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The Impact of Socio-Ecological Transition on Employment Structure and Patterns in the Context of (Non) Rural Regions

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Abstract

This paper focuses on emerging labour patterns within the Socio-Ecological Transition (SET), with particular attention paid to the effects of urbanisation. Based on the European Labour Force Survey (ELFS), we mobilize micro-econometric approaches in order to understand three major employment patterns: job mobility (between unemployment, inactivity, and employment), the desire to change jobs, and underemployment (*i.e.* part time jobs) in the European Union.

The results show that the urbanization transition might express some positive effects on the labour market in the medium-term for several reasons. The employment rate has slightly decreased in all types of regions, yet it remains higher in urban settlements. Urban settlements offer more job opportunities and more part-time employment options. However, cyclical shocks tend to have a higher impact on urban areas when compared to rural areas. This means higher chances for employment in urban settlements during a boom and more job losses during a slow-down (causing less security on the labour market).

1. Introduction

The structure of employment is characterized by unceasing changes and economists are constantly trying to understand these shifts. Employment has already been analysed from various perspectives (skill-biased technological change, job polarisation, changing demand and several others). In recent years, it has become apparent that more complex approaches are needed.

The most recent study by Brewer et al. (2012) analyses medium-term changes in employment structure taking into account medium-term trends (ageing, rising skill levels, changes in personnel and occupational characteristics) as well as the on-going financial and economic crisis. They project that full-time employment will remain the most common status of workers, but the proportion of total employment accounted for by full-time male employees is projected to fall. Meanwhile, the proportions of part-time male employees and self-employed women are projected to grow. Total employment is projected to be lower in the agriculture, mining, manufacturing and education sectors, while the fastest growth in employment will be in electricity, gas, water and other miscellaneous business services. For professional characteristics, specific competences may be less demanded like for managers, professionals, and technical professionals.

The study by Fischer-Kowalsky et al. (2012) assumes that human labour patterns are influenced by the socio-metabolic regimes that constantly take place. The authors argue that the transition away from fossil fuels (that started in 1970s) has changed the traditional well-established patterns of employment, increasing part-time work, unemployment and “flexibility”. At the same time, the European labour market is currently facing the serious problems of ageing and high levels of unemployment among the young and elderly. Moreover, regional disparities in employment patterns are persistent and employment problems and successes are often linked to particular regions.

Thus, the question arises about the impact of the Socio-Ecological Transition (SET) on employment structure in different type of regions. This paper aims to answer this inquiry. In particular, first, we try to identify significant differences in changes in the employment structure and patterns between urban and rural regions. Second, we empirically analyse the impact of urbanization on employment structure and patterns. Third, we attempt to see whether there are significant differences in the impact of the SET on employment between urban and rural areas.

We mobilize micro-econometric approaches in order to understand three major employment patterns: job mobility (between unemployment, inactivity and employment), the desire to change jobs, and underemployment (i.e. part time jobs). We use the *European Labour Force Survey (ELFS),* which provides yearly detailed data on all labour market characteristics, as the reference dataset in order to distinguish several paths across European countries and regions. We provide our estimates for five European countries (Czech Republic, Germany, Finland, Netherlands and Spain) for the 2006-2010 period.

When defining the SET, we follow the work of Fischer-Kowalsky et al. (2012), prepared within WP1 of the NEUJOBS project. Their comprehensive definition of the SET is not only in line with the majority of scientific research in this area, but also covers the most important future challenges for EU regions and for EU policy effectiveness. The authors characterise the SET using four plausible mega-trends. The first one is the socio-ecological transition: a comprehensive change in the patterns of social organisation and culture, production, and consumption that will drive humanity beyond the current industrial model towards a more sustainable future. The second is the societal transition, produced by a combination of population ageing, low fertility rates, changing family structures, urbanisation and growing female employment. The third transition concerns new territorial dynamics and the balance between agglomeration and dispersion forces. The fourth is a skills (upgrading) transition.

In order to analyse the impact of urbanisation transformation on labour patterns, we follow the classification of urban-rural regions created in the de Beer et al. (2011) report prepared within WP8 of NEUJOBS project.

