours_t = 0 < Hours_t \leq 5$ and worker is actively seeking work

(PT)    $I_t = 3$ if $6 \leq Hours_t < 30$

(FT)    $I_t = 4$ if $Hours_t \geq 30$

$X_t$ is a vector of personal, household and economic variables including an individual's age and its square, educational attainment, marital status, total number of children by age bracket, a dummy variable for step children, non labour household income, a set of regional variables to capture the effect of local labour market conditions[17] and a set of country dummies. g(.) is a function that describes an individual's past history of labour market attachment.

Using this four way characterisation of labour supply, we first estimate the discrete version of (3) in each time period, controlling for past labour market history through the use of dummy variables which

---

[17] All regional variables are in logs when appropriate and are lagged by one period so to avoid obvious endogeneity problems. We also cluster by region in our estimation of the multinomial logit, so as to accurately reflect the error structure.

represent the range of discrete labour market choices made in the past. The following multinomial logit model therefore gives the probability that a person is inactive in year t:

$$\Pr ob(LMS_t = 1) = \frac{\exp(X_t\beta_1 + L_t\lambda_1)}{1 + \exp(x_t\beta_1 + L_t\lambda_1) + \exp(x_t\beta_2 + L_t\lambda_2) + \exp(x_t\beta_3 + L_t\lambda_3)} \quad (4)$$

where L is the vector of dummy variables which represent an individual's past labour market history. $\beta_1$, $\beta_2$ and $\beta_3$ measure the effect of the variables in X on being out of the labour market, unemployed and part-time work, respectively. $\lambda_1$, $\lambda_2$ and $\lambda_3$ capture the effect of past working history on the probability of being inactive, unemployed or working work part-time where full time work is the reference category. Equivalent expressions can be found for the probability of being unemployed, working part-time, or full-time.

Given the importance of the effect of past labour market history on labour supply in this model, we follow Blank (1998) in comparing three different lag specifications[18]. The three specifications are:

(1) Full lag specification

If there are j lag periods in the model, having defined our four labour market states, there are $j^4$ potential patterns of past labour market history for a particular individual. A separate dummy variable for each of these possible patterns of past labour market experience is added to the model to provide the fullest possible set of controls for past experience. This specification is only possible at relatively low levels of j.

(2) Simple lag specification

For each of the j lag periods, a dummy variable is added to the model for each of the independent labour market states in each past year. Thus, for each lag period, a dummy variable is added to control for if an individual was out of the labour force, another for if they were unemployed and another for if they were working part-time. Full-time status can always be derived from these three variables. This results in 3j lag parameters. This simple specification assumes that the effect of each past labour market choice is independent of the pattern of choices made in previous or future years. Multiple years in one labour market state therefore has a simple additive effect on current labour market choice.

(3) Complex lag specification

This specification controls for the labour market state within each past year (the simple specification) as well as for patterns of experience over time. All 3j dummy variables from the simple specification are included in the model, as well as dummy variables controlling for the total number of times that each state was observed over the past j years (resulting in 3(j-1)+(j-2) independent dummy variables). For example, with five (three) lags, the complex lag specification includes 30 (16) dummy variables which can be used

---

[18] None of these specifications include interaction terms between variables capturing past labour market choice with other controls. This is simply due to the constraint on the number of parameters that can be estimated. However as Blank (1998) outline, it may be the case that, for example, the effect of past education on the probability of working full-time is different for someone who has been out of the labour market for three years in comparison with someone who has not.

to uniquely characterise each one of the possible past labour market states within a five (three) period lag structure.

As an alternative to the multinomial logit model above, which includes past lagged labour market histories to capture heterogeneous choices, it is possible to consider a multinomial logit model controlling for heterogeneity across the population through random effects. Rather than predicting current labour market status on a personal history of previous labour market states, the random effect specification predicts a labour market state in any given year. This type of model is well capable of estimating aggregate distributions of labour market states in the economy, but less capable of predicting individual outcomes compared to the models that rely on detailed personal labour market histories. The advantage of the random effect model is that it identifies the existence of different types of individuals that are characterized by a predisposition to be in a particular labour market state. These different types have often an intuitive appeal since they provide an easy link to popular perceptions regarding the existing broad types of individuals[19].

The heterogeneity is described through the assumption that the constant term in the multinomial logit differs across heterogeneous groups of individuals. Assuming that there are three types of individuals, the probability of being out of the labour market therefore becomes:

$$\Pr ob(LMS_t = 1) = P_1 \frac{\exp(X_t \beta_1 + C_{11})}{1 + \exp(X_t \beta_1 + C_{11}) + \exp(X_t \beta_2 + C_{12}) + \exp(X_t \beta_3 + C_{13})} + \tag{5}$$

$$P_2 \frac{\exp(X_t \beta_1 + C_{21})}{1 + \exp(X_t \beta_1 + C_{21}) + \exp(X_t \beta_2 + C_{22}) + \exp(X_t \beta_3 + C_{23})} +$$

$$(1 - P_1 - P_2) \frac{\exp(X_t \beta_1 + C_{31})}{1 + \exp(X_t \beta_1 + C_{31}) + \exp(X_t \beta_2 + C_{32}) + \exp(X_t \beta_3 + C_{33})} +$$

where $P_1$ and $P_2$ are estimated coefficients equal to the probability of being a type 1 or type 2 individual, and $C_{11}$, $C_{12}$, $C_{13}$, $C_{21}$, $C_{22}$, $C_{23}$, $C_{31}$, $C_{32}$ and $C_{33}$ are the random effects parameters associated with being a type 1, type 2 or type 3 individual. A caveat of this approach is that the choice of the number of types is fairly arbitrary. We take account of the fact that each individual can only be one of three types, which is fixed over time, which is a good compromise between the sophistication of the model and the wish to have representative types in terms of estimated probability. By doing so, we try to capture unobserved preferences for particular labour market states. The different sets of unobserved preferences are not necessary the same between men and women and do not necessarily consist of clear-cut preference for any of the four labour market states. This is particularly clear for men, as shown below.

---

[19] We provide the estimates of this alternative specification mainly for this reason.

The choice of three types only renders the comparison with the existing results for the US (Blank, 1998) easier.

### Results for the female sample

Multinomial logit regressions were run for women between the ages of 20 and 60 using the three different lag specifications for 1997 (wave 4 of our data, with three lags), and two lag specifications for 1999[20] (wave 6, with five lags). Results are very similar across the different specifications and waves, thus for brevity we present the results for the complex specification for 1997 only (table 4). We find that younger individuals with less education and a greater number of pre-school aged children are significantly more likely to be unemployed or inactive than working full time. Married individuals are found to be less likely to be unemployed, but more likely to be inactive, than working full time. In comparison with those working full-time, part-time workers are more likely to be married, with a higher number of children under the age of 12 and higher non-labour household income (for wave 6 results only).

In all countries, workers are significantly more likely to be full-time employed, rather than in any other labour market state. The large marginal effects associated with the country dummy variables suggest that country specific institutional arrangements may strongly influence individuals' decisions to work part time (for wave 6 results only)[21]. We also controlled for the importance of temporary or fixed term jobs among those working part-time[22]. Regional variables are found to exert some significant impact on the probability of being found in a particular labour market state. For example, women are more likely to be active in the labour market if they live in areas with a history of high female activity or to be working full-time relative to part-time in regions of industrial concentration.

The effect of past labour market history is found to be strong and significant in its impact on current labour market state. Results from the simple and complex specifications reveal that the most recent year's history is generally most important. For example, women who worked part-time in the most recent past

---

[20] The full specification is not possible with this number of lags.

[21] For a more detailed investigation of the effect of institutional arrangements and aggregate labour market conditions on the rate of part-time work see Buddelmeyer, Mourre and Ward (2004) and (2005). Results of this analysis suggests that the rate of part time work is significantly affected by institutional and policy changes. This suggests that the inclusion of separate estimates by country of the results in table 4 may also be interesting. However the sometimes very small number of observations available by country for the regional information meant that sufficient variation in the sample was not available to undertake such an analysis for a number of countries. For the other countries, the identification of the institutional variables was also weakened due to the number of regions often being less than 10. Instead, some experimentation with the interaction of the country dummies with a variety of the other variables was undertaken. When introducing interaction terms between the non-institutional explanatory variables (age, education, etc.) and the country dummies interaction variables were found to be significant, however, the extra 110 or so variables did not dramatically improve the overall fit with the pseudo R-squares increasing to the order of 0.01 to 0.02 points. More importantly, all parameter estimates of the variables not interacted with the country dummies were found to be very similar to the specification omitting these interaction variables.

[22] Studies on the rise in temporary or fixed term jobs such as Dolado, Garcia-Serrano and Jimeno-Serrano (2001) suggest that at least some part-time positions will also be temporary. A number of papers such as Booth, Francesconi and Frank (2002) for the UK and Guell and Petrongolo (2000) for Spain, have analysed the transition from temporary to permanent jobs. Booth, Francesconi and Frank (2002) find the transition rate from temporary to permanent employment to lie just over one third for both men and women and for the average length of temporary contracts to lie at around 3 years. We investigated the hypothesis that the pattern of results may be sensitive to proportion of temporary workers within those classified as part-time by country. Results proved to be robust to the exclusion of countries with relatively high rates of temporary workers such as Spain and Portugal.

year have nearly a 50% probability of working part time the following year. They are significantly less likely to be inactive, unemployed or working full time. Similarly, women who were unemployed or inactive in one given year are most likely to be unemployed or inactive the following year, and significantly less likely to be found in another labour market state. History of a more distant nature is also found to be very important in determining current labour market activity. Previous labour market experience of at least up to five years ago is found to have a significant impact on current labour supply, although the strength of past experience decreases in its impact with each successive year gone by.

Table 5 presents simulated probabilities for labour market states using the coefficients from the simple lag and complex models and data from wave 4 of our data. As our reference female, we take a 25 year old with medium education, who is married with 2 children (one aged between 0 and 3, one aged between 4 and 6, no step children and a non-labour income of 25,000 Euro). She is taken as living in each country in turn to calculate the predicted probabilities, which are then averaged to give our results for the EU. Thus the table simulates the probability that this woman is observed working part-time, full-time or non-employed (either unemployed or inactive). Results for the EU average are similar across lag specifications and tell us that, first, the most recent year's labour market history is very important in the determination of current female labour market status. For example, women who worked full time last year (row 3 and rows 20-27) have at least a 40 percent probability of working full time this year. Second, those that have remained in one labour market state for all three years (columns 1 to 3) are significantly more likely to remain within this labour market state than even individuals that have been in the same state for the last two years (rows 4-5, 12-13, 20-21). Third, results again reveal part-time work to be a more transitory state than unemployment, inactivity or full-time work, confirming the patterns observed in our simple mobility tabulations in section 4.

Comparing these results for the EU with those of Blank (1998) for the US, we find a similar probability of our females working part time or being out of the labour force across most patterns of past working history. Table 5 present the same predictions exercise for the UK only. The UK is chosen here since its labour market is often considered to be relatively flexible within the EU. Comparing the UK with the results for the EU as a whole reveals that our reference female has a higher probability of working part-time and a lower probability of being found out of the labour market within the UK, across all patterns of past working history. A further interesting observation is that the probability of remaining in part-time work following some previous experience of a part time job (rows 12 to 19) is significantly higher in Europe relative to the US, suggesting that Europeans may view part-time work as a more permanent labour market state than in the US.

Further comparison of the results with Blank (1998) reveals one other result worthy of note. This is the very different probability for our European female to work full-time across most patterns of past working history. First, the probability for females to re-enter full time employment following periods of inactivity (rows 4 to 11) is significantly higher in Europe than found by Blank (1998) in the US. One possible explanation for this European (including UK) pattern could be the treatment of career breaks for women. One could, for example, hypothesise that European law supports female re-entry to full-time work

following childbirth. Alternatively, this result may simply reflect a greater number of periods out of the labour market for European relative to American females. Second, table 5 reveals that the probability of women entering full-time work following periods of part-time employment (rows 12-19) is significantly lower in Europe than in the US. Third, the probability that European women remain in full time employment following previous history of full-time work is significantly lower than in the US.

Table 6 presents the coefficients of our random effects estimation, controlling for individual heterogeneity, where full-time workers are the omitted category. Since we include a constant term in this regression, we drop one country dummy, so the UK is chosen as our reference country. Comparison of these results with the models using our lag specifications in table 4 shows considerable variation in the size of the estimated coefficients. In the random effects model a number of variables exhibit larger coefficients and greater significance. Age, number of children and country of residence are found to have particularly strong effects on the probability of working part-time relative to full-time. Age, educational attainment and the presence of small children are particularly important explanatory factors for inactivity. The regional female activity rate and the regional concentration of industry exert a strong positive influence on the probability of females working full-time relative to other labour market states.

Table 7 uses the coefficients from our random effects estimation to predict the probabilities of being in each of the three labour market states for a typical woman of type 1, 2 or 3 (as presented in equation 5 and discussed at the beginning of this section). Results are generated for the pooled EU average and for each country individually. For a female in the EU, we know from the results of the random effects estimate that the probability of being a type 1 worker is estimated at 25%. Table 7 now shows us that type 1 workers are mobile across all labour market states, but are significantly more likely to be working part-time. The probability of being a type 2 worker is 35%. In contrast to type 1, type 2 workers are far less mobile across labour market states and work full-time with a 75% probability. The probability of being a type 3 worker is estimated at 40%. Type 3 workers are most likely to be inactive, or unemployed. Comparison of these results with Blank (1998) reveals a significantly higher proportion of type 3 workers – those preferring inactivity – and a significantly lower percentage of type 2 workers – those preferring full-time work – in Europe than in the US. Consideration of the results by EU country reveals that type 1 workers are significantly more likely, relative to the European average, to be working part-time (than in other labour market states) in the Netherlands and UK, and significantly less likely to be working part-time in Italy, Greece, Spain or Portugal. Type 2 individuals are significantly more likely to be working full time in Denmark and less likely to be working full-time in the Netherlands, Spain and Ireland. Finally, there is also some significant cross-country variation in the likelihood of type 3 individuals being inactive. The probability of being out of the labour market is very high in Ireland, Italy and Spain, and relatively low in Denmark and the Netherlands.

**Results for the male sample**

Comparison of the results of the multinomial logit model for men across the three different specifications reveals that, in comparison with those working full-time, part-time male workers are significantly less likely to be married and more likely to have children under the age of 3, although the probability of working part-time decreases with the total number of children. (For brevity, table 8 again presents only the results for 1997 with the complex lag specification.) Hence, as with our female results, household composition plays an important role in the probability of working part-time for males. There is also significant evidence that male part-timers are generally younger and more educated than those working full-time[23]. In contrast to the female results, the determinants of part-time work are not found to vary significantly by country, since country dummies are generally not significant.

Unemployment and part-time employment exhibit a U shape relative to age for men, whereas inactivity rises with age. Higher educated and married individuals are less likely to be unemployed or out of the labour force relative to full employment.

As with the results for women, past labour market history is found to be a significant determinant of the current labour market state for men. The most recent year's history is again found to be the most important factor determining current labour force status, but exerts a weaker influence than in the female results. For example, men who worked part-time in the most recent past year have a 26% probability of working part time the following year, compared with 49% in the case of the female sample, and are significantly less likely to be working full time. Men who were unemployed or inactive last year are significantly more likely to be part-time employed or remain unemployed or inactive this year, and significantly less likely to be in full-time employment. History of a more distant nature is also found to be important in determining current labour market activity but to a lesser extent than in the female sample. Previous labour market experience of only up to around three, rather than five years ago, has a significant impact on current labour supply, although the strength of past experience continues to decrease in its impact with each successive year gone by.

