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Labour market mobility and employment security of male employees in Europe: ‘trade-off’ or ‘flexicurity’?

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ABSTRACT
The dominant view in economics is that increasing demands for flexibility on the labour market jeopardizes employment security. However, against the prediction of a negative relationship or a ‘trade-off’ between flexibility and security, there is evidence for a positive, mutually reinforcing relationship known as the ‘flexicurity’ thesis. Using comparative panel data for 14 European countries, we elaborate dynamic outcome indicators for flexibility and employment security to assess the differences across countries and welfare regimes in balancing the two. We estimate transition models to explain the observed mobility patterns. The outcomes confirm the impact of the institutional set-up indicated by regime type on these transitions supporting the ‘variety of capitalism’ approach. The regulated Southern and Continental regimes perform worst and the unregulated Anglo-Saxon and Nordic regimes best in attaining high levels of flexibility and employment security simultaneously, though for both regimes with a small loss either in flexibility or in security.

KEY WORDS
employment security / flexibility / flexible contracts / flexicurity / job mobility / labour market / welfare regimes

Background and purpose of the study
The main issue addressed in this article concerns the empirical relationship between flexibility and employment security in European labour markets and the role institutions play to affect the balance between the two. In the
economic literature there is reason to argue for a negative or ‘trade-off’ relationship implying that increases in flexibility go at the expense of job and employment security and vice versa. However, in organizational sociology and institutional approaches, under the headings of the ‘new employment relationship’ (Collins, 2005; Stone, 2005) and ‘flexicurity’ respectively (European Commission, 2007; Wilthagen and Tros, 2004), a positive or ‘mutually reinforcing’ relationship is argued for.

The relationship has been studied – though framed in very different wordings – in various strands of the economic and sociological literature. In neo-classical economics the reasoning is that due to institutional constraints such as minimum wages, collective wage bargaining, social protection and employment protection rules employers have little leeway to adapt to business cycle changes. This will therefore lead to a slowed adjustment process of the labour force to changes in demand for labour signalling a lack of flexibility on the labour market. Institutional economists consider more tightly regulated labour markets less efficient owing to the additional transaction costs involved in hiring and firing policies (Addison and Teixeira, 2003; Blanchard and Tirole, 2004). The knowledge economy and what is known as the process of ‘skill-biased technical change’ also play a role. Due to the more rapid spread of knowledge in the ‘knowledge economy’, the demand for low skilled labour reduces in favour of the demand for higher educated and highly skilled workers. Because of this reduced demand for unskilled labour, the low skilled have to accept jobs of lower quality with lower wages and less job and employment security (Acemoglu, 2002).

In Esping-Andersen’s socio-political study of the Three Worlds of Welfare Capitalism (1990), various forms of ‘welfare capitalism’ with very dissimilar economic (efficiency) and social (equity) outcomes are considered. These welfare regimes are characterized by their degree of decommodification or the extent by which the state intervenes in the market and the level of social stratification in society. That study has been succeeded by very many others creating more refined classifications of countries (Ferrera, 1996; Goodin et al., 1999). In the ‘variety of capitalism’ approach (Albert, 1991; Hall and Soskice 2001) the focus has been on the modes of coordination, the degree to which it is the market which mediates or whether it is the institutions that take up the coordination responsibilities. Albert speaks of the Rhineland versus the Beveridgian or Anglo-Saxon model of capitalism, whereas Hall and Soskice distinguish between liberal or unregulated market economies versus regulated market economies. Soskice and Hall’s approach is further elaborated by Amable (2003). They all end up considering a classification very much like that of Esping-Andersen: the market based model typified by the USA and the UK in Europe; the social-democratic model typified by the Nordic countries and the ‘Continental’ model typified by the central European countries, though they have added a Mediterranean and an Asian model.

In the management literature sociologists are concerned with the changes occurring in the employment relationship as a consequence of the alleged flexibility trend that is delineated as an ongoing shift ‘from lifetime employment to
the boundaryless career’ (Stone, 2005). In the ‘new’ employment relationship
the job security offered through life-time employment and the ‘internal labour
market’ is substituted by employment security offered through investments in
the ‘employability’ of workers by providing for training and learning opportu-
nities, which raises the ‘general’ skill-level (Collins, 2005). The underlying
hypothesis is that the ‘new worker’ will change jobs and employers more fre-
quently provided that sufficient investments are made in skill formation during
the job. By marketing newly acquired skills on the external labour market the
worker is better capable of safeguarding his or her employment security. The
metaphor of ‘flexicurity’, currently very prominent in European policy circles
(European Commission, 2007; Wilthagen, 1998; Wilthagen and Tros, 2004),
resembles the views of these management theorists. The underlying idea is that
when institutions are properly designed to activate employers and employees to
facilitate investments in workers’ ‘employability’, this will also contribute to a
high level of mobility raising the worker’s productivity and therewith employ-
ment security. The other side of the coin is that lack of investments in the
‘employability’ of workers can lead to a low level of mobility and hence of flex-
ibility. When this is accompanied by a tightly regulated, segmented labour mar-
ket excluding particular groups, the attained level of employment security is
also low reflecting a situation of ‘inflexicurity’.

