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Female Labor Market Transitions in Europe

DIW Berlin

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Abstract[*]

Using micro panel data, labor market transitions are analyzed for the EU-member states by cumulative year-by-year transition probabilities. As female (non-)employment patterns changed more dramatically than male employment in past decades, the analyses mainly refer to female labor supply. In search for important determinants of these transitions, six EU-countries with different labor market-regimes are selected as examples (Denmark, Germany, Netherlands, Portugal, Ireland, UK). Within these countries, women's determinants of labor market transitions are compared by means of pooled multinominal logit-regressions.

The outcomes hint at both, the importance of socio-economic determinants, like the life cycle or human capital, but also address gender related differences in the paths of labor market transitions. Clearly, the observed cross-national differences are driven by specific national institutional settings. Among others, one of the most crucial features is the day-care infrastructure concerning children, which either fosters or restricts a sustainable risk management between family and work in the respective countries.

JEL-Classification: J21, J22, J78

Keywords: labor supply, labor market transitions, socio-economic determinants, institutional settings, risk management, cross-national comparison

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1 Labor Market Transitions in Europe

For the 15 member states of the European Union (EU), it is well known that these countries vary substantially in terms of key labor market indicators, like activity rates, participation rates or the share of part-time employment (EC 2004a). In a second dimension, these differences become even more accentuated, if labor market attachment is compared between men and women (cf. table A-1)[1], although, for both the permanent full-time job is (still) the dominant form of employment in the EU (Kaiser 2001). As changes in employment patterns, and therefore labor market transitions, became more apparent for women than for men in the past decades, in the following cross-gender and cross-national comparisons are applied to put the main focus on female labor supply in the light of different institutional backgrounds.

Keeping these dimensions in mind, the balance between risk and opportunity, either, for instance, directed to employment opportunities or to other societal relevant activities, like caring, is determined by the interaction of individual capabilities and institutional settings of a national welfare- and labor market-regime. These aspects partially influence individual incentives whether to supply labor, creating a kind of circular micro-marco-micro dependency between individuals' decisions and (labor market) institutions.[2] The labor-supply-frame of the following analyses focuses on three main features of the micro-macro-relationship between individuals and their institutional background: i. the system of social security, ii. the tax-system, iii. the child day-care infrastructure. All these aspects do have a crucial impact on labor supply, both for women and men, as incentives to supply manpower at all or to supply labor at a specific quantum are affected.

The entire micro-macro based development of changing employment patterns and changing institutions can be explained by the 'modernization-approach'. As the term 'modernization' is quite extensive with the theoretical span of the discussion being quite wide, it is controversial towards what kind of goals 'modernization' should be directed. One of the leading contemporary commentators on modernization, Wolfgang Zapf, distinguishes between 'initial', 'catching-up', and 'advanced' modernization, with the latter describing the most recent stage (Zapf 1991; 1996). A main feature of advanced modernization, as emphasized by Zapf (2001, 501),

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[1] Tables with the prefix ‚A' are placed to the annex of this article.

[2] These kind of societal different level-dependencies are thoroughly described by James Coleman (1986) and Bourdieu and Coleman (1991).

is a 'new gender contract' including the rising labor market orientation of women, a topic, which is also highly compatible with risk management in respect to labor market transitions (Schmid 2001).[3] Thus, a cross-national comparison may use different levels of modernization to scale the current structure of welfare and labor market regimes in terms of a new gender contract (Pfau-Effinger 2001).

A new gender contract concerning labor market modernization may be based on simple legal non-discrimination acts. Accordingly, modernization could be interpreted as phasing the state out of the fields of active social policy and welfare. Conversely, modernization can be discussed as an approach to restructure the welfare state- and labor market-regime in order to supply manpower with 'diverse abilities' to cope with labor market transitions (employability, care ability, adaptability, ..., ...).

As far as possible, these abilities should be associated with important economic and societal developments, like changes in productivity or new directions in the demographic development.[4] Nevertheless, adaptability in terms of risk-taking and flexibility should be combined with a distinct quantum of security, as a strategy of 'flexicurity' enhances the acceptability of labor market reforms (Schmidt 2002) and, therefore, accelerates the process of modernization. Nevertheless, one has to face that this approach cannot be assigned to a "flat rate interpretation" of flexicurity, as there will always be different ratios of flexibility, insecurity and security, depending on the nature of a specific labor market transition. In this respect, Giddens' consequences of modernity (1990) should be put as challenges of modernity.

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[3] For a detailed interpretation of the 'Transitional Labor Market-Approach', cf. Schmid (1998; 2002a; 2002b).

[4] For an overview of these trends, cf. EC (2004b).

2 Determinants of labor market transitions

The reasons for the increase in labor supply of women include greater access to education, declining fertility rates, and a rising employability of women, which is, for instance, a result of the increased importance of the service sector. These trends are somewhat contradictory to traditional theories on differences between male and female labor supply, which are based on the static unitary model of the household with a joint utility function and individuals acting and reacting independently of each other. This approach partially interprets labor supply in terms of biological differences, concluding that "this sexual division of labor has been found in virtually all human societies" (Becker 1994, 39). In contrast, other theoretical approaches suggest that individuals' mutual independent rational choices are not the only factor (Nelson 1998). For instance, an explicit bargaining-orientated dynamic approach can be used to explain changes in female labor supply over time. A shift in the female's bargaining power within marriage associated with a rise in the opportunity costs of raising children, has encouraged women to increase their supply of labor and combine a specialization in domestic work with market work, mainly by part-time, employment (Ott 1992 and 1995). However, cross-national differences in the institutional background are likely to affect the EU-wide rise of female economic activity, i.e. either to promote or hinder the labor market attachment of women.

In terms of cross-national institutional differences that can be clustered to 'families of nations', Gornick and Meyers (2003, 51) state that "(i)n the Nordic countries, the social democratic principles that guide policy design are generally paired with a commitment to gender equality, and the market-replicating principles in the Conservative countries are often embedded in socially conservative ideas about family and gender roles. In the Liberal countries, the supremacy of the market system generally drives social welfare designs across all policy arenas."

In a cross-national, but cross sectional perspective, Kaiser (2004) finds that those differences in welfare state arrangements and labor market regimes that are related to the social security-system, the taxation-system, and the child day-care infrastructure are most crucial for women to show differences in the opportunities of holding a specific labor market status. In contrast, variations in respect to ordinary human capital issues, like age or education (Killingsworth 1983), are most important for European men in respect to labor supply. The relevance of the

taxation-system for male and female labor supply is also substantiated by Dingeldey (2001) or Garibaldi and Wasmer (2003). In the six countries, only Germany and Portugal (still) stick to a pure joint taxation-model that, especially in the case of Germany, creates prohibitive high marginal tax rates with increasing working hours for the second, in most cases, female wage-earner (OECD 2002).

A general note on the public policy-, female labor supply- and fertility-nexus is delivered by Apps and Rees (2004). They find that "countries which have individual rather than joint taxation, and which support families through child care facilities rather than child payments, are likely to have both higher female labor supply and higher fertility" (l.c., 745). The effect of the demandability of the child day-care infrastructure on labor turnover is discussed by Hofferth and Collins (2000). Their outcomes show "that the availability of care affects the job stability of all employed mothers" (l.c., 357), i.e. child care matters directly, if employment opportunities of women are addressed.[5] The described cross-European institutional differences are validated, for instance, by considerable differences in the enrolment rate in pre-primary education (table 1).

Table 1:
The child day-care infrastructure in European countries

age	DEN		GER		IRE		NET		POR		UK	
0-2	64	(1998)	10	(2000)	38	(1998)	5	(1998)	12	(1999)	34	(2000)
3-6	91	(1998)	78	(2000)	56	(1998)	98	(1998)	75	(1999)	60	(2000)
7-10	80	(1996)	5	(1996)	5	(1996)	6	(1996)	10	(1994)	5	(1996)

Source: 0-2 and 3-6 years: OECD (2001), 7-10 Years: EC (1998), 7-10 years (Portugal): ECN (1995); enrolment rates in % by age group, reference years in parentheses.

However, it might be argued that an expansion of child day-care facilities may result in an inefficient supply surplus of the day-care infrastructure when no adequate demand would be met. Accordingly, the necessity of expanding the child day-care infrastructure would be relevant for those countries only, where a suitable 'culture' or 'tradition' of female employment is

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[5] Earlier evidence on this topic is given by Heckman (1974). For further up-to-date work in respect to this issue, c.f. Michalopoulos and Robins (2000), Jenkins and Symons (2001) or Datta Gupta and Smith (2002).

present, as in the Scandinavian countries. These kinds of retentions can be falsified by empirical facts. In virtually every kind of welfare state regime, the discrepancy of desired and actual employment patterns and working hours are marked by a modernization hold-up. Compared to the given employment opportunities, a clear expansion of female employment, both in respect to full- and part-time employment and a reduction of non-employment is reported by survey data (Chart1).

Chart 1:
Actual (_a) and preferred (_p) employment patterns in %
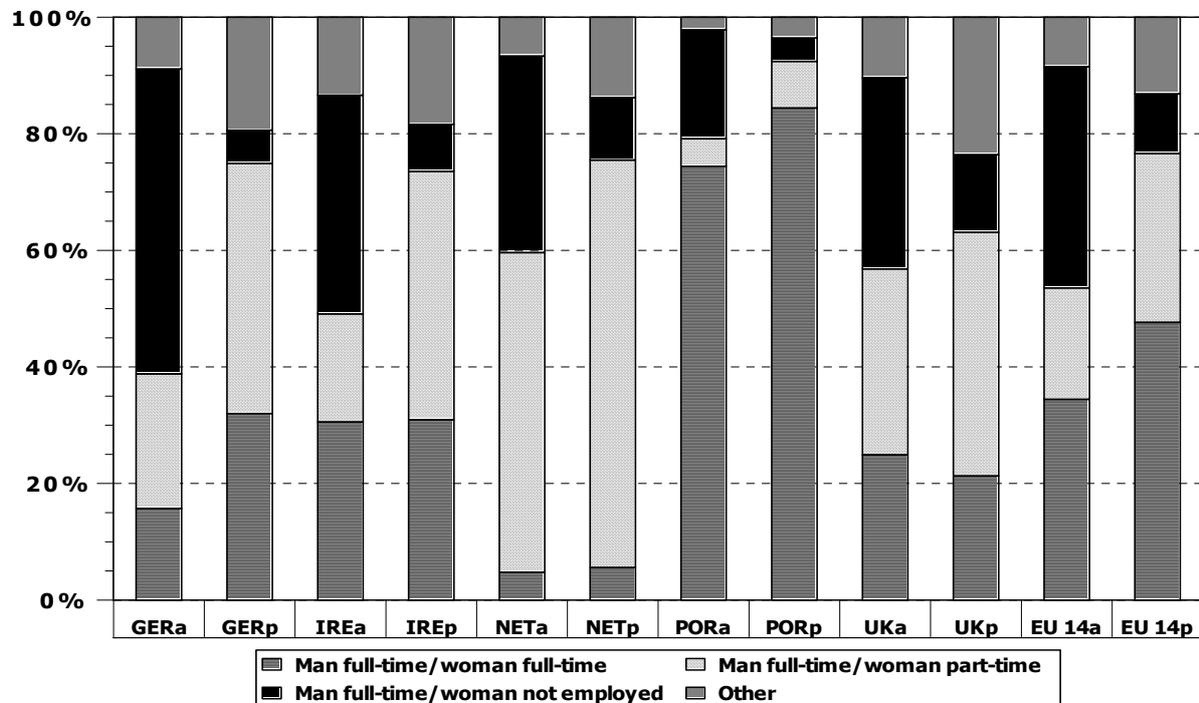
Source: OECD (2001, 136), couple families with child under 6.

Furthermore, different welfare state settings incorporate specific regimes of incentives that affect individuals in their labor supply decision-making. A prominent example is the field of maternity leave. Merz (2004) reports that "institutional changes in the federal legislation governing parental leave contributed to the observed changes in married women's labor market involvement in Germany. (…) The strong increase in monthly real payments of parental subsidies to new parents which took place between 1986 and 1991 coincided with a big drop in married women's weekly hours worked" (l.c., 16). Similar evidence for this correlation is given by Ruhm (1998) for the European context.

In respect to maternity leave regulation in the six countries under consideration, Denmark is outstanding. Compared to the five other European neighbors, the duration of parental leave is comparatively short, transfers during this period are high in order to substitute forgone income and child benefits tend to be low. Moreover, the entire length of parental leave is only admitted if fathers participate to a certain extent (table 2).

In contrast, a somewhat different parental leave regime is currently in force in Germany, for instance. The duration is comparatively long, transfers are low and child benefits are high. Therefore, especially for women, this setting creates incentives towards a relatively long duration of maternity leave, whereas a low income substitution rate is unsuitable for men to take maternity leave in Germany.

Table 2:
Maternity leave and child benefit regulations

	duration	transfer per month (EUR)	child benefit (EUR)
DEN	14 +36* weeks	up to 1788	94 to 131
GER	36 months	307 (2 yrs) or 450 (1 yr)	154
NET	13 weeks	none	53 to 76
IRE	14 weeks	none	44
POR	6 months	none	means tested
UK	13 weeks	none	100

*(36 weeks to be shared between father and mother)

Source: Eichhorst and Thode (2002, 35).

In sum, comparing different aspects of the institutional setting, Denmark appears to have the 'healthiest' institutions that tend to generate equal employment opportunities between men and women and that foster incentives for females to get or to be employed. In contrast, the institutional landscape of the other countries under consideration either aim at a liberal (Ire-

land and UK), conservative (Germany and the Netherlands) or residual interpretation of those institutions that tend to affect (female) labor supply.

2.1 The Data

The European Community Household Panel (ECHP) is a longitudinal data set, conducted for eight waves (1994 to 2001). It is organized by the Statistical Office of the European Communities (EUROSTAT, Luxembourg), the fieldwork being carried out by public or private statistical institutions of the respective EU-member states.[6] The questionnaire of the ECHP contains comparable individual and household micro-level data on employment, income, living conditions, demography, migration, housing and health. Per wave, over 136.000 individuals at an age of at least 16 years within some 66.000 households across the 15 European Union member states are included. For the first wave, as of 1994, the ECHP contains 12 countries. In 1995 Austria, in 1996 Finland and in 1997 Sweden joined the ECHP. The data also includes observations from the Panel Study Living in Luxembourg (PSELL), the British Household Panel (BHPS) and the German Socio-Economic Panel (GSOEP). These datasets are substitutes, as for these three countries, the original ECHP-data was not continued after 1996. Since the original ECHP data is based on a harmonized questionnaire and since copies of the PSELL, BHPS and GSOEP data incorporated later on were aligned to the structure of the ECHP, especially for cross-national comparisons, it is a very valuable and unique dataset.

2.2 Transition Probabilities in European Labor Markets

To obtain an initial impression of transitions in European labor markets, the entire information of the data is used by cumulative year-by-year transitions. For a time window of eight years, in the maximum case, seven year-by-year transitions may occur for a single sample person, comparing the starting labor market statuses t_w with $w = 1994, ..., 2000$ and their respective possible target statuses in t_{w+1} (Figure 1).[7] Based on these conventions, the initial

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[6] An introduction to the ECHP is given by Mejer and Wirtz (2002). For further information, also visit the websites of EPAG (www.iser.essex.ac.uk/epag) and EPUNet (http://epunet.essex.ac.uk).

[7] For Austria, $w = 1995, ..., 2000$; for Finland, $w = 1996, ..., 2000$).

descriptive analysis refers to four starting statuses (full-time employment, part-time employ-ment, unemployment or non-working).[8]

Figure 1:
Potential labor market transitions $t_w \Rightarrow t_{w+1}$
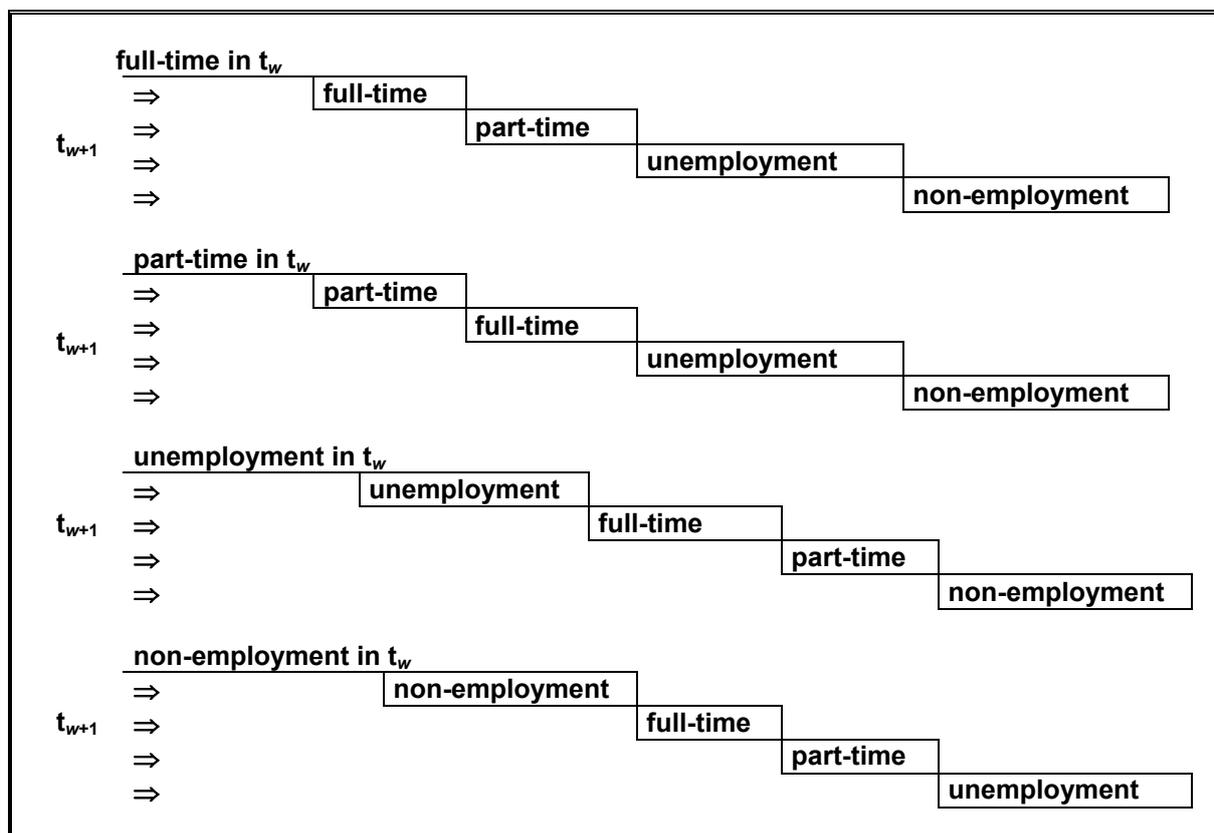
For thirteen out of the core EU15-countries (except Luxembourg and Sweden, due to insuffi-cient data quality), some 504.000 year-by-year transitions are observable for 1994-2001. The age span of the observed population is set to 26 to 64 years with respect to t_{w+1}. This restric-tion should prevent observations of transitions from school to work. However, the other end of the age span fully includes older workers, who are about to retire. This is contrary to the current fashionable trend which is to ignore the older working population for analyses of labor market dynamics. We incline to follow this trend, since analyses of labor market dynamics should definitely include this experienced part of the working population that has to face early retirement schemes in sight of an unlikely reintegration into the labor market in the case of

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[8] To differ between full- and part-time, the OECD definition of these two working-time statuses is used (Bastelaer, Lemaître and Marianna 1997). Accordingly, full-time refers to at least 30 working hours per week, whereas part-time coincides with 1 to 29 working hours per week.

unemployment (EC 2004b). For the same reason, the analyses include the self-employed, since for the management of risk and opportunity, self-employment is one possible opportunity to prevent the risk of under-employment or unemployment.