Table 9 presents the simulated probabilities for male labour market state using the coefficients from the simple and complex lag models and data from wave 4 of our data. Our reference male is chosen to have the same characteristics as the reference female used in the female results section. Results for the EU average confirm that the most recent year's labour market history is important in the determination of current male labour market status for full-time workers. Men who worked full time in period t-1 (row 3 and rows 20-27) have at least a 87 percent probability of working full time in period t. For men who worked full-time for the last three years, this percentage is almost 100. Individuals who remained part-time employed or out of the labour force for all three years (columns 1 to 3) are still significantly more likely to remain state persistent in the future, however to a significantly lesser extent than females. All other combinations of previous work experience, including male individuals who were out of the labour

---

[23] This result may point to the use of part-time work as a stepping stone into employment for young men.

force or part-time employed in period t-1, are most likely to be found in full-time employment in period t than another labour market state. Finally, results confirm part-time work to be less of transitory state than non-employment for men. Comparison of predicted probabilities for the UK sample reveals a similar pattern of mobility to other European males.

Table 10 presents the coefficients of the random effects estimation for men. Comparison of these results with the models using our lag specifications again shows considerable variation in the size of the estimated coefficients with most variables exhibiting larger coefficients and greater significance. Age, being married and the regional concentration of employment in industry and services are particularly important explanatory factors on the determination of labour market state. In addition, country of residence is found to be an important predictor of inactivity.

Our random effects estimation reveals that for the male sample, the probability of being a type 1 worker is estimated at 12%, the probability of being a type 2 worker is 71% and the probability of being type 3 is 17%. Table 11 reveals that for the EU overall, all three types of male workers are more likely to be working full-time than in any other labour market state. Type 1 workers are significantly more likely to be active in the labour market, and mobile across states but with a preference for full-time work. Type 2 workers are found exclusively in full-time work. Finally, type 3 male workers, although most likely to be working full-time, may also be inactive. While each type has a broadly similar probability for women, type 2 emerges as clearly dominant of men. Consideration of the results by country reveals the probability of type 2 workers working full-time to be practically identical across EU countries. Relative to the European average, type 1 workers are significantly more likely to be working part-time (rather than in other labour market states) in Ireland and Greece and significantly less likely to be working part-time in Denmark, and Germany. Similarly, type 1 workers are more likely to unemployed in Belgium and Germany and less likely to be unemployed in Portugal. Finally, there is also some significant cross-country variation in the likelihood of type 3 individuals being out of the labour force, the probability of which is relatively high in Italy and Spain and relatively low in the Netherlands, Greece, Germany and the UK.


## 6. Conclusion

Original contributions of this paper include, first, a consideration of labour mobility flow for 11 EU countries, between four labour market states: inactivity, unemployment, part-time work and full-time employment. Results conclude that the mobility between employment states within any two-year period is limited, with around 85% of individuals remaining in the same labour market state. The greatest state-stability for men is found to be full-time employment, and for women, inactivity. In fact, nearly 17% of all individuals (26% of women and 7% of men) are found to be inactive for the whole 6-year period from 1994 to 1999 representing a vast reserve of potential labour resources, currently untapped within EU labour markets. The EU's target employment rate of 70% of the working age population set in the Lisbon agenda is still far off. These results suggest that more attention should be paid towards policies encouraging, particularly female, participation.

Second, the paper assesses the role of part-time work in facilitating labour market entry and exit for these 11 EU countries. The purpose of this analysis is to find out to what extent part-time jobs are used as intermediate states, i.e. stepping-stones, from non-employment (inactivity or unemployment) to full-time employment in Europe. Some evidence of part-time work as a stepping stone from inactivity into full-time employment is revealed, but the proportion of individuals affected is tiny, at less than 3% of individuals moving labour market state within the 6 year period considered. This figure is below 2% when considering the transition from unemployment into full-time employment. However, this figure refers to the six year period for which data is available - the stepping stone effect might be larger in the longer run. The rate of transition from non-employment to full-time work exhibits considerable cross-country variation (ranging from 3% in Belgium, France, Germany and Italy to 7% in Ireland) and is higher for women. Comparison of results with those of Blank (1998) in the US reveals that both men and women stay longer in part-time positions in the European sample and are significantly less likely to move to full-time work. An interesting topic for further work in this area would therefore be to undertake a more detailed investigation of the reasons why experience in a part-time job does not more readily result in an individual progressing into full-time work in Europe. Individual preferences for shorter hours, a lack of career development opportunities of part-time jobs or specific incentives created by national policies may all offer possible explanations. Nevertheless, the finding that workers remain within part-time jobs and that part-time jobs are more likely to promote labour market entry rather than facilitate labour market exit confirms such news forms of work contracts as important in helping into the labour market individuals who wish to work shorter hours.

Finally, the paper considers the determinants of part-time work, with application of the methodology from Blank (1998) and special attention is given to the role of past history in determining both current and future labour market status. Multinomial logit regression results reveal that first, household composition plays an important role in the probability of working part-time, for both males and females. Female part-time workers are more likely to be married, with a higher number of children under the age of 12 and higher non-labour household income. Male part-time workers are significantly less likely to be married and more likely to have children under the age of 3, although the probability of working part-time decreases with the total number of children. Second, large marginal effects associated with the country dummy variables in the female regression results suggest that country specific arrangements strongly influence female decisions to work part time. Such country effects may reflect cultural factors as well as national differences in labour market institutions and part-time policies. This is not the case for the male results, where the determinants of part-time work are found not to vary significantly across countries. Third, the effect of past labour market history is found to be strong and significant in its impact on the current labour market state for both men and women. Previous labour market experience of up to three years for men and five years for women has a significant impact on current labour supply, although the strength of past experience continues to decrease in its impact with each year gone by. Finally, random effects estimation reveals a significantly higher proportion of females preferring inactivity (type 3 females) and a significantly lower percentage preferring full-time work (types 2 females) in Europe than in the US. Consideration of these results by country reveals that type 1 female workers (those preferring

part-time work) are significantly more likely, relative to the European average, to be working part-time in the Netherlands and UK, and significantly less likely to be working part-time in Italy, Greece, Spain or Portugal. Type 2 women (those preferring full-time work) are significantly more likely to be working full time in Denmark and less likely to be working full-time in the Netherlands, Spain and Ireland. Overall, these results suggest that household composition, country specific arrangements and recent work experience are the most important determinants of part-time work in Europe.

## Bibliography

Abowd, J. and F. Kramarz (1997) "The cost of hiring and Separations", *National Bureau of Economic Research Working Paper*: 6110.

Andersen, T. M., N. Haldrup and J. R. Sorensen (1999), "EU Labour Markets: Effects of greater product Market Integration", *Economic Policy*, 13 (30), April, pp.106-133.

Begg, D. (1997) "The design of EMU", *IMF Working Paper* No. 99.

Blanchard, O. (2004) "The economic future of Europe", *NBER Working Paper Series*, No. 10310.

Blank, R. M. (1998), "Labor Market Dynamics and Part-time Work", *Research in Labor Economics*, Polachek, Solomom, ed., Greenwich, Vol.17, pp.57-93, CT: JAI Press.

Blank R. M. (1990) "Simultaneously Modelling the Supply of Weeks and Hours of Work among Female Household Heads", *Journal of Labor Economics*, Vol. 6:2, April 1998, pp.177-204.

Booth, A. L., M. Francesconi and J. Frank (2002), "Temporary Jobs: Stepping Stones or Dead Ends?", *Economic Journal*, Vol. 112, pp.F189-213.

Bover, O., P. Garcia-Perea and P. Portugal (1995). "A comparative study of the Portuguese and Spanish labour markets", *Banco de Espana, Servicio de Estudios,* Documento de Trabajo 9807, March 1998.

Buddelmeyer, H., G. Mourre and M. Ward (2004), "The determinants of part-time work in EU countries: empirical investigations with macro-panel data", *European Commission Economic Papers No.213* and *IZA Discussion Paper* No. 1361.

Buddelmeyer, H., G. Mourre and M. Ward (2005), "Recent developments in part-time work in EU countries: Trends and policy", *IZA Discussion Paper* No. 1415 and chapter 7 in the forthcoming "*Labor Supply and incentives to work in Europe*" edited by R. Gomez-Salvador, A. Lamo, P. Petrongolo, M. Ward and E. Wasmer, CEPR/ECB.

Dolado, J., C. Garcia-Serrano, and J. Jimeno-Serrano (2001), "Drawing lessons from the boom of temporary jobs in Spain" *Economic Journal*, Vol. 112.

Euwals, R. (2001), "Female Labour Supply, Flexibility of Working Hours and Job Mobility", *The Economic Journal*, Vol.111, C120-C134.

Farber, H. S. (1999), "Alternative and part-time employment arrangements as a response to job loss", *Journal of Labor Economics*, Vol.17, pp. S142-169.

Fabiani, S. and D. Rodriguez-Palenzuela (2001), "Model-based indicators of labour market rigidity" *ECB Working Paper* No.57.

Guell, M. and B. Petrongolo (2000), "The transition of workers from temporary to permanent employment: the Spanish case", London School of Economics CEP, DP 438.

Haskel, J., B. Kersley and C. Martin (1997), "Labour Market Flexibility and Employment Adjustment: Micro Evidence from UK Establishments", *Oxford Economic Papers*, New Series, Vol.49, No.3, pp.362-379.

Laroque, G. and B. Salanié (2003) "Participation, Fertility and Financial Incentives in France", *Paper presented at ECB/CEPR workshop* "What Explains the Pattern of Labour Supply in Europe", Frankfurt, June 2003.

Lemaitre, G., P. Marianna and A. Van Bastelaer (1997), "The definition of part-time for the purpose of international comparisons", *Labour Market and Social Policy Occasional Papers*, No.22. OECD/GD(97)121, Paris.

McCall, B. (1997) "The determinants of Full-time versus Part-time Reemployment following Job Displacement", *Journal of Labor Economics*, vol.15, pp.714-507.

OECD (1999) "Focus on part-time work". *Employment outloo*k, June.

O'Reilly, J. and S. Bothfeld (2002) "What happens after working part-time? Integration, maintenance or exclusionary transitions in Britain and western Germany", *Cambridge Journal of Economics*, Vol.26, pp409-439.

Saint-Paul, G. and S. Bentolila (2000) "Will EMU Increase Eurosclerosis?", *CEPR Discussion Paper*, No. 2423.

**Figure 1: Part-time employment rate (%)**
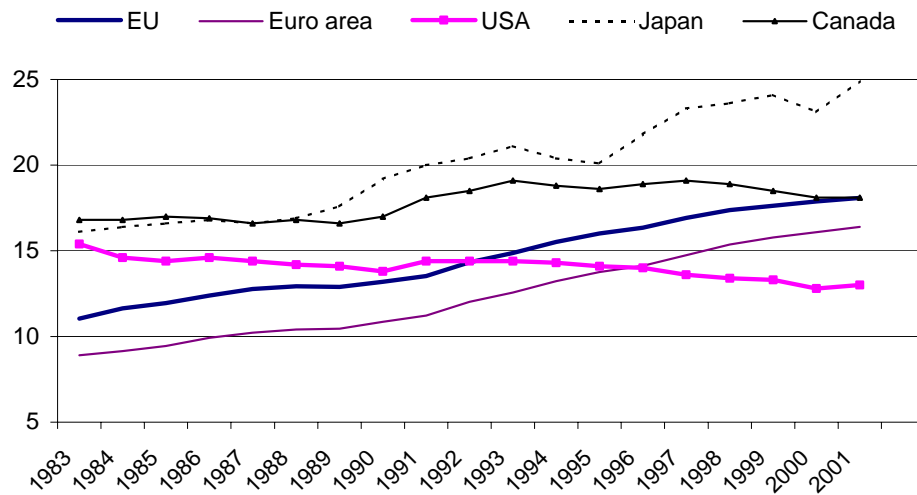


*Sources: OECD, Eurostat (Labour force surveys).*

**Figure 2: Part-time employment rate in 2001 (%)**
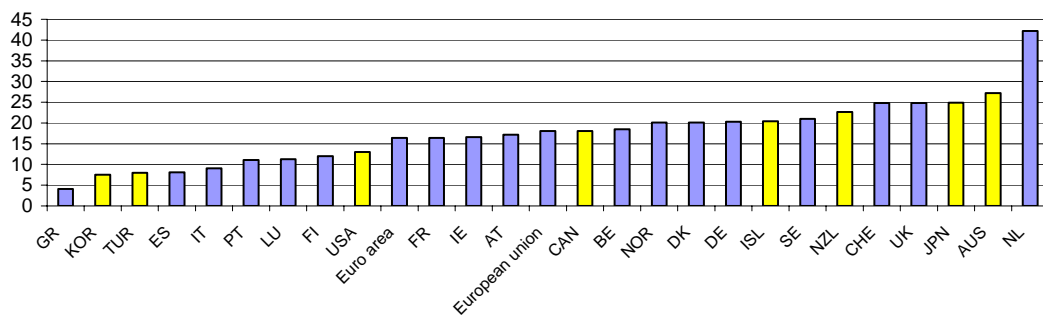


*Sources: OECD, Eurostat (Labour force surveys).*

**Figure 3: Part-time employment rate by gender: EU Countries**
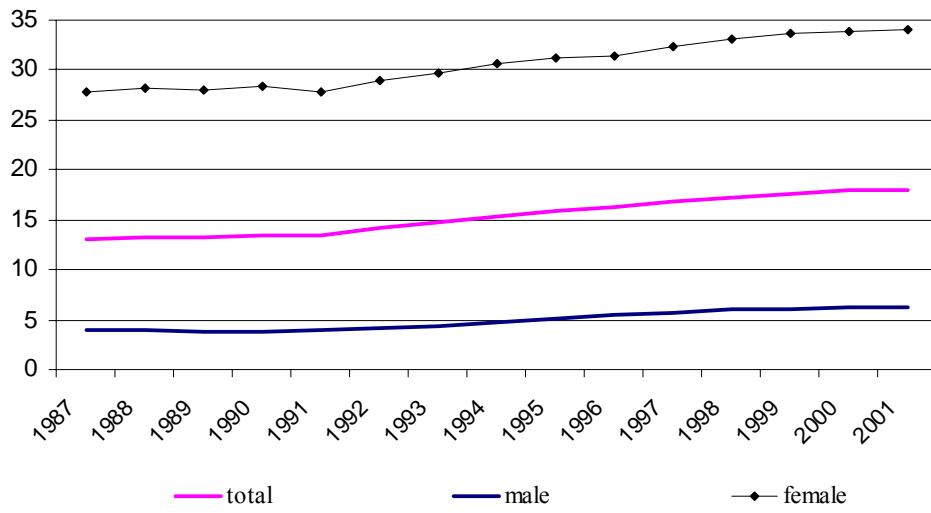


*Sources: OECD, Eurostat (Labour force surveys).*

**Table 1 Two step labour market transition patterns: EU average for waves 1 to 5**

| | Year t+1 | | | | Row totals |
|---|---|---|---|---|---|
| | Part-time | Full-time | UE | Inactive | |
| | I. Adult Women | | | | |
| **Part-time** | | | | | |
| row % | 72.00 | 14.10 | 3.40 | 10.51 | 100.00 |
| total % | 11.83 | 2.32 | 0.56 | 1.73 | 16.44 |
| **Full-time** | | | | | |
| row % | 6.98 | 85.54 | 2.99 | 4.50 | 100.00 |
| total % | 2.31 | 28.27 | 0.99 | 1.49 | 33.05 |
| **UE** | | | | | |
| row % | 9.55 | 13.98 | 53.17 | 23.30 | 100.00 |
| total % | 0.72 | 1.05 | 3.99 | 1.75 | 7.51 |
| **Inactive** | | | | | |
| row % | 4.48 | 3.23 | 3.89 | 88.40 | 100.00 |
| total % | 1.92 | 1.39 | 1.67 | 38.02 | 43.01 |
| **Column totals % of total** | 16.78 | 33.02 | 7.21 | 42.98 | 100.00 |
| | II. Adult Men | | | | |
| **Part-time** | | | | | |
| row % | 49.17 | 33.92 | 5.65 | 11.25 | 100.00 |
| total % | 2.06 | 1.42 | 0.24 | 0.47 | 4.19 |
| **Full-time** | | | | | |
| row % | 1.90 | 93.14 | 2.42 | 2.54 | 100.00 |
| total % | 1.37 | 67.20 | 1.75 | 1.83 | 72.15 |
| **UE** | | | | | |
| row % | 5.30 | 28.16 | 54.24 | 12.30 | 100.00 |
| total % | 0.38 | 1.99 | 3.84 | 0.87 | 7.08 |
| **Inactive** | | | | | |
| row % | 2.67 | 6.96 | 5.19 | 85.18 | 100.00 |
| total % | 0.44 | 1.15 | 0.86 | 14.13 | 16.58 |
| **Column totals % of total** | 4.25 | 71.77 | 6.69 | 17.30 | 100.00 |