At the individual or workers’ level sociologists engaged in social stratification
research have paid attention to the adverse effects of globalization trends and the
accompanying larger demand for flexibility. They showed that due to social strat-
ification processes particularly the weakest groups on the labour market, work-
ers in low status jobs, with low skill levels and human capital endowments, are
increasingly exposed to rising employment instability and income insecurity
(Blossfeld and Mills, 2005; Blossfeld et al., 2006; Breen, 1997; Scherer, 2004).
The unskilled seem to be entrapped in low-quality jobs acting as ‘dead-end’ jobs
in which people have little prospect of escape. This refers to the ‘scarring thesis’
that has now become more popular among sociologists, according to which expe-
rience of non-employment or employment in low-level jobs, being partly the
result of flexibilization, has an enduring negative effect on the workers’ future
career in terms of employment stability and earnings (Booth et al., 2002; DiPrete
et al., 1997; European Commission, 2003; Gangl, 2003; Gangl, 2006; Golsch,
2003; Kalleberg, 2000; Muffels and Luijkx, 2006).

Our definitions of flexibility and security

Flexibility is understood here in economic terms as the degree to which the
labour market is capable of creating opportunities for employers and employ-
ees to meet their demands for qualified workers and jobs. A flexible labour
market operates efficiently when it exhibits high levels of mobility on the inter-
nal (functional flexibility) as well as the external labour market (numerical flex-
ibility), creating more opportunities for employers to adapt the workforce to the
vicissitudes of the business cycle, and for workers and non-employed people
to rapidly get the job they are looking for. A flexible labour market means that employers have more leeway either due to lack of institutional constraints or to opportunities offered by the terms of law to adapt the size of the work force to changes in demand. By employment security we mean, in analogy to Wilthagen and Tros (2004), remaining in employment but not necessarily in the same job with the same employer.

**Methodology and hypotheses**

Based on these theoretical notions we have formulated some *macro-level* and *micro-level* hypotheses. The basic idea is that we examine how at the macro level countries perform in terms of the attained balance, as measured by two *outcome* indicators: the level of mobility and dynamic employment security. At the micro-level we examine to what extent individual mobility patterns can be explained by factors, which in the literature have been shown to be important predictors of individual mobility, such as personal characteristics and capabilities of people or socio-economic conditions. Our main interest lies, however, in the impact of differences in the institutional design across countries, that is represented by the notion of ‘welfare regimes’, as elaborated in, for example, the seminal work of Esping-Andersen (1990). We view regimes as a ‘regulatory mix’ of institutions, laws and policies aimed at achieving an efficiently operating labour market without distorting income and employment security. The choice of the mix is likely to be different across welfare regimes dependent on their historical roots and economic and socio-cultural heritage. From the literature the following factors appear relevant: generosity of the benefit systems, strictness of employment protection legislation (EPL), industrial relations system, companies’ ‘employability’ policies, wage legislation, wage bargaining and active labour market policies.

In Figure 1 we have depicted the theoretical relationship between attained levels of income/employment security, represented by the x-axis, and mobility levels, represented by the y-axis. In the second and fourth quadrant there exists a ‘trade-off’ between flexibility and security: a high level of flexibility is combined with a low level of security or a low level of flexibility with a high level of security (IV). In the first (I) and third quadrant (III) the values on the flexibility and security axes are either both, high (flexicurity) or low (inflexicurity). From a theoretical viewpoint we would expect that if the ‘flexicurity’ thesis holds, a country’s scores would lie around the positively sloped 45° line drawn in Figure 1 and when the ‘trade-off’ thesis holds that they would lie around the negatively sloped 45° line. The ‘flexicurity’ line signals a positive association between flexibility and security and the ‘trade-off’ line a negative one. In reality, countries can be located anywhere left or right of both lines.

In our classification we put the UK and Ireland in an Anglo-Saxon cluster, although Ireland does not fit neatly in this regime. Countries like Germany, France, Belgium, Austria and Luxembourg are placed in a Continental cluster,
and the Netherlands and the Nordic welfare regimes (Denmark, Finland) in a Nordic cluster. The Southern welfare states (Spain, Portugal, Greece and Italy) are set apart as a distinct regime type.

The literature suggests that the Nordic regime is likely to attain moderately high levels of flexibility or mobility due to intermediate levels of employment protection and leniency towards flexible contracts, moderate companies’ ‘employability’ efforts, generous (minimum) benefits and rather passive labour market policies. However, they supposedly pay a cost in terms of flexibility (lower mobility). The Anglo-Saxon regime is presumably strong on the flexibility part due to low EPL levels and a strong ‘employability’ record, but weak on the employment security due in part to low benefits and absence of active labour market policies. The Continental regime might not perform particularly well with a view to labour market flexibility due to strong EPL but is fairly good in terms of safeguarding income/employment security due to generous benefits, strong ‘employability’ efforts and active labour market policies. Although generalizations are risky, the Southern, traditionalist regime might combine a low level of flexibility through strict EPL and leniency to flexible contracts with low levels of income/employment security caused by low benefits, a weak ‘employability’ record and passive labour market policies. There is no regime that is likely to be perfectly positioned on the ‘flexicurity’ or ‘trade-off’ lines though the Nordic and Anglo-Saxon regimes seem closer to the former and the Continental and Southern closer to the latter. The lines through the
origin signal the European averages in terms of the attained levels of flexibility and security.

Micro-level factors

We believe that apart from macro-level variables micro-level variables are also important to explain mobility patterns. In our transition models we therefore apply a multi-level approach and include micro-level variables which are derived from the rich social stratification literature on job and occupational mobility (Blossfeld et al., 2006; DiPrete et al., 1997). We pay particular interest to the role of human capital variables like age, work experience and education level, signalling the skill level and work experience of the job seeker. Bad health is supposed to lower the value of someone’s productivity and human capital endowments for which reason he is less likely to move into a better job and more likely to move into a worse job. We further include some control variables such as the level of economic resources in the household of the respondent, the characteristics of the job the worker currently occupies (number of hours, industrial sector, firm size), life-course related variables such as marital status and number of children (referring to life-course theory) and year dummies to take account of changes in the economic cycle. The variables included and how they are defined are summarized in Table 1.