In the following, transition probabilities are displayed by the use of cross-sectional time series data, i.e. persons' transitions covering two years. The probability that $x_{i,tw+1} = v_2$ is estimated, given that $x_{i,tw} = v_1$. The entire range of results, as sketched by figure 1, is displayed by table A-2. Chart 2 displays the incidence of full-time permanence. With no exception the probability of full-time permanence is higher for men than for women in every of the 13 countries under consideration. Overall, the difference is about 7 percentage points with respect to the EU-average, with a comparatively high (low) difference displayed by the Netherlands, Ireland and Greece (Finland, Denmark, Portugal, Germany and France). However, it must be kept mind that employment rates and the share of full-time employment is quite differently distributed amongst men and women in Europe.

Chart 2:
Labor market transition-probabilities (full-time permanence)
(full-time: $t_w \Rightarrow$ full-time: t_{w+1} in %, > 25 & < 65 years of age in t_{w+1})
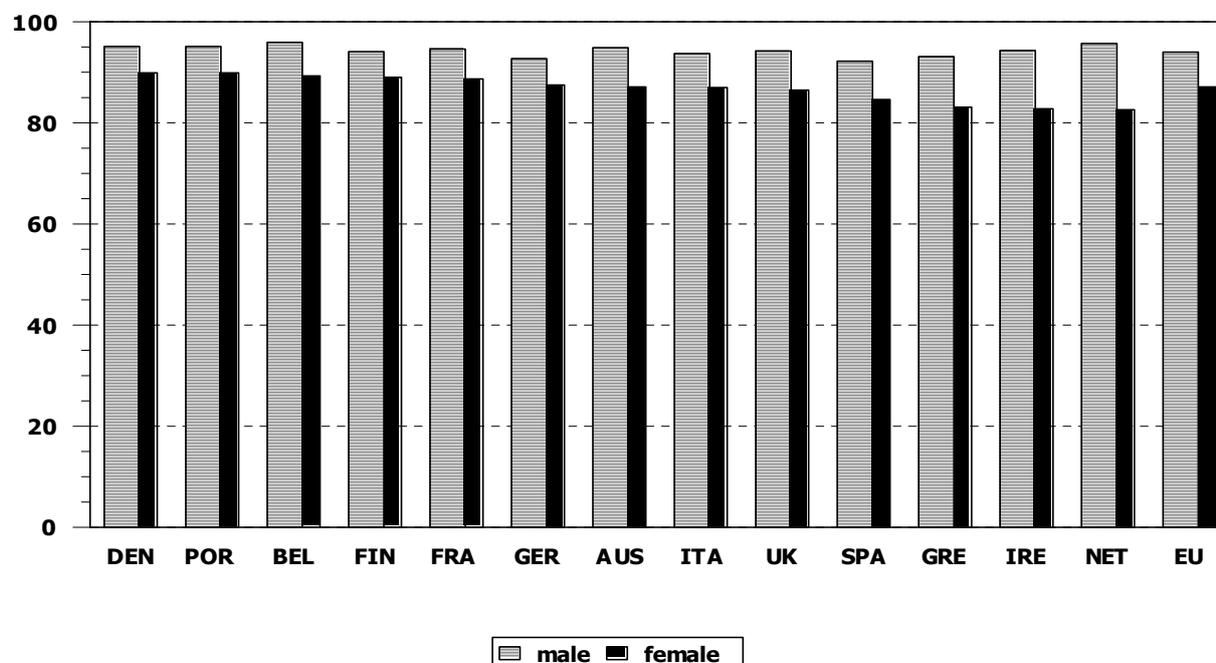
Note: descended ranking according to full-time permanence (women), except EU-average.

Source: ECHP, authors' calculations (see appendix, table A-2).

In this respect, however, Portugal turns out to be an exception. Despite the comparatively residual setting of the Portuguese welfare state, for both men and women, employment rates and the share of standard employment are higher than in other (southern) countries. This finding is probably due to fact that Portugal possesses the lowest wage level in the entire EU (ILO 1997, 421), which forces most of the Portuguese to be attached to the labor market mainly on the basis of a full-time job (Ruivo et al. 1998, Santos 1991). This economic characteristic places Portugal between the statuses of 'catching-up' and a 'continuing' modernization of the labor market.

Chart 3:
Labor market transition-probabilities (part-time permanence)
(part-time: $t_w \Rightarrow$ part-time: t_{w+1} in %, > 25 & < 65 years of age in t_{w+1})
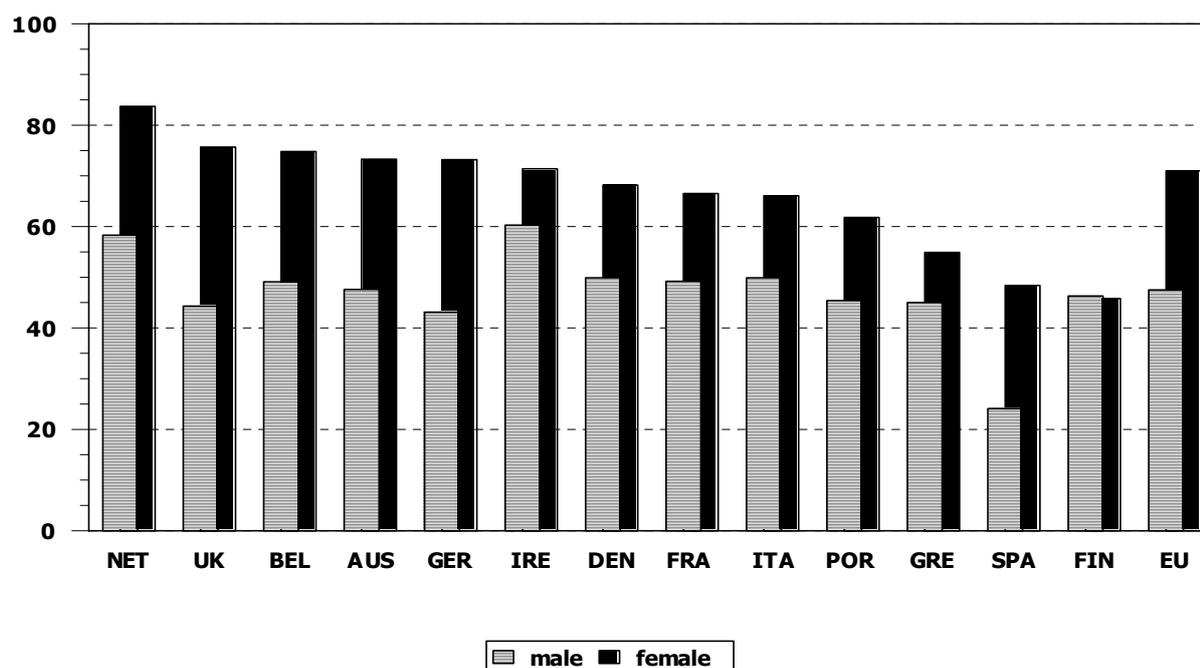
Note: descended ranking according to part-time permanence (women), except EU-average.
Source: ECHP, authors' calculations (see appendix, table A-2).

An opposite picture is drawn by chart 3 for the incidence of part-time permanence. With more than 80% for Dutch females and a comparatively high incidence for part-time permanence for Dutch males, the Netherlands lead the range of the considered countries. With the highest share of part-time workers as a percentage of total employment in Europe and throughout the world, this country is an example of a part-time regime par excellence. In contrast, the four

Mediterranean countries and Finland, where part-time permanence is more or less equally distributed among men and women, show up with a relatively low incidence of part-time permanence for both.

Chart 4 observes the transition probability from part- to full-time employment. It becomes apparent that, with the exception of Finland, part-time relationships are a device for men to continue with full-time employment.

Chart 4:
Labor market transition-probabilities (part-time – full-time)
(part-time: $t_w \Rightarrow$ full-time: t_{w+1} in %, > 25 & < 65 years of age in t_{w+1})
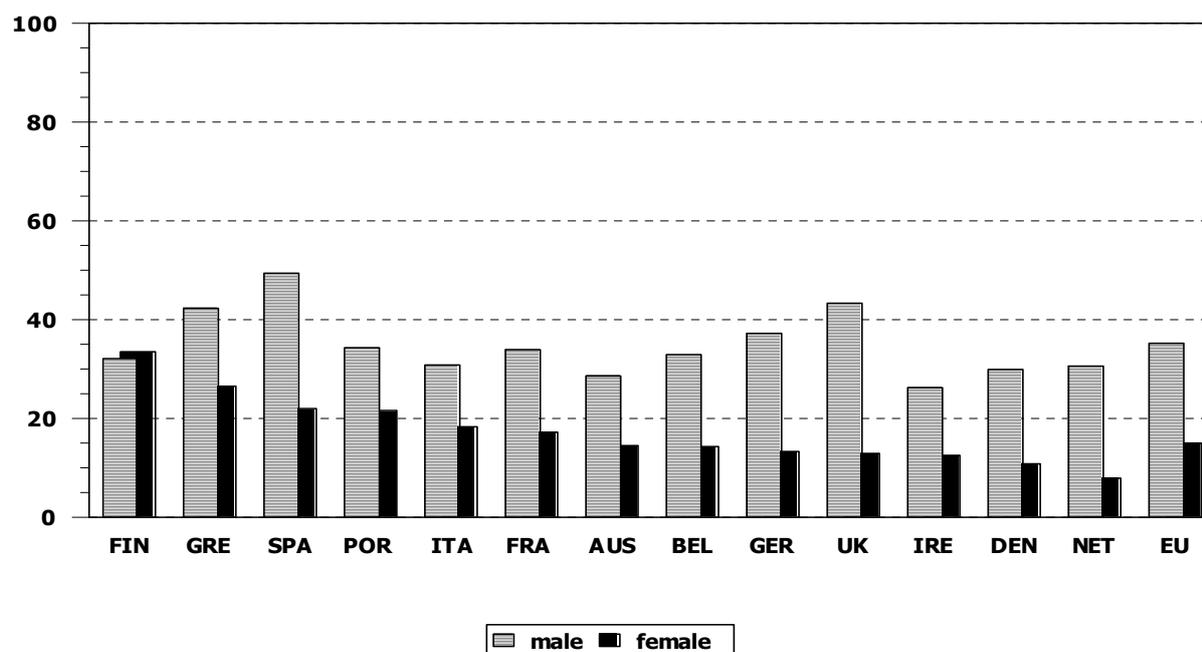
Note: descended ranking according to part- to full-time transition probability (women), except EU-average.
Source: ECHP, authors' calculations (see appendix, table A-2).

In contrast, these kinds of transition are much rarer for female workers in Europe. The overall difference turns out at a level of more than 20 percentage points.

An unlikely straight forward pattern in terms of gender differences emerges for the permanence of unemployment (chart 5). In nine out of thirteen cases, men come up with a higher probability of permanent unemployment than women. The most remarkable gender distance in this respect is exhibited by Ireland and the UK. In these two European countries, men are

traditionally affected by higher unemployment rates and longer lasting spells of unemployment than their respective female counterparts (Kaiser and Siedler 2000). Just in the last decade, it can be observed that in other European labor markets the risk of becoming and staying unemployed turns out to increase more significantly for men than for women. One main reason for this development is the improvement of female employability in the service sector, simultaneously coinciding with their higher (voluntary or involuntary) 'willingness' to work on a part-time basis (Tijdens 2002).

Chart 5:
Labor market transition-probabilities (unemployment permanence)
(unemployment: $t_w \Rightarrow$ unemployment: t_{w+1} in %, > 25 & < 65 years of age in t_{w+1})
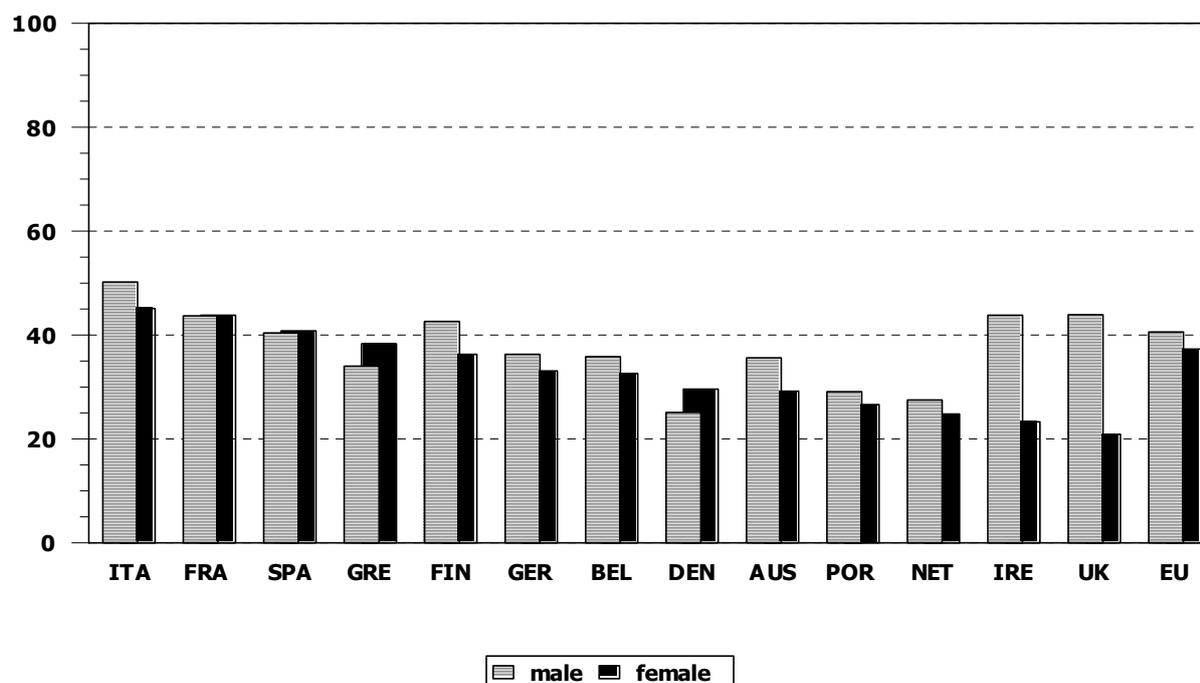
Note: descended ranking according to unemployment permanence (women), except EU-average.

Source: ECHP, authors' calculations (see appendix, table A-2).

However, successful paths of leaving unemployment are also of a different character between men and women and between European countries. Regarding transitions from unemployment to full-employment (chart 6), the highest transition probabilities amongst females are displayed by Finland, Denmark and Portugal. On the other end of the countries' range, the most apparent distance in respect of full-time (re-) employment probabilities is displayed by the

Netherlands. Overall, for European women, the chance of (re-) entering the labor market via full-time is half the size, as it is for European men. In contrast, leaving unemployment by a transition to part-time employment is much more likely for women than for men, with the most extreme gender discrepancy displayed again by the Netherlands. Here, the probability of using part-time employment as a device to leave unemployment is four times higher for Dutch females than for Dutch males (cf. table A2).