**Table 2a Two step labour market transition patterns: Denmark**

| | Year t+1 | | | | Row totals |
|---|---|---|---|---|---|
| | Part-time | Full-time | UE | Inactive | |
| **I. Adult Women** | | | | | |
| **Part-time** | | | | | |
| row % | 71.04 | 17.27 | 4.48 | 7.21 | 100.00 |
| total % | 12.06 | 2.93 | 0.76 | 1.22 | 16.98 |
| **Full-time** | | | | | |
| row % | 5.49 | 88.19 | 3.41 | 2.91 | 100.00 |
| total % | 3.04 | 48.91 | 1.89 | 1.61 | 55.45 |
| **UE** | | | | | |
| row % | 10.28 | 25.05 | 41.33 | 23.34 | 100.00 |
| total % | 0.89 | 2.17 | 3.58 | 2.02 | 8.66 |
| **Inactive** | | | | | |
| row % | 5.30 | 8.05 | 5.69 | 80.96 | 100.00 |
| total % | 1.00 | 1.52 | 1.08 | 15.31 | 18.91 |
| **Column totals % of total** | 16.99 | 55.53 | 7.31 | 20.17 | 100.00 |
| **II. Adult Men** | | | | | |
| **Part-time** | | | | | |
| row % | 54.38 | 25.00 | 4.38 | 16.25 | 100.00 |
| total % | 1.73 | 0.79 | 0.14 | 0.52 | 3.18 |
| **Full-time** | | | | | |
| row % | 1.08 | 95.27 | 1.84 | 1.81 | 100.00 |
| total % | 0.87 | 77.21 | 1.49 | 1.47 | 81.04 |
| **UE** | | | | | |
| row % | 3.39 | 42.37 | 40.25 | 13.98 | 100.00 |
| total % | 0.16 | 1.98 | 1.89 | 0.66 | 4.68 |
| **Inactive** | | | | | |
| row % | 4.65 | 6.44 | 2.33 | 86.58 | 100.00 |
| total % | 0.52 | 0.71 | 0.26 | 9.61 | 11.10 |
| **Column totals % of total** | 3.28 | 80.71 | 3.77 | 12.25 | 100.00 |

**Table 2b Two step labour market transition patterns: The Netherlands**

| | Year t+1 | | | | Row totals |
|---|---|---|---|---|---|
| | Part-time | Full-time | UE | Inactive | |
| **I. Adult Women** | | | | | |
| **Part-time** | | | | | |
| row % | 83.22 | 6.86 | 3.54 | 6.38 | 100.00 |
| total % | 29.35 | 2.42 | 1.25 | 2.25 | 35.27 |
| **Full-time** | | | | | |
| row % | 13.37 | 80.96 | 2.68 | 2.99 | 100.00 |
| total % | 2.79 | 16.92 | 0.56 | 0.62 | 20.90 |
| **UE** | | | | | |
| row % | 15.52 | 3.80 | 54.05 | 26.63 | 100.00 |
| total % | 2.06 | 0.50 | 7.17 | 3.53 | 13.26 |
| **Inactive** | | | | | |
| row % | 6.79 | 2.15 | 11.74 | 79.33 | 100.00 |
| total % | 2.07 | 0.66 | 3.59 | 24.25 | 30.57 |
| **Column totals % of total** | 36.28 | 20.50 | 12.57 | 30.66 | 100.00 |
| **II. Adult Men** | | | | | |
| **Part-time** | | | | | |
| row % | 60.32 | 26.81 | 2.47 | 10.41 | 100.00 |
| total % | 3.18 | 1.41 | 0.13 | 0.55 | 5.28 |
| **Full-time** | | | | | |
| row % | 1.77 | 95.72 | 0.88 | 1.63 | 100.00 |
| total % | 1.41 | 75.92 | 0.70 | 1.29 | 79.32 |
| **UE** | | | | | |
| row % | 5.71 | 21.82 | 49.61 | 22.86 | 100.00 |
| total % | 0.20 | 0.78 | 1.78 | 0.82 | 3.58 |
| **Inactive** | | | | | |
| row % | 3.54 | 6.92 | 4.96 | 84.58 | 100.00 |
| total % | 0.42 | 0.82 | 0.59 | 10.00 | 11.83 |
| **Column totals % of total** | 5.21 | 78.93 | 3.19 | 12.66 | 100.00 |

**Table 2c Two step labour market transition patterns: Belgium**

| | Year t+1 | | | | Row totals |
|---|---|---|---|---|---|
| | Part-time | Full-time | UE | Inactive | |
| **I. Adult Women** | | | | | |
| **Part-time** | | | | | |
| row % | 77.44 | 13.01 | 3.60 | 5.95 | 100.00 |
| total % | 14.36 | 2.41 | 0.67 | 1.10 | 18.54 |
| **Full-time** | | | | | |
| row % | 7.21 | 88.00 | 2.03 | 2.76 | 100.00 |
| total % | 2.68 | 32.75 | 0.76 | 1.03 | 37.22 |
| **UE** | | | | | |
| row % | 9.67 | 6.27 | 70.84 | 13.22 | 100.00 |
| total % | 0.91 | 0.59 | 6.67 | 1.24 | 9.42 |
| **Inactive** | | | | | |
| row % | 2.91 | 2.25 | 2.51 | 92.33 | 100.00 |
| total % | 1.01 | 0.78 | 0.87 | 32.15 | 34.82 |
| **Column totals % of total** | 18.97 | 36.54 | 8.97 | 35.52 | 100.00 |
| **II. Adult Men** | | | | | |
| **Part-time** | | | | | |
| row % | 51.81 | 34.94 | 3.61 | 9.64 | 100.00 |
| total % | 1.29 | 0.87 | 0.09 | 0.24 | 2.50 |
| **Full-time** | | | | | |
| row % | 1.28 | 95.77 | 1.24 | 1.72 | 100.00 |
| total % | 0.96 | 72.09 | 0.93 | 1.29 | 75.28 |
| **UE** | | | | | |
| row % | 2.27 | 16.76 | 71.88 | 9.09 | 100.00 |
| total % | 0.12 | 0.89 | 3.80 | 0.48 | 5.29 |
| **Inactive** | | | | | |
| row % | 1.69 | 4.00 | 2.22 | 92.10 | 100.00 |
| total % | 0.29 | 0.68 | 0.38 | 15.59 | 16.93 |
| **Column totals % of total** | 2.66 | 74.53 | 5.20 | 17.61 | 100.00 |

**Table 2d Two step labour market transition patterns: France**

| | Year t+1 | | | | Row totals |
|---|---|---|---|---|---|
| | Part-time | Full-time | UE | Inactive | |
| **I. Adult Women** | | | | | |
| **Part-time** | | | | | |
| row % | 71.79 | 15.81 | 6.00 | 6.39 | 100.00 |
| total % | 10.00 | 2.20 | 0.84 | 0.89 | 13.93 |
| **Full-time** | | | | | |
| row % | 5.51 | 89.18 | 2.25 | 3.05 | 100.00 |
| total % | 2.24 | 36.33 | 0.92 | 1.24 | 40.73 |
| **UE** | | | | | |
| row % | 9.27 | 12.45 | 65.84 | 12.45 | 100.00 |
| total % | 0.73 | 0.99 | 5.21 | 0.99 | 7.92 |
| **Inactive** | | | | | |
| row % | 1.93 | 1.96 | 2.47 | 93.64 | 100.00 |
| total % | 0.72 | 0.73 | 0.92 | 35.04 | 37.42 |
| **Column totals % of total** | 13.70 | 40.25 | 7.89 | 38.16 | 100.00 |
| **II. Adult Men** | | | | | |
| **Part-time** | | | | | |
| row % | 54.68 | 31.17 | 7.84 | 6.31 | 100.00 |
| total % | 2.11 | 1.20 | 0.30 | 0.24 | 3.86 |
| **Full-time** | | | | | |
| row % | 1.52 | 95.08 | 1.64 | 1.76 | 100.00 |
| total % | 1.06 | 66.61 | 1.15 | 1.23 | 70.05 |
| **UE** | | | | | |
| row % | 7.55 | 20.53 | 60.93 | 10.99 | 100.00 |
| total % | 0.42 | 1.14 | 3.39 | 0.61 | 5.57 |
| **Inactive** | | | | | |
| row % | 0.57 | 3.45 | 2.98 | 92.99 | 100.00 |
| total % | 0.12 | 0.71 | 0.61 | 19.09 | 20.52 |
| **Column totals % of total** | 3.71 | 69.66 | 5.46 | 21.17 | 100.00 |

**Table 2e Two step labour market transition patterns: Ireland**

| | | Year t+1 | | | Row totals |
|---|---|---|---|---|---|
| | Part-time | Full-time | UE | Inactive | |
| | | | I. Adult Women | | |
| **Part-time** | | | | | |
| row % | 72.07 | 11.49 | 2.26 | 14.18 | 100.00 |
| total % | 13.98 | 2.23 | 0.44 | 2.75 | 19.40 |
| **Full-time** | | | | | |
| row % | 10.02 | 82.71 | 1.94 | 5.33 | 100.00 |
| total % | 2.21 | 18.22 | 0.43 | 1.17 | 22.03 |
| **UE** | | | | | |
| row % | 20.10 | 23.12 | 39.70 | 17.09 | 100.00 |
| total % | 0.47 | 0.55 | 0.94 | 0.40 | 2.36 |
| **Inactive** | | | | | |
| row % | 7.24 | 3.27 | 0.82 | 88.67 | 100.00 |
| total % | 4.07 | 1.84 | 0.46 | 49.84 | 56.21 |
| **Column totals % of total** | 20.73 | 22.83 | 2.27 | 54.17 | 100.00 |
| | | | II. Adult Men | | |
| **Part-time** | | | | | |
| row % | 55.03 | 29.86 | 6.77 | 8.33 | 100.00 |
| total % | 3.94 | 2.14 | 0.48 | 0.60 | 7.15 |
| **Full-time** | | | | | |
| row % | 2.61 | 93.26 | 1.98 | 2.14 | 100.00 |
| total % | 1.81 | 64.78 | 1.38 | 1.49 | 69.46 |
| **UE** | | | | | |
| row % | 10.01 | 19.54 | 64.22 | 6.23 | 100.00 |
| total % | 1.02 | 1.99 | 6.53 | 0.63 | 10.17 |
| **Inactive** | | | | | |
| row % | 3.94 | 10.42 | 3.76 | 81.88 | 100.00 |
| total % | 0.52 | 1.38 | 0.50 | 10.83 | 13.22 |
| **Column totals % of total** | 7.29 | 70.28 | 8.89 | 13.54 | 100.00 |

**Table 2f Two step labour market transition patterns: Italy**

| | | Year t+1 | | | Row totals |
|---|---|---|---|---|---|
| | Part-time | Full-time | UE | Inactive | |
| | | | I. Adult Women | | |
| **Part-time** | | | | | |
| row % | 68.41 | 16.46 | 3.03 | 12.10 | 100.00 |
| total % | 6.94 | 1.67 | 0.31 | 1.23 | 10.15 |
| **Full-time** | | | | | |
| row % | 6.07 | 85.62 | 2.38 | 5.93 | 100.00 |
| total % | 1.57 | 22.22 | 0.62 | 1.54 | 25.96 |
| **UE** | | | | | |
| row % | 5.86 | 10.27 | 60.19 | 23.67 | 100.00 |
| total % | 0.46 | 0.81 | 4.73 | 1.86 | 7.86 |
| **Inactive** | | | | | |
| row % | 2.18 | 2.29 | 4.11 | 91.41 | 100.00 |
| total % | 1.22 | 1.29 | 2.30 | 51.23 | 56.04 |
| **Column totals % of total** | 10.20 | 25.99 | 7.96 | 55.86 | 100.00 |
| | | | II. Adult Men | | |
| **Part-time** | | | | | |
| row % | 51.41 | 30.26 | 8.10 | 10.24 | 100.00 |
| total % | 2.08 | 1.23 | 0.33 | 0.42 | 4.06 |
| **Full-time** | | | | | |
| row % | 1.89 | 92.25 | 2.31 | 3.55 | 100.00 |
| total % | 1.20 | 58.81 | 1.47 | 2.26 | 63.75 |
| **UE** | | | | | |
| row % | 4.26 | 21.70 | 63.84 | 10.20 | 100.00 |
| total % | 0.42 | 2.12 | 6.23 | 0.99 | 9.75 |
| **Inactive** | | | | | |
| row % | 1.42 | 4.68 | 7.26 | 86.64 | 100.00 |
| total % | 0.32 | 1.05 | 1.63 | 19.44 | 22.44 |
| **Column totals % of total** | 4.02 | 63.21 | 9.66 | 23.11 | 100.00 |

**Table 2g Two step labour market transition patterns: Greece**

| | | Year t+1 | | | Row totals |
|---|---|---|---|---|---|
| | Part-time | Full-time | UE | Inactive | |
| | | | I. Adult Women | | |
| **Part-time** | | | | | |
| row % | 56.12 | 24.40 | 3.20 | 16.29 | 100.00 |
| total % | 6.16 | 2.68 | 0.35 | 1.79 | 10.98 |
| **Full-time** | | | | | |
| row % | 9.62 | 78.34 | 3.44 | 8.60 | 100.00 |
| total % | 2.85 | 23.22 | 1.02 | 2.55 | 29.64 |
| **UE** | | | | | |
| row % | 5.71 | 17.59 | 48.07 | 28.64 | 100.00 |
| total % | 0.45 | 1.37 | 3.75 | 2.23 | 7.80 |
| **Inactive** | | | | | |
| row % | 3.13 | 3.79 | 3.72 | 89.36 | 100.00 |
| total % | 1.62 | 1.95 | 1.92 | 46.10 | 51.58 |
| **Column totals % of total** | 11.07 | 29.22 | 7.04 | 52.67 | 100.00 |
| | | | II. Adult Men | | |
| **Part-time** | | | | | |
| row % | 49.22 | 38.78 | 3.44 | 8.56 | 100.00 |
| total % | 3.50 | 2.75 | 0.24 | 0.61 | 7.10 |
| **Full-time** | | | | | |
| row % | 4.09 | 90.37 | 2.35 | 3.18 | 100.00 |
| total % | 2.96 | 65.41 | 1.70 | 2.30 | 72.38 |
| **UE** | | | | | |
| row % | 8.73 | 35.62 | 45.21 | 10.44 | 100.00 |
| total % | 0.48 | 1.96 | 2.49 | 0.58 | 5.52 |
| **Inactive** | | | | | |
| row % | 2.73 | 7.57 | 4.47 | 85.23 | 100.00 |
| total % | 0.41 | 1.14 | 0.67 | 12.79 | 15.01 |
| **Column totals % of total** | 7.35 | 71.26 | 5.11 | 16.28 | 100.00 |