Outline of the study

Before we define our outcome measures for flexibility and security we explain the data we have used. Then we discuss our empirical models to explain individual mobility patterns. Subsequently, we map the countries and regimes on the flexibility–security balance. Eventually, we discuss the results of our model estimations and we end with a general discussion.

Data and definition of the dependent variables

Data

We use the available eight waves of the European Community Household Panel (ECHP) covering 14 countries of the European Union during the years 1994–2001. Sweden was excluded from the sample. For substantive reasons we restricted our sample to male persons of working age, i.e. men between 16 and 65 years old. Because the labour market behaviour and transition patterns of men and women on the labour market are very dissimilar, especially with a view to the underlying causal mechanisms, a full account of the gender specific transition patterns would require a separate treatment for both. Female patterns are dissimilar due to differences including: working time preferences at different stages of the life course, employment careers, occupational segregation, and pay levels etcetera. A related technical argument is associated with the larger heterogeneity...
Table 1 Covariates included in the models plus mean values

<table>
<thead>
<tr>
<th>Variables</th>
<th>Description</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Age in years</td>
<td>39.5</td>
</tr>
<tr>
<td>Age squared/100</td>
<td>Age squared divided by 100</td>
<td>17.4</td>
</tr>
<tr>
<td>Number of children</td>
<td>Number of children below 16 years of age in the household</td>
<td>0.51</td>
</tr>
<tr>
<td>Married</td>
<td>Dummy for being married</td>
<td>0.57</td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>Dummy for being divorced or separated</td>
<td>0.05</td>
</tr>
<tr>
<td>Education level</td>
<td>1. primary education; 2. lower and medium level of vocational training plus high school (reference category), and 3. higher vocational training and university</td>
<td>2.15</td>
</tr>
<tr>
<td>Low education</td>
<td>Dummy for low education</td>
<td>0.38</td>
</tr>
<tr>
<td>High education</td>
<td>Dummy for high education</td>
<td>0.24</td>
</tr>
<tr>
<td>Unemployment history</td>
<td>Dummy for whether people experienced an unemployment spell in the five years preceding the current job (1 = yes; 0 = no)</td>
<td>0.20</td>
</tr>
<tr>
<td>Work experience</td>
<td>Number of years passed since the worker started his first job. Hence, it is corrected for the different length of the schooling period before first entrance on the labour market</td>
<td>20.9</td>
</tr>
<tr>
<td>Bad health</td>
<td>Dummy for bad health, which is a subjectively assessed measure for one's personal health (1 = bad health; 0 = not in bad health)</td>
<td>0.07</td>
</tr>
<tr>
<td>Personal non-labour income</td>
<td>Personal net non-labour income in 1000 euros per year</td>
<td>2.57</td>
</tr>
<tr>
<td>Other net labour income in household</td>
<td>Net household labour income of other household members is the summation of the annual net labour incomes of all other persons between 25 and 65 years in the household in the calendar year preceding the interview year in 1000 euros per year</td>
<td>6.48</td>
</tr>
<tr>
<td>Net non-labour income in household</td>
<td>Net non-labour household income is the net household income from social security transfers and/or from wealth (excluding income from imputed rent). Incomes are deflated and made comparable across countries using the purchasing power parities as calculated by Eurostat for the various countries in 1000 euros per year</td>
<td>10.91</td>
</tr>
<tr>
<td>Number of working hours</td>
<td>Weekly working hours are the total number of actual working hours a worker usually worked throughout the past calendar year</td>
<td>43.61</td>
</tr>
<tr>
<td>Primary sector</td>
<td>Dummies for industrial sector as derived from the two-digit NACE-code, recoded into four dummies for the primary sector, the services/trade sector, the industrial sector and the public sector.</td>
<td>0.05</td>
</tr>
<tr>
<td>Service sector</td>
<td>NACE-code, recoded into four dummies for the primary sector, the services/trade sector, the industrial sector and the public sector.</td>
<td>0.16</td>
</tr>
<tr>
<td>Industry</td>
<td>Reference category is industry</td>
<td>0.24</td>
</tr>
<tr>
<td>Public sector</td>
<td>Reference category is industry</td>
<td>0.13</td>
</tr>
<tr>
<td>Firm size</td>
<td>Firm size measuring the number of employees in seven classes in the firm (0; 1–4; 5–19; 20–49; 50–99; 100–499; 500+)</td>
<td>3.95</td>
</tr>
<tr>
<td>Occupational class</td>
<td>To take account of bottom and ceiling effects we included the initial occupational class position consisting of either three categories as in Model I, or four categories as in the Models II, III and IV (1=low, low manual, 4=high, professional)</td>
<td>2.8</td>
</tr>
</tbody>
</table>

(continued)
involved in female working time patterns compared to men especially in a life-course perspective.