Chart 6:
Labor market transition-probabilities (unemployment – full-time employment)
(unemployment: $t_w \Rightarrow$ full-time: t_{w+1} in %, > 25 & < 65 years of age in t_{w+1})
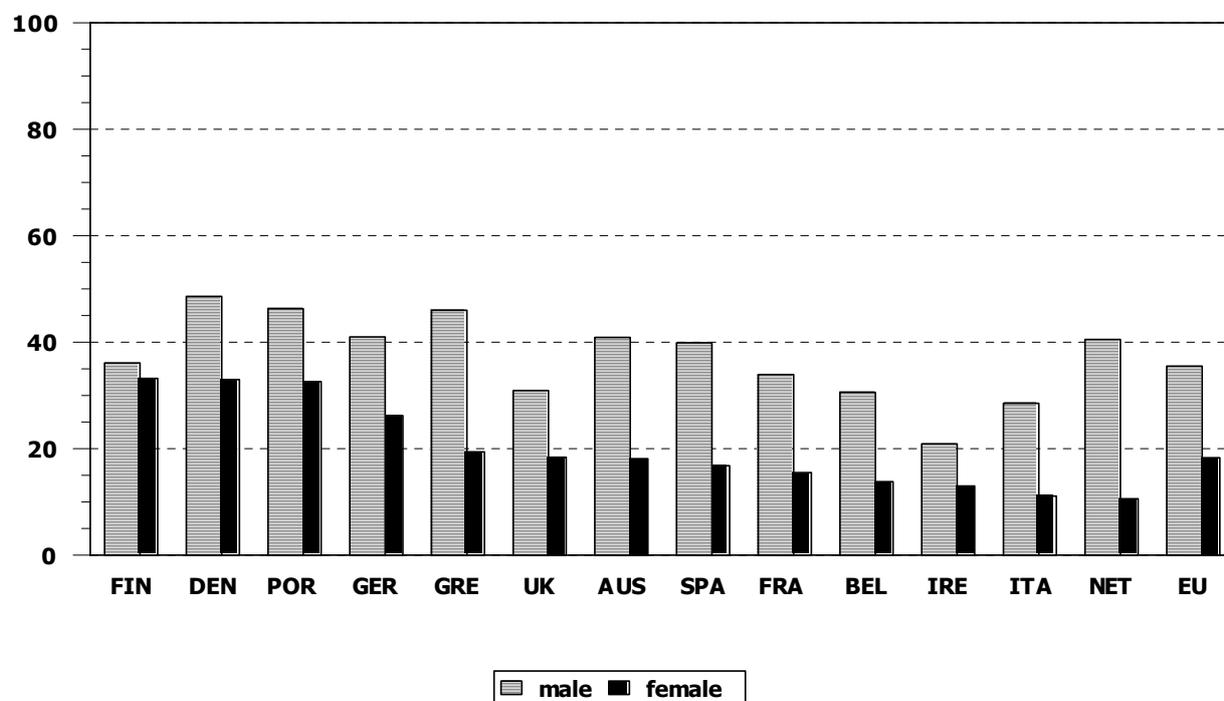
Note: descended ranking according to unemployment to full-time transition probability (women), except EU-average. Source: ECHP, authors' calculations (see appendix, table A-2).

A similar picture is drawn when transition probabilities from unemployment to non-employment are observed (chart 7). In all countries under consideration, instances of exits to economic inactivity are much more likely for women than for their male counterparts. The highest transition rates for women are displayed in Ireland and the UK, while the lowest rates can be found in Finland, Denmark and Germany. On average, for European women, the chance to leave unemployment by entering the status of non-employment is nearly 100%

higher than for men. However, reasons and incentives of this path out of unemployment are mainly due to early retirement-schemes, most relevant for men. In many European countries, the partially generous implementation of early retirement ended in a rethinking of this seemingly 'successful' instrument to cope with the persistency of unemployment in sight of the predicted shortage of human capital due to demographic reasons. For women, however, the high probability to leave unemployment by entering non-employment is due to the fact that turning to economic inactivity is still a 'socially accepted' alternative for women, rather than for men.

Chart 7:
Labor market transition-probabilities (unemployment–non-employment)

(unemployment: $t_w \Rightarrow$ non-employment: t_{w+1} in %, > 25 & < 65 years of age in t_{w+1})
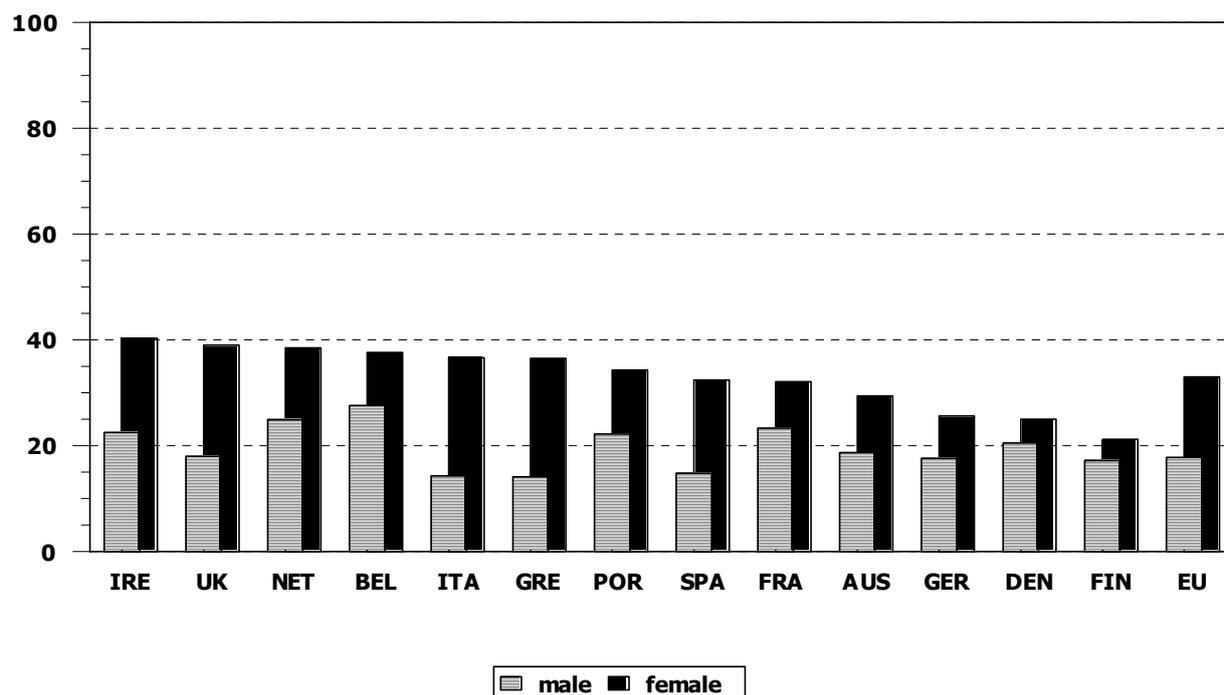
Note: descended ranking according to unemployment to non-employment transition probability (women), except EU-average. Source: ECHP, authors' calculations (see appendix, table A-2).

However, it must be kept in mind that the state of the so-called economic inactivity may imply diverse activities, which are neither irrelevant to the economy, nor do many of these activities deserve the label inactivity. At least for aging European societies, care-giving for the

elderly will become even more important in the future than it is today. Similar to child care, an integration of these socially and economically highly relevant topics is still awaiting implementation into the modernization process of European societies and economies.

So far, for both the male and the female European workforce potential, the diverse reasons not to be employed coincide with a high probability to stay in non-employment (Chart 8). Definitely, this fact can be marked as an inflexibility of European labor markets. However, for females, the probability of staying in non-employment is lowest in Denmark and Finland. For men, the highest incidence of remaining in this labor market status is displayed by Austria and Belgium, two countries that counted on early retirement for long and therefore possess one of the lowest employment rates of the workforce aged between 55-64 today (EC 2004c, 20).

Chart 8:
Labor market transition-probabilities (non-employment permanence)

(non-employment: $t_w \Rightarrow$ non-employment: t_{w+1} in %, > 25 & < 65 years of age in t_{w+1})
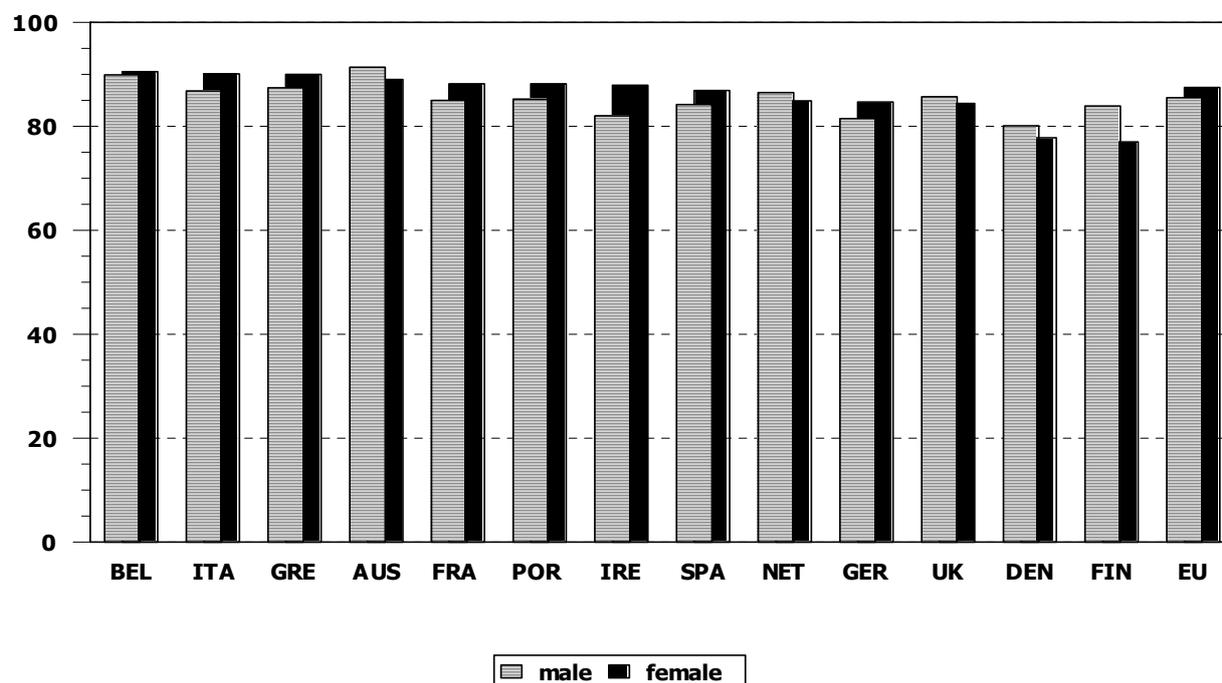
Note: descended ranking according to unemployment permanence (women), except EU-average.

Source: ECHP, authors' calculations (see appendix, table A-2).

Up to now, the micro data was employed for the sake of descriptive purposes only. In the following, a multinominal logit-model will be employed to test determinants of labor market transition, explicitly.

2.3   The multinominal logit-model

The multinominal logit-model (mlogit) is an extension of the binary logit-model. Compared to the binary logit-model (logit) that is adequate for a dichotomous endogenous category, mlogit is capable of regressing more than two dimensions of the dependent variable. Therefore, mlogit is an adequate model for the longitudinal analysis of switches in the labor market status over time.

The mlogit assumes that the categories of a (at least) threefold dependent variable are independent between each other and are of a nominal scale[9]. As for the logit, it is necessary to define a reference category for the mlogit. However, the interpretation of the mlogit coefficients is somewhat difficult. This drawback is due to the multidimensional character of the mlogit, i.e. the dependency of the respective interpreted category, like the transition from full-time to part-time work, on the reference category (e.g. full-time permanence) and on the remaining categories of the model. The problem becomes obvious, when the sign of the coefficients has to be interpreted, as either plus or minus may be numerically correct, but can be used in a false way for the purpose of interpretation.

To avoid the drawback of the mlogit, it is useful to interpret the calculated marginal effects of the model, rather than the results for the coefficients. Similar to the concept of elasticity, marginal effects can be interpreted as a change in the predicted probability of the outcome of the categories of the dependent variable for a change in a specific covariate, holding the remaining exogenous variables constant (usually at the mean). This approach incorporates some advantages: Firstly, the model becomes intuitively more demonstrative, as marginal effects refer to the entire set of categories of the mlogit; no reference category is necessary anymore. Secondly, one can compare the magnitude of one marginal effect directly with another marginal effect. Hence, the interpretation of the algebraic sign of the marginal effects is not misleading anymore.

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[9] The Independence of Irrelevant Alternative (IIA) is a restrictive assumption. However, if the relevant exogenous categories can be assumed to be distinct, an mlogit is an adequate model for multifold outcomes (McFadden 1973).

The applied mlogit assesses what determinants influence the individual labor supply-opportunities. For instance, the possible opportunities of an individual who was employed full-time in t_w, one year later (t_{w+1}) are:

$$y_i, t_{w+1} = \begin{cases} 1 = \text{full-time employment} \\ 2 = \text{part-time employment} \\ 3 = \text{unemployment} \\ 4 = \text{non-employment} \end{cases} \quad \text{where } w = 1994, ..., 2000. \quad [1]$$

According to Long (1997), the estimable probability-model then is:

$$\Pr(y_{i,t_{w+1}} = m \mid x_i, y_{i,t_w} = 1) = \frac{\exp(x_i\beta_m)}{\sum_{j=1}^{J} \exp(x_i\beta_j)} \quad [2]$$

$$\text{where } \beta_1 = 0, m = 1, 2, 3, 4, w = 1994, ..., 2000.$$

As mentioned before, the resulting odds of the mlogit are difficult to interpret. Hence, more easily interpretable marginal effects are calculated by means of:

$$\frac{\partial \Pr(y = m \mid x)}{\partial x_k} = \Pr(y = m \mid x) \left[\beta_{km} - \sum_{j=1}^{J} \beta_{kj} \Pr(y = j \mid x) \right] \quad [3]$$

for continuous variables and by

$$\frac{\Delta \Pr(y = m \mid x)}{\Delta x_k} = \Pr(y = m \mid x, x_k = 1) - \Pr(y = m \mid x, x_k = 0). \quad [4]$$

for dummy-variables.

Using pooled panel data, one has to control for repeated observations of the identical individual. An application for a robust estimation with repeated observations is the Huber/White-Sandwich Estimator (Huber, 1967 and White, 1980, 1982). The repeated observations are treated as clusters, which are dependent within the cluster, but set as independent between the clusters. The divergence between the dependent within- and the independence-between is incorporated in a mathematical correction of standard errors ('robust standard errors'). However, the correction does not change the numeric value of coefficients or marginal effects, but increases the value of the robust standard errors as compared to non-corrected standard errors. This results in a reduction of the number of significant coefficients or marginal effects.

The endogenous variable is constructed according to [1], whereas the exogenous covariates cover the information, as displayed by table A-3. The household structure, a set of covariates

measuring the number of children in accordance to the child day-care infrastructure and mari-
tal status mainly accounts for family related characteristics. The remaining covariates refer to
general human capital variables, which are known to have an impact on employment prob-
abilities (years of education, age, tenure, income, state of health, citizenship and unemploy-
ment history, cf. Killingsworth 1983). The research question is whether and to what extent
these factors vary in sight of different institutional backgrounds. If substantial differences
emerge, the countries could be assigned to different levels of modernization and the country
with the most developed ongoing state of modernization could act as benchmark for the re-
maining counterparts.

For both, women and men, general human capital variables turned out to be determinants for
labor supply. For instance, the likelihood to stay in a full-time job increases with age, but
decreases at the very end of the employment-life cycle, which creates an inverse u-shaped age
full-time profile. On top of the relevance of general human capital variables, the outcomes for
women are clearly dominated by additional effects of family related characteristics whereas
those effects of a negligible importance for men in all of the observed six countries. There-
fore, in the following only significant effects of those covariates that turn out to be most im-
portant for women, namely number and age of children, are discussed in detail. The effects of
the other covariates are displayed by table A-4.1a-4.4c.

With regard to the number of children in specific age spans, the outcomes suggest that an
increasing number of children aged 3 to 6 results in a higher probability of Danish women to
change from full- to part-time by 1.2 % per additional child in this age group (table 3). By
contrast, for Germany, the figures show that (an increasing number of) children reduce the
likelihood of staying in full-time, regardless different age groups. Instead of continuing full-
time employment, German women change to part-time employment, have to face unemploy-
ment or experience labor market transitions to non-employment. The results for the latter
transition path clearly reflect the current German child day-care infrastructure. In sight of
comparatively high enrolment rates for children in the kindergarten (age group 3-6, cf. above,
table 1), no significant effects emerge for transition from full- to non employment with an
increasing number of children aged 3-6.

Table 3:

Determination of age and number of kids for female labor market transitions

(full-time in t_w, part-time in t_w; age span: 26-64 years in t_{w+1})

Status in t_w	DEN ft	DEN pt	GER ft	GER pt	IRE ft	IRE pt	NET ft	NET pt	POR ft	POR pt	UK ft	UK pt
$\Rightarrow$ full-time in t_{w+1}												
#kids (0-2 years)	0	0	-4.6	0	-8.6	0	-11.2	-5.7	0	/	-9.9	-7.0
#kids (3-6 years)	0	0	-4.0	-10.3	0	-5.4	0	-4.2	-1.4	/	-3.4	-4.3
#kids (7-15 years)	0	0	-1.3	- 2.8	-2.7	0	0	-1.6	0	/	-2.1	0
$\Rightarrow$ part-time in t_{w+1}												
#kids (0-2 years)	0	0	3.3	0	5.9	0	9.4	6.2	0	/	6.4	5.0
#kids (3-6 years)	1.2	0	2.2	8.7	0	0	0	3.9	1.0	/	3.4	4.1
#kids (7-15 years)	0	0	0	0	1.7	0	0	1.5	0	/	1.3	0
$\Rightarrow$ unemployment in t_{w+1}												
#kids (0-2 years)	0	0	0	0	0	0	0.4	0	0	/	0.7	0
#kids (3-6 years)	0	0	1.2	0	0	0	0	0	-0.4	/	0	0
#kids (7-15 years)	0	0	0.4	0	0	0	0	0	0	/	0	0
$\Rightarrow$ non-empl. in t_{w+1}												
#kids (0-2 years)	0	0	1.5	0	2.3	4.0	1.4	0	0	/	2.8	0
#kids (3-6 years)	0	0	0	1.8	0	0	0	0	0	/	0	0
#kids (7-15 years)	0	0	0.6	1.0	1.0	0	0	0	0	/	0.7	0

Notes: Marginal effects from pooled multinomial logistic regression equations using Huber-White estimators. For other controls included, see table A-3. 0 = not significant at the 5 per cent level, / = insufficient number of cases. Source: ECHP (1994-2001), authors' calculations (see appendix, table A-4.1a - A-4.2c).