The structure of the paper is the following. In the first chapter, we present selected features of the European employment confronting urbanisation and SET. The second chapter describes the data and methodology applied, data shortcomings, and problems we experienced with the estimation. In the third chapter, we present estimation results together and policy recommendations. The concluding remarks are presented in the final chapter.

2. Features of European employment confronting urbanisation and SET

It is a well-established fact that regional disparities in employment performance are found to be persistent, and employment problems and successes are often linked to particular regions. The latest OECD Regions at Glance series (2011) reveals that around 40% of OECD GDP, employment, and population growth in the past 15 years has largely been attributed to a small number of regions (the top 10% of the highest performing regions). The distribution of the employment rate in the EU-27 reveals that the highest regional employment rates in the EU are in northern and central Europe, particularly in Germany, the Netherlands, Austria, Sweden, and the UK. The lowest regional employment rates are found in the southern regions of Spain and Italy, as well as in some regions of Belgium, Hungary, Malta, Poland and Romania. While disparities in employment and unemployment rates between countries have tended to decrease, regional disparities within countries are more persistent. The dispersion rate, measured by the coefficient of variation, generally followed a downward path through 2007. Then this pattern reversed, with the dispersion rate increasing for three successive years through 2010.

Differences across regions are factors behind the observed regional disparities in employment rates. According to the OECD (2011), they seem to be mostly driven by the capacity of regional labour markets to generate new jobs, rather than by labour supply or demographic factors. This fact, however, does not mean that supply-side factors do not intervene. Depressed regions tend to experience both higher unemployment rates and lower participation rates than their better performing counterparts. In addition, discouragement effects are likely to occur in regions where job creation is lagging and unemployment is high.

Differences across regions in the average educational attainment of the working-age population are another possible factor at work. Regions where unskilled labour is relatively abundant are likely to be disproportionately affected by skill-biased technological change. Differences in the age structure of the working-age population seem to play only a very minor role in most OECD countries in accounting for regional disparities in employment rates.

Another very important explanation of regional disparities in employment is the agglomeration effect. Firms and people benefit from being located in areas endowed with natural advantages such as raw materials, availability of fertile soil, suitability of weather conditions or

easy access by land or water. Additionally, firms may benefit from being located near many other firms if the scale of the economic environment adds to productivity, that is, if agglomeration generates external economies.

Also, the role of the initial sectoral specialization is assumed to be relatively important in countries where regional disparities are high. Since employment growth tends to be less dynamic in some sectors, such as in the agriculture and some manufacturing sectors, than in others, employment growth differentials at the regional level may simply mirror differences in initial sectoral specialization. When looking at a classification of the three sectors (agriculture, manufacturing and services), most empirical analyses suggest that the industry-mix provides only a partial explanation of regional variations in employment changes. One possibility is to look more carefully at the type of settlement.

Very few studies analyse the urban-rural differences in employment opportunities. Initially, rural areas were discussed in the context of employment losses and population decline. Since the 1970s, researchers have been pointing out that a substantial urban-rural shift is occurring in the distribution of both population and employment opportunities (see for example Berry et al., 1973, or Vining et al., 1977). Furthermore, the EC study (1997) shows that some rural regions are among the most dynamic of the European Union, and that they have been more successful in generating a higher level of new employment opportunities than the national economies as a whole.

Nevertheless, some critics see the counter-urbanisation as a construct resulting from an inadequate area typology where the growth and sprawl of urban areas is counted as rural growth by mistake (Koch, 1980). In fact, depending on the time period, region, and methodology, different estimations and assessments can be proven. An additional problem found in the literature is the difference in classifying urban and rural areas. For example, the study by Kiehl et al. (2002) investigates the continuity and the driving forces of the urban-rural employment shift in Western Europe. They use the typology of urban, semi-urban, and rural areas for three European countries, namely Great Britain, Germany and Italy. According to their study, these countries are characterised by a long-term redistribution of employment in favour of rural areas. The peak of counter urbanisation was reached in the 1970s. Rural employment growth in the 1980s and 1990s occurred at relatively low levels. A general and strong polarisation trend across the area typologies (agglomerations, semi-urbanised areas and rural areas) could be seen.