We weighted the data and calculated adjusted longitudinal weights. These were calculated as the product of the cross-sectional weights and the inverse of the survival probabilities between two consecutive waves. The weights were adjusted to take account of the differences in population sizes across countries. The ECHP contains information on the type of contract, on occupation (2-digit ISCO 1988-code) and the branch of industry (NACE). Unfortunately, there is a lack of information on the employer and hence on job changes involving an employer change. We focus on year-to-year changes in employment contract, labour market status and occupational class. The dependent variables are defined using the information as reported for the preceding calendar year. For estimation we pooled the information for the seven transition rates for each individual in the sample and consider changes in status between year $t$ and year $t+1$. The independent variables are all measured at time $t$. The total number of observations in the seven year-by-year transition panel data sets is 384,209. Because of the clustering of transitions over time and the clustering of individuals over countries we use robust estimation of the model parameters and their standard errors.

Outcome measures

The standard approach is to use static institutional measures such as the level of employment protection to map countries on flexibility and security (e.g. European Commission, 2007), whereas we focus on dynamic outcome measures. Institutions determine the room for flexibility but, in the end, social and economic interactions determine what countries actually achieve in terms of flexibility and security. We defined two outcome measures for mobility and one for employment security:

Occupational class mobility (OM). The first measure uses the information on the change in occupational class across two years as a proxy for job-to-job mobility. A move into a higher class is considered an *upward* move and a move into a lower class a *downward* move. Workers staying in the same class might
still experience a so-called lateral move because they might change their job without changing occupation, for which reason our measure underestimates to some extent the amount of job mobility in society. \( OM \) is the sum of upward (\( OM_{up} \)) and downward mobility (\( OM_{down} \)):

\[
OM = OM_{up} + OM_{down}
\]

**Contract mobility** (CM). The second measure deals with the mobility between different types of contracts (permanent, temporary, self-employment), which we label as ‘contract mobility’. The ECHP contains information on whether workers are occupied in a permanent job, a non-standard contract (temporary job, casual job or another job with a different kind of contract) or a self-employed job. Using the information on the transitions between contract status across two years we can calculate the number of workers moving from one of these contract types into another. CM is therefore the sum of the mobility between contract types (\( CM_{od} \)) weighted with the share of workers as percentage of all employed people \( \left( \rho_e \right) \):

\[
CM = \sum_{o=1}^{O} \sum_{d=1}^{D} \rho_o \rho_d CM_{od}
\]

- \( o \): origin state; \( d \): destination state; \( O/D \): number of origin/destination states
- \( o \): 1 = permanent job; 2 = flexible contract;
- \( d \): 1 = permanent job; 2 = flexible contract; 3 = self-employment.

Occupational and contract mobility are treated as separate outcome indicators for the level of flexibility in a country. The sum of occupational and contract mobility weighted with the share of people in employment as percentage of the population between 16 and 65 years \( \left( \rho_e \right) \) is called the labour market flexibility or mobility measure:

\[
M = \rho_e (CM + OM)
\]

where \( \rho_e \) is the share of people in employment.

After multiplication with 100 the \( M \) measure ranges from 0 to 100 per cent. If \( M \) is 0 per cent nobody changes occupations or contracts. If it is 100 per cent everybody has changed either occupation or contract. The average value for \( M \) for the 14 countries is 6.73 per cent ranging from 1.74 per cent in France to 11.2 per cent in the UK and 11.6 per cent in Belgium.

**Dynamic employment security** (ESD). Dynamic employment security at the individual level is measured by changes in employment security due to changes in the employment status of a person. If a person during two consecutive years enters a permanent job or self-employment either from non-work (unemployment or inactivity) or from a flexible contract, his employment security is increased and if he leaves a permanent job and moves into a flexible contract, self-employment or into non-work his employment security is reduced. This implies that people moving into early retirement after employment are included.
in our exit rates, but early retired people who re-enter employment also show up in the entry rates. We also treated those who stayed in the same status as entries or exits into employment security. We treat workers staying employed across two years as entries into security because we know from the literature that due to path dependency effects the likelihood of being employed the next year is higher for people already employed. However, for the same reason non-working people staying out of work for another year will have impaired chances of re-entering a job and becoming employment secure, for which reason they are treated as exits into less security. This allows us to define the ESD (dynamic employment security) measure as the weighted average of the ‘entry’ and ‘exit’ rates, weighted with the shares of the different types of workers with respect to their origin statuses in the population of 16 to 65 years ($\rho_o$):

$$ESD = \sum_{o=1}^{O} \sum_{d=1}^{D} \rho_o \text{Entry}_{od} - \sum_{o=1}^{O} \sum_{d=1}^{D} \rho_o \text{Exit}_{od}$$

where $o$ is origin state; $d$ is destination state; $O/D$ is number of origin/destination states.

- $o$: 1 = permanent job; 2 = flexible job; 3 = out-of-work;
- $d$: 1 = permanent job; 2 = flexible job; 3 = self-employment; 4 = out-of-work.$^4$

After multiplication with 100 the dynamic employment security measure lies between –100 per cent and +100 per cent. If it is –100 per cent it means that nobody has a job and all people moved out of the labour market. If it is +100 per cent it means that everybody acquired a job and that nobody stayed non-working. In our sample the average score is 34 per cent ranging from 15 per cent in Italy to 52 per cent in the Netherlands.$^5$

**Models for explaining changes in mobility and employment security**

We examined the various forms of mobility by applying multinomial logit models$^6$ for occupational class and for each of the three origin employment states. The underlying idea is that if people make transitions it involves a choice for the destination state they want to move to, dependent on the origin state. However, choices are constrained due to lack of capabilities or opportunities to move, for example, from a flexible job into a permanent job or from non-work into self-employment. Therefore, we take the current status of people and estimate the transition probabilities from that origin state into the various destination states. We distinguish three origin states, only excluding self-employment because of the low numbers of transitions and the problems involved in assessing self-employment status, though we included movements into self-employment.