A similar occurrence, albeit with higher impacts on the changes in percent, can be observed for British women. This can be interpreted as an outcome of a child day-care system that is even worse than Germany's. The Netherlands exhibit a more or less straightforward picture, as the negative (positive) effect on remaining in full-time (changing to part-time) is highest compared to women in the other five countries. The finding has to be explained by the Dutch part-time employment regime. For Irish female workers, an increasing number of children also turn out to be an obstacle to continue full-time employment, too. Somewhat similarly as in the Danish case, an increasing number of children have only a minor impact on labor market transitions of Portuguese women. However, the generally low wage level, entailing to the necessity to work full-time in order to have a second source of household income, seems to have a predominant effect on female labor supply. Thus, in the end, the findings for Portugal fit into the concept of this residual welfare regime, even though one might have assumed that the low level of child day care facilities and the weak support for mothers' employment should result in a low female labor force participation in that country.

Concerning labor market transitions with part-time employment in starting year t_w, with the exception of Portugal (again, due to insufficient number of cases in respect to part-time employment relationships) outcomes are available and of high relevance. In Denmark, no effect emerges for females, which points to the comparatively low importance of part-time employment for women, but also addresses once again the high state of demandability of the child day-care infrastructure in this country. In Germany, women either stick to part-time or change to non-employment but do not (re-)enter full-time employment. This is especially true for an increasing number of children within the age range from 3 to 6. This is mainly due to the fact that child day-care facilities are on the one hand available to a comparatively high rate for children within this age span, but in most cases care is not supplied on the basis of full day coverage. In the Netherlands, again a distinct part-time prevalence is exhibited by the results for Dutch women, as the probability to work via part-time permanence increases and the transition probability to full-time work decreases with an increasing number of children in any age span. A similar, but not equally obvious tendency to part-time permanence is shown by the UK. Given a rising number of children in Irish households, part-time arrangements of female workers tend to result in transitions into the non-employment status in this country.

Turning to transitions from the state of unemployment, results for Danish women suggest a partial escape from unemployment either to full-time employment or to the state of non-employment in the case of an increasing number of children in the age span of 0 to 2. This partially points to successful labor market transitions in the case of unemployment when having very young children. A similar occurrence can be observed for German unemployed women. However, their labor market transitions in terms of exits from unemployment are not as successful as Danish women's, because the effect of leaving unemployment is only caused by children within the age span of 7 to 15, while changes from unemployment to full-time employment are unlikely, whereas transitions from unemployment to non-employment are likely. In contrast, Dutch unemployed women either stay in unemployment or exit to part-time employment, but are not supposed to change to non-employment. In Portugal, women possess a likelihood to exit unemployment by a change to non-employment in the case of an increasing number of children aged 3 to 6. The reverse is true for British unemployed women. They tend to solve their unemployment problem by a change to part-time employment. For Irish female workers, no significant effects emerged with regard to the starting status unemployment

In terms of transitions that are based on the labor market status of non-employment, no significant effect occurs in Denmark. This is again due to the considerably well established promotion of employment opportunities of Danish women who have dependent children. In the remaining five countries, a straight forward pattern emerges, namely, a rising probability of permanent non-employment in sight of an increasing number of children. This will be mainly due to child care activities. Accordingly, the chances of a change from the care duty to either part-time or full-time employment are negative. Again, Portugal remains as an exception, since only for very young children a positive effect is displayed to remain in non-employment.

3   Conclusions

If one takes the well known results of the economics of discrimination into account (Arrow 1973, Aigner and Cain 1977), the high extent of female investment in domestic work (EC 2004d, 43-77) automatically reproduces employers' misleading expectations due to the lack of information on male versus female job applicants and workers. The reason is that expected but not necessarily empirically evidenced labor market patterns of women can be clearly distinguished from expected male employment paths. However, statistically discriminated expectations are valid for women at large, regardless of whether their employment careers were planned to include children. Therefore, institutions with the broadest variety of labor supply opportunities are a device to kill two birds with one stone: to smooth labor market discrimination of women in general by means of minimizing the employment-family crunch.

For the sake of smoothing risks and generating opportunities of labor market transitions, a rearrangement of the relevant institutions, like the social benefit system, the taxation system and the child day-care infrastructure have to be put on the agenda. However, devices to foster the flexibility and security of labor market transitions should always be concerted with respect to their assumed direct and indirect positive and negative externalities.

In this sense, investments in pre-primary education are investments that pay in various respects and serve to make progress in the field of reconciling employment and family. This goal coincides with many positive external effects, which are all relevant for a positive economic development (higher employment rates caused by higher employment opportunities for parents and an increasing demand for employees to boost the child day-care infrastructure, higher taxes, less dependency on transfer income, etc.). The early promotion of future human capital also incorporates a 'brain-gain-effect', as there is strong evidence for a positive effect of pre-primary education on the development of emotional and social competencies and learning-to-learn capabilities (Barnett and Hustedt 2003), which will become at least as important as the formation of formal human capital by schooling or the attendance of universities. Hence, pre-primary education can be rated as a public good whose benefits reach across borders, communities, generations and population groups. To provide child day-care as a public good would be most important where child day-care is comparatively expensive, as in the UK, which prevents parents from affording this service (Management Issues News 2003). Consequently, a high coverage of a high quality pre-school education should be guaranteed by

public authorities by means of public production and/or a controlled delegation to private providers. Furthermore, as these positive long-term effects are underestimated by individuals, namely parents, why should pre-school education not become compulsory like schooling?

Moreover, this early investment in social and human capital should be combined with a further dismantling of incentives to seek for early retirement. The restructuring strategy should become valid for all, employers, employees and the political arena. In this sense, the idea of fostering the concept of Life-Long-Learning should include the expanding of Life-Long-Learning to the left- and right handed margins, that is pre-primary education on the one hand and the maintaining and further promotion of skills and employability of older workers on the other hand.

With the focus on individuals and private households, strategies to minimize risks and to optimize employment opportunities should consider the mutual interdependency dependencies between male and female partners and couples on decision making for time distribution on employment, care and leisure. In this respect, for instance, the maternity leave model in Demark (and in the other Scandinavian countries) pays the highest contribution to approaching an equal distribution of opportunity cost related to child rearing. In addition, private household services should experience further attendance to support chances to combine employment and the family. Yet, the potential of this option is still underrated in many European countries (Cancedda 2001).

In respect of (female) employment opportunities, that can also be defined as transition opportunities under control of transition risks, the six countries considered can be assigned to a scale that measures gender-related labor market modernization. Two extreme positions can be identified. On the one hand, Denmark at the top of the scale with an equal opportunity regime that has to be assessed as 'continuing' modernization. On the other hand, Germany the UK and Ireland at the bottom of the scale, with obvious institutional lags that still point to a male breadwinner regime, either embedded in a liberal or in a conservative frame. In between, the conservative/social democratic part-time regime for women of the Netherlands is assigned. However, the straight focus on the part-time solution is of an ambivalent nature, as there is ample evidence that the metamorphosis of part-time employment in the Netherlands from atypical to typical (Visser et al. 2004) also incorporates new risks that are located on a somewhat higher level, like wage and career penalties (Giovanni and Hassink 2005). Although the latter three countries show features of a continuing modernization, their performance in terms of a gender-related modernization of the labor market cannot be rated to be as successful as

the Danish case. Since Portugal still shows some features of a 'catching-up' modernization, as the Portuguese low wage level is essential to explain similarities in the outcomes of the analyses, the Portuguese case cannot unequivocally be assessed as 'continuing' modernization. Hence, Portugal cannot really be compared to the other four countries.

All things considered, a joint European strategy that entails to cope with the expected scarcity of skilled labor resulting from demographic trends should set the increasing educational attainment and rising labor market participation of women into a flexible but sustainable frame for (re-)accessing the labor market. The Danish case already provides an example of good practice towards gender related modernization of the labor market on the bases of equal labor market opportunities.

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ANNEX

Table A-1: **Key Labor Market Indicators (2001)**

	Men & Women															
	AUS	**BEL**	**DEN**	**FIN**	**FRA**	**GER**	**GRE**	**IRE**	**ITA**	**NET**	**LUX**	**POR**	**SPA**	**SWE**	**UK**	**EU15**
Total population (000)	7967	10263	5321	5166	57726	81349	10356	3853	57229	15837	433	10294	39972	8889	58856	373483
Population aged 15-64 (000)	5411	6728	3545	3450	37682	54976	6858	2600	38645	10801	293	6959	27437	5739	38761	249888
Total employment (000)	4077	4148	2792	2330	24716	38917	3921	1741	23567	8277	277	5098	16094	4346	29481	169781
Population in employment aged 15-64 (000)	3707	4033	2700	2350	23659	36188	3802	1708	21169	8005	185	4782	15839	4249	27803	160074
Employment rate (% population aged 15-64)	68.5	59.9	76.2	68.1	62.8	65.8	55.4	65.7	54.8	74.1	63.1	68.7	57.7	74.0	71.7	64.1
FTE employment rate (% population aged 15-64)	63.4	55.8	69.8	65.7	59.9	58.6	55.1	60.7	52.7	58.1	60.0	67.2	55.3	68.4	62.2	58.7
Part-time employment (% total employment)	18.2	18.5	20.2	12.2	16.3	20.9	4.0	16.4	8.4	42.2	10.4	11.0	7.9	21.1	24.6	17.8
Fixed term contracts (% total employment)	7.8	8.8	9.2	16.4	14.6	12.4	12.6	5.2	9.8	14.3	5.6	20.4	31.7	15.2	6.7	13.3
Activity rate (% population aged 15-64)	71.3	64.2	79.9	75.0	68.7	71.5	62.1	68.4	60.6	75.8	64.4	71.8	64.5	77.9	75.6	69.2
Total unemployment (000)	140	289	124	238	2212	3110	452	69	2249	198	4	213	1889	224	1489	12893
Unemployment rate (% labor force 15+)	3.6	6.7	4.3	9.1	8.5	7.8	10.4	3.9	9.4	2.4	2.1	4.1	10.6	4.9	5.0	7.4
Long term unemployment rate (% labor force)	0.9	3.2	0.8	2.5	3.0	3.8	5.4	1.2	5.8	0.6	0.6	1.5	3.9	1.0	1.3	3.1

Table A-1 (contd.): **Key Labor Market Indicators (2001)**

							Men									
	AUS	**BEL**	**DEN**	**FIN**	**FRA**	**GER**	**GRE**	**IRE**	**ITA**	**NET**	**LUX**	**POR**	**SPA**	**SWE**	**UK**	**EU15**
Total population (000)	3855	5018	2632	2512	28010	39738	5004	1913	27764	7865	214	4966	19569	4393	29107	182542
Population aged 15-64 (000)	2695	3388	1792	1733	18631	27716	3334	1305	19258	5469	148	3412	13747	2916	19553	125098
Total employment (000)	2266	2400	1494	1220	13578	21715	2441	1023	14738	4691	175	2800	10123	2270	16268	97181
Population in employment aged 15-64 (000)	2060	2331	1438	1227	12992	20164	2360	997	13201	4526	111	2618	9957	2208	15309	91421
Employment rate (% population aged 15-64)	76.4	68.8	80.2	70.8	69.7	72.8	70.8	76.4	68.6	82.8	75.0	76.7	72.4	75.7	78.3	73.1
FTE employment rate (% population aged 15-64)	76.0	68.6	76.9	69.8	70.3	70.9	71.2	75.6	67.6	75.0	74.9	77.3	71.8	73.6	74.8	71.5
Part-time employment (% total employment)	4.8	5.2	10.2	7.9	5.0	n.a.	2.2	6.6	3.5	20.0	1.4	6.7	2.7	10.8	8.9	6.2
Fixed term contracts (% total employment)	7.2	6.3	7.7	12.9	13.2	12.1	10.9	4.3	8.3	11.9	5.2	18.6	30.0	12.9	6.0	12.3
Activity rate (% population aged 15-64)	79.5	73.2	83.8	77.6	75.2	78.9	76.2	79.7	74.1	84.3	76.3	79.4	78.3	79.9	82.9	78.3
Total unemployment (000)	67	150	59	117	988	1717	181	42	1057	92	2	91	809	124	910	6402
Unemployment rate (% labor force 15+)	3.2	6.0	3.9	8.6	7.0	7.8	6.9	4.0	7.3	2.0	1.7	3.2	7.5	5.2	5.5	6.5
Long term unemployment rate (% labor force)	0.7	3.0	0.7	2.7	2.4	3.7	3.1	1.6	4.5	0.5	0.5	1.2	2.3	1.2	1.7	2.7

Table A-1 (contd.): **Key Labor Market Indicators (2001)**

	Women															
	AUS	**BEL**	**DEN**	**FIN**	**FRA**	**GER**	**GRE**	**IRE**	**ITA**	**NET**	**LUX**	**POR**	**SPA**	**SWE**	**UK**	**EU15**
Total population (000)	4112	5245	2689	2654	29716	41612	5352	1940	29465	7972	219	5329	20403	4496	29750	190941
Population aged 15-64 (000)	2716	3341	1752	1717	19051	27260	3524	1296	19388	5332	145	3546	13689	2823	19209	124789
Total employment (000)	1811	1748	1299	1109	11138	17202	1480	718	8828	3585	102	2299	5971	2077	13213	72600
Population in employment aged 15-64 (000)	1647	1702	1261	1123	10667	16024	1443	712	7968	3479	74	2164	5883	2041	12494	68653
Employment rate (% population aged 15-64)	60.7	51.0	72.0	65.4	56.0	58.8	40.9	54.9	41.1	65.2	50.9	61.0	43.0	72.3	65.0	55.0
FTE employment rate (% population aged 15-64)	50.9	43.0	63.0	61.8	50.0	46.5	40.0	45.7	38.1	41.6	45.1	57.6	38.8	63.3	50.2	46.2
Part-time employment (% total employment)	34.9	36.9	31.6	16.8	30.1	n.a.	7.1	30.5	16.6	71.3	25.8	16.4	16.8	33.0	44.0	33.4
Fixed term contracts (% total employment)	8.6	12.0	10.7	19.9	16.2	12.6	15.0	6.2	11.9	17.4	6.4	22.6	34.3	17.6	7.5	14.5
Activity rate (% population aged 15-64)	63.2	55.1	75.9	72.4	62.4	63.9	48.7	57.1	47.3	67.1	52.2	64.5	50.7	75.7	68.1	60.2
Total unemployment (000)	72	139	65	121	1224	1393	271	28	1191	106	2	122	1079	100	579	6491
Unemployment rate (% labor force 15+)	4.2	7.6	4.9	9.7	10.3	7.9	15.5	3.8	12.9	2.9	2.7	5.1	15.4	4.5	4.4	8.6
Long term unemployment rate (% labor force)	1.1	3.6	1.0	2.3	3.7	4.1	8.6	0.8	8.0	0.8	0.7	1.9	6.3	0.8	0.8	3.8

Source: EC (2003).

Table A-2: **Transition probabilities**

$t_w \Rightarrow t_{w+1}$ (in %; 1= full-time, 2= part-time, 3=unemployment, 4=non-employment)

Austria (male)

		t_{w+1}			
		1	**2**	**3**	**4**
t_w	**1**	94.9	0.9	1.1	3.1
	2	28.6	47.6	3.3	20.5
	3	40.9	4.9	35.6	18.7
	4	3.7	2.8	2.1	91.4
		76.3	**2.4**	**2.0**	**19.3**

Belgium (male)

		t_{w+1}			
		1	**2**	**3**	**4**
	1	95.9	1.3	0.9	1.9
	2	32.9	49.1	3.1	14.9
t_w	**3**	30.6	6.1	35.8	27.6
	4	5.1	1.7	3.4	89.9
		79.2	**2.9**	**2.3**	**15.2**

Denmark (male)

		t_{w+1}			
		1	**2**	**3**	**4**
	1	95.1	1.3	1.6	2.0
	2	29.9	49.9	4.8	15.5
	3	48.6	5.8	25.1	20.5
	4	8.5	5.5	5.8	80.1
		82.6	**3.5**	**3.1**	**10.8**

Finland (female)

		t_{w+1}			
		1	**2**	**3**	**4**
	1	94.1	1.8	1.9	2.2
	2	32.1	46.3	4.6	17.0
	3	36.1	4.1	42.6	17.2
	4	7.6	4.0	4.5	83.9
		76.6	**4.0**	**4.8**	**14.6**

Austria (female)

		t_{w+1}			
		1	**2**	**3**	**4**
	1	87.1	5.7	1.5	5.7
	2	14.5	73.3	1.8	10.5
t_w	**3**	18.1	22.9	29.2	29.4
	4	3.1	5.8	2.2	89.0
		38.4	**18.2**	**2.5**	**40.8**

Belgium (female)

		t_{w+1}			
		1	**2**	**3**	**4**
	1	89.3	6.7	1.2	2.8
	2	14.3	74.8	2.0	9.0
	3	13.8	15.9	32.6	37.6
	4	1.8	3.7	4.0	90.5
		42.3	**18.8**	**3.8**	**35.2**

Denmark (female)

		t_{w+1}			
		1	**2**	**3**	**4**
	1	89.9	4.2	2.0	3.9
	2	10.8	68.2	3.4	10.4
t_w	**3**	33.0	12.4	29.6	25.0
	4	10.0	6.1	6.1	77.8
		60.8	**14.3**	**4.8**	**20.6**

Finland (female)

		t_{w+1}			
		1	**2**	**3**	**4**
	1	89.0	4.2	2.7	4.1
	2	33.5	45.8	6.6	14.1
	3	33.2	9.2	36.3	21.2
	4	10.4	5.5	7.1	77.0
		66.1	**8.2**	**6.1**	**19.6**

The rows reflect the initial values of the starting labor market status in t_w and the columns reflect the final values for every year in t_{w+1}.

Marginal distributions may not sum up correctly due to rounding errors.