On the other hand, the EC study (2006) on employment in rural regions reveals that economic activity rates are, on average, slightly higher in urban regions than in rural regions. A low rate of economic activity is observed due to ageing populations or barriers to

employment, which particularly affect older women. Moreover, the economic activity rate is rather stable in rural areas over time, while only a small increase is observed in urban areas. The level of economic activity is largely a function of three supply-side factors: gender differences, age structure, and worker discouragement. Employment rates are also generally higher in urban regions than rural regions.

Some interesting studies examine the impact of the SET on the labour market. Fischer-Kowalsky et al. (2012) attempt to find linkages between the SET and labour. They look at the human labour patterns in four different socio-metabolic regimes, namely the agrarian regime, the coal-based industrial regime, the oil based industrial regime II and the transition phase away from fossil fuels (early 1970s onwards). They consider human labour on three levels:

1) Qualitative changes in labour: critical capacities of human labour,
2) Quantitative changes in labour: how much of the collectively existing human lifetime is spent on labour, and,
3) Changes in the institutional form of labour.

They find that in the last regime, working time per employee continues to decline in Europe. They argue that this is rather a symptom of increasing part-time work (particularly by women), unemployment, and rising "flexibility". More generally, they admit that there are signs of erosion of traditional well-established patterns of employment, and rising insecurity, while no clear-cut new pattern has emerged.

The European Commission's report on future challenges for EU regions, including changes in employment (EC, 2008), identifies adapting to globalisation, demographic change, climate change, as well as energy challenges as potential roadblocks. As stated in the report, the shrinking working age population, an ageing society, and population decline will have a marked effect on many regions. Regions in demographic decline are often characterised by relatively low-income levels, high unemployment, and a large proportion of the workforce employed in declining economic sectors. They tend to have a relatively small proportion of young people, due to their migration to other areas, as well as low population density and low growth potential due to the shrinking labour force. Other regions, in particular metropolitan and some coastal areas, will gain in population. Metropolitan regions are projected to face high levels of inward migration of the working age population while remaining primary destinations for international migration. Demographic changes are therefore likely to reinforce regional disparities in employment growth as well as economic growth in certain areas.

The aim of the ESPON project on "Demography and Migratory Flows Affecting European Regions and Cities" (2011) was to assess future changes in population growth, the size of labour force, and population ageing, and to explore different policy options aimed at

increasing regional competitiveness and territorial cohesion. The project was developed for selected European countries. The analyses of trends between selected regions revealed significant changes in the regional labour force. If life expectancy continues to grow, the number of persons aged 65+ in those selected regions would increase to 111 per cent. To address these challenges, intra and extra European migration will become increasingly important. Only under favourable economic conditions, if extra-European migration is high and if the activity rate increases, will the total size of the labour force increase until 2050. Even under these favourable conditions, 35 to 40 per cent of all NUTS2 regions will face a decline in the size of the labour force over this period. If the economic conditions are poor, 55 to 70 per cent of regions will experience a decline in the labour force by 10 per cent or more. This is especially problematic for rural areas. In most regions in the eastern and southern parts of Europe, the labour force may decrease by more than 30 per cent. In order to attain the goals of regional competitiveness and territorial cohesion, policy makers have to cope with these challenges.

3. Data and methodology

Data. The statistical data used for this analysis comes from the EU-ELSF database, which is the only EU-wide source providing economic, labour market and social information. In addition, it has the advantage of being homogeneous across countries, as in the definitions of variables in the criteria.

Nevertheless, there are some important limitations to this study linked to the availability and quality of the available information. The ELFS does not allow us to describe new job patterns, since the data are not detailed enough by sectors and professions. Job mobility, or the destructive creation of jobs, appears within the sectors and not simply between sectors. Professional variables (ISCO) do not take into account the transformation of job tasks and are also highly aggregated. Additionally, the EU-LFS data has measuring errors that occurred during data collection and which cause differences among the recorded values of variables. Biases also emerge due to non-responses (see Rendall et al., 2003), the reluctance or refusal to cooperate with the survey, as well as the absence of people residing in a household.