The probability of moving from the origin state (permanent job, flexible contract, non-participation) into either of the four destination states (including self-employment), as compared to staying in the origin state being the reference group, is given by the following equation:
\[ P(y = d) = \frac{\exp\left(\sum_{k=1}^{K} \beta_{dk} x_k\right)}{1 + \sum_{d=1}^{D-1} \exp\left(\sum_{k=1}^{K} \beta_{dk} x_k\right)} \]

with \( d = \) destination state, \( D = 4 \) (number of destination states, one acting as reference group) and \( K \) the number of explanatory variables \( x \).

We estimated four models:

- Model I deals with occupational mobility. This is the mobility from a current occupational class position at \( t \) into another position at \( t + 1 \). We used the occupational class variable containing four categories: professional worker; upper manual worker; low white-collar worker and lower manual or personal service workers.\(^7\) Because the scheme is essentially non-hierarchical, the ranking of the four classes is based on the calculation of the median hourly wage level in each category for workers working at least 15 hours a week.\(^8\) Using this ranking we are able to make a distinction between upward and downward job mobility.

- Models II and III deal with contract and exit (from work to non-work) mobility. Model II examines the mobility from a flexible contract (origin state) into a permanent job, into unemployment/inactivity or into self-employment (destination states).

- Model III examines the mobility from a permanent job into self-employment, a flexible contract or unemployment/inactivity. The reference category is staying in a flexible contract in Model II and staying in a permanent job in Model III.

- Model IV examines (re-)entry mobility, the mobility from non-work into a permanent job, a flexible contract or into self-employment. The reference category is staying out of work.

**Results**

**Mobility and employment security measures**

We calculated outcome measures \( M \) and \( ESD \) by country and regime type. The results are graphically depicted in Figure 2. The levels for \( M \) and \( ESD \), given by the values on the X and Y-axis, determine the location of each country and of the four regime clusters on the two dimensions. Note the large distance of some countries (Portugal, Finland, France) from their natural clusters. We also depict the lines showing the European average for \( M \) and \( ESD \). This allows us to examine the countries and regimes in the ‘flexicurity’ quadrant.

The regression line calculated and drawn in the figure shows that there is a very weak relationship between flexibility and security indicating that
the 14 EU countries are far away from the ‘trade-off’ as well as the ‘flexi-
certainty’ line. The general conclusion is that the theoretical classification of
the regimes in Figure 1 is empirically confirmed though the Anglo-Saxon
regime seems to perform much better than we expected in terms of employ-
ment security.

Upward and downward occupational mobility

The results of our model estimations for occupational mobility (Model I) are
presented in Table 2. It has to be noted that the coefficient estimates in the
multinomial model represent – after exponentiation – relative probabilities
or odds ratios. This means that the effect should always be compared with
the effect for the reference category. In model I for downward occupational
mobility, the coefficient for low education is significant and equals 0.440.
The odds ratio being the exponent value is 1.55. Hence, the low educated
have a 55 per cent higher chance to move into a lower-level job compared
to a worker with intermediate education level. Since we are less interested
in these odds ratios than in the strength and the significance of each coeffi-
cient we present here the coefficient, estimates only. Because we are pri-
marily interested in the institutional effects, we start by viewing the regime
type effects. Then we discuss the human capital variables including age and
health status.9
Table 2  Multinomial model for explaining occupational class mobility (staying in same occupational class as reference group)

<table>
<thead>
<tr>
<th>Model I: Occupational class</th>
<th>Downward mobility</th>
<th>Upward mobility</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Life-course</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>−0.168***</td>
<td>−0.026</td>
</tr>
<tr>
<td>Age squared</td>
<td>0.125***</td>
<td>0.030</td>
</tr>
<tr>
<td>Number of children</td>
<td>0.055**</td>
<td>−0.062**</td>
</tr>
<tr>
<td><strong>Marital status (ref. is single)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>−0.059</td>
<td>−0.043</td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>0.043</td>
<td>0.106</td>
</tr>
<tr>
<td><strong>Human Capital</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education (ref. = intermediate)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low education</td>
<td>0.440***</td>
<td>−0.460***</td>
</tr>
<tr>
<td>High education</td>
<td>−0.579***</td>
<td>0.302***</td>
</tr>
<tr>
<td>Unemployment history</td>
<td>0.484***</td>
<td>0.039</td>
</tr>
<tr>
<td>Work experience</td>
<td>0.046***</td>
<td>−0.018***</td>
</tr>
<tr>
<td><strong>Socio-economic characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad health</td>
<td>0.077</td>
<td>−0.043</td>
</tr>
<tr>
<td>Personal non-labour income</td>
<td>−0.004</td>
<td>0.003</td>
</tr>
<tr>
<td>Other labour income HH</td>
<td>−0.004***</td>
<td>0.005***</td>
</tr>
<tr>
<td>Non-labour income other HH members</td>
<td>0.002</td>
<td>0.007***</td>
</tr>
<tr>
<td><strong>Job characteristics</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of working hrs</td>
<td>−0.009**</td>
<td>−0.004</td>
</tr>
<tr>
<td>Occupational Class (1 = low to 4 = high)</td>
<td>0.973***</td>
<td>−1.161***</td>
</tr>
<tr>
<td>Primary sector</td>
<td>0.544***</td>
<td>−0.031</td>
</tr>
<tr>
<td>Public sector</td>
<td>−0.356***</td>
<td>0.142***</td>
</tr>
<tr>
<td>Firm size</td>
<td>−0.021</td>
<td>0.016</td>
</tr>
<tr>
<td><strong>Regime type (ref. = Continental)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anglo-Saxon</td>
<td>0.451***</td>
<td>0.933***</td>
</tr>
<tr>
<td>Nordic</td>
<td>0.190</td>
<td>0.649***</td>
</tr>
<tr>
<td>Southern</td>
<td>0.473*</td>
<td>0.492*</td>
</tr>
<tr>
<td><strong>Year dummies</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>0.294</td>
<td>−0.117</td>
</tr>
<tr>
<td>1996</td>
<td>1.642***</td>
<td>1.526***</td>
</tr>
<tr>
<td>1997</td>
<td>1.253***</td>
<td>1.010***</td>
</tr>
<tr>
<td>1998</td>
<td>1.072***</td>
<td>0.670***</td>
</tr>
<tr>
<td>1999</td>
<td>1.463***</td>
<td>1.011***</td>
</tr>
<tr>
<td>2000</td>
<td>1.401***</td>
<td>1.065***</td>
</tr>
<tr>
<td>Constant</td>
<td>−3.393***</td>
<td>−0.287</td>
</tr>
</tbody>
</table>