Table A-2 (contd.): transition probabilities

$t_w \Rightarrow t_{w+1}$ (in %; 1= full-time, 2= part-time, 3=unemployment, 4=non-employment)

France (male)

t_w	t_{w+1} 1	2	3	4
1	94.6	1.2	1.6	2.6
2	33.9	49.2	6.6	10.4
3	27.0	6.0	43.7	23.3
4	9.0	1.8	4.3	85.0
	73.8	**3.2**	**4.3**	**18.7**

Germany (male)

t_w	t_{w+1} 1	2	3	4
1	92.7	1.8	2.3	3.3
2	37.2	43.1	3.8	16.0
3	41.0	5.1	36.3	17.6
4	7.9	5.6	5.0	81.5
	76.8	**4.1**	**4.3**	**14.7**

Greece (male)

t_w	t_{w+1} 1	2	3	4
1	93.1	2.2	1.9	2.8
2	42.3	45.0	3.5	9.2
3	46.0	6.0	34.0	14.1
4	7.1	2.2	3.4	87.4
	77.8	**4.3**	**3.6**	**14.3**

Ireland (male)

t_w	t_{w+1} 1	2	3	4
1	94.3	2.4	1.4	1.9
2	26.2	60.3	5.7	7.8
3	20.9	12.8	43.8	22.5
4	5.7	5.4	6.9	82.0
	73.3	**7.5**	**5.1**	**14.0**

France (female)

t_w	t_{w+1} 1	2	3	4
1	88.7	4.5	2.0	4.9
2	17.2	66.5	5.1	1.3
3	15.5	8.6	43.8	32.1
4	4.2	3.1	4.5	88.2
	43.0	**11.9**	**6.3**	**38.9**

Germany (female)

t_w	t_{w+1} 1	2	3	4
1	87.5	5.7	2.8	4.0
2	13.3	73.2	2.6	11.0
3	26.2	15.1	33.1	25.6
4	3.1	8.6	3.7	84.7
	42.2	**21.4**	**4.7**	**31.7**

Greece (female)

t_w	t_{w+1} 1	2	3	4
1	83.1	6.0	2.5	8.4
2	26.5	54.9	2.7	16.0
3	19.4	5.8	38.3	36.5
4	5.0	2.4	2.6	90.0
	35.1	**8.3**	**4.7**	**51.9**

Ireland (female)

t_w	t_{w+1} 1	2	3	4
1	82.8	9.9	1.7	5.6
2	12.5	71.4	2.1	14.0
3	13.0	23.3	23.3	40.3
4	2.7	7.1	2.3	87.9
	26.2	**21.0**	**2.8**	**50.1**

The rows reflect the initial values of the starting labor market status in t_w and the columns reflect the final values for every year in t_{w+1}.

Marginal distributions may not sum up correctly due to rounding errors.

Table A-2 (contd.): **Transition probabilities**

$t_w \Rightarrow t_{w+1}$ (in %; 1= full-time, 2= part-time, 3=unemployment, 4=non-employment)

Italy (male)

t_w	t_{w+1} 1	2	3	4
1	93.7	1.6	1.7	3.0
2	30.8	49.9	8.2	11.1
3	28.5	6.9	50.2	14.3
4	5.3	2.1	5.7	86.8
	71.9	**4.1**	**5.8**	**18.1**

Netherlands (male)

t_w	t_{w+1} 1	2	3	4
1	95.7	1.9	0.6	1.8
2	30.6	58.3	1.2	10.0
3	40.5	7.2	27.5	24.9
4	7.6	2.9	3.1	86.5
	80.6	**5.0**	**1.4**	**13.0**

Portugal (male)

t_w	t_{w+1} 1	2	3	4
1	95.1	1.1	1.1	2.6
2	34.3	45.4	2.3	18.0
3	46.3	2.4	29.1	22.2
4	9.1	3.9	1.9	85.2
	81.0	**2.7**	**1.9**	**14.4**

Spain (male)

t_w	t_{w+1} 1	2	3	4
1	92.2	1.3	3.8	2.8
2	49.4	24.1	13.6	13.0
3	39.9	4.9	40.4	14.8
4	6.6	2.3	7.0	84.2
	73.8	**2.4**	**8.0**	**15.9**

Italy (female)

t_w	t_{w+1} 1	2	3	4
1	87.0	5.3	2.1	5.6
2	18.3	66.1	4.6	11.3
3	11.1	7.3	45.1	36.6
4	2.8	2.0	5.2	90.1
	32.3	**10.0**	**7.4**	**50.3**

Netherlands (female)

t_w	t_{w+1} 1	2	3	4
1	82.6	12.5	1.1	3.8
2	7.9	83.7	1.2	7.3
3	10.6	26.2	24.8	38.5
4	2.1	8.2	4.8	84.9
	24.6	**37.9**	**3.3**	**34.2**

Portugal (female)

t_w	t_{w+1} 1	2	3	4
1	89.9	3.6	1.5	4.9
2	21.6	61.8	1.2	15.4
3	32.6	6.5	26.6	34.3
4	6.0	4.1	1.7	88.2
	50.1	**9.1**	**2.3**	**37.6**

Spain (female)

t_w	t_{w+1} 1	2	3	4
1	84.6	4.5	4.1	6.8
2	22.0	48.4	9.7	19.9
3	16.8	10.1	40.8	32.4
4	3.7	2.9	6.4	86.9
	31.3	**7.8**	**9.9**	**51.0**

The rows reflect the initial values of the starting labor market status in t_w and the columns reflect the final values for every year in t_{w+1}.

Marginal distributions may not sum up correctly due to rounding errors.

Table A-2 (contd.): **transition probabilities**

$t_w \Rightarrow t_{w+1}$ (in %; 1= full-time, 2= part-time, 3=unemployment, 4=non-employment)

		UK (male)						UK (female)						EU-13 (male)						EU-13 (female)			
		t_{w+1}						t_{w+1}						t_{w+1}						t_{w+1}			
		1	2	3	4		1	2	3	4		1	2	3	4		1	2	3	4
	1	94.2	2.5	1.4	1.9	1	86.5	8.6	1.2	3.8	1	94.0	1.6	1.8	2.6	1	87.1	5.8	2.1	5.0
	2	43.3	44.3	4.0	8.5	2	12.9	75.7	1.5	9.9	2	35.2	47.5	5.2	12.1	2	15.0	71.0	2.8	11.2
t_w	3	30.9	7.2	43.9	18.0	3	18.4	21.8	20.9	39.0	3	35.5	6.1	40.6	17.8	3	18.3	11.4	37.3	33.0
	4	6.1	3.6	4.6	85.7	4	3.3	10.4	2.0	84.4	4	6.9	3.1	4.6	85.5	4	3.8	4.7	4.1	87.5
		78.9	**4.8**	**3.9**	**12.5**		**41.1**	**28.0**	**1.9**	**29.1**		**76.6**	**3.9**	**4.2**	**15.3**		**39.2**	**16.1**	**5.0**	**39.8**

(Note: the t_w label for the EU-13 columns appears between the UK (female) and EU-13 (male) panels.)

The rows reflect the initial values of the starting labor market status in t_w and the columns reflect the final values for every year in t_{w+1}.

Marginal distributions may not sum up correctly due to rounding errors.

Source: ECHP, authors' calculations.

Table A-3: **Determinants of labor market transitions (mlogit-model)**

related field	variable	definition	time reference
household structure	si_hhd	single	
	lopa_hhd	lone parent	
	(kid_hhd	couple with kids)	t_w
	nkid_hhd	couple, no kids	
	oth_hhd	other	
# of kids in age spans	s_kid0-2	# kids (age span 0-2)	
	s_kid3-6	# kids (age span 3-6)	t_w
	s_kid7-15	# kids (age span 7-15)	
marital status	unmarr	unmarried	
	(mar_wid	married or widowed)	t_w
	sep_div	separated or divorced	
education	y_edu	years of education	t_w
age	age	years of age	t_w
	age_q	years of age, squared	
tenure	tenu	years job tenure	
	tenu_q	years job tenure, squared	
income	ln_incph	log of net income per hour	t_w
	o_hhdinc	other household income	t_w
	do_hhdinc	difference of other household income	t_w - t_{w+1}
state of health	sick	bad health state	t_w
citizenship	foreign	foreigner	t_w
unemployment history	st_alo5	short term unemployment in past 5 years	t_{w-5} - t_w
	lt_alo5	long term unemployment in past 5 years	

a) reference category in parentheses.

Table A-4.1a.: **Marginal Effects of mlogit-regressions (full-time employment in $t_{w,}$)**

	Denmark								Germany							
	(1)		(2)		(3)		(4)		(1)		(2)		(3)		(4)	
si_hhd	0.0083	(0.0127)	-0.0067	(0.0100)	0.0011	(0.0055)	-0.0027	(0.0050)	-0.0033	(0.0138)	-0.0039	(0.0106)	-0.0025	(0.0044)	0.0097	(0.0061)
lopa_hhd	0.0046	(0.0128)	-0.0163	(0.0081)	-0.0046	(0.0038)	0.0162	(0.0099)	-0.0331	(0.0164)	0.0143	(0.0123)	0.0016	(0.0057)	0.0172	(0.0079)
nkid_hhd	0.0138	(0.0090)	-0.0089	(0.0074)	0.0007	(0.0036)	-0.0056	(0.0032)	0.0036	(0.0080)	-0.0106	(0.0063)	0.0009	(0.0032)	0.0062	(0.0032)
oth_hhd	0.0084	(0.0166)	-0.0110	(0.0122)	-0.0044	(0.0054)	0.0070	(0.0099)	0.0045	(0.0136)	0.0020	(0.0114)	-0.0015	(0.0049)	-0.0050	(0.0040)
s_kid0-2	-0.0022	(0.0083)	0.0023	(0.0067)	-0.0011	(0.0034)	0.0010	(0.0031)	-0.0464	(0.0162)	0.0331	(0.0118)	-0.0013	(0.0066)	0.0146	(0.0065)
s_kid3-6	-0.0053	(0.0071)	0.0118	(0.0054)	-0.0025	(0.0031)	-0.0040	(0.0032)	-0.0395	(0.0093)	0.0216	(0.0072)	0.0115	(0.0031)	0.0064	(0.0045)
s_kid7-15	0.0029	(0.0048)	-0.0003	(0.0038)	-0.0009	(0.0017)	-0.0017	(0.0021)	-0.0134	(0.0048)	0.0039	(0.0038)	0.0037	(0.0016)	0.0057	(0.0019)
unmarr	-0.0059	(0.0093)	0.0022	(0.0072)	0.0011	(0.0037)	0.0025	(0.0042)	0.0094	(0.0101)	-0.0026	(0.0086)	-0.0028	(0.0038)	-0.0041	(0.0035)
sep_div	-0.0055	(0.0115)	-0.0081	(0.0078)	0.0127	(0.0066)	0.0010	(0.0047)	0.0056	(0.0105)	0.0027	(0.0089)	-0.0028	(0.0038)	-0.0055	(0.0029)
y_edu	0.0030	(0.0010)	0.0003	(0.0007)	-0.0013	(0.0004)	-0.0020	(0.0004)	0.0017	(0.0010)	0.0008	(0.0008)	-0.0009	(0.0004)	-0.0016	(0.0004)
age	0.0141	(0.0033)	-0.0037	(0.0027)	-0.0001	(0.0013)	-0.0103	(0.0017)	0.0087	(0.0031)	-0.0020	(0.0026)	0.0002	(0.0012)	-0.0069	(0.0012)
age_q	-0.0002	(0.0000)	0.0001	(0.0000)	0.0000	(0.0000)	0.0001	(0.0000)	-0.0001	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0001	(0.0000)
tenu	0.0077	(0.0018)	-0.0032	(0.0015)	-0.0015	(0.0007)	-0.0030	(0.0008)	0.0126	(0.0018)	-0.0054	(0.0014)	-0.0049	(0.0007)	-0.0023	(0.0007)
tenu_q	-0.0003	(0.0001)	0.0001	(0.0001)	0.0000	(0.0000)	0.0001	(0.0000)	-0.0005	(0.0001)	0.0002	(0.0001)	0.0002	(0.0000)	0.0001	(0.0000)
ln_incph	0.0315	(0.0083)	-0.0171	(0.0050)	-0.0052	(0.0021)	-0.0091	(0.0029)	0.0467	(0.0069)	-0.0245	(0.0046)	-0.0096	(0.0018)	-0.0126	(0.0024)
o_hhdinc	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
do_hhdinc	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	-0.0001	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
sick	-0.1569	(0.0508)	0.0097	(0.0217)	0.0276	(0.0181)	0.1196	(0.0409)	-0.0469	(0.0098)	0.0064	(0.0073)	0.0050	(0.0032)	0.0355	(0.0054)
foreign	n.a.	n.a	n.a	n.a	n.a	n.a	n.a	n.a	0.0161	(0.0083)	-0.0137	(0.0070)	-0.0018	(0.0033)	-0.0005	(0.0030)
st_alo5	-0.0294	(0.0107)	0.0114	(0.0079)	0.0049	(0.0043)	0.0131	(0.0053)	-0.0261	(0.0097)	-0.0001	(0.0067)	0.0186	(0.0048)	0.0076	(0.0041)
lt_alo5	-0.0765	(0.0169)	0.0237	(0.0120)	0.0241	(0.0085)	0.0287	(0.0085)	-0.0757	(0.0184)	0.0053	(0.0104)	0.0407	(0.0103)	0.0297	(0.0091)

regression parameters	regression parameters
Wald chi2(63) = 414.58	Wald chi^2 (63) = 931.08
Prob > chi2 = 0.0000	Prob > chi^2 = 0.0000
Pseudo R2 = 0.1403	Pseudo R^2 = 0.1504
Log pseudolikelihood = -2079.8055	Log pseudolikelihood = -4305.742

N	5903	10092

(1) full-time⇒full-time, (2) full-time⇒part-time, (3) full-time⇒unemployment , (4) full-time⇒non-employment, robust standard errors in parentheses. n.a. = not applicable.

Source: ECHP, authors' calculations.

Table A-4.1b.: **Marginal Effects of mlogit-regressions (full-time employment in $t_{w,}$)**

| | Ireland | | | | | | | | Netherlands | | | | | | | |
	(1)		(2)		(3)		(4)		(1)		(2)		(3)		(4)	
si_hhd	-0.1080	(0.0800)	0.0682	(0.2070)	0.0069	(0.5990)	0.0330	(0.2710)	-0.0368	(0.0256)	-0.0002	(0.0207)	0.0050	(0.0052)	0.0319	(0.0128)
lopa_hhd	0.0204	(0.4450)	-0.0157	(0.4770)	0.0004	(0.9560)	-0.0050	(0.6690)	-0.0903	(0.0453)	0.0490	(0.0396)	0.0035	(0.0056)	0.0378	(0.0229)
nkid_hhd	0.0133	(0.4940)	-0.0134	(0.3940)	0.0007	(0.9030)	-0.0006	(0.9540)	0.0113	(0.0141)	-0.0176	(0.0132)	0.0000	(0.0017)	0.0062	(0.0030)
oth_hhd	0.0184	(0.4000)	-0.0196	(0.2580)	0.0140	(0.1370)	-0.0129	(0.1150)	-0.0327	(0.0421)	0.0273	(0.0393)	0.0038	(0.0050)	0.0016	(0.0073)
s_kid0-2	-0.0860	(0.0000)	0.0587	(0.0000)	0.0039	(0.2430)	0.0234	(0.0000)	-0.1115	(0.0166)	0.0942	(0.0156)	0.0035	(0.0015)	0.0138	(0.0029)
s_kid3-6	-0.0091	(0.5380)	0.0135	(0.2680)	-0.0060	(0.2240)	0.0016	(0.7910)	-0.0293	(0.0187)	0.0217	(0.0175)	0.0015	(0.0017)	0.0061	(0.0033)
s_kid7-15	-0.0274	(0.0000)	0.0172	(0.0080)	0.0011	(0.5810)	0.0091	(0.0040)	-0.0104	(0.0087)	0.0066	(0.0083)	0.0014	(0.0008)	0.0023	(0.0017)
unmarr	0.0738	(0.0000)	-0.0543	(0.0000)	0.0001	(0.9900)	-0.0195	(0.0300)	0.0823	(0.0114)	-0.0756	(0.0110)	-0.0003	(0.0015)	-0.0065	(0.0024)
sep_div	-0.0285	(0.4790)	0.0350	(0.3510)	-0.0034	(0.5480)	-0.0030	(0.8160)	0.0432	(0.0145)	-0.0410	(0.0140)	0.0003	(0.0019)	-0.0026	(0.0023)
y_edu	0.0037	(0.0520)	-0.0011	(0.4770)	-0.0001	(0.8190)	-0.0025	(0.0110)	0.0002	(0.0027)	0.0007	(0.0026)	-0.0003	(0.0003)	-0.0007	(0.0006)
age	0.0042	(0.5150)	-0.0001	(0.9850)	0.0031	(0.2040)	-0.0071	(0.0070)	0.0173	(0.0051)	-0.0136	(0.0050)	0.0001	(0.0007)	-0.0038	(0.0008)
age_q	-0.0001	(0.3410)	0.0000	(0.7330)	0.0000	(0.2250)	0.0001	(0.0040)	-0.0002	(0.0001)	0.0002	(0.0001)	0.0000	(0.0000)	0.0000	(0.0000)
tenu	0.0128	(0.0000)	-0.0027	(0.3460)	-0.0029	(0.0010)	-0.0072	(0.0000)	0.0021	(0.0029)	-0.0011	(0.0028)	-0.0005	(0.0003)	-0.0005	(0.0005)
tenu_q	-0.0005	(0.0050)	0.0000	(0.7850)	0.0001	(0.0100)	0.0003	(0.0000)	0.0000	(0.0002)	0.0000	(0.0002)	0.0000	(0.0000)	0.0000	(0.0000)
ln_incph	0.0308	(0.0120)	-0.0070	(0.4710)	-0.0067	(0.0020)	-0.0171	(0.0000)	0.0095	(0.0108)	-0.0035	(0.0104)	-0.0013	(0.0009)	-0.0048	(0.0013)
o_hhdinc	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.2510)	0.0000	(0.0270)	-0.0001	(0.0000)	0.0001	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
do_hhdinc	0.0000	(0.0000)	0.0000	(0.0020)	0.0000	(0.0000)	0.0000	(0.0000)	-0.0001	(0.0000)	0.0001	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
sick	-0.2012	(0.0560)	0.0418	(0.5580)	0.0155	(0.5930)	0.1439	(0.0530)	-0.1304	(0.0421)	0.0498	(0.0365)	0.0050	(0.0050)	0.0756	(0.0238)
foreign	-0.0039	(0.9290)	0.0093	(0.8050)	0.0018	(0.8860)	-0.0072	(0.6770)	0.0370	(0.0276)	-0.0387	(0.0256)	0.0011	(0.0044)	0.0006	(0.0039)
st_alo5	0.0158	(0.4450)	-0.0077	(0.6770)	-0.0016	(0.6980)	-0.0064	(0.4180)	-0.0095	(0.0145)	0.0018	(0.0135)	0.0028	(0.0019)	0.0049	(0.0036)
lt_alo5	-0.0490	(0.0920)	0.0151	(0.5800)	0.0143	(0.1430)	0.0196	(0.1640)	-0.0389	(0.0291)	0.0190	(0.0263)	0.0076	(0.0056)	0.0123	(0.0086)

regression parameters	regression parameters
Wald chi^2 (63) = 320.33	Wald chi^2 (63) = 778.73
Prob > chi^2 = 0.0000	Prob > chi^2 = 0.0000
Pseudo R^2 = 0.0976	Pseudo R^2 = 0.1755
Log pseudolikelihood = -1641.9018	Log pseudolikelihood = -2200.8833

| N | 3168 | 4979 |

(1) full-time $\Rightarrow$ full-time, (2) full-time $\Rightarrow$ part-time, (3) full-time $\Rightarrow$ unemployment , (4) full-time $\Rightarrow$ non-employment, robust standard errors in parentheses.