As there are no core variables directly linked to the SET within the ELFS, we consider job mobility in order to produce results on new jobs. We address this issue by looking both at the macro data from Eurostat and by using individual data from the EU-LFS database. We are

able to study mobility between jobs and even geographical mobility because some questions from the EU-LFS address the former labour status of the individual surveyed (1 year prior).

Due to data availability (some information is optional in ELFS) and software constraints, we were not able to cover all European countries. However, the countries under scrutiny constitute an interesting sample in Europe; we chose some peripheral countries like Spain and Finland and also included countries from the core of the EU, like the Netherlands or Germany. We also studied countries that have relatively miscellaneous territorial and/or population size. At the same time, our sample does not include the Czech Republic, a representative of the New Member States. Furthermore, for comparative reasons, the choice of countries corresponds to the territorial coverage of the study of Styczynska et al. (2012), prepared within WP8 of NEUJOBS project. Additionally, the full set of variables necessary for our analysis is available only for the last five years. Consequently, we have decided to cover the period of 2006-2010.

Variables. In order to create a consistent set of independent variables, we followed the work of the most prominent papers in the fields of evolution of labour market patterns and the SET, while taking into account data availability and software limitations.

When creating the set of variables that cover the SET, we based our choice on the work of Fischer-Kowalsky et al. (2012) (a report prepared within WP1 of NEUJOBS project) and NIDI et al. (2012) (a working paper presented within WP8 of the same project). Fischer-Kowalsky et al. (2012)'s comprehensive definition of the SET is not only in line with the majority of scientific research in this area, but also covers the most important future challenges for EU regions and for EU policy effectiveness. The authors characterise the SET using four plausible mega-trends. The first one is the socio-ecological transition: a comprehensive change in the patterns of social organisation and culture, production, and consumption that will drive humanity beyond the current industrial model towards a more sustainable future. The second is the societal transition, produced by a combination of population ageing, low fertility rates, changing family structures, urbanisation and growing female employment. The third transition concerns new territorial dynamics and the balance between agglomeration and dispersion forces. The fourth is a skills (upgrading) transition and its likely consequences for employment and (in)equality.

The paper by de Beer et al. (2011) prepared within the NEUJOBS project aimed to develop a rural-urban classification for NUTS 2 regions. We follow their assumptions and, based on their classification, we created analogous independent variables that describe the urbanisation transition. Consequently, we analyse the changes in employment patterns and

structure in the context of existing urbanisation, while taking into account socio-ecological changes on the market.

Additionally, within the classical approach of the labour market, we searched for sectors obviously concerned with the socio-ecological transition towards renewable energies, spare energy and materials as well as sustainable development, such as agriculture, the construction sector, transports and care-taking. For the moment, these sectors and related activities have not yet been clearly defined under the viewpoint of the SET within the EU. Therefore, we were unable to define completely new sectors, job profiles and regions, which might be defined as emerging poles, or the potential of socio-ecological jobs within the existing structures, reconversions and dynamics. It is therefore impossible to properly identify the ecological transformation at the ELFS level.

Based on the issues described above, we use the following explanatory variables of the evolution of employment patterns:

- Individual characteristics (gender, age, educational level)
- Societal transition (changing family structure, population ageing, female labour activity)
- Urbanisation
- Skills transition and knowledge spill over (short-term training)
- Crisis
- Country dummies

Information covering the societal transition, which is not available in the ELFS (regional population ageing and regional female labour activity) has been merged with the information from the Eurostat REGIO database. The *urbanisation* variable is created based on the classification of urban-rural NUTS2 regions presented in de Beer et al. (2011). To test the different possibilities of mobility within the labour market, we use a multinomial regression analysis. In order to analyse regional differences in employment structure, we follow a logit model, conditional on the labour status of the previous year.

4. Results