Notes: Asterisks denote significance of coefficients: *** 1%, ** 5%, * 10%. The mobility measure is four category occupational class. Coefficients from multinomial logit regressions, relative to staying in same class (N = 102,823). Pseudo $R^2 = 0.138$. Coefficients are effects relative to reference category. Sample: males aged 16–64 in all countries except Sweden. Source: ECHP (1994–2001).
Regime type

The Anglo-Saxon regimes exhibit in both models, for upward and downward mobility, a significantly positive effect compared to the Continental regime, which is the reference category. The effects for this regime cluster are also relatively stronger than for the other regimes, supporting our prior presumptions about a higher mobility in the liberal or Anglo-Saxon labour markets. Remarkably though, there is also more upward mobility in the Nordic regime, though the effect is smaller than in the former regime. We observe high upward but also high downward mobility rates in the Southern regimes. The strong segmentation in Southern labour markets protecting insiders and creating barriers for outsiders might account for both of these effects. The labour market for permanent jobs operates as a ‘closed shop’, to which access is unattainable for the younger cohorts of workers.

Human capital

The relationship with age is U-shaped, both for upward and for downward occupational mobility. With increasing age, occupational mobility slows down. The positive effect for age squared indicates that beyond some age threshold both upward and downward mobility increase again.10 Upward mobility at higher ages is more likely to occur just before retirement age (at 50 years), whereas downward mobility is likely to occur somewhat earlier (at 48 years) either due to demotion on the job, or to moving to a lower level job with another employer, or into self-employment.

The education variables demonstrate a significant effect on upward and downward mobility. Low education exerts a strong positive effect on downward mobility into lower level jobs and a negative effect on upward mobility into better jobs. Whereas high education has the reverse effect, it strongly increases the chances for upward mobility and lowers the likelihood of downward mobility into lower-level jobs. These results are consistent with human capital predictions and support our hypotheses about the differential impact of the knowledge economy on the demand for low and high skilled labour.

Work experience is already partly covered by age, but we also include the number of years worked after the employee started his first job and the experience of unemployment in the last five years. The last variable has a strong positive effect on downward mobility supporting the ‘scarring’ hypothesis. Work experience exerts a positive effect on downward mobility and a negative effect on upward mobility. Poor health appears insignificant and neither harms upward mobility nor leads to more downward mobility, at least not in the short run.

Employment security and contract, exit and re-entry mobility

Table 3 shows the results for contract and exit and re-entry mobility (Models II to IV). Again we start with the effects of regime type.
Table 3  Multinomial models for explaining contract, exit and (re-)entry mobility for workers in permanent jobs (model II), in flexible contracts (model III) and non-working (model IV)

<table>
<thead>
<tr>
<th>Origin</th>
<th>Model II: Permanent job</th>
<th>Model III: Flexible contract</th>
<th>Model IV: Non-work</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life-course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-0.188***</td>
<td>0.025</td>
<td>-0.302***</td>
</tr>
<tr>
<td>Age squared</td>
<td>0.214***</td>
<td>-0.015</td>
<td>0.418***</td>
</tr>
<tr>
<td>Number of children</td>
<td>-0.006</td>
<td>0.047</td>
<td>0.011</td>
</tr>
<tr>
<td>Marital status (ref. is single)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>-0.085</td>
<td>-0.068</td>
<td>-0.350***</td>
</tr>
<tr>
<td>Divorced/separated</td>
<td>-1.145***</td>
<td>0.146</td>
<td>0.063</td>
</tr>
<tr>
<td>Human Capital</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low education</td>
<td>0.067</td>
<td>-0.023</td>
<td>0.034</td>
</tr>
<tr>
<td>High education</td>
<td>0.045</td>
<td>0.121</td>
<td>-0.113**</td>
</tr>
<tr>
<td>Unemployment history</td>
<td>0.768***</td>
<td>0.205***</td>
<td>0.603***</td>
</tr>
<tr>
<td>Work experience</td>
<td>0.001</td>
<td>-0.019**</td>
<td>-0.004</td>
</tr>
<tr>
<td>Socio-economic characteristics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bad health</td>
<td>-0.057</td>
<td>0.209</td>
<td>0.908***</td>
</tr>
<tr>
<td>Personal non-labour income</td>
<td>0.022***</td>
<td>0.034***</td>
<td>0.017***</td>
</tr>
<tr>
<td>Other labour income HH</td>
<td>0.003</td>
<td>-0.001</td>
<td>-0.006**</td>
</tr>
<tr>
<td>Non-labour income other HH members</td>
<td>-0.005</td>
<td>-0.014***</td>
<td>0.005</td>
</tr>
</tbody>
</table>