Source: ECHP, authors' calculations.

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Table A-4.1c.: **Marginal Effects of mlogit-regressions (full-time employment in $t_{w,}$)**

	Portugal								UK							
	(1)		(2)		(3)		(4)		(1)		(2)		(3)		(4)	
si_hhd	0.0044	(0.0121)	-0.0004	(0.0084)	-0.0040	(0.0024)	0.0000	(0.0082)	-0.0087	(0.0193)	-0.0093	(0.0139)	-0.0025	(0.0039)	0.0205	(0.0123)
lopa_hhd	0.0094	(0.0087)	0.0050	(0.0068)	-0.0009	(0.0021)	-0.0135	(0.0049)	0.0026	(0.0165)	-0.0037	(0.0135)	0.0037	(0.0051)	-0.0026	(0.0080)
nkid_hhd	-0.0023	(0.0082)	-0.0015	(0.0050)	-0.0014	(0.0022)	0.0052	(0.0058)	-0.0164	(0.0115)	0.0024	(0.0092)	0.0018	(0.0036)	0.0122	(0.0058)
oth_hhd	0.0069	(0.0061)	-0.0019	(0.0042)	-0.0014	(0.0013)	-0.0036	(0.0041)	0.0247	(0.0142)	-0.0173	(0.0111)	0.0092	(0.0068)	-0.0166	(0.0044)
s_kid0-2	-0.0086	(0.0065)	0.0012	(0.0042)	0.0025	(0.0016)	0.0049	(0.0045)	-0.0987	(0.0117)	0.0637	(0.0091)	0.0067	(0.0033)	0.0283	(0.0045)
s_kid3-6	-0.0137	(0.0064)	0.0104	(0.0040)	-0.0039	(0.0019)	0.0072	(0.0047)	-0.0336	(0.0135)	0.0338	(0.0101)	-0.0102	(0.0062)	0.0101	(0.0061)
s_kid7-15	-0.0020	(0.0036)	-0.0009	(0.0026)	0.0015	(0.0008)	0.0013	(0.0025)	-0.0205	(0.0062)	0.0125	(0.0050)	0.0013	(0.0015)	0.0067	(0.0032)
unmarr	-0.0033	(0.0084)	-0.0011	(0.0049)	0.0068	(0.0033)	-0.0024	(0.0059)	0.0175	(0.0113)	-0.0272	(0.0088)	0.0063	(0.0042)	0.0033	(0.0061)
sep_div	-0.0029	(0.0101)	-0.0049	(0.0054)	0.0020	(0.0030)	0.0058	(0.0082)	0.0082	(0.0116)	-0.0100	(0.0096)	0.0081	(0.0047)	-0.0063	(0.0046)
y_edu	0.0002	(0.0005)	0.0008	(0.0003)	0.0000	(0.0001)	-0.0010	(0.0004)	0.0009	(0.0012)	-0.0003	(0.0001)	-0.0007	(0.0003)	0.0001	(0.0005)
age	-0.0005	(0.0021)	0.0015	(0.0014)	0.0009	(0.0007)	-0.0018	(0.0014)	0.0159	(0.0037)	-0.0006	(0.0032)	-0.0007	(0.0009)	-0.0092	(0.0014)
age_q	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	-0.0002	(0.0000)	0.0001	(0.0000)	0.0000	(0.0000)	0.0001	(0.0000)
tenu	0.0095	(0.0014)	-0.0024	(0.0010)	-0.0024	(0.0004)	-0.0047	(0.0010)	0.0048	(0.0023)	-0.0026	(0.0019)	-0.0010	(0.0007)	-0.0013	(0.0010)
tenu_q	-0.0003	(0.0001)	0.0001	(0.0000)	0.0001	(0.0000)	0.0002	(0.0001)	-0.0002	(0.0001)	0.0001	(0.0001)	0.0000	(0.0000)	0.0001	(0.0001)
ln_incph	0.0150	(0.0026)	-0.0066	(0.0017)	-0.0011	(0.0006)	-0.0072	(0.0017)	0.0531	(0.0008)	-0.0366	(0.0061)	-0.0049	(0.0014)	-0.0116	(0.0029)
o_hhdinc	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
do_hhdinc	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
sick	-0.0345	(0.0101)	0.0022	(0.0053)	0.0045	(0.0031)	0.0278	(0.0079)	-0.0567	(0.0168)	-0.0044	(0.0116)	0.0146	(0.0066)	0.0465	(0.0116)
foreign	-0.0653	(0.0421)	-0.0063	(0.0158)	-0.0089	(0.0012)	0.0805	(0.0396)	0.0307	(0.0222)	-0.0359	(0.0161)	0.0126	(0.0123)	-0.0074	(0.0097)
st_alo5	0.0000	(0.0087)	-0.0076	(0.0050)	0.0030	(0.0025)	0.0045	(0.0065)	-0.0130	(0.0120)	0.0124	(0.0101)	0.0013	(0.0033)	-0.0007	(0.0055)
lt_alo5	-0.0157	(0.0092)	-0.0058	(0.0049)	0.0074	(0.0028)	0.0141	(0.0066)	-0.0263	(0.0246)	0.0050	(0.0198)	0.0047	(0.0060)	0.0165	(0.0138)

regression parameters	regression parameters
Wald chi^2 (63) = 414.58	Wald chi^2 (63) = 519.00
Prob > chi^2 = 0.0000	Prob > chi^2 = 0.0000
Pseudo R^2 = 0.1403	Pseudo R^2 = 0.0704
Log pseudolikelihood = -2079.8055	Log pseudolikelihood = -3418.1526

N	5903	7484

(1) full-time $\Rightarrow$ full-time, (2) full-time $\Rightarrow$ part-time, (3) full-time $\Rightarrow$ unemployment , (4) full-time $\Rightarrow$ non-employment, robust standard errors in parentheses.

Source: ECHP, authors' calculations.

Table A-4.2a.: **Marginal Effects of mlogit-regressions (part-time employment in t_w,)**

	Denmark								Germany							
	(1)		(2)		(3)		(4)		(1)		(2)		(3)		(4)	
si_hhd	0.0291	(0.0667)	-0.0031	(0.0659)	-0.0201	(0.0053)	-0.0059	(0.0024)	-0.1020	(0.0642)	0.0278	(0.0469)	0.0355	(0.0303)	0.0387	(0.0336)
lopa_hhd	0.0237	(0.0727)	-0.0032	(0.0729)	0.0046	(0.0073)	-0.0251	(0.0046)	0.0000	(0.0414)	0.0018	(0.0358)	0.0152	(0.0153)	-0.0170	(0.0128)
nkid_hhd	-0.0182	(0.0407)	0.0208	(0.0406)	0.0010	(0.0021)	-0.0036	(0.0030)	0.0059	(0.0227)	-0.0134	(0.0207)	0.0048	(0.0058)	0.0027	(0.0096)
oth_hhd	0.0967	(0.0416)	-0.1132	(0.0419)	0.0033	(0.0062)	0.0132	(0.0138)	-0.0373	(0.0461)	0.0121	(0.0402)	0.0182	(0.0166)	0.0070	(0.0164)
s_kid0-2	0.0353	(0.0361)	-0.0337	(0.0358)	-0.0004	(0.0020)	-0.0012	(0.0038)	0.0271	(0.0317)	-0.0256	(0.0288)	-0.0078	(0.0089)	0.0062	(0.0127)
s_kid3-6	-0.0251	(0.0342)	0.0242	(0.0337)	-0.0007	(0.0015)	0.0016	(0.0033)	0.0865	(0.0249)	-0.1031	(0.0236)	-0.0011	(0.0048)	0.0177	(0.0091)
s_kid7-15	0.0327	(0.0175)	-0.0278	(0.0173)	-0.0009	(0.0011)	-0.0040	(0.0023)	0.0197	(0.0119)	-0.0276	(0.0112)	-0.0019	(0.0022)	0.0098	(0.0049)
unmarr	-0.0212	(0.0470)	0.0112	(0.0461)	0.0055	(0.0044)	0.0045	(0.0066)	-0.0541	(0.0429)	0.0475	(0.0397)	-0.0014	(0.0052)	0.0079	(0.0223)
sep_div	-0.0869	(0.0803)	0.0859	(0.0795)	-0.0027	(0.0015)	0.0037	(0.0080)	-0.0962	(0.0468)	0.0986	(0.0440)	-0.0073	(0.0037)	0.0048	(0.0161)
y_edu	-0.0062	(0.0034)	0.0065	(0.0034)	-0.0003	(0.0003)	0.0000	(0.0003)	-0.0046	(0.0036)	0.0051	(0.0033)	0.0009	(0.0006)	-0.0014	(0.0014)
age	-0.0075	(0.0144)	0.0117	(0.0143)	0.0006	(0.0007)	-0.0048	(0.0014)	0.0023	(0.0098)	0.0096	(0.0091)	0.0039	(0.0019)	-0.0159	(0.0035)
age_q	0.0001	(0.0002)	-0.0002	(0.0002)	0.0000	(0.0000)	0.0001	(0.0000)	0.0000	(0.0001)	-0.0002	(0.0001)	0.0000	(0.0000)	0.0002	(0.0000)
tenu	0.0166	(0.0080)	-0.0145	(0.0080)	-0.0012	(0.0004)	-0.0010	(0.0000)	0.0148	(0.0049)	-0.0074	(0.0045)	-0.0029	(0.0012)	-0.0046	(0.0020)
tenu_q	-0.0005	(0.0004)	0.0004	(0.0004)	0.0001	(0.0000)	0.0000	(0.0000)	-0.0007	(0.0003)	0.0004	(0.0002)	0.0001	(0.0001)	0.0002	(0.0001)
ln_incph	0.0148	(0.0276)	-0.0104	(0.0275)	0.0003	(0.0012)	-0.0047	(0.0021)	0.0115	(0.0191)	0.0277	(0.0182)	-0.0128	(0.0033)	-0.0264	(0.0060)
o_hhdinc	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
do_hhdinc	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0o.0000)
sick	0.0888	(0.0483)	-0.0850	(0.0479)	-0.0021	(0.0015)	-0.0017	(0.0043)	0.0049	(0.0217)	-0.0317	(0.0192)	0.0006	(0.0045)	0.0262	(0.0110)
foreign	0.0111	(0.1093)	-0.0043	(0.1056)	0.0055	(0.0083)	-0.0123	(0.0023)	-0.0562	(0.0314)	0.0235	(0.0291)	0.0205	(0.0090)	0.0123	(0.0113)
st_alo5	0.0264	(0.0346)	-0.0259	(0.0343)	-0.0006	(0.0018)	0.0000	(0.0037)	-0.0574	(0.0302)	0.0549	(0.0280)	0.0138	(0.0074)	-0.0114	(0.0091)
lt_alo5	0.0183	(0.0425)	-0.0222	(0.0413)	0.0027	(0.0026)	0.0011	(0.0047)	0.0033	(0.0412)	-0.0214	(0.0364)	0.0128	(0.0093)	0.0053	(0.0186)

regression parameters	regression parameters
Wald chi^2 (63) = 28692.55	Wald chi^2 (63) = 419.08
Prob > chi^2 = 0.0000	Prob > chi^2 = 0.0000
Pseudo R^2 = 0.1120	Pseudo R^2 = 0.0974
Log pseudolikelihood = -828.15473	Log pseudolikelihood = -1924.91
N	1163	2915

(1) part-time $\Rightarrow$ part-time, (2) part-time $\Rightarrow$ full-time, (3) part-time $\Rightarrow$ unemployment , (4) part-time $\Rightarrow$ non-employment, robust standard errors in parentheses.

Source: ECHP, authors' calculations.

Table A-4.2b.: **Marginal Effects of mlogit-regressions (part-time employment in t_w,)**

	Ireland								Netherlands							
	(1)		(2)		(3)		(4)		(1)		(2)		(3)		(4)	
si_hhd	-0.0146	(0.8600)	-0.0302	(0.5980)	-0.0005	(0.0010)	0.0453	(0.5380)	0.0055	(0.0243)	-0.0216	(0.0176)	0.0001	(0.0030)	0.0160	(0.0160)
lopa_hhd	-0.0145	(0.8080)	-0.0260	(0.6080)	0.0000	(0.7620)	0.0405	(0.3140)	0.0373	(0.0173)	-0.0282	(0.0153)	-0.0018	(0.0015)	-0.0073	(0.0081)
nkid_hhd	0.0856	(0.0070)	-0.0709	(0.0150)	-0.0029	(0.0010)	-0.0119	(0.5290)	0.0067	(0.0134)	-0.0096	(0.0123)	-0.0004	(0.0018)	0.0033	(0.0053)
Oth_hhd	0.0319	(0.4260)	-0.0463	(0.1540)	-0.0001	(0.0250)	0.0144	(0.5840)	-0.0744	(0.0398)	0.0823	(0.0397)	0.0008	(0.0044)	-0.0087	(0.0077)
s_kid0-2	0.0080	(0.7590)	-0.0484	(0.0550)	0.0001	(0.0950)	0.0402	(0.0010)	0.0622	(0.0153)	-0.0573	(0.0148)	-0.0012	(0.0015)	-0.0037	(0.0040)
s_kid3-6	0.0333	(0.1770)	-0.0544	(0.0190)	0.0000	(0.3470)	0.0210	(0.0710)	0.0388	(0.0123)	-0.0415	(0.0118)	0.0001	(0.0014)	0.0026	(0.0036)
s_kid7-15	0.0099	(0.4480)	-0.0179	(0.1220)	0.0000	(0.6470)	0.0080	(0.2350)	0.0145	(0.0069)	-0.0162	(0.0065)	-0.0001	(0.0009)	0.0018	(0.0022)
unmarr	0.0379	(0.3930)	-0.0064	(0.8810)	0.0001	(0.7080)	-0.0315	(0.0720)	-0.0466	(0.0203)	0.0498	(0.0194)	0.0022	(0.0039)	-0.0054	(0.0045)
Sep_div	0.0057	(0.9250)	-0.0113	(0.8450)	0.0001	(0.6040)	0.0056	(0.8500)	-0.0047	(0.0207)	0.0090	(0.0194)	0.0009	(0.0025)	-0.0051	(0.0064)
y_edu	0.0082	(0.0400)	-0.0036	(0.3220)	0.0000	(0.0050)	-0.0046	(0.0360)	-0.0087	(0.0030)	0.0100	(0.0027)	-0.0005	(0.0005)	-0.0008	(0.0010)
Age	0.0249	(0.0620)	-0.0011	(0.9350)	0.0000	(0.4790)	-0.0238	(0.0000)	0.0077	(0.0057)	0.0033	(0.0053)	0.0001	(0.0007)	-0.0111	(0.0018)
Age_q	-0.0003	(0.0770)	0.0000	(0.9210)	0.0000	(0.5350)	0.0003	(0.0000)	-0.0001	(0.0001)	-0.0001	(0.0001)	0.0000	(0.0000)	0.0001	(0.0000)
tenu	0.0153	(0.0180)	-0.0049	(0.4020)	0.0000	(0.0080)	-0.0104	(0.0040)	0.0152	(0.0027)	-0.0109	(0.0025)	-0.0010	(0.0004)	-0.0033	(0.0009)
tenu_q	-0.0007	(0.0540)	0.0003	(0.3600)	0.0000	(0.0110)	0.0004	(0.0560)	-0.0006	(0.0001)	0.0004	(0.0001)	0.0000	(0.0000)	0.0001	(0.0000)
ln_incph	-0.0107	(0.6490)	0.0403	(0.0650)	0.0000	(0.3930)	-0.0296	(0.0040)	-0.0083	(0.0112)	0.0272	(0.0111)	-0.0036	(0.0010)	-0.0153	(0.0027)
o_hhdinc	0.0000	(0.4540)	0.0000	(0.2970)	0.0000	(0.0800)	0.0000	(0.6450)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
do_hhdinc	0.0000	(0.7960)	0.0000	(0.3370)	0.0000	(0.0090)	0.0000	(0.0010)	0.0000	(0.0000)	-0.0001	(0.0000)	0.0000	(0.0000)	0.0000	(0o.0000)
Sick	-0.3459	(0.1310)	0.2355	(0.3060)	-0.0002	(0.0020)	0.1106	(0.3590)	-0.2047	(0.0521)	0.0347	(0.0330)	0.0162	(0.0110)	0.1539	(0.0430)
foreign	0.0176	(0.8100)	-0.0395	(0.5260)	0.0000	(0.8420)	0.0218	(0.6030)	-0.1090	(0.0610)	0.0944	(0.0574)	0.0109	(0.0162)	0.0036	(0.0140)
st_alo5	-0.0392	(0.3570)	0.0110	(0.7850)	0.0003	(0.1560)	0.0278	(0.2190)	-0.0008	(0.0134)	-0.0034	(0.0123)	0.0037	(0.0030)	0.0006	(0.0049)
lt_alo5	-0.0950	(0.1150)	0.0668	(0.2530)	0.0010	(0.0480)	0.0271	(0.3190)	-0.0047	(0.0195)	0.0008	(0.0180)	-0.0007	(0.0020)	0.0046	(0.0073)

regression parameters	regression parameters
Wald chi^2 (63) = 25488.86	Wald chi2 (63) = 588.54
Prob > chi^2 = 0.0000	Prob > chi2 = 0.0000
Pseudo R^2 = 0.0768	Pseudo R2 = 0.1368
Log pseudolikelihood = -1223.6263	Log pseudolikelihood = -2049.5534

N	1660	4454

(1) part-time $\Rightarrow$ part-time, (2) part-time $\Rightarrow$ full-time, (3) part-time $\Rightarrow$ unemployment , (4) part-time $\Rightarrow$ non-employment, robust standard errors in parentheses.