**Table 2h Two step labour market transition patterns: Spain**

| | | Year t+1 | | | Row totals |
|---|---|---|---|---|---|
| | Part-time | Full-time | UE | Inactive | |
| | | | I. Adult Women | | |
| **Part-time** | | | | | |
| row % | 51.76 | 20.81 | 7.54 | 19.90 | 100.00 |
| total % | 4.45 | 1.79 | 0.65 | 1.71 | 8.59 |
| **Full-time** | | | | | |
| row % | 6.46 | 81.40 | 5.18 | 6.96 | 100.00 |
| total % | 1.52 | 19.14 | 1.22 | 1.64 | 23.51 |
| **UE** | | | | | |
| row % | 8.90 | 16.39 | 47.23 | 27.48 | 100.00 |
| total % | 0.84 | 1.55 | 4.47 | 2.60 | 9.47 |
| **Inactive** | | | | | |
| row % | 3.27 | 3.17 | 5.15 | 88.40 | 100.00 |
| total % | 1.91 | 1.85 | 3.01 | 51.65 | 58.43 |
| **Column totals % of total** | 8.72 | 24.33 | 9.35 | 57.60 | 100.00 |
| | | | II. Adult Men | | |
| **Part-time** | | | | | |
| row % | 31.46 | 43.66 | 11.08 | 13.80 | 100.00 |
| total % | 1.19 | 1.65 | 0.42 | 0.52 | 3.78 |
| **Full-time** | | | | | |
| row % | 2.07 | 89.90 | 5.22 | 2.81 | 100.00 |
| total % | 1.32 | 57.51 | 3.34 | 1.80 | 63.97 |
| **UE** | | | | | |
| row % | 4.44 | 34.81 | 49.92 | 10.83 | 100.00 |
| total % | 0.52 | 4.09 | 5.87 | 1.27 | 11.76 |
| **Inactive** | | | | | |
| row % | 2.75 | 7.01 | 6.90 | 83.34 | 100.00 |
| total % | 0.56 | 1.44 | 1.41 | 17.08 | 20.49 |
| **Column totals % of total** | 3.60 | 64.69 | 11.04 | 20.67 | 100.00 |

**Table 2i Two step labour market transition patterns: Portugal**

| | Year t+1 | | | | Row totals |
|---|---|---|---|---|---|
| | Part-time | Full-time | UE | Inactive | |
| **I. Adult Women** | | | | | |
| **Part-time** | | | | | |
| row % | 62.01 | 21.97 | 1.66 | 14.37 | 100.00 |
| total % | 6.28 | 2.22 | 0.17 | 1.46 | 10.13 |
| **Full-time** | | | | | |
| row % | 5.10 | 88.35 | 2.72 | 3.83 | 100.00 |
| total % | 2.24 | 38.80 | 1.20 | 1.68 | 43.91 |
| **UE** | | | | | |
| row % | 4.76 | 25.16 | 46.56 | 23.53 | 100.00 |
| total % | 0.25 | 1.30 | 2.41 | 1.22 | 5.17 |
| **Inactive** | | | | | |
| row % | 4.63 | 5.42 | 2.54 | 87.41 | 100.00 |
| total % | 1.89 | 2.21 | 1.03 | 35.66 | 40.79 |
| **Column totals % of total** | 10.65 | 44.53 | 4.81 | 40.01 | 100.00 |
| **II. Adult Men** | | | | | |
| **Part-time** | | | | | |
| row % | 45.22 | 34.88 | 2.33 | 17.57 | 100.00 |
| total % | 1.28 | 0.98 | 0.07 | 0.50 | 2.82 |
| **Full-time** | | | | | |
| row % | 1.41 | 94.68 | 1.84 | 2.08 | 100.00 |
| total % | 1.09 | 73.12 | 1.42 | 1.60 | 77.23 |
| **UE** | | | | | |
| row % | 3.02 | 38.61 | 44.13 | 14.23 | 100.00 |
| total % | 0.12 | 1.58 | 1.81 | 0.58 | 4.10 |
| **Inactive** | | | | | |
| row % | 3.26 | 8.92 | 3.36 | 84.46 | 100.00 |
| total % | 0.52 | 1.41 | 0.53 | 13.39 | 15.85 |
| **Column totals % of total** | 3.00 | 77.10 | 3.83 | 16.07 | 100.00 |

**Table 2j Two step labour market transition patterns: Germany**

| | Year t+1 | | | | Row totals |
|---|---|---|---|---|---|
| | Part-time | Full-time | UE | Inactive | |
| **I. Adult Women** | | | | | |
| **Part-time** | | | | | |
| row % | 74.75 | 12.24 | 3.37 | 9.64 | 100.00 |
| total % | 15.07 | 2.47 | 0.68 | 1.94 | 20.16 |
| **Full-time** | | | | | |
| row % | 5.75 | 86.41 | 4.92 | 2.92 | 100.00 |
| total % | 2.25 | 33.81 | 1.92 | 1.14 | 39.12 |
| **UE** | | | | | |
| row % | 9.79 | 18.22 | 49.51 | 22.48 | 100.00 |
| total % | 0.78 | 1.44 | 3.92 | 1.78 | 7.92 |
| **Inactive** | | | | | |
| row % | 8.22 | 3.12 | 3.32 | 85.34 | 100.00 |
| total % | 2.69 | 1.02 | 1.09 | 27.99 | 32.80 |
| **Column totals % of total** | 20.79 | 38.74 | 7.62 | 32.86 | 100.00 |
| **II. Adult Men** | | | | | |
| **Part-time** | | | | | |
| row % | 42.51 | 35.83 | 4.45 | 17.21 | 100.00 |
| total % | 1.28 | 1.08 | 0.13 | 0.52 | 3.02 |
| **Full-time** | | | | | |
| row % | 1.53 | 91.82 | 3.95 | 2.70 | 100.00 |
| total % | 1.15 | 69.47 | 2.99 | 2.05 | 75.66 |
| **UE** | | | | | |
| row % | 3.11 | 31.96 | 46.76 | 18.17 | 100.00 |
| total % | 0.23 | 2.32 | 3.40 | 1.32 | 7.26 |
| **Inactive** | | | | | |
| row % | 4.99 | 9.55 | 5.25 | 80.20 | 100.00 |
| total % | 0.70 | 1.34 | 0.74 | 11.28 | 14.06 |
| **Column totals % of total** | 3.36 | 74.21 | 7.26 | 15.16 | 100.00 |

**Table 2k Two step labour market transition patterns: United Kingdom**

| | Year t+1 | | | | Row totals |
|---|---|---|---|---|---|
| | Part-time | Full-time | UE | Inactive | |
| **I. Adult Women** | | | | | |
| **Part-time** | | | | | |
| row % | 75.80 | 12.38 | 1.28 | 10.53 | 100.00 |
| total % | 21.32 | 3.48 | 0.36 | 2.96 | 28.12 |
| **Full-time** | | | | | |
| row % | 8.47 | 85.95 | 1.11 | 4.47 | 100.00 |
| total % | 3.38 | 34.27 | 0.44 | 1.78 | 39.87 |
| **UE** | | | | | |
| row % | 22.67 | 19.84 | 21.46 | 36.03 | 100.00 |
| total % | 0.43 | 0.38 | 0.41 | 0.68 | 1.89 |
| **Inactive** | | | | | |
| row % | 11.01 | 4.27 | 1.68 | 83.05 | 100.00 |
| total % | 3.31 | 1.29 | 0.51 | 25.01 | 30.11 |
| **Column totals % of total** | 28.44 | 39.41 | 1.71 | 30.43 | 100.00 |
| **II. Adult Men** | | | | | |
| **Part-time** | | | | | |
| row % | 49.11 | 35.37 | 2.80 | 12.72 | 100.00 |
| total % | 1.87 | 1.34 | 0.11 | 0.48 | 3.80 |
| **Full-time** | | | | | |
| row % | 1.32 | 94.24 | 1.34 | 3.10 | 100.00 |
| total % | 1.07 | 76.73 | 1.09 | 2.52 | 81.42 |
| **UE** | | | | | |
| row % | 7.58 | 30.49 | 43.56 | 18.37 | 100.00 |
| total % | 0.39 | 1.56 | 2.22 | 0.94 | 5.11 |
| **Inactive** | | | | | |
| row % | 5.10 | 16.30 | 7.40 | 71.20 | 100.00 |
| total % | 0.49 | 1.58 | 0.72 | 6.89 | 9.67 |
| **Column totals % of total** | 3.82 | 81.21 | 4.14 | 10.83 | 100.00 |

**Table 3 Patterns of Labour Market Experience over 6 years: 1994 to 1999**

**Part 1**

**1. Non Movers**

| % Spending all 6 years | EU | Belgium | Denmark | France | Germany | Greece | Ireland | Italy | Portugal | Spain | The Netherlands | UK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **All** | | | | | | | | | | | | |
| Full-time | 38.44 | 45.21 | 53.09 | 45.02 | 42.23 | 33.23 | 31.97 | 32.18 | 45.59 | 28.63 | 38.62 | 44.17 |
| Part-time | 3.25 | 4.99 | 3.14 | 2.71 | 3.92 | 1.4 | 3.27 | 2.04 | 1.07 | 0.66 | 9.89 | 5.99 |
| UE | 0.94 | 2.4 | 0.15 | 1.4 | 0.58 | 0.33 | 1.61 | 1.81 | 0.13 | 0.82 | 0.97 | 0.23 |
| Inactive | 16.70 | 15.53 | 5 | 20.05 | 10.49 | 18.7 | 20.74 | 25.1 | 15.96 | 23.42 | 7.2 | 7.52 |
| *Total* | 59.33 | 68.13 | 61.38 | 69.18 | 57.22 | 53.66 | 57.59 | 61.13 | 62.75 | 53.53 | 56.68 | 57.91 |
| **Adult Women** | | | | | | | | | | | | |
| Full-time | 20.52 | 26.12 | 37.35 | 30.43 | 25.68 | 14.78 | 10.75 | 16.07 | 29.1 | 13.09 | 10.84 | 24.9 |
| Part-time | 5.71 | 8.92 | 5.73 | 4.3 | 7.76 | 1.95 | 5.16 | 3.26 | 1.81 | 1.21 | 17.81 | 10.43 |
| UE | 0.84 | 2.52 | 0.2 | 1.84 | 0.63 | 0.43 | 0.25 | 1.37 | 0.14 | 0.6 | 0.33 | 0 |
| Inactive | 25.95 | 22.09 | 6.03 | 27.66 | 17.5 | 31.11 | 35.54 | 38.92 | 23.68 | 37.06 | 1.11 | 12.34 |
| *Total* | 53.02 | 59.65 | 49.31 | 64.23 | 51.57 | 48.27 | 51.70 | 59.62 | 54.73 | 51.96 | 30.09 | 47.67 |
| **Adult Men** | | | | | | | | | | | | |
| Full-time | 58.12 | 67.48 | 70.26 | 61.48 | 58.04 | 53.96 | 54.47 | 49.18 | 64.24 | 45.53 | 70.5 | 68.56 |
| Part-time | 0.54 | 0.42 | 0.32 | 0.91 | 0.27 | 0.79 | 1.27 | 0.76 | 0.25 | 0.07 | 0.79 | 0.37 |
| UE | 1.06 | 2.26 | 0.11 | 0.91 | 0.53 | 0.22 | 3.07 | 2.28 | 0.12 | 1.05 | 0.54 | 0.53 |
| Inactive | 6.56 | 7.88 | 3.88 | 11.5 | 3.81 | 4.77 | 5.07 | 10.52 | 7.23 | 8.58 | 2.67 | 1.42 |
| *Total* | 66.28 | 78.04 | 74.57 | 74.8 | 62.65 | 59.74 | 63.88 | 62.74 | 71.84 | 55.23 | 74.5 | 70.88 |

| % Spending all 6 years | EU Aged16-24 | EU Aged 25-49 | EU Aged 50-64 |
|---|---|---|---|
| | All | All | All |
| Full-time | 7.00 | 45.10 | 32.13 |
| Part-time | 0.17 | 3.60 | 3.18 |
| UE | 0.99 | 1.10 | 0.69 |
| Inactive | 24.41 | 10.17 | 26.6 |
| *Total* | 32.57 | 59.97 | 62.60 |

**2. Percentage ever spending at least one year**

| | EU | Belgium | Denmark | France | Germany | Greece | Ireland | Italy | Portugal | Spain | The Netherlands | UK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **All** | | | | | | | | | | | | |
| Full-time | 68.23 | 68.84 | 85.57 | 68.02 | 74.65 | 70.03 | 61.81 | 59.41 | 75.93 | 62.38 | 62.76 | 75.56 |
| Part-time | 23.55 | 22.18 | 23.45 | 18.1 | 23.52 | 25.1 | 30.97 | 17.27 | 16.9 | 19.72 | 37.6 | 34.1 |
| UE | 19.33 | 14.29 | 19.79 | 16.11 | 21.97 | 19.49 | 14.82 | 21.27 | 14.35 | 28.82 | 22.26 | 10.24 |
| Inactive | 41.63 | 32.33 | 24.48 | 36.75 | 35.25 | 47.07 | 47.44 | 51.48 | 40.23 | 52.48 | 33.03 | 33.96 |
| **Adult Women** | | | | | | | | | | | | |
| Full-time | 50.64 | 53.17 | 78.95 | 55.04 | 57.23 | 51.38 | 39.18 | 40.07 | 63.81 | 41.75 | 37.48 | 60.31 |
| Part-time | 33.69 | 34.53 | 36.56 | 25.28 | 37.63 | 29.05 | 42.33 | 22.4 | 24.19 | 25.18 | 58.78 | 52.29 |
| UE | 20.28 | 18.06 | 24.8 | 18.78 | 22.01 | 21.8 | 8.99 | 20.14 | 15.87 | 27.12 | 33.48 | 8.02 |
| Inactive | 57.22 | 42.52 | 31.92 | 47.24 | 45.98 | 69.4 | 71.45 | 69.08 | 54.92 | 73.16 | 47.81 | 45.84 |
| **Adult Men** | | | | | | | | | | | | |
| Full-time | 87.54 | 87.09 | 92.78 | 82.66 | 91.29 | 90.98 | 85.8 | 79.82 | 89.62 | 84.81 | 91.8 | 94.85 |
| Part-time | 12.43 | 7.80 | 9.16 | 10.01 | 10.04 | 20.67 | 18.93 | 11.86 | 8.66 | 13.77 | 13.29 | 11.09 |
| UE | 18.29 | 9.89 | 14.33 | 13.09 | 21.93 | 16.91 | 21 | 22.45 | 1263 | 30.67 | 9.39 | 13.04 |
| Inactive | 24.50 | 20.45 | 15.73 | 24.92 | 25 | 21.99 | 22 | 32.9 | 23.62 | 30.01 | 16.06 | 18.93 |

| | EU Aged16-24 All | EU Aged 25-49 All | EU Aged 50-64 All |
|---|---|---|---|
| Full-time | 54.65 | 74.64 | 59.53 |
| Part-time | 21.32 | 25.16 | 21.17 |
| UE | 36.83 | 21.24 | 13.22 |
| Inactive | 82.90 | 31.62 | 51.91 |