(continued)
### Table 3 (continued)

<table>
<thead>
<tr>
<th>Destination</th>
<th>Model II: Permanent job</th>
<th>Model III: Flexible contract</th>
<th>Model IV: Non-work</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job characteristics</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Number of working hrs</td>
<td>0.008*</td>
<td>0.038***</td>
<td>-0.009***</td>
</tr>
<tr>
<td>Occupational</td>
<td>-0.146****</td>
<td>0.288***</td>
<td>-0.095</td>
</tr>
<tr>
<td>Class (1 = low to 4)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Primary sector</td>
<td>0.140</td>
<td>0.294</td>
<td>0.077</td>
</tr>
<tr>
<td>Public sector</td>
<td>0.236</td>
<td>-0.547***</td>
<td>-0.444***</td>
</tr>
<tr>
<td>Firm size</td>
<td>-0.159****</td>
<td>-0.465***</td>
<td>-0.100***</td>
</tr>
<tr>
<td>Regime type (ref. = Continental)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Anglo-Saxon</td>
<td>-0.942****</td>
<td>0.267</td>
<td>-0.229***</td>
</tr>
<tr>
<td>Nordic</td>
<td>-0.019</td>
<td>0.403***</td>
<td>-0.278***</td>
</tr>
<tr>
<td>Southern</td>
<td>0.062</td>
<td>0.905***</td>
<td>-0.193***</td>
</tr>
<tr>
<td>Year dummies</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>-0.073</td>
<td>0.021</td>
<td>-0.201</td>
</tr>
<tr>
<td>1996</td>
<td>-0.052</td>
<td>0.019</td>
<td>0.039</td>
</tr>
<tr>
<td>1997</td>
<td>-0.275</td>
<td>-0.242*</td>
<td>-0.177**</td>
</tr>
<tr>
<td>1998</td>
<td>-0.178</td>
<td>-0.139</td>
<td>-0.167</td>
</tr>
<tr>
<td>1999</td>
<td>0.286</td>
<td>-0.281*</td>
<td>-0.465**</td>
</tr>
<tr>
<td>2000</td>
<td>0.218</td>
<td>-0.092</td>
<td>-0.311**</td>
</tr>
</tbody>
</table>

**Notes:**
1. Non-work means unemployment or inactivity.
2. Base year is 1993 (Model II, IV) and 1994 (Model III).
4. Asterisks denote significance of coefficients: *** 1%, ** 5%, * 10% (p-values between parentheses).
5. Coefficients from ML regression, relative to staying in origin state being the reference group (n = 78,612 in Model II; 12,423 in Model III and 53,026 in Model IV), Pseudo R$^2 = 0.088$ in Model II; 0.069 in Model III and 0.151 in Model IV. Due to autocorrelation, year dummies for 1996, 1995 and 2000 are removed in Models II, III and IV, respectively.
Regime type

The exit from a permanent job (Model II) into a flexible contract or into non-work, and hence into less security, is significantly lower in Anglo-Saxon regimes compared to the Continental regimes. But even the Nordic and Southern regimes perform better in preventing people moving into more insecure employment status. On the other hand, improvements in terms of employment security by switching from a flexible contract into a permanent job (Model III) are much less likely to occur in Southern and more likely in Anglo-Saxon and Nordic regimes. The initial expectations with respect to welfare regimes seem to be confirmed. Politicians might especially be concerned with getting people out of work into permanent employment (Model IV) and these transitions are more likely to occur in the unregulated Anglo-Saxon regimes than in the Continental regimes. The Southern welfare states perform, however, worse than the Continental regimes in this respect. Business start-ups by non-working people occur more often in Southern regimes compared to the Continental regime. This resembles the larger share of self-employment and informal jobs in this regime. Southern regimes and particularly Anglo-Saxon regimes also perform better in getting workers from a flexible contract into self-employment (Model III) compared to Corporatist regimes (the reference category). The findings for the Southern regimes confirm what we found earlier, that workers in flexible contracts, mostly young workers, tend to shift into self-employment if the door to a permanent job is closed, pointing to the segmented labour market and the significant role of the informal economy.

Human capital

Exits out of a permanent job or a flexible contract into non-work (less security) increase strongly with age but slow down after some age threshold (56 years for exit out of a permanent job), which is likely to be due to the attractiveness of exit routes through early retirement, unemployment or disability, because of which older workers tend to move out of the labour market at early ages. The reverse pattern is observed for re-entry into employment that occurs at relatively young ages (43 years for entry into a permanent job). This implies that older workers have poor chances of re-entering employment after unemployment or a flexible contract, and that with increasing age the opportunities to improve one’s employment security diminishes strongly.

The education variables exert a strong effect in models III and IV. In model II a high education reduces the chances of losing one’s permanent job. In Model III a low education decreases the chances of getting a permanent job after having worked in a flexible contract. Remarkably though, the highly educated workers also exhibit lower chances than workers at the intermediate level of finding a permanent job. The results also show that the highly educated have lower chances of exiting into non-work after having worked in a flexible contract and higher chances of escaping from unemployment by finding a flexible contract, a permanent job or self-employment. For the low educated the situation is worse after unemployment, when they have reduced chances of finding
a permanent job. These results confirm the contended impact of the knowledge-based economy on reducing the demand for lower educated people, aggravating the weak position of workers in the lower strata of the labour market and thereby endangering their employment security.