Source: ECHP, authors' calculations.

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Table A-4.2c.: **Marginal Effects of mlogit-regressions (part-time employment in t$_{w,}$)**

	(1)		(2)		(3)		(4)	
				UK				
si_hhd	0.0684	(0.0308)	-0.0469	(0.0271)	0.0008	(0.0080)	-0.0223	(0.0133)
lopa_hhd	0.0333	(0.0298)	-0.0239	(0.0227)	0.0016	(0.0077)	-0.0110	(0.0157)
nkid_hhd	-0.0166	(0.0258)	0.0147	(0.0230)	0.0022	(0.0053)	-0.0002	(0.0124)
Oth_hhd	0.0215	(0.0393)	-0.0167	(0.0296)	0.0189	(0.0169)	-0.0237	(0.0154)
s_kid0-2	0.0495	(0.0219)	-0.0702	(0.0192)	0.0024	(0.0045)	0.0184	(0.0110)
s_kid3-6	0.0409	(0.0173)	-0.0431	(0.0144)	-0.0051	(0.0054)	0.0072	(0.0105)
s_kid7-15	-0.0028	(0.0104)	-0.0062	(0.0084)	0.0012	(0.0023)	0.0078	(0.0065)
unmarr	-0.0773	(0.0440)	0.0971	(0.0396)	-0.0006	(0.0069)	-0.0191	(0.0159)
Sep_div	-0.0370	(0.0283)	0.0139	(0.0230)	0.0029	(0.0063)	0.0202	(0.0167)
y_edu	0.0009	(0.0024)	-0.0021	(0.0021)	-0.0008	(0.0006)	0.0020	(0.0013)
Age	0.0003	(0.0081)	0.0246	(0.0073)	-0.0017	(0.0017)	-0.0232	(0.0040)
Age_q	0.0000	(0.0001)	-0.0003	(0.0001)	0.0000	(0.0000)	0.0003	(0.0000)
tenu	0.0186	(0.0046)	-0.0101	(0.0040)	-0.0017	(0.0009)	-0.0068	(0.0025)
tenu_q	-0.0007	(0.0003)	0.0003	(0.0003)	0.0001	(0.0001)	0.0003	(0.0001)
ln_incph	-0.0355	(0.0168)	0.0586	(0.0156)	-0.0031	(0.0022)	-0.0200	(0.0084)
o_hhdinc	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
do_hhdinc	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
Sick	-0.1551	(0.0375)	0.0697	(0.0313)	0.0120	(0.0085)	0.0735	(0.0238)
foreign	-0.0513	(0.0691)	0.0581	(0.0600)	0.0216	(0.0319)	-0.0283	(0.0279)
st_alo5	-0.0239	(0.0239)	0.0239	(0.0211)	-0.0005	(0.0052)	0.0005	(0.0135)
lt_alo5	-0.0859	(0.0516)	0.0337	(0.0411)	0.0153	(0.0144)	0.0368	(0.0279)

regression parameters

Wald chi^2 (63) = 308.33

Prob > chi^2 = 0.0000

Pseudo R^2 = 0.0669

Log pseudolikelihood = -2224.8375

N	3347

(1) part-time $\Rightarrow$ part-time, (2) part-time $\Rightarrow$ full-time, (3) part-time $\Rightarrow$ unemployment , (4) part-time $\Rightarrow$ non-employment, robust standard errors in parentheses.

Source: ECHP, authors' calculations.

Table A-4.3a.: **Marginal Effects of mlogit-regressions (unemployment in t_w,)**

	Denmark								Germany							
	(1)		(2)		(3)		(4)		(1)		(2)		(3)		(4)	
si_hhd	0.0911	(0.1308)	-0.1827	(0.1035)	-0.0841	(0.0223)	0.1757	(0.1575)	0.1412	(0.0948)	-0.1579	(0.0266)	0.0514	(0.0849)	-0.0346	(0.0708)
lopa_hhd	0.2503	(0.1246)	-0.1779	(0.0863)	-0.0260	(0.0362)	-0.0464	(0.1036)	0.0470	(0.0638)	-0.1038	(0.0388)	0.0727	(0.0628)	-0.0160	(0.0553)
nkid_hhd	-0.0741	(0.0809)	-0.0973	(0.0850)	0.0164	(0.0369)	0.1550	(0.0962)	0.0372	(0.0464)	-0.0734	(0.0323)	-0.0059	(0.0359)	0.0421	(0.0421)
oth_hhd	0.1818	(0.2535)	0.1022	(0.2625)	-0.1424	(0.0214)	-0.1416	(0.1120)	0.0427	(0.0660)	-0.0507	(0.0513)	-0.0759	(0.0432)	0.0840	(0.0639)
s_kid0-2	-0.1749	(0.0659)	0.0764	(0.0759)	0.0119	(0.0313)	0.0865	(0.0740)	-0.0424	(0.0598)	-0.0658	(0.0415)	0.0402	(0.0528)	0.0679	(0.0666)
s_kid3-6	0.0349	(0.0644)	-0.0394	(0.0576)	-0.0284	(0.0275)	0.0329	(0.0591)	0.0061	(0.0417)	-0.0029	(0.0338)	0.0185	(0.0293)	-0.0217	(0.0410)
s_kid7-15	-0.0674	(0.0420)	-0.0036	(0.0346)	-0.0072	(0.0189)	0.0783	(0.0390)	-0.0401	(0.0217)	-0.0347	(0.0183)	0.0092	(0.0171)	0.0657	(0.0196)
unmarr	-0.0004	(0.0753)	-0.1599	(0.0679)	0.0369	(0.0390)	0.1234	(0.0809)	-0.0174	(0.0618)	0.0187	(0.0535)	-0.0529	(0.0386)	0.0516	(0.0639)
sep_div	-0.1302	(0.0693)	-0.1224	(0.0741)	-0.0094	(0.0348)	0.2619	(0.0937)	0.0083	(0.0538)	-0.0269	(0.0462)	-0.0610	(0.0388)	0.0796	(0.0562)
y_edu	0.0072	(0.0066)	0.0043	(0.0064)	-0.0031	(0.0034)	-0.0084	(0.0067)	-0.0072	(0.0059)	0.0116	(0.0051)	0.0010	(0.0048)	-0.0054	(0.0063)
age	-0.0021	(0.0252)	0.0702	(0.0285)	0.0273	(0.0122)	-0.0954	(0.0254)	0.0646	(0.0185)	0.0219	(0.0133)	-0.0095	(0.0145)	-0.0770	(0.0147)
age_q	0.0001	(0.0003)	-0.0010	(0.0003)	-0.0003	(0.0002)	0.0012	(0.0003)	-0.0008	(0.0002)	-0.0003	(0.0002)	0.0001	(0.0002)	0.0010	(0.0002)
o_hhdinc	0.0002	(0.0001)	-0.0003	(0.0001)	0.0000	(0.0000)	0.0001	(0.0001)	0.0001	(0.0000)	-0.0002	(0.0000)	0.0000	(0.0000)	0.0001	(0.0000)
do_hhdinc	0.0004	(0.0001)	-0.0006	(0.0001)	-0.0001	(0.0000)	0.0003	(0.0001)	0.0002	(0.0000)	-0.0003	(0.0000)	0.0000	(0.0000)	0.0002	(0.0000)
sick	-0.0650	(0.1180)	-0.0249	(0.1355)	-0.0204	(0.0477)	0.1102	(0.1378)	-0.0187	(0.0368)	-0.0716	(0.0280)	-0.0241	(0.0295)	0.1143	(0.0368)
foreign	-0.0405	(0.1083)	-0.1987	(0.1034)	0.0383	(0.0758)	0.2009	(0.1707)	-0.0711	(0.0462)	-0.0825	(0.0317)	-0.0491	(0.0336)	0.2028	(0.0524)
st_alo5	-0.0173	(0.0784)	-0.0270	(0.0703)	0.0104	(0.0344)	0.0339	(0.0731)	0.1554	(0.0400)	-0.0658	(0.0260)	-0.0396	(0.0260)	-0.0499	(0.0317)
lt_alo5	0.1573	(0.0641)	-0.1219	(0.0652)	-0.0403	(0.0318)	0.0050	(0.0625)	0.2097	(0.0402)	-0.0785	(0.0251)	-0.0978	(0.0260)	-0.0335	(0.0319)

	regression parameters	regression parameters
	Wald chi^2 (54) = 7569.98	Wald chi^2 (54) = 291.00
	Prob > chi^2 = 0.0000	Prob > chi^2 = 0.0000
	Pseudo R^2 = 0.2029	Pseudo R^2 = 0.1249
	Log pseudolikelihood = -504.9272	Log pseudolikelihood = -1627.7969
N	475	1377

(1) unemployment $\Rightarrow$ unemployment (2) unemployment $\Rightarrow$ full-time, (3) unemployment $\Rightarrow$ part-time, (4) unemployment $\Rightarrow$ non-employment, robust standard errors in parentheses.

Source: ECHP, authors' calculations.

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Table A-4.3b.: **Marginal Effects of mlogit-regressions (unemployment in t_w,)**

	Ireland								Netherlands							
	(1)		(2)		(3)		(4)		(1)		(2)		(3)		(4)	
si_hhd	0.1189	(0.3200)	-0.0304	(0.5020)	-0.0546	(0.5650)	-0.0339	(0.7980)	0.1628	(0.1133)	0.0087	(0.0241)	-0.0776	(0.0864)	-0.0938	(0.1048)
lopa_hhd	0.0944	(0.2820)	-0.0548	(0.1210)	0.0292	(0.7720)	-0.0688	(0.5280)	0.1193	(0.0993)	-0.0081	(0.0136)	-0.0400	(0.0831)	-0.0712	(0.0926)
nkid_hhd	0.1333	(0.2810)	-0.0272	(0.5300)	-0.0522	(0.5120)	-0.0539	(0.6250)	0.0723	(0.0629)	0.0225	(0.0234)	-0.0829	(0.0583)	-0.0119	(0.0663)
oth_hhd	-0.0638	(0.3070)	0.0633	(0.3730)	-0.0816	(0.2440)	0.0821	(0.4450)	-0.0887	(0.0670)	-0.0023	(0.0193)	0.0459	(0.1275)	0.0451	(0.1252)
s_kid0-2	-0.0147	(0.8330)	-0.0598	(0.1930)	-0.0303	(0.5850)	0.1048	(0.1750)	-0.0494	(0.0587)	-0.0268	(0.0170)	0.0365	(0.0577)	0.0397	(0.0677)
s_kid3-6	-0.0226	(0.6980)	-0.0283	(0.3570)	-0.0419	(0.3390)	0.0928	(0.1730)	-0.0454	(0.0465)	0.0092	(0.0135)	-0.0179	(0.0486)	0.0541	(0.0558)
s_kid7-15	0.0193	(0.4570)	-0.0231	(0.1460)	0.0060	(0.7890)	-0.0022	(0.9360)	0.0698	(0.0225)	-0.0084	(0.0072)	0.0438	(0.0253)	-0.1051	(0.0273)
unmarr	0.0929	(0.3170)	0.0384	(0.4730)	-0.0677	(0.3970)	-0.0636	(0.5590)	0.0888	(0.0761)	-0.0070	(0.0103)	-0.0331	(0.0704)	-0.0486	(0.0850)
sep_div	-0.0088	(0.9190)	0.0726	(0.5250)	-0.1162	(0.0930)	0.0524	(0.6810)	-0.0347	(0.0716)	-0.0164	(0.0104)	-0.1118	(0.0669)	0.1629	(0.0889)
y_edu	-0.0104	(0.2370)	0.0079	(0.0360)	-0.0191	(0.0140)	0.0215	(0.0220)	0.0052	(0.0124)	0.0034	(0.0031)	-0.0043	(0.0152)	-0.0043	(0.0164)
age	0.0205	(0.3720)	0.0232	(0.1330)	-0.0280	(0.2030)	-0.0158	(0.5760)	0.0385	(0.0218)	0.0060	(0.0053)	-0.0287	(0.0256)	-0.0158	(0.0265)
age_q	-0.0002	(0.3570)	-0.0004	(0.0690)	0.0003	(0.2190)	0.0003	(0.3610)	-0.0004	(0.0003)	-0.0001	(0.0001)	0.0003	(0.0003)	0.0002	(0.0003)
o_hhdinc	0.0000	(0.4680)	0.0000	(0.4510)	0.0000	(0.7170)	0.0000	(0.8420)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
do_hhdinc	0.0001	(0.0190)	0.0000	(0.0430)	0.0000	(0.5470)	0.0000	(0.9660)	0.0002	(0.0000)	-0.0001	(0.0000)	-0.0002	(0.0001)	0.0001	(0.0001)
sick	-0.2565	(0.0000)	-0.0954	(0.0000)	-0.2402	(0.0000)	0.5920	(0.0000)	-0.1000	(0.0745)	0.0022	(0.0158)	-0.0076	(0.0896)	0.1054	(0.0941)
foreign	-0.0524	(0.6850)	0.0131	(0.8850)	0.0666	(0.6740)	-0.0274	(0.8890)	0.2790	(0.1283)	0.0006	(0.0158)	0.0175	(0.1245)	-0.2971	(0.0809)
st_alo5	0.0267	(0.6990)	0.0004	(0.9910)	0.1341	(0.1000)	-0.1613	(0.0460)	0.1504	(0.0852)	0.0221	(0.0244)	-0.0647	(0.0682)	-0.1079	(0.0829)
lt_alo5	0.0704	(0.2180)	0.0160	(0.6680)	-0.0096	(0.8870)	-0.0768	(0.2650)	-0.0876	(0.0682)	0.0937	(0.0527)	0.1160	(0.0883)	-0.1221	(0.0748)

regression parameters								regression parameters							
Wald chi^2 (54) = 174.67								Wald chi^2 (54) = 174.67							
Prob > chi^2 = .								Prob > chi^2 = 0.0000							
Pseudo R^2 = .								Pseudo R^2 = 0.1565							
Log pseudolikelihood = -504.25186								Log pseudolikelihood = -844.04931							

N	415	Netherlands	775

(1) unemployment $\Rightarrow$ unemployment (2) unemployment $\Rightarrow$ full-time, (3) unemployment $\Rightarrow$ part-time, (4) unemployment $\Rightarrow$ non-employment, robust standard errors in parentheses.

Source: ECHP, authors' calculations.

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Table A-4.3c.: **Marginal Effects of mlogit-regressions (unemployment in $t_{w,}$)**

	Portugal								UK							
	(1)		(2)		(3)		(4)		(1)		(2)		(3)		(4)	
si_hhd	-.00471	(0.0853)	-0.0228	(0.0817)	0.0352	(0.0448)	0.0348	(0.0894)	0.1831	(0.1254)	-0.0578	(0.0705)	-0.0744	(0.0822)	-0.0508	(0.1208)
lopa_hhd	-0.0200	(0.0689)	-0.0647	(0.0755)	-0.0441	(0.0178)	0.1288	(0.0816)	0.1221	(0.1046)	-0.0971	(0.0555)	-0.1154	(0.0598)	0.0904	(0.1032)
nkid_hhd	0.0064	(0.0514)	0.0571	(0.0530)	-0.0029	(0.0220)	-0.0606	(0.0551)	0.1374	(0.1037)	-0.0378	(0.0590)	-0.0450	(0.0704)	-0.0545	(0.0908)
oth_hhd	-0.0501	(0.0561)	-0.0259	(0.0461)	0.0250	(0.0185)	0.0510	(0.0584)	0.0232	(0.1078)	0.0367	(0.0762)	-0.2007	(0.0455)	0.1408	(0.1129)
s_kid0-2	-0.0865	(0.0500)	-0.0769	(0.0488)	0.0028	(0.0191)	0.1606	(0.0499)	0.0109	(0.0990)	-0.1720	(0.0937)	0.1013	(0.0573)	0.0598	(0.0914-)
s_kid3-6	0.0388	(0.0281)	-0.0332	(0.0275)	-0.0118	(0.0108)	0.0062	(0.0260)	-0.0598	(0.0648)	-0.0720	(0.0651)	0.0422	(0.0706)	0.0897	(0.0668-)
s_kid7-15	-0.0482	(0.0625)	-0.0078	(0.0537)	0.0338	(0.0351)	0.0222	(0.0721)	-0.1420	(0.0542)	0.0160	(0.0334)	0.0488	(0.0460)	0.0772	(0.0540)
unmarr	0.1138	(0.0800)	0.0092	(0.0719)	-0.0072	(0.0298)	-0.1157	(0.0680)	0.0446	(0.0689)	0.0690	(0.0721)	-0.0042	(0.0710)	-0.1094	(0.0817)
sep_div	-0.0046	(0.0040)	0.0041	(0.0044)	0.0016	(0.0022)	-0.0012	(0.0048)	0.0375	(0.0637)	0.0621	(0.0639)	0.0487	(0.0647)	-0.1484	(0.0671)
y_edu	-0.0160	(0.0193)	0.0070	(0.0198)	0.0172	(0.0083)	-0.0082	(0.0192)	-0.0098	(0.0078)	0.0050	(0.0073)	-0.0084	(0.0079)	0.0132	(0.0096)
age	0.0002	(0.0002)	-0.0003	(0.0003)	-0.0002	(0.0001)	0.0003	(0.0002)	0.0274	(0.0217)	0.0139	(0.0195)	0.0118	(0.0231)	-0.0531	(0.0260)
age_q	0.0001	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	-0.0004	(0.0003)	-0.0002	(0.0002)	-0.0001	(0.0003)	0.0007	(0.0003)
o_hhdinc	0.0001	(0.0001)	-0.0003	(0.0001)	0.0000	(0.0001)	0.0002	(0.0001)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0001	(0.0000)
do_hhdinc	-0.0304	(0.0514)	0.0358	(0.0604)	-0.0353	(0.0166)	0.0299	(0.0530)	0.0000	(0.0000)	0.0000	(0.0000)	-0.0001	(0.0000)	0.0001	(0.0000)
sick	0.1024	(0.0661)	0.0384	(0.0590)	0.0239	(0.0283)	-0.1647	(0.0535)	-0.1183	(0.0448)	-0.0699	(0.0481)	-0.0281	(0.0586)	0.2163	(0.0737)
foreign	0.1031	(0.0457)	-0.0611	(0.0423)	-0.0321	(0.0180)	-0.0098	(0.0453)	-0.1012	(0.0750)	0.4073	(0.1775)	-0.0854	(0.1059)	-0.2207	(0.1134)
st_alo5	-0.0471	(0.0853)	-0.0228	(0.0817)	0.0352	(0.0448)	0.0348	(0.0894)	-0.0961	(0.0431)	0.0336	(0.0563)	0.0620	(0.0609)	0.0005	(0.0717)
lt_alo5	-0.0200	(0.0689)	-0.0647	(0.0755)	-0.0441	(0.0178)	0.1288	(0.0816)	0.0388	(0.0537)	-0.0432	(0.0502)	-0.0731	(0.0564)	0.0775	(0.0667)

regression parameters		regression parameters	
Wald chi^2 (48) =	190.26	Wald chi^2 (54) =	114.14
Prob > chi^2 =	0.0000	Prob > chi^2 =	0.0000
Pseudo R^2 =	0.0967	Pseudo R^2 =	0.1013
Log pseudolikelihood = -725.7741		Log pseudolikelihood = -501.64232	

N		
	639	417

(1) unemployment $\Rightarrow$ unemployment (2) unemployment $\Rightarrow$ full-time, (3) unemployment $\Rightarrow$ part-time, (4) unemployment $\Rightarrow$ non-employment, robust standard errors in parentheses.