**Part 3**

| | | EU | Belgium | Denmark | France | Germany | Greece | Ireland | Italy | Portugal | Spain | The Netherlands | UK |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **3. Percentage ever moving IA to Part-time to Full-time** | | | | | | | | | | | | | |
| Total Percentage | All | 1.04 | 0.69 | 0.77 | 0.45 | 0.85 | 1.42 | 1.75 | 0.62 | 1.44 | 0.93 | 0.92 | 1.9 |
| | Adult Women | 1.51 | 0.86 | 1.19 | 0.76 | 1.15 | 2.26 | 2.89 | 0.93 | 1.92 | 1.09 | 1.42 | 2.66 |
| | Adult Men | 0.52 | 0.5 | 0.32 | 0.1 | 0.56 | 0.48 | 0.53 | 0.27 | 0.89 | 0.75 | 0.34 | 0.94 |
| % of those ever moved | All | 2.56% | 2.18% | 2.00% | 1.46% | 1.99% | 3.07% | 4.12% | 1.58% | 3.86% | 1.99% | 2.12% | 4.52% |
| | Adult Women | 3.22% | 2.13% | 2.33% | 2.13% | 2.38% | 4.37% | 5.98% | 2.31% | 4.23% | 2.26% | 2.41% | 5.08% |
| | Adult Men | 1.56% | 2.29% | 1.27% | 0.40% | 1.51% | 1.19% | 1.47% | 0.74% | 3.19% | 1.68% | 1.35% | 3.24% |
| **4. Percentage ever moving UE to Part-time to Full-time** | | | | | | | | | | | | | |
| Total % | All | 0.69 | 0.3 | 0.87 | 0.53 | 0.47 | 0.99 | 1.13 | 0.64 | 0.29 | 1.02 | 0.78 | 0.65 |
| | Adult Women | 0.71 | 0.43 | 1.38 | 0.58 | 0.73 | 0.82 | 0.5 | 0.6 | 0.4 | 0.91 | 1.21 | 0.54 |
| | Adult Men | 0.67 | 0.17 | 0.32 | 0.46 | 0.23 | 1.18 | 1.8 | 0.68 | 0.16 | 1.15 | 0.3 | 0.79 |
| % of those ever moved | All | 1.70% | 0.97% | 2.26% | 1.69% | 1.11% | 2.13% | 2.67% | 1.64% | 0.77% | 2.20% | 1.80% | 1.54% |
| | Adult Women | 1.51% | 1.06% | 2.72% | 1.62% | 1.51% | 1.58% | 1.04% | 1.48% | 0.87% | 1.88% | 2.04% | 1.03% |
| | Adult Men | 1.98% | 0.76% | 1.27% | 1.80% | 0.62% | 2.93% | 4.98% | 1.83% | 0.58% | 2.56% | 1.16% | 2.70% |
| **5. Percentage ever moving Full-time to Part-time to IA** | | | | | | | | | | | | | |
| Total % | All | 0.76 | 0.50 | 0.77 | 0.45 | 0.41 | 1.55 | 0.87 | 0.59 | 0.9 | 0.5 | 0.74 | 1.32 |
| | Adult Women | 1.06 | 0.79 | 1.09 | 0.44 | 0.56 | 2.18 | 1 | 0.79 | 1.41 | 0.61 | 0.95 | 2.04 |
| | Adult Men | 0.44 | 0.17 | 0.43 | 0.45 | 0.27 | 0.83 | 0.73 | 0.38 | 0.33 | 0.4 | 0.5 | 0.42 |
| % of those ever moved | All | 1.88% | 1.57% | 2.00% | 1.46% | 0.95% | 3.33% | 2.06% | 1.51% | 2.42% | 1.08% | 1.69% | 3.14% |
| | Adult Women | 2.26% | 1.96% | 2.14% | 1.25% | 1.15% | 4.22% | 2.08% | 1.95% | 3.11% | 1.25% | 1.60% | 3.89% |
| | Adult Men | 1.29% | 0.76% | 1.69% | 1.80% | 0.71% | 2.06% | 2.02% | 1.01% | 1.16% | 0.88% | 1.93% | 1.44% |
| **6. Percentage ever moving Full-time to Part-time to UE** | | | | | | | | | | | | | |
| Total % | All | 0.34 | 0.23 | 0.41 | 0.33 | 0.41 | 0.35 | 0.42 | 0.4 | 0.15 | 0.44 | 0.32 | 0.26 |
| | Adult Women | 0.39 | 0.36 | 0.79 | 0.45 | 0.45 | 0.39 | 0.38 | 0.31 | 0.18 | 0.36 | 0.52 | 0.38 |
| | Adult Men | 0.3 | 0.08 | 0 | 0.2 | 0.36 | 0.31 | 0.47 | 0.48 | 0.12 | 0.53 | 0.1 | 0.11 |
| % of those ever moved | All | 0.84% | 0.72% | 1.06% | 1.07% | 0.95% | 0.75% | 0.99% | 1.01% | 0.41% | 0.94% | 0.74% | 0.60% |
| | Adult Women | 0.82% | 0.89% | 1.55% | 1.25% | 0.93% | 0.75% | 0.78% | 0.77% | 0.39% | 0.75% | 0.87% | 0.71% |
| | Adult Men | 0.88% | 0.38% | 0.00% | 0.80% | 0.98% | 0.76% | 1.29% | 1.28% | 0.43% | 1.17% | 0.38% | 0.36% |

# Table 4: Complex Lag Specification: Wave 4 (1997). Women.

| | Coefficients | | | Marginal effects (dy/dx) computed at the mean of x | | | | |
|---|---|---|---|---|---|---|---|---|
| | PT | UE | IA | PT | FT | UE | IA | MEAN X |
| Age (/10) | 0.01 | -1.01 | 0.24 | 0.00 | 0.01 | -0.08 | 0.07 | 4.18 |
| | (0.02) | (3.92)*** | (0.86) | | | | | |
| Age squared (/100) | 0.04 | 0.14 | 0.08 | 0.00 | -0.02 | 0.01 | 0.01 | 18.52 |
| | (1.40) | (4.31)*** | (2.52)*** | | | | | |
| High education | 0.08 | -0.66 | -0.84 | 0.07 | 0.10 | -0.03 | -0.14 | 0.17 |
| | (0.80) | (5.83)*** | (8.49)*** | | | | | |
| Medium education | -0.10 | -0.27 | -0.47 | 0.02 | 0.07 | -0.01 | -0.08 | 0.32 |
| | (1.26) | (3.28)*** | (5.17)*** | | | | | |
| Non-labour HH income (log) | 0.02 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 2.94 |
| | (1.93)** | (0.50) | (0.85) | | | | | |
| WE rate (NUTS3, UK NUTS2) | -0.02 | 0.05 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 11.45 |
| | (1.36) | (3.06)*** | (0.17) | | | | | |
| Married | 0.28 | -0.24 | 0.57 | 0.02 | -0.08 | -0.04 | 0.10 | 0.79 |
| | (4.03)*** | (3.34)*** | (5.62)*** | | | | | |
| Step children in HH | 0.41 | 0.65 | -0.05 | 0.06 | -0.06 | 0.05 | -0.05 | 0.01 |
| | (1.46) | (1.66)* | (0.14) | | | | | |
| Total number of children | 0.01 | -0.05 | -0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 1.36 |
| | (0.39) | (1.16) | (0.37) | | | | | |
| Number of children 0-3 | 0.64 | 0.63 | 1.43 | 0.01 | -0.25 | 0.00 | 0.24 | 0.12 |
| | (4.49)*** | (3.46)*** | (9.55)*** | | | | | |
| Number of children 4-6 | 0.15 | 0.16 | 0.37 | 0.00 | -0.06 | 0.00 | 0.06 | 0.14 |
| | (1.94)** | (2.06)* | (4.84)** | | | | | |
| Number of children 7-12 | 0.18 | 0.13 | 0.31 | 0.01 | -0.06 | 0.00 | 0.05 | 0.32 |
| | (3.52)*** | (1.59) | (6.23)*** | | | | | |
| Number of children 13-16 | 0.08 | 0.02 | 0.04 | 0.01 | -0.01 | 0.00 | 0.00 | 0.24 |
| | (1.21) | (0.27) | (0.57) | | | | | |
| Denmark | -1.19 | 4.24 | -4.05 | -0.20 | -0.32 | 0.84 | -0.32 | 0.04 |
| | (0.49) | (1.57) | (1.75)* | | | | | |
| Netherlands | -0.22 | 5.26 | -3.07 | -0.19 | -0.35 | 0.89 | -0.36 | 0.09 |
| | (0.09) | (1.89)* | (1.31) | | | | | |
| Belgium | -1.06 | 4.00 | -3.94 | -0.19 | -0.29 | 0.82 | -0.33 | 0.05 |
| | (0.44) | (1.40) | (1.68)* | | | | | |
| France | -1.25 | 3.96 | -3.68 | -0.19 | -0.25 | 0.81 | -0.37 | 0.10 |
| | (0.52) | (1.43) | (1.60)* | | | | | |
| Ireland | -0.57 | 2.63 | -3.82 | -0.13 | -0.12 | 0.58 | -0.33 | 0.05 |
| | (0.23) | (0.92) | (1.61)* | | | | | |
| Italy | -1.28 | 3.69 | -4.00 | -0.18 | -0.16 | 0.76 | -0.42 | 0.15 |
| | (0.52) | (1.28) | (1.69)* | | | | | |
| Greece | -1.81 | 3.68 | -3.96 | -0.20 | -0.21 | 0.78 | -0.37 | 0.10 |
| | (0.77) | (1.34) | (1.75)* | | | | | |
| Spain | -1.16 | 3.41 | -3.93 | -0.17 | -0.17 | 0.73 | -0.39 | 0.12 |
| | (0.46) | (1.18) | (1.65)* | | | | | |
| Portugal | -1.82 | 3.12 | -4.71 | -0.19 | -0.12 | 0.70 | -0.39 | 0.10 |
| | (0.77) | (1.20) | (2.13)** | | | | | |
| Germany | -0.87 | 4.19 | -3.76 | -0.18 | -0.26 | 0.82 | -0.39 | 0.11 |
| | (0.36) | (1.50) | (1.60)* | | | | | |
| UK | -0.65 | 3.25 | -3.34 | -0.16 | -0.20 | 0.70 | -0.34 | 0.07 |
| | (0.27) | (1.21) | (1.46) | | | | | |
| Regional rate of real GDP (log) | -0.03 | -0.29 | -0.12 | 0.01 | 0.03 | -0.02 | -0.02 | 9.76 |
| | (0.12) | (0.99) | (0.48) | | | | | |
| Regional total activity rate (t-1) | 0.01 | -0.05 | 0.02 | 0.00 | 0.00 | 0.00 | 0.01 | 54.14 |
| | (0.38) | (1.07) | (0.75) | | | | | |
| Regional female activity rate (t-1) | -0.04 | 0.01 | -0.07 | 0.00 | 0.01 | 0.00 | -0.01 | 43.38 |
| | (1.68)* | (0.31) | (3.45)*** | | | | | |
| Regional long-term unemployment rate (t-1) | -0.01 | -0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 50.36 |
| | (2.14)** | (0.99) | (0.60) | | | | | |
| Regional population (log) | 0.04 | -0.08 | -0.05 | 0.01 | 0.01 | -0.01 | -0.01 | 8.34 |
| | (0.66) | (0.87) | (0.81) | | | | | |
| Regional share of employment in industry | -2.04 | -0.23 | 0.71 | -0.38 | 0.10 | 0.00 | 0.28 | 0.28 |
| | (2.66)*** | (0.18) | (0.98) | | | | | |
| Regional share of employment in services | -1.38 | -0.30 | -0.24 | -0.21 | 0.16 | 0.01 | 0.04 | 0.64 |
| | (2.13)** | (0.38) | (0.51) | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Lag structure LT 30 (t-1) | 2.88 | 0.97 | 1.07 | 0.49 | -0.37 | -0.03 | -0.09 | 0.17 |
| | (27.39)*** | (5.88)*** | (8.12)*** | | | | | |
| Lag structure UE (t-1) | 1.28 | 3.66 | 1.93 | -0.08 | -0.37 | 0.40 | 0.05 | 0.08 |
| | (8.15)*** | (19.70)*** | (10.96)*** | | | | | |
| Lag structure IA (t-1) | 1.07 | 1.60 | 3.11 | -0.07 | -0.46 | 0.01 | 0.53 | 0.37 |
| | (8.39)*** | (7.56)*** | (19.93)*** | | | | | |
| Lag structure LT 30 (t-2) | 2.12 | 0.85 | 1.15 | 0.31 | -0.31 | -0.02 | 0.02 | 0.17 |
| | (17.97)*** | (5.39)*** | (8.52)*** | | | | | |
| Lag structure UE (t-2) | 1.05 | 2.33 | 1.73 | -0.03 | -0.31 | 0.16 | 0.19 | 0.09 |
| | (6.43)*** | (16.54)*** | (11.74)*** | | | | | |
| Lag structure IA (t-2) | 1.16 | 1.11 | 3.04 | -0.05 | -0.45 | -0.02 | 0.52 | 0.37 |
| | (9.88)*** | (6.28)*** | (26.60)*** | | | | | |
| Lag structure LT 30 (t-3) | 1.46 | 0.49 | 0.84 | 0.21 | -0.23 | -0.02 | 0.04 | 0.16 |
| | (10.51)*** | (4.26)*** | (8.45)*** | | | | | |
| Lag structure UE (t-3) | 0.86 | 2.19 | 1.53 | -0.04 | -0.29 | 0.16 | 0.17 | 0.09 |
| | (5.72)*** | (15.05)*** | (10.75)*** | | | | | |
| Lag structure IA (t-3) | 0.72 | 0.87 | 2.23 | -0.05 | -0.34 | -0.01 | 0.40 | 0.38 |
| | (6.29)*** | (5.88)*** | (16.78)*** | | | | | |
| IA 2 out of three past periods | -0.40 | -0.69 | -1.88 | 0.02 | 0.24 | -0.01 | -0.25 | 0.12 |
| | (2.09)** | (3.48)*** | (10.81)*** | | | | | |
| IA 3 out of three past periods | 0.43 | 0.45 | -1.15 | 0.13 | 0.05 | 0.05 | -0.23 | 0.26 |
| | (1.65)* | (1.45) | (5.40)*** | | | | | |
| LT 30 2 out of three past periods | -0.93 | 0.07 | 0.03 | -0.12 | 0.06 | 0.02 | 0.05 | 0.07 |
| | (5.88)*** | (0.36) | (0.15) | | | | | |
| LT 30 3 out of three past periods | -1.39 | 0.03 | 0.13 | -0.17 | 0.06 | 0.02 | 0.09 | 0.09 |
| | (5.90)*** | (0.11) | (0.45) | | | | | |
| UE 2 out of three past periods | -0.12 | -1.43 | -0.57 | 0.03 | 0.11 | -0.06 | -0.08 | 0.04 |
| | (0.54) | (7.06)*** | (2.76)*** | | | | | |
| UE 3 out of three past periods | 0.03 | -2.31 | -0.50 | 0.06 | 0.10 | -0.08 | -0.07 | 0.03 |
| | (0.06) | (8.75)*** | (1.50) | | | | | |
| MT 30 2 out of three past periods | 0.46 | 0.58 | 0.97 | -0.01 | -0.17 | 0.01 | 0.17 | 0.10 |
| | (4.18)*** | (4.86)*** | (8.10)*** | | | | | |
| *Observations* | 23957 | 23957 | 23957 | | | | | |
| *Pseudo R-squared* | 0.55 | | | | | | | |
| *Log pseudo-likelihood* | -14782.52 | | | | | | | |

*Robust z statistics in parentheses ; * significant at 1%; ** significant at 5% ; *** significant at 10%; Standard errors adjusted for clustering on region*

Note: LT 30 stands for "Less than 30 hours" i.e part time.