Workers who were unemployed in the recent past are more likely to move into less secure statuses and less likely to move into more secure statuses. Workers in permanent jobs (Model II) who were unemployed earlier in the last five years have more chances of moving into a flexible contract, a self-employment job or non-work. When they work in a flexible contract (Model III) and were unemployed earlier, they are confronted with reduced chances of finding a permanent job or even moving into self-employment. And for those who have no work now (Model IV) and were unemployed earlier, they are more likely to re-enter a flexible contract that serves as a second best solution to a permanent job.

Longer work experience exerts a negative effect on moving into self-employment after having worked in a permanent job (Model II). However, it also raises the chances of escaping from unemployment or inactivity (Model IV) into work, be it a flexible contract, a permanent job or self-employment.

**Conclusions and discussion**

The main question raised is whether there is a ‘trade-off’ between flexibility and security – apparently the dominant view in economics – or a mutually reinforcing relationship known as the ‘flexicurity’ thesis. The results show that for Europe as a whole the attained balance of flexibility and security does not support either of the two theses. The calculated dynamic outcome indicators and the model estimations make clear, however, that attained levels of mobility and employment security diverge widely across countries and regimes. The unregulated Anglo-Saxon and moderately regulated Nordic regimes achieve a much better balance of flexibility and security, though for the Nordic regimes with a small efficiency (less mobility) loss and for the Anglo-Saxon with a small (but less than expected) security loss, than the highly regulated labour markets of the Continental and Southern countries. These findings provide a warning against too much regulation that might lead to a segmented labour market protecting insiders at the expense of outsiders and, therewith, endangering mobility as well as security. The results also render support to Soskice and Hall’s approach with a view to the presumed impact of the modes of coordination on the performance of the various forms of capitalism to balance economic and social goals in society.

We used the ECHP, with an eight-year window that is much too short to assess regime type changes over time. However, the analyses indicate that institutional differences are rather stable and that they do shape dissimilar outcomes across institutional settings in this period. However, a detailed analysis of the institutional changes over time and their effects on the regime outcomes would render added value to our analyses.
We find support for the impact of the ‘knowledge-based economy’. We conclude that the more human capital endowments workers possess, the more opportunities there are to improve one’s position on the labour market. Low educated workers appear particularly sensitive to downward moves, which underpins our supposition about the adverse impact of the knowledge economy on the career opportunities of this group. The findings that human capital investments promote upward mobility also support the notion of the ‘flexible employment relationship’. However, due to lack of data on functional mobility, the outcomes do not allow us to draw any conclusion about the alleged shift to the ‘flexible employment relationship’ in European labour markets at the level of workplaces. That demands research at the company or demand level, as in Rose’s study (2006) for the UK. Demand data would also permit us to incorporate the ‘job quality’ dimension in our employment security measure that we could not capture with our data.

Our analyses were restricted to male transition patterns though we know that female employment patterns are much more volatile and diverse than those of men. To take full account of the gender specific transition patterns would require a separate treatment, taking account of many specific influencing factors related to working times, caring roles, childcare policies, social stratification, gender wage gaps etc. This is one of the primary challenges we have to take up in future research.

We also examined the combined impact of institutions represented by regime type on the achieved balance. However, examining the separate impact of institutions and policies would be another way to progress in future research.

The main policy lesson to be learned concerns the idea that a ‘one-size-fits-all’ approach is likely to be ineffective since countries seem to follow their own specific roads. In this respect, Europe demonstrates ‘unity in diversity’ showing that there is not one world of welfare but many.

Notes

1 The definition of skills in economics includes general and cognitive skills obtained through pre-school learning, formal education and training and on-the-job learning.
2 No distinction is made between voluntary and forced moves because what matters is that workers and employers have opportunities to move to other jobs or to adapt the work force to changing demands. The economic rationale is that it improves worker’s careers and employers might be less reluctant to hire permanent workers.
3 Sweden is excluded because the dataset contains no panel data.
4 In the ESD measure, o and d include unemployment and inactivity whereas in the CM measure they include employment only.
5 Information on the calculated mobility and security measures averaged over the years of observation by country and regime type is available upon request from the authors.
6 Another way is to use the monthly calendar information and to estimate event history models. However, information in the ECHP is not very precise in terms
of the exact duration of each spell over the year and we lack information on
the value of the time-varying covariates at the start of the spell.

7 In the user database of the ECHP this variable has only four categories.

8 Calculation of hourly wages on the weighted data shows that highest mean wages,
for those working at least 15 hours a week, are observed for professional work-
ers (€12.03), next highest for low, white collar workers (€8.25), then for upper
manual workers (€7.44), and lowest for lower manual and personal services
workers (€6.53).

9 We will not discuss the control variables in our models, being of less interest
here.

10 The age thresholds are calculated using a model with the work experience vari-
able left out, while that variable already partly captures the effect of age. The
threshold values in Model I are 57 years (upward mobility) and 49 years
(downward mobility).

11 The threshold values in years are: for model II, 56 (into non-work), 50 (into a
flexible contract) and 49 (into self-employment); for Model III, 49 (into a per-
manent job), 53 (into non-work) and 49 (into self-employment) and for Model
IV, 43 (into a permanent job) and 44 (into a flexible contract; or into self-
employment).

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