Source: ECHP, authors' calculations.

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Table A-4.4a.: **Marginal Effects of mlogit-regressions (non-employment in t_w,)**

	Denmark								Germany							
	(1)		(2)		(3)		(4)		(1)		(2)		(3)		(4)	
si_hhd	0.0073	(0.0450)	-0.0177	(0.0074)	0.0071	(0.0352)	0.0033	(0.0220)	0.0304	(0.0191)	-0.0068	(0.0019)	-0.0174	(0.0156)	-0.0062	(0.0087)
lopa_hhd	0.0429	(0.0313)	-0.0067	(0.0081)	-0.0485	(0.0177)	0.0123	(0.0213)	0.0120	(0.0221)	-0.0064	(0.0016)	-0.0185	(0.0154)	0.0129	(0.0141)
nkid_hhd	0.0031	(0.0341)	-0.0131	(0.0082)	0.0205	(0.0260)	-0.0105	(0.0153)	0.0305	(0.0129)	0.0027	(0.0025)	-0.0274	(0.0109)	-0.0057	(0.0057)
oth_hhd	0.0876	(0.0250)	-0.0158	(0.0063)	-0.0411	(0.0227)	-0.0307	(0.0106)	-0.0357	(0.0238)	0.0071	(0.0061)	0.0178	(0.0187)	0.0109	(0.0104)
s_kid0-2	0.0012	(0.0211)	-0.0033	(0.0045)	0.0023	(0.0157)	-0.0002	(0.0096)	0.0422	(0.0091)	-0.0070	(0.0023)	-0.0195	(0.0074)	-0.0157	(0.0042)
s_kid3-6	0.0257	(0.0233)	-0.0022	(0.0042)	-0.0234	(0.0197)	-0.0001	(0.0094)	0.0129	(0.0087)	-0.0044	(0.0019)	-0.0034	(0.0072)	-0.0051	(0.0040)
s_kid7-15	0.0038	(0.0140)	-0.0026	(0.0033)	0.0067	(0.0111)	-0.0080	(0.0067)	-0.0050	(0.0050)	-0.0008	(0.0010)	0.0040	(0.0040)	0.0018	(0.0020)
unmarr	0.0269	(0.0236)	-0.0041	(0.0055)	-0.0221	(0.0161)	-0.0007	(0.0127)	-0.0002	(0.0201)	0.0064	(0.0047)	-0.0146	(0.0146)	0.0085	(0.0105)
sep_div	-0.0411	(0.0361)	0.0079	(0.0093)	0.0145	(0.0289)	0.0187	(0.0189)	-0.0289	(0.0238)	0.0108	(0.0060)	0.0167	(0.0192)	0.0014	(0.0096)
y_edu	-0.0062	(0.0026)	0.0008	(0.0007)	0.0036	(0.0019)	0.0018	(0.0013)	-0.0040	(0.0017)	0.0007	(0.0003)	0.0021	(0.0014)	0.0013	(0.0007)
age	-0.0088	(0.0077)	0.0074	(0.0028)	-0.0072	(0.0057)	0.0086	(0.0039)	-0.0138	(0.0037)	0.0021	(0.0006)	0.0045	(0.0031)	0.0071	(0.0015)
age_q	0.0002	(0.0001)	-0.0001	(0.0000)	0.0000	(0.0001)	-0.0001	(0.0000)	0.0002	(0.0000)	0.0000	(0.0000)	-0.0001	(0.0000)	-0.0001	(0.0000)
o_hhdinc	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
do_hhdinc	0.0001	(0.0000)	0.0000	(0.0000)	-0.0001	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
sick	0.0835	(0.0193)	-0.0243	(0.0076)	-0.0275	(0.0152)	-0.0317	(0.0090)	0.0313	(0.0090)	-0.0038	(0.0016)	-0.0334	(0.0073)	0.0059	(0.0042)
foreign	0.0406	(0.0356)	-0.0167	(0.0070)	-0.0530	(0.0173)	0.0292	(0.0264)	0.0311	(0.0096)	-0.0045	(0.0016)	-0.0301	(0.0074)	0.0035	(0.0049)
st_alo5	-0.0432	(0.0301)	0.0000	(0.0057)	0.0102	(0.0214)	0.0331	(0.0187)	-0.0408	(0.0180)	0.0054	(0.0027)	-0.0077	(0.0104)	0.0432	(0.0130)
lt_alo5	-0.0498	(0.0278)	0.0005	(0.0056)	-0.0105	(0.0179)	0.0599	(0.0201)	-0.0201	(0.0169)	0.0064	(0.0037)	-0.0304	(0.0098)	0.0440	(0.0110)

regression parameters	regression parameters
Wald chi^2 (54) = 329.71	Wald chi^2 (54) = 724.44
Prob > chi^2 = 0.0000	Prob > chi^2 = 0.0000
Pseudo R^2 = 0.2534	Pseudo R^2 = 0.1380
Log pseudolikelihood = -1063.58	Log pseudolikelihood = -3780.0244
N 1710	7198

(1) non-employment $\Rightarrow$ non-employment, (2) non-employment $\Rightarrow$ full-time, (3) non-employment $\Rightarrow$ part-time, (4) non-employment $\Rightarrow$ unemployment,

robust standard errors in parentheses.

Source: ECHP, authors' calculations.

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Table A-4.4b.: **Marginal Effects of mlogit-regressions (non-employment in $t_{w,}$)**

	Ireland								Netherlands							
	(1)		(2)		(3)		(4)		(1)		(2)		(3)		(4)	
si_hhd	0.0207	(0.5540)	0.0001	(0.9940)	-0.0349	(0.1140)	0.0141	(0.5180)	0.0313	(0.0160)	-0.0210	(0.0123)	-0.0089	(0.0092)	0.0507	(0.0187)
lopa_hhd	-0.0004	(0.9860)	-0.0012	(0.8760)	0.0049	(0.7830)	-0.0033	(0.6490)	0.0058	(0.0173)	-0.0112	(0.0116)	0.0075	(0.0111)	0.0353	(0.0173)
nkid_hhd	-0.0107	(0.6230)	0.0061	(0.5320)	-0.0117	(0.4380)	0.0163	(0.1770)	0.0379	(0.0113)	-0.0253	(0.0085)	-0.0125	(0.0066)	0.0153	(0.0158)
Oth_hhd	0.0032	(0.8450)	-0.0052	(0.3320)	0.0032	(0.8130)	-0.0013	(0.8760)	0.0406	(0.0142)	-0.0222	(0.0121)	-0.0163	(0.0070)	0.0029	(0.0171)
s_kid0-2	0.0280	(0.0080)	-0.0106	(0.0130)	-0.0117	(0.1660)	-0.0057	(0.2110)	0.0497	(0.0096)	-0.0180	(0.0067)	-0.0294	(0.0064)	0.0039	(0.0192)
s_kid3-6	0.0165	(0.0690)	-0.0064	(0.0770)	-0.0073	(0.2980)	-0.0028	(0.4840)	0.0055	(0.0072)	0.0004	(0.0053)	-0.0056	(0.0042)	0.0039	(0.0169)
s_kid7-15	0.0006	(0.8930)	-0.0002	(0.9390)	-0.0015	(0.6590)	0.0010	(0.5240)	0.0088	(0.0042)	-0.0051	(0.0032)	-0.0028	(0.0024)	0.0195	(0.0098)
unmarr	0.0206	(0.2680)	-0.0014	(0.8550)	-0.0141	(0.3220)	-0.0051	(0.4510)	0.0060	(0.0163)	-0.0114	(0.0109)	0.0050	(0.0105)	0.0601	(0.0179)
Sep_div	-0.0491	(0.1290)	-0.0052	(0.5070)	0.0394	(0.1460)	0.0148	(0.3120)	-0.0112	(0.0185)	-0.0012	(0.0131)	0.0097	(0.0109)	0.0092	(0.0296)
y_edu	-0.0039	(0.0330)	0.0019	(0.0000)	0.0014	(0.3210)	0.0006	(0.5060)	-0.0109	(0.0030)	0.0068	(0.0023)	0.0041	(0.0017)	-0.0029	(0.0015)
Age	-0.0192	(0.0000)	0.0020	(0.2490)	0.0136	(0.0000)	0.0036	(0.0470)	-0.0240	(0.0037)	0.0130	(0.0028)	0.0103	(0.0021)	0.0006	(0.0052)
Age_q	0.0003	(0.0000)	0.0000	(0.0310)	-0.0002	(0.0000)	-0.0001	(0.0070)	0.0004	(0.0000)	-0.0002	(0.0000)	-0.0001	(0.0000)	0.0000	(0.0001)
o_hhdinc	0.0000	(0.0050)	0.0000	(0.0860)	0.0000	(0.1180)	0.0000	(0.1080)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
do_hhdinc	0.0000	(0.0220)	0.0000	(0.2700)	0.0000	(0.0160)	0.0000	(0.6180)	0.0001	(0.0000)	-0.0001	(0.0000)	0.0000	(0.0000)	0.0001	(0.0000)
Sick	0.0488	(0.0070)	-0.0028	(0.7680)	-0.0490	(0.0000)	0.0030	(0.7670)	0.0573	(0.0085)	-0.0459	(0.0060)	-0.0092	(0.0057)	0.0447	(0.0125)
foreign	-0.0623	(0.2430)	0.0061	(0.7390)	0.0588	(0.1960)	-0.0025	(0.8200)	0.0003	(0.0351)	-0.0094	(0.0238)	0.0099	(0.0198)	0.0141	(0.0551)
st_alo5	-0.0992	(0.0170)	0.0181	(0.2370)	0.0601	(0.0600)	0.0209	(0.1760)	-0.0060	(0.0207)	-0.0106	(0.0127)	0.0110	(0.0136)	-0.0547	(0.0307)
lt_alo5	-0.0745	(0.0280)	0.0235	(0.1020)	0.0231	(0.3530)	0.0279	(0.0530)	-0.0558	(0.0264)	0.0139	(0.0179)	0.0424	(0.0198)	-0.0745	(0.0287)

regression parameters	regression parameters
Wald chi^2 (54) = 297.42	Wald chi^2 (54) = 774.72
Prob > chi^2 = 0.0000	Prob > chi^2 = 0.0000
Pseudo R^2 = 0.0658	Pseudo R^2 = 0.1780
Log pseudolikelihood = -2770.9687	Log pseudolikelihood = -3218.6851

N	5386	6449

(1) non-employment $\Rightarrow$ non-employment, (2) non-employment $\Rightarrow$ full-time, (3) non-employment $\Rightarrow$ part-time, (4) non-employment $\Rightarrow$ unemployment,

robust standard errors in parentheses.

Source: ECHP, authors' calculations.

Table A-4.4c.: **Marginal Effects of mlogit-regressions (non-employment in $t_{w,}$)**

	Portugal								UK							
	(1)		(2)		(3)		(4)		(1)		(2)		(3)		(4)	
si_hhd	0.0318	(0.0176)	-0.0243	(0.0103)	-0.0150	(0.0103)	0.0075	(0.0080)	0.0371	(0.0214)	-0.0079	(0.0056)	-0.0339	(0.0179)	0.0048	(0.0068)
lopa_hhd	0.0188	(0.0144)	-0.0127	(0.0090)	-0.0038	(0.0099)	-0.0023	(0.0024)	0.0127	(0.0158)	-0.0076	(0.0034)	-0.0104	(0.0137)	0.0053	(0.0052)
nkid_hhd	0.0035	(0.0116)	0.0009	(0.0085)	-0.0070	(0.0068)	0.0026	(0.0030)	-0.0051	(0.0165)	0.0022	(0.0049)	-0.0041	(0.0145)	0.0070	(0.0049)
Oth_hhd	-0.0026	(0.0099)	0.0050	(0.0068)	-0.0028	(0.0066)	0.0003	(0.0018)	-0.0037	(0.0225)	-0.0071	(0.0042)	-0.0095	(0.0181)	0.0203	(0.0109)
s_kid0-2	0.0263	(0.0107)	-0.0110	(0.0065)	-0.0152	(0.0081)	-0.0001	(0.0013)	0.0500	(0.0098)	-0.0165	(0.0036)	-0.0201	(0.0082)	-0.0133	(0.0035)
s_kid3-6	0.0100	(0.0097)	-0.0084	(0.0062)	-0.0024	(0.0068)	0.0007	(0.0013)	0.0201	(0.0097)	-0.0116	(0.0034)	0.0032	(0.0080)	-0.0117	(0.0036)
s_kid7-15	0.0104	(0.0055)	-0.0048	(0.0033)	-0.0056	(0.0039)	0.0000	(0.0008)	0.0092	(0.0054)	-0.0043	(0.0018)	-0.0016	(0.0047)	-0.0033	(0.0015)
unmarr	0.0224	(0.0122)	-0.0060	(0.0086)	-0.0198	(0.0070)	0.0035	(0.0029)	0.0212	(0.0147)	0.0015	(0.0048)	-0.0283	(0.0117)	0.0057	(0.0050)
Sep_div	-0.0516	(0.0281)	0.0356	(0.0206)	0.0041	(0.0169)	0.0119	(0.0074)	-0.0516	(0.0192)	0.0152	(0.0079)	0.0256	(0.0156)	0.0108	(0.0055)
y_edu	-0.0010	(0.0012)	0.0023	(0.0007)	-0.0014	(0.0009)	0.0001	(0.0002)	-0.0048	(0.0015)	0.0012	(0.0004)	0.0040	(0.0013)	-0.0004	(0.0004)
Age	-0.0026	(0.0034)	-0.0003	(0.0022)	0.0019	(0.0023)	0.0011	(0.0006)	-0.0082	(0.0044)	0.0029	(0.0014)	0.0032	(0.0038)	0.0021	(0.0010)
Age_q	0.0001	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0002	(0.0001)	-0.0001	(0.0000)	-0.0001	(0.0000)	0.0000	(0.0000)
o_hhdinc	0.0001	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
do_hhdinc	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)	0.0000	(0.0000)
Sick	0.0263	(0.0078)	-0.0271	(0.0053)	0.0071	(0.0056)	-0.0062	(0.0016)	0.0732	(0.0091)	-0.0109	(0.0028)	-0.0586	(0.0082)	-0.0037	(0.0021)
foreign	-0.0663	(0.0525)	0.0333	(0.0361)	0.0334	(0.0428)	-0.0004	(0.0070)	0.0167	(0.0287)	-0.0082	(0.0063)	-0.0142	(0.0236)	0.0057	(0.0105)
st_alo5	-0.0536	(0.0278)	0.0426	(0.0195)	-0.0167	(0.0112)	0.0276	(0.0115)	-0.0238	(0.0161)	0.0053	(0.0050)	0.0141	(0.0140)	0.0044	(0.0043)
lt_alo5	-0.0777	(0.0175)	0.0435	(0.0127)	0.0087	(0.0094)	0.0255	(0.0070)	0.0101	(0.0185)	0.0020	(0.0061)	-0.0319	(0.0148)	0.0198	(0.0083)

	regression parameters								regression parameters							
	Wald chi^2 (54) = 440.77								Wald chi^2 (54) = 583.06							
	Prob > chi^2 = 0.0000								Prob > chi^2 = 0.0000							
	Pseudo R^2 = 0.0840								Pseudo R^2 = 0.1272							
	Log pseudolikelihood = -3468.9349								Log pseudolikelihood = -2623.2383							
N	7463								5107							

(1) non-employment $\Rightarrow$ non-employment, (2) non-employment $\Rightarrow$ full-time, (3) non-employment $\Rightarrow$ part-time, (4) non-employment $\Rightarrow$ unemployment,

   robust standard errors in parentheses.

Source: ECHP, authors' calculations.