**Table 5: Simulated Probabilities of Labour Market Choices Conditional on Past Labour Market Patterns. Wave 4 (1997). Women.**

| | Employment HISTORY WAVE3 | WAVE2 | WAVE1 | EU pop-weighted AVG PREDICTED LFS IN WAVE 4 SIMPLE-LAG | | | EU pop-weighted AVG PREDICTED LFS IN WAVE 4 COMPLEX-LAG | | |
|---|---|---|---|---|---|---|---|---|---|
| | L1 | L2 | L3 | OLM | PT | FT | OLM | PT | FT |
| 1 | O | O | O | 0.82 | 0.12 | 0.07 | 0.81 | 0.11 | 0.09 |
| 2 | P | P | P | 0.06 | 0.88 | 0.07 | 0.06 | 0.87 | 0.08 |
| 3 | F | F | F | 0.07 | 0.08 | 0.86 | 0.04 | 0.06 | 0.90 |
| 4 | O | O | P | 0.68 | 0.22 | 0.11 | 0.64 | 0.26 | 0.11 |
| 5 | O | O | F | 0.66 | 0.16 | 0.20 | 0.66 | 0.13 | 0.22 |
| 6 | O | P | O | 0.61 | 0.29 | 0.11 | 0.56 | 0.35 | 0.10 |
| 7 | O | P | P | 0.42 | 0.45 | 0.14 | 0.51 | 0.38 | 0.12 |
| 8 | O | P | F | 0.43 | 0.33 | 0.25 | 0.43 | 0.38 | 0.21 |
| 9 | O | F | O | 0.59 | 0.15 | 0.26 | 0.60 | 0.12 | 0.29 |
| 10 | O | F | F | 0.36 | 0.14 | 0.51 | 0.56 | 0.12 | 0.34 |
| 11 | O | F | P | 0.42 | 0.24 | 0.34 | 0.44 | 0.28 | 0.29 |
| 12 | P | P | O | 0.13 | 0.80 | 0.08 | 0.19 | 0.74 | 0.09 |
| 13 | P | P | F | 0.07 | 0.78 | 0.16 | 0.07 | 0.75 | 0.19 |
| 14 | P | O | O | 0.33 | 0.59 | 0.10 | 0.31 | 0.61 | 0.09 |
| 15 | P | O | P | 0.18 | 0.73 | 0.10 | 0.26 | 0.64 | 0.11 |
| 16 | P | O | F | 0.20 | 0.61 | 0.20 | 0.21 | 0.63 | 0.17 |
| 17 | P | F | F | 0.08 | 0.48 | 0.44 | 0.09 | 0.61 | 0.32 |
| 18 | P | F | P | 0.08 | 0.68 | 0.25 | 0.08 | 0.63 | 0.31 |
| 19 | P | F | O | 0.17 | 0.58 | 0.26 | 0.18 | 0.61 | 0.23 |
| 20 | F | F | O | 0.18 | 0.13 | 0.70 | 0.34 | 0.13 | 0.54 |
| 21 | F | F | P | 0.10 | 0.17 | 0.74 | 0.12 | 0.29 | 0.61 |
| 22 | F | O | O | 0.47 | 0.19 | 0.35 | 0.48 | 0.15 | 0.38 |
| 23 | F | O | P | 0.31 | 0.28 | 0.42 | 0.32 | 0.33 | 0.37 |
| 24 | F | O | F | 0.24 | 0.16 | 0.61 | 0.42 | 0.15 | 0.44 |
| 25 | F | P | P | 0.14 | 0.45 | 0.41 | 0.12 | 0.44 | 0.45 |
| 26 | F | P | F | 0.12 | 0.27 | 0.62 | 0.13 | 0.42 | 0.46 |
| 27 | F | P | O | 0.26 | 0.35 | 0.40 | 0.26 | 0.42 | 0.33 |

| SAME NUMBERS FOR UK PREDICTED LFS IN WAVE 4 SIMPLE-LAG | | | SAME NUMBERS FOR UK PREDICTED LFS IN WAVE 4 COMPLEX-LAG | | |
|---|---|---|---|---|---|
| OLM | PT | FT | OLM | PT | FT |
| 0.75 | 0.16 | 0.09 | 0.75 | 0.15 | 0.11 |
| 0.04 | 0.89 | 0.06 | 0.04 | 0.89 | 0.07 |
| 0.04 | 0.09 | 0.87 | 0.03 | 0.07 | 0.90 |
| 0.59 | 0.28 | 0.13 | 0.55 | 0.33 | 0.12 |
| 0.56 | 0.20 | 0.23 | 0.57 | 0.17 | 0.26 |
| 0.51 | 0.37 | 0.13 | 0.46 | 0.43 | 0.11 |
| 0.32 | 0.53 | 0.15 | 0.41 | 0.46 | 0.13 |
| 0.32 | 0.40 | 0.28 | 0.32 | 0.46 | 0.22 |
| 0.49 | 0.20 | 0.32 | 0.50 | 0.16 | 0.34 |
| 0.26 | 0.17 | 0.57 | 0.46 | 0.15 | 0.39 |
| 0.32 | 0.30 | 0.38 | 0.33 | 0.34 | 0.32 |
| 0.09 | 0.84 | 0.07 | 0.13 | 0.79 | 0.08 |
| 0.05 | 0.80 | 0.15 | 0.04 | 0.78 | 0.17 |
| 0.25 | 0.65 | 0.10 | 0.24 | 0.67 | 0.09 |
| 0.13 | 0.77 | 0.09 | 0.20 | 0.70 | 0.10 |
| 0.15 | 0.65 | 0.20 | 0.15 | 0.68 | 0.17 |
| 0.06 | 0.51 | 0.44 | 0.06 | 0.64 | 0.30 |
| 0.06 | 0.71 | 0.24 | 0.05 | 0.66 | 0.29 |
| 0.12 | 0.62 | 0.26 | 0.12 | 0.66 | 0.22 |
| 0.13 | 0.15 | 0.72 | 0.27 | 0.16 | 0.58 |
| 0.07 | 0.19 | 0.74 | 0.09 | 0.31 | 0.60 |
| 0.40 | 0.22 | 0.38 | 0.40 | 0.18 | 0.41 |
| 0.25 | 0.31 | 0.44 | 0.25 | 0.37 | 0.38 |
| 0.19 | 0.18 | 0.64 | 0.35 | 0.17 | 0.47 |
| 0.10 | 0.49 | 0.41 | 0.08 | 0.48 | 0.44 |
| 0.08 | 0.29 | 0.63 | 0.09 | 0.46 | 0.45 |
| 0.19 | 0.39 | 0.41 | 0.19 | 0.47 | 0.34 |

## Table 6: Random Effects Estimation: Wave 4 (1997). Women.

| | Coefficients | | |
|---|---|---|---|
| | PT | UE | IA |
| Age (/10) | -1.74 | -3.31 | -4.71 |
| | (-5.06)*** | (-11.63)*** | (-14.50)*** |
| Age squared (/100) | 0.26 | 0.42 | 0.68 |
| | ( 6.85)*** | (11.51)*** | (16.58)*** |
| High education | 0.15 | -1.63 | -2.52 |
| | ( 0.90) | (-8.50)*** | (-15.41)*** |
| Medium education | 0.00 | -0.63 | -1.17 |
| | (-0.04) | (-4.31)*** | (-8.01)*** |
| Non-labour HH income (log) | 0.02 | -0.01 | 0.00 |
| | ( 1.61) | (-1.14) | (0.47 ) |
| WE rate (NUTS3, UK NUTS2) | -0.03 | 0.03 | -0.04 |
| | (-1.27) | (2.10)** | (-1.75)* |
| Married | 0.33 | -0.38 | 0.71 |
| | ( 3.77)*** | (-3.73)*** | (5.42)*** |
| Step children in HH | 0.02 | 0.14 | -0.49 |
| | ( 0.03) | (0.37) | (-1.30) |
| Total number of children | 0.21 | 0.04 | 0.28 |
| | ( 3.04)** | (0.61) | (5.78 )*** |
| Number of children 0-3 | 0.58 | 0.80 | 1.24 |
| | ( 2.90)** | (3.79)*** | (6.64)*** |
| Number of children 4-6 | 0.46 | 0.60 | 0.87 |
| | ( 3.62)*** | (2.96)** | (7.85)*** |
| Number of children 7-12 | 0.34 | 0.44 | 0.52 |
| | ( 3.13)** | (3.11)** | (6.09)*** |
| Number of children 13-16 | 0.16 | 0.28 | 0.20 |
| | ( 2.24)** | (2.92)** | (2.34 )** |
| Denmark | -1.19 | 1.21 | -0.44 |
| | (-6.99)*** | (2.57)** | (-1.74)* |
| Netherlands | 0.77 | 2.98 | 0.20 |
| | ( 3.70)*** | (6.01)*** | (0.60) |
| Belgium | -1.08 | 1.31 | -0.37 |
| | (-3.45)*** | (2.42)** | (-0.88) |
| France | -1.11 | 1.14 | 0.15 |
| | (-3.20)*** | (2.06)** | (0.40 ) |
| Ireland | -0.97 | 0.22 | 0.97 |
| | (-2.38)** | (0.43) | (2.83)** |
| Italy | -2.26 | 0.48 | -0.10 |
| | (-5.46)*** | (0.81) | (-0.22 ) |
| Greece | -2.27 | 0.66 | -0.62 |
| | (-7.19)*** | (1.30) | (-1.68)* |
| Spain | -1.78 | 0.75 | 0.61 |
| | (-3.64)*** | (1.20) | (1.15 ) |
| Portugal | -2.49 | -0.78 | -0.78 |
| | (-10.72)*** | (-1.52) | (-2.83)** |
| Germany | -0.92 | 1.20 | -0.15 |
| | (-4.12)*** | (2.52)** | (-0.43 ) |
| UK | | | |
| Regional rate of real GDP (log) | 0.25 | -1.16 | -1.08 |
| | ( 0.59) | (-3.67)*** | (-2.32)** |
| Regional total activity rate (t-1) | 0.10 | 0.05 | 0.13 |
| | ( 1.82)* | (0.81) | (2.39 )** |
| Regional female activity rate (t-1) | -0.14 | -0.08 | -0.21 |
| | (-4.25)*** | (-2.33)** | (-6.12)*** |
| Regional long-term unemployment rate (t-1) | 0.00 | 0.00 | -0.01 |
| | (-0.52) | (-0.60) | (-1.48 ) |
| Regional population (log) | 0.21 | -0.05 | 0.10 |
| | ( 2.60)** | (-0.60) | (1.01) |
| Regional share of employment in industry | -2.36 | 0.86 | 1.12 |
| | (-2.18)** | (0.76) | (0.84 ) |
| Regional share of employment in services | -2.54 | 1.14 | 2.60 |
| | (-2.58)** | '(1.28) | (2.43)** |

| | | | |
|---|---|---|---|
| Constant Type A | 3.74<br>(0.87) | 17.25<br>(5.20)*** | 16.86<br>(4.53)*** |
| Constant Type B | -1.15<br>(-0.26) | 12.85<br>(3.78)*** | 13.66<br>(3.68)*** |
| Constant Type C | 0.71<br>(0.16) | 17.73<br>( 5.04)*** | 19.74<br>(5.34)*** |
| Pa | 0.26<br>(14.97)*** | | |
| Pb | 0.35<br>(17.42)*** | | |

*Observations (22085 individuals)*  66255
*Log pseudo-likelihood*  -58591.24
*Robust z statistics in parentheses ; * significant at 1%; ** significant at 5% ;*
*** significant at 10%; Standard errors adjusted for clustering on region*

**Table 7: Simulated Probabilities of Labour Market Choices from Random Effects Model. Women.**

| | | | |
|---|---|---|---|
| Out of Labour force (=IA) | O | | |
| Unemployed | U | | |
| Part-time | P | | |
| Full-time | F | | |

| | | TYPE 1 | TYPE 2 | TYPE 3 |
|---|---|---|---|---|
| UNWGHTED EUROPEAN AVG | P | 0.66 | 0.11 | 0.02 |
| | U | 0.11 | 0.03 | 0.10 |
| | O | 0.16 | 0.11 | 0.86 |
| | F | 0.06 | 0.75 | 0.03 |
| POPweight EUROPEAN AVG | P | 0.68 | 0.10 | 0.02 |
| | U | 0.11 | 0.02 | 0.08 |
| | O | 0.17 | 0.11 | 0.88 |
| | F | 0.05 | 0.77 | 0.02 |
| DENMARK | P | 0.70 | 0.04 | 0.03 |
| | U | 0.15 | 0.02 | 0.20 |
| | O | 0.05 | 0.02 | 0.68 |
| | F | 0.11 | 0.92 | 0.09 |
| NETHERLANDS | P | 0.87 | 0.40 | 0.07 |
| | U | 0.10 | 0.08 | 0.28 |
| | O | 0.02 | 0.05 | 0.63 |
| | F | 0.01 | 0.47 | 0.01 |
| BELGIUM | P | 0.70 | 0.09 | 0.02 |
| | U | 0.16 | 0.04 | 0.13 |
| | O | 0.09 | 0.07 | 0.83 |
| | F | 0.05 | 0.80 | 0.02 |
| FRANCE | P | 0.68 | 0.07 | 0.01 |
| | U | 0.14 | 0.02 | 0.09 |
| | O | 0.12 | 0.07 | 0.87 |
| | F | 0.06 | 0.84 | 0.02 |
| IRELAND | P | 0.71 | 0.13 | 0.01 |
| | U | 0.03 | 0.01 | 0.01 |
| | O | 0.24 | 0.24 | 0.97 |
| | F | 0.02 | 0.61 | 0.01 |
| ITALY | P | 0.49 | 0.06 | 0.00 |
| | U | 0.12 | 0.02 | 0.03 |
| | O | 0.35 | 0.22 | 0.96 |
| | F | 0.04 | 0.70 | 0.01 |
| GREECE | P | 0.57 | 0.07 | 0.01 |
| | U | 0.19 | 0.04 | 0.08 |
| | O | 0.19 | 0.11 | 0.89 |
| | F | 0.05 | 0.79 | 0.01 |
| SPAIN | P | 0.45 | 0.07 | 0.00 |
| | U | 0.11 | 0.03 | 0.02 |
| | O | 0.42 | 0.34 | 0.97 |
| | F | 0.03 | 0.57 | 0.00 |
| PORTUGAL | P | 0.53 | 0.02 | 0.01 |
| | U | 0.11 | 0.01 | 0.05 |
| | O | 0.18 | 0.04 | 0.89 |
| | F | 0.18 | 0.94 | 0.05 |
| GERMANY | P | 0.75 | 0.09 | 0.02 |
| | U | 0.13 | 0.03 | 0.12 |
| | O | 0.08 | 0.05 | 0.82 |
| | F | 0.05 | 0.83 | 0.03 |
| UK | P | 0.89 | 0.14 | 0.04 |
| | U | 0.03 | 0.01 | 0.04 |
| | O | 0.05 | 0.04 | 0.87 |
| | F | 0.04 | 0.81 | 0.04 |

**Table 8: Complex Lag Specification: Wave 4 (1997). Men.**

| | Coefficients | | | Marginal effects (dy/dx) computed at the mean of x | | | | |
|---|---|---|---|---|---|---|---|---|
| | PT | UE | IA | PT | FT | UE | IA | MEAN X |
| Age (/10) | -0.52 | -0.85 | 0.62 | -0.01 | 0.03 | -0.03 | 0.01 | 4.17 |
| | (1.55) | (3.03)*** | (1.81)* | | | | | |
| Age squared (/100) | 0.11 | 0.13 | 0.10 | 0.00 | -0.01 | 0.00 | 0.00 | 18.51 |
| | (2.77)*** | (3.99)*** | (2.59)*** | | | | | |
| High education | 0.41 | -0.92 | -0.92 | 0.01 | 0.02 | -0.03 | -0.01 | 0.20 |
| | (3.35)*** | (7.76)*** | (6.51)*** | | | | | |
| Medium education | 0.11 | -0.35 | -0.40 | 0.00 | 0.01 | -0.01 | -0.01 | 0.34 |
| | (1.20) | (4.58)*** | (4.27)*** | | | | | |
| Non-labour HH income (log) | -0.02 | -0.03 | -0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 2.95 |
| | (1.10) | (2.36)*** | (1.52) | | | | | |
| WE rate (NUTS3, UK NUTS2) | 0.01 | 0.03 | -0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 11.47 |
| | (0.49) | (1.86)* | (0.71) | | | | | |
| Married | -0.44 | -0.72 | -0.73 | -0.01 | 0.05 | -0.03 | -0.01 | 0.77 |
| | (4.17)*** | (7.65)*** | (5.31)*** | | | | | |
| Step children in HH | 0.21 | 0.21 | 0.32 | 0.00 | -0.02 | 0.01 | 0.01 | 0.02 |
| | (0.58) | (0.77) | (1.09) | | | | | |
| Total number of children | -0.12 | 0.04 | -0.09 | 0.00 | 0.00 | 0.00 | 0.00 | 1.26 |
| | (2.10)** | (0.75) | (2.16)** | | | | | |
| Number of children 0-3 | 0.30 | 0.06 | 0.27 | 0.01 | -0.01 | 0.00 | 0.00 | 0.13 |
| | (2.37)*** | (0.50) | (1.21) | | | | | |
| Number of children 4-6 | 0.16 | 0.06 | 0.27 | 0.00 | -0.01 | 0.00 | 0.00 | 0.14 |
| | (1.00) | (0.56) | (1.37) | | | | | |
| Number of children 7-12 | 0.17 | 0.03 | -0.13 | 0.00 | 0.00 | 0.00 | 0.00 | 0.32 |
| | (2.25)** | (0.38) | (1.03) | | | | | |
| Number of children 13-16 | 0.18 | -0.02 | -0.06 | 0.00 | 0.00 | 0.00 | 0.00 | 0.23 |
| | (1.87)* | (0.21) | (0.53) | | | | | |
| Denmark | -1.89 | -1.65 | -4.70 | -0.02 | 0.07 | -0.03 | -0.02 | 0.04 |
| | (0.45) | (0.63) | (1.26) | | | | | |
| Netherlands | -1.90 | -1.52 | -3.74 | -0.02 | 0.07 | -0.03 | -0.02 | 0.09 |
| | (0.45) | (0.59) | (1.01) | | | | | |
| Belgium | -2.70 | -1.19 | -4.14 | -0.02 | 0.07 | -0.03 | -0.02 | 0.05 |
| | (0.65) | (0.45) | (1.11) | | | | | |
| France | -1.74 | -1.05 | -3.70 | -0.02 | 0.07 | -0.03 | -0.02 | 0.10 |
| | (0.42) | (0.39) | (1.00) | | | | | |
| Ireland | -1.90 | -1.30 | -4.61 | -0.02 | 0.07 | -0.03 | -0.02 | 0.06 |
| | (0.44) | (0.48) | (1.19) | | | | | |
| Italy | -3.04 | -1.51 | -4.43 | -0.03 | 0.10 | -0.03 | -0.03 | 0.16 |
| | (0.72) | (0.56) | (1.16) | | | | | |
| Greece | -2.29 | -1.30 | -4.04 | -0.02 | 0.07 | -0.03 | -0.02 | 0.09 |
| | (0.57) | (0.51) | (1.10) | | | | | |
| Spain | -2.66 | -1.33 | -4.10 | -0.03 | 0.08 | -0.03 | -0.02 | 0.12 |
| | (0.62) | (0.48) | (1.05) | | | | | |
| Portugal | -2.42 | -2.02 | -5.40 | -0.02 | 0.09 | -0.04 | -0.02 | 0.10 |
| | (0.59) | (0.80) | (1.47) | | | | | |
| Germany | -2.24 | -0.38 | -4.08 | -0.03 | 0.06 | -0.01 | -0.02 | 0.13 |
| | (0.53) | (0.14) | (1.07) | | | | | |
| UK | -1.60 | -1.52 | -4.29 | -0.02 | 0.07 | -0.03 | -0.02 | 0.06 |
| | (0.38) | (0.59) | (1.14) | | | | | |
| Regional rate of real GDP (log) | -0.14 | -0.23 | -0.54 | 0.00 | 0.02 | -0.01 | -0.01 | 9.76 |
| | (0.34) | (0.70) | (1.32) | | | | | |
| Regional total activity rate (t-1) | 0.05 | -0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 54.04 |
| | (0.74) | (0.37) | (0.27) | | | | | |
| Regional female activity rate (t-1) | -0.08 | 0.03 | -0.02 | 0.00 | 0.00 | 0.00 | 0.00 | 43.24 |
| | (1.81)* | (1.06) | (0.64) | | | | | |
| Regional long-term unemployment rate (t-1) | 0.00 | 0.01 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 50.42 |
| | (0.41) | (1.40) | (0.08) | | | | | |
| Regional population (log) | 0.19 | 0.04 | -0.16 | 0.00 | 0.00 | 0.00 | 0.00 | 8.36 |
| | (2.14)** | (0.48) | (1.91)* | | | | | |
| Regional share of employment in industry | -2.03 | -1.73 | 3.23 | -0.04 | 0.06 | -0.06 | 0.05 | 0.28 |
| | (1.45) | (1.73)* | (2.61)*** | | | | | |
| Regional share of employment in services | -1.86 | 0.33 | 2.46 | -0.04 | -0.01 | 0.01 | 0.04 | 0.63 |
| | (1.89)* | (0.50) | (2.69)*** | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Lag structure LT 30 (t-1) | 3.03 | 0.96 | 1.21 | 0.26 | -0.30 | 0.03 | 0.02 | 0.04 |
| | (18.58)*** | (5.23)*** | (5.57)*** | | | | | |
| Lag structure UE (t-1) | 1.33 | 3.13 | 1.27 | 0.02 | -0.40 | 0.36 | 0.01 | 0.07 |
| | (5.90)*** | (27.79)*** | (4.55)*** | | | | | |
| Lag structure IA (t-1) | 0.84 | 1.38 | 3.05 | 0.01 | -0.23 | 0.06 | 0.15 | 0.11 |
| | (4.26)*** | (9.41)*** | (16.21)*** | | | | | |
| Lag structure LT 30 (t-2) | 2.22 | 0.58 | 1.18 | 0.13 | -0.17 | 0.02 | 0.02 | 0.04 |
| | (13.64)*** | (3.17)*** | (5.56)*** | | | | | |
| Lag structure UE (t-2) | 1.22 | 2.13 | 0.91 | 0.03 | -0.22 | 0.17 | 0.01 | 0.07 |
| | (6.69)*** | (13.79)*** | (4.44)*** | | | | | |
| Lag structure IA (t-2) | 1.07 | 0.92 | 2.93 | 0.03 | -0.20 | 0.03 | 0.15 | 0.11 |
| | (5.68)*** | (5.34)*** | (19.22)*** | | | | | |
| Lag structure LT 30 (t-3) | 1.74 | 0.39 | 0.49 | 0.08 | -0.10 | 0.01 | 0.01 | 0.04 |
| | (10.18)*** | (2.15)** | (2.33)*** | | | | | |
| Lag structure UE (t-3) | 0.49 | 1.82 | 0.99 | 0.01 | -0.16 | 0.13 | 0.02 | 0.07 |
| | (2.76)*** | (11.51)*** | (5.40)*** | | | | | |
| Lag structure IA (t-3) | 0.47 | 0.58 | 2.15 | 0.01 | -0.11 | 0.02 | 0.08 | 0.11 |
| | (2.53)*** | (3.59)*** | (12.20)*** | | | | | |
| IA 2 out of three past periods | -0.09 | -0.46 | -2.29 | 0.00 | 0.03 | -0.01 | -0.02 | 0.06 |
| | (0.29) | (1.91)* | (10.50)*** | | | | | |
| IA 3 out of three past periods | 1.14 | 0.65 | -1.14 | 0.04 | -0.06 | 0.03 | -0.01 | 0.05 |
| | (2.24)** | (1.57) | (3.56)*** | | | | | |
| LT 30 2 out of three past periods | -1.09 | 0.02 | -0.50 | -0.01 | 0.02 | 0.00 | -0.01 | 0.02 |
| | (4.02)*** | (0.05) | (1.32) | | | | | |
| LT 30 3 out of three past periods | -1.45 | -0.02 | -0.33 | -0.02 | 0.02 | 0.00 | 0.00 | 0.01 |
| | (3.50)*** | (0.03) | (0.65) | | | | | |
| UE 2 out of three past periods | -0.31 | -1.19 | -0.09 | -0.01 | 0.03 | -0.03 | 0.00 | 0.04 |
| | (1.01) | (5.81)*** | (0.29) | | | | | |
| UE 3 out of three past periods | -0.01 | -1.94 | 0.04 | 0.00 | 0.03 | -0.03 | 0.00 | 0.02 |
| | (0.01) | (6.40)*** | (0.08) | | | | | |
| MT 30 2 out of three past periods | 0.51 | 0.31 | 0.37 | 0.01 | -0.03 | 0.01 | 0.01 | 0.12 |
| | (4.83)*** | (2.97)*** | (2.83)*** | | | | | |
| *Observations* | 22161 | 22161 | 22161 | | | | | |
| *Pseudo R-squared* | 0.72 | | | | | | | |
| *Log pseudo-likelihood* | -8504.72 | | | | | | | |

*Robust z statistics in parentheses ; * significant at 1%; ** significant at 5% ; ***significant at 10%; Standard errors adjusted for clustering on region*

Note: LT 30 stands for "Less than 30 hours" i.e part time.

**Table 9: Simulated Probabilities of Labour Market Choices Conditional on Past Labour Market Patterns. Wave 4 (1997). Men.**

EU pop-weighted AVG PREDICTED LFS IN WAVE 4

| | Employment HISTORY WAVE3 L1 | WAVE2 L2 | WAVE1 L3 | SIMPLE-LAG OLM | PT | FT | COMPLEX-LAG OLM | PT | FT |
|---|---|---|---|---|---|---|---|---|---|
| 1 | O | O | O | 0.45 | 0.05 | 0.51 | 0.44 | 0.05 | 0.52 |
| 2 | P | P | P | 0.04 | 0.61 | 0.36 | 0.03 | 0.57 | 0.41 |
| 3 | F | F | F | 0.01 | 0.01 | 0.99 | 0.01 | 0.01 | 0.99 |
| 4 | O | O | P | 0.32 | 0.12 | 0.57 | 0.31 | 0.15 | 0.55 |
| 5 | O | O | F | 0.27 | 0.05 | 0.69 | 0.28 | 0.03 | 0.70 |
| 6 | O | P | O | 0.30 | 0.11 | 0.60 | 0.30 | 0.13 | 0.58 |
| 7 | O | P | P | 0.19 | 0.22 | 0.60 | 0.22 | 0.18 | 0.61 |
| 8 | O | P | F | 0.17 | 0.09 | 0.76 | 0.18 | 0.11 | 0.71 |
| 9 | O | F | O | 0.22 | 0.03 | 0.76 | 0.22 | 0.02 | 0.77 |
| 10 | O | F | F | 0.11 | 0.02 | 0.88 | 0.16 | 0.02 | 0.83 |
| 11 | O | F | P | 0.15 | 0.06 | 0.80 | 0.16 | 0.07 | 0.78 |
| 12 | P | P | O | 0.10 | 0.41 | 0.51 | 0.12 | 0.33 | 0.56 |
| 13 | P | P | F | 0.05 | 0.33 | 0.63 | 0.04 | 0.26 | 0.71 |
| 14 | P | O | O | 0.19 | 0.26 | 0.56 | 0.20 | 0.28 | 0.53 |
| 15 | P | O | P | 0.10 | 0.45 | 0.46 | 0.13 | 0.36 | 0.52 |
| 16 | P | O | F | 0.10 | 0.21 | 0.70 | 0.11 | 0.24 | 0.66 |
| 17 | P | F | F | 0.04 | 0.09 | 0.88 | 0.03 | 0.16 | 0.82 |
| 18 | P | F | P | 0.05 | 0.24 | 0.73 | 0.04 | 0.18 | 0.80 |
| 19 | P | F | O | 0.09 | 0.12 | 0.80 | 0.09 | 0.15 | 0.77 |
| 20 | F | F | O | 0.04 | 0.01 | 0.96 | 0.06 | 0.01 | 0.94 |
| 21 | F | F | P | 0.02 | 0.02 | 0.97 | 0.02 | 0.05 | 0.94 |
| 22 | F | O | O | 0.11 | 0.03 | 0.87 | 0.12 | 0.02 | 0.86 |
| 23 | F | O | P | 0.06 | 0.06 | 0.88 | 0.08 | 0.09 | 0.84 |
| 24 | F | O | F | 0.05 | 0.02 | 0.94 | 0.08 | 0.03 | 0.90 |
| 25 | F | P | P | 0.03 | 0.11 | 0.87 | 0.03 | 0.09 | 0.89 |
| 26 | F | P | F | 0.03 | 0.04 | 0.95 | 0.03 | 0.08 | 0.90 |
| 27 | F | P | O | 0.06 | 0.05 | 0.90 | 0.08 | 0.07 | 0.86 |

SAME NUMBERS FOR UK PREDICTED LFS IN WAVE 4

| | SIMPLE-LAG OLM | PT | FT | COMPLEX-LAG OLM | PT | FT |
|---|---|---|---|---|---|---|
| 1 | 0.38 | 0.06 | 0.56 | 0.37 | 0.05 | 0.58 |
| 2 | 0.03 | 0.62 | 0.35 | 0.02 | 0.58 | 0.40 |
| 3 | 0.01 | 0.01 | 0.98 | 0.01 | 0.01 | 0.99 |
| 4 | 0.25 | 0.13 | 0.61 | 0.25 | 0.16 | 0.59 |
| 5 | 0.21 | 0.05 | 0.74 | 0.22 | 0.04 | 0.75 |
| 6 | 0.24 | 0.11 | 0.65 | 0.24 | 0.14 | 0.62 |
| 7 | 0.14 | 0.24 | 0.62 | 0.17 | 0.19 | 0.64 |
| 8 | 0.12 | 0.09 | 0.79 | 0.14 | 0.12 | 0.74 |
| 9 | 0.17 | 0.03 | 0.81 | 0.17 | 0.02 | 0.81 |
| 10 | 0.08 | 0.02 | 0.90 | 0.12 | 0.02 | 0.86 |
| 11 | 0.11 | 0.06 | 0.83 | 0.12 | 0.08 | 0.80 |
| 12 | 0.07 | 0.42 | 0.51 | 0.09 | 0.34 | 0.57 |
| 13 | 0.03 | 0.34 | 0.63 | 0.03 | 0.26 | 0.71 |
| 14 | 0.14 | 0.27 | 0.58 | 0.15 | 0.30 | 0.55 |
| 15 | 0.07 | 0.47 | 0.46 | 0.09 | 0.37 | 0.53 |
| 16 | 0.07 | 0.22 | 0.71 | 0.08 | 0.25 | 0.67 |
| 17 | 0.03 | 0.09 | 0.89 | 0.02 | 0.16 | 0.82 |
| 18 | 0.03 | 0.24 | 0.73 | 0.02 | 0.18 | 0.80 |
| 19 | 0.06 | 0.13 | 0.82 | 0.07 | 0.15 | 0.78 |
| 20 | 0.02 | 0.01 | 0.97 | 0.04 | 0.01 | 0.94 |
| 21 | 0.01 | 0.02 | 0.96 | 0.01 | 0.05 | 0.94 |
| 22 | 0.08 | 0.03 | 0.89 | 0.09 | 0.02 | 0.89 |
| 23 | 0.04 | 0.06 | 0.89 | 0.06 | 0.09 | 0.85 |
| 24 | 0.03 | 0.02 | 0.95 | 0.06 | 0.03 | 0.92 |
| 25 | 0.02 | 0.11 | 0.87 | 0.02 | 0.09 | 0.89 |
| 26 | 0.02 | 0.03 | 0.95 | 0.02 | 0.08 | 0.90 |
| 27 | 0.04 | 0.05 | 0.91 | 0.05 | 0.07 | 0.87 |

## Table 10:  Random Effects Estimation: Wave 4 (1997). Men.

| | Coefficients | | |
|---|---|---|---|
| | PT | UE | IA |
| Age (/10) | -3.24 | -4.13 | -6.71 |
| | (-11.82)*** | (-12.22)*** | (-12.06 )*** |
| Age squared (/100) | 0.43 | 0.51 | 0.90 |
| | (12.50)*** | (12.20)*** | (13.44)*** |
| High education | 0.42 | -1.06 | -1.32 |
| | (2.95)*** | (-9.05)*** | (-8.54 )*** |
| Medium education | -0.18 | -0.58 | -0.77 |
| | (-1.76)* | (-5.41)*** | (-7.07)*** |
| Non-labour HH income (log) | 0.00 | -0.06 | -0.01 |
| | (0.23) | (-4.40)*** | (-1.01 ) |
| WE rate (NUTS3, UK NUTS2) | 0.00 | 0.04 | -0.08 |
| | (0.17) | (1.55) | (-2.59)*** |
| Married | -1.20 | -1.67 | -1.34 |
| | (-9.14)*** | (-10.67)*** | (-10.64 )*** |
| Step children in HH | 0.98 | 0.51 | 0.77 |
| | (3.37)*** | (1.67)* | (3.20)*** |
| Total number of children | -0.10 | -0.04 | -0.12 |
| | (-2.23)** | (-0.61) | (-2.60 )*** |
| Number of children 0-3 | 0.17 | 0.05 | 0.01 |
| | (1.63)* | (0.50) | (0.05) |
| Number of children 4-6 | 0.20 | 0.08 | 0.11 |
| | (1.97)** | (0.85) | (1.32 ) |
| Number of children 7-12 | 0.14 | 0.07 | 0.17 |
| | (2.26)** | (1.04) | (2.47)*** |
| Number of children 13-16 | 0.13 | 0.11 | 0.02 |
| | (1.69)* | (1.15) | (0.32 ) |
| Denmark | -1.19 | -0.27 | 0.83 |
| | (-7.02)*** | (-1.11) | (1.75)* |
| Netherlands | -0.70 | -0.60 | 0.13 |
| | (-3.53)*** | (-2.29)** | (0.25 ) |
| Belgium | -0.91 | -0.25 | 1.58 |
| | (-2.89)*** | (-0.78) | (2.71)*** |
| France | -0.57 | -0.30 | 1.06 |
| | (-2.11)** | (-0.95) | (1.81)* |
| Ireland | -0.22 | -0.07 | 2.44 |
| | (-0.80) | (-0.26) | (4.48)*** |
| Italy | -0.71 | -0.12 | 2.75 |
| | (-2.05)** | (-0.33) | (4.60 )*** |
| Greece | -0.95 | -0.70 | 0.56 |
| | (-3.18)*** | (-2.03)** | (0.99) |
| Spain | -0.94 | -0.01 | 2.23 |
| | (-2.23)** | (-0.02) | (3.08 )*** |
| Portugal | -1.21 | -1.35 | 0.73 |
| | (-4.99)*** | (-4.77)*** | (1.37) |
| Germany | -1.07 | 0.38 | 0.79 |
| | (-5.42)*** | (1.75)* | (1.59 ) |
| UK | | | |
| Regional rate of real GDP (log) | -0.39 | -0.56 | -2.72 |
| | (-0.96) | (-1.35) | (-4.27)*** |
| Regional total activity rate (t-1) | 0.02 | -0.02 | 0.02 |
| | (0.36) | (-0.48) | (0.36 ) |
| Regional female activity rate (t-1) | -0.05 | 0.00 | 0.00 |
| | (-1.72)* | (0.13) | (-0.09) |
| Regional long-term unemployment rate (t-1) | -0.01 | 0.01 | -0.02 |
| | (-0.85) | (1.25) | (-1.99 )** |
| Regional population (log) | 0.25 | 0.07 | 0.07 |
| | (3.35)*** | (0.72) | (0.67) |
| Regional share of employment in industry | -5.63 | -4.01 | 1.29 |
| | (-4.86)*** | (-3.30)*** | (0.95 ) |
| Regional share of employment in services | -2.71 | 0.90 | 6.09 |
| | (-3.41)*** | (1.16) | (4.24)*** |

| | | | |
|---|---|---|---|
| Constant Type A | 13.67 | 15.99 | 32.06 |
| | (3.81)*** | (3.97)*** | (6.14)*** |
| Constant Type B | 9.20 | 10.81 | 29.05 |
| | (2.59)** | (2.72)** | (5.59)*** |
| Constant Type C | 10.99 | 13.55 | 34.03 |
| | (3.11)** | (3.40)*** | (6.54)*** |
| Pa | 0.12 | | |
| | (10.74)*** | | |
| Pb | 0.71 | | |

*Observations (20680 individuals)*     62040
*Log pseudo-likelihood*     -35719.72
*Robust z statistics in parentheses ; * significant at 1%; ** significant at 5% ;*
*\*\*\*significant at 10%; Standard errors adjusted for clustering on region*

## Table 11: Simulated Probabilities of Labour Market Choices from Random Effects Model. Men.

| Out of Labour force (=IA) | O |
|---|---|
| Unemployed | U |
| Part-time | P |
| Full-time | F |

| | | TYPE 1 | TYPE 2 | TYPE 3 |
|---|---|---|---|---|
| UNWGHTED EUROPEAN AVG | P | 0.28 | 0.01 | 0.03 |
| | U | 0.31 | 0.01 | 0.04 |
| | O | 0.04 | 0.01 | 0.38 |
| | F | 0.36 | 0.98 | 0.55 |
| POPweight EUROPEAN AVG | P | 0.27 | 0.01 | 0.03 |
| | U | 0.35 | 0.01 | 0.05 |
| | O | 0.04 | 0.01 | 0.38 |
| | F | 0.35 | 0.99 | 0.55 |
| DENMARK | P | 0.16 | 0.00 | 0.01 |
| | U | 0.30 | 0.00 | 0.03 |
| | O | 0.04 | 0.00 | 0.33 |
| | F | 0.51 | 0.99 | 0.62 |
| NETHERLANDS | P | 0.35 | 0.01 | 0.05 |
| | U | 0.27 | 0.00 | 0.05 |
| | O | 0.01 | 0.00 | 0.19 |
| | F | 0.37 | 0.98 | 0.72 |
| BELGIUM | P | 0.21 | 0.01 | 0.02 |
| | U | 0.41 | 0.01 | 0.05 |
| | O | 0.04 | 0.01 | 0.40 |
| | F | 0.35 | 0.98 | 0.53 |
| FRANCE | P | 0.31 | 0.01 | 0.03 |
| | U | 0.30 | 0.00 | 0.04 |
| | O | 0.04 | 0.01 | 0.41 |
| | F | 0.35 | 0.98 | 0.52 |
| IRELAND | P | 0.39 | 0.02 | 0.04 |
| | U | 0.28 | 0.01 | 0.04 |
| | O | 0.05 | 0.01 | 0.50 |
| | F | 0.28 | 0.97 | 0.42 |
| ITALY | P | 0.31 | 0.01 | 0.02 |
| | U | 0.34 | 0.01 | 0.03 |
| | O | 0.08 | 0.01 | 0.65 |
| | F | 0.27 | 0.97 | 0.29 |
| GREECE | P | 0.44 | 0.02 | 0.07 |
| | U | 0.26 | 0.00 | 0.05 |
| | O | 0.01 | 0.00 | 0.24 |
| | F | 0.29 | 0.98 | 0.65 |
| SPAIN | P | 0.27 | 0.01 | 0.02 |
| | U | 0.37 | 0.01 | 0.04 |
| | O | 0.08 | 0.01 | 0.65 |
| | F | 0.27 | 0.97 | 0.30 |
| PORTUGAL | P | 0.24 | 0.00 | 0.02 |
| | U | 0.16 | 0.00 | 0.02 |
| | O | 0.04 | 0.00 | 0.35 |
| | F | 0.55 | 0.99 | 0.62 |
| GERMANY | P | 0.15 | 0.00 | 0.02 |
| | U | 0.44 | 0.01 | 0.07 |
| | O | 0.02 | 0.00 | 0.25 |
| | F | 0.39 | 0.99 | 0.67 |
| UK | P | 0.31 | 0.01 | 0.04 |
| | U | 0.31 | 0.00 | 0.05 |
| | O | 0.01 | 0.00 | 0.18 |
| | F | 0.37 | 0.98 | 0.72 |

## European Central Bank working paper series

For a complete list of Working Papers published by the ECB, please visit the ECB's website (http://www.ecb.int)

419 "The design of fiscal rules and forms of governance in European Union countries" by M. Hallerberg, R. Strauch and J. von Hagen, December 2004.

420 "On prosperity and posterity: the need for fiscal discipline in a monetary union" by C. Detken, V. Gaspar and B. Winkler, December 2004.

421 "EU fiscal rules: issues and lessons from political economy" by L. Schuknecht, December 2004.

422 "What determines fiscal balances? An empirical investigation in determinants of changes in OECD budget balances" by M. Tujula and G. Wolswijk, December 2004.

423 "Price setting in France: new evidence from survey data" by C. Loupias and R. Ricart, December 2004.

424 "An empirical study of liquidity and information effects of order flow on exchange rates" by F. Breedon and P. Vitale, December 2004.

425 "Geographic versus industry diversification: constraints matter" by P. Ehling and S. B. Ramos, January 2005.

426 "Security fungibility and the cost of capital: evidence from global bonds" by D. P. Miller and J. J. Puthenpurackal, January 2005.

427 "Interlinking securities settlement systems: a strategic commitment?" by K. Kauko, January 2005.

428 "Who benefits from IPO underpricing? Evidence form hybrid bookbuilding offerings" by V. Pons-Sanz, January 2005.

429 "Cross-border diversification in bank asset portfolios" by C. M. Buch, J. C. Driscoll and C. Ostergaard, January 2005.

430 "Public policy and the creation of active venture capital markets" by M. Da Rin, G. Nicodano and A. Sembenelli, January 2005.

431 "Regulation of multinational banks: a theoretical inquiry" by G. Calzolari and G. Loranth, January 2005.

432 "Trading european sovereign bonds: the microstructure of the MTS trading platforms" by Y. C. Cheung, F. de Jong and B. Rindi, January 2005.

433 "Implementing the stability and growth pact: enforcement and procedural flexibility" by R. M. W. J. Beetsma and X. Debrun, January 2005.

434 "Interest rates and output in the long-run" by Y. Aksoy and M. A. León-Ledesma, January 2005.

435 "Reforming public expenditure in industrialised countries: are there trade-offs?" by L. Schuknecht and V. Tanzi, February 2005.

436 "Measuring market and inflation risk premia in France and in Germany" by L. Cappiello and S. Guéné, February 2005.

437 "What drives international bank flows? Politics, institutions and other determinants" by E. Papaioannou, February 2005.

438 "Quality of public finances and growth" by A. Afonso, W. Ebert, L. Schuknecht and M. Thöne, February 2005.

439  "A look at intraday frictions in the euro area overnight deposit market"
by V. Brousseau and A. Manzanares, February 2005.

440  "Estimating and analysing currency options implied risk-neutral density functions for the largest
new EU member states" by O. Castrén, February 2005.

441  "The Phillips curve and long-term unemployment" by R. Llaudes, February 2005.

442  "Why do financial systems differ? History matters" by C. Monnet and E. Quintin, February 2005.

443  "Explaining cross-border large-value payment flows: evidence from TARGET and EURO1 data"
by S. Rosati and S. Secola, February 2005.

444  "Keeping up with the Joneses, reference dependence, and equilibrium indeterminacy" by L. Stracca
and Ali al-Nowaihi, February 2005.

445  "Welfare implications of joining a common currency" by M. Ca' Zorzi, R. A. De Santis and F. Zampolli,
February 2005.

446  "Trade effects of the euro: evidence from sectoral data" by R. Baldwin, F. Skudelny and D. Taglioni,
February 2005.

447  "Foreign exchange option and returns based correlation forecasts: evaluation and two applications"
by O. Castrén and S. Mazzotta, February 2005.

448  "Price-setting behaviour in Belgium: what can be learned from an ad hoc survey?"
by L. Aucremanne and M. Druant, March 2005.

449  "Consumer price behaviour in Italy: evidence from micro CPI data" by G. Veronese, S. Fabiani,
A. Gattulli and R. Sabbatini, March 2005.

450  "Using mean reversion as a measure of persistence" by D. Dias and C. R. Marques, March 2005.

451  "Breaks in the mean of inflation: how they happen and what to do with them" by S. Corvoisier
and B. Mojon, March 2005.

452  "Stocks, bonds, money markets and exchange rates: measuring international financial transmission"
by M. Ehrmann, M. Fratzscher and R. Rigobon, March 2005.

453  "Does product market competition reduce inflation? Evidence from EU countries and sectors"
by M. Przybyla and M. Roma, March 2005.

454  "European women: why do(n't) they work?" by V. Genre, R. G. Salvador and A. Lamo, March 2005.

455  "Central bank transparency and private information in a dynamic macroeconomic model"
by J. G. Pearlman, March 2005.

456  "The French block of the ESCB multi-country model" by F. Boissay and J.-P. Villetelle, March 2005.

457  "Transparency, disclosure and the Federal Reserve" by M. Ehrmann and M. Fratzscher, March 2005.

458  "Money demand and macroeconomic stability revisited" by A. Schabert and C. Stoltenberg,
March 2005.

459  "Capital flows and the US 'New Economy': consumption smoothing and risk  exposure"
by M. Miller, O. Castrén and L. Zhang , March 2005.

460  "Part-time work in EU countries: labour market mobility, entry and exit" by H. Buddelmeyer, G. Mourre
and M. Ward-Warmedinger, March 2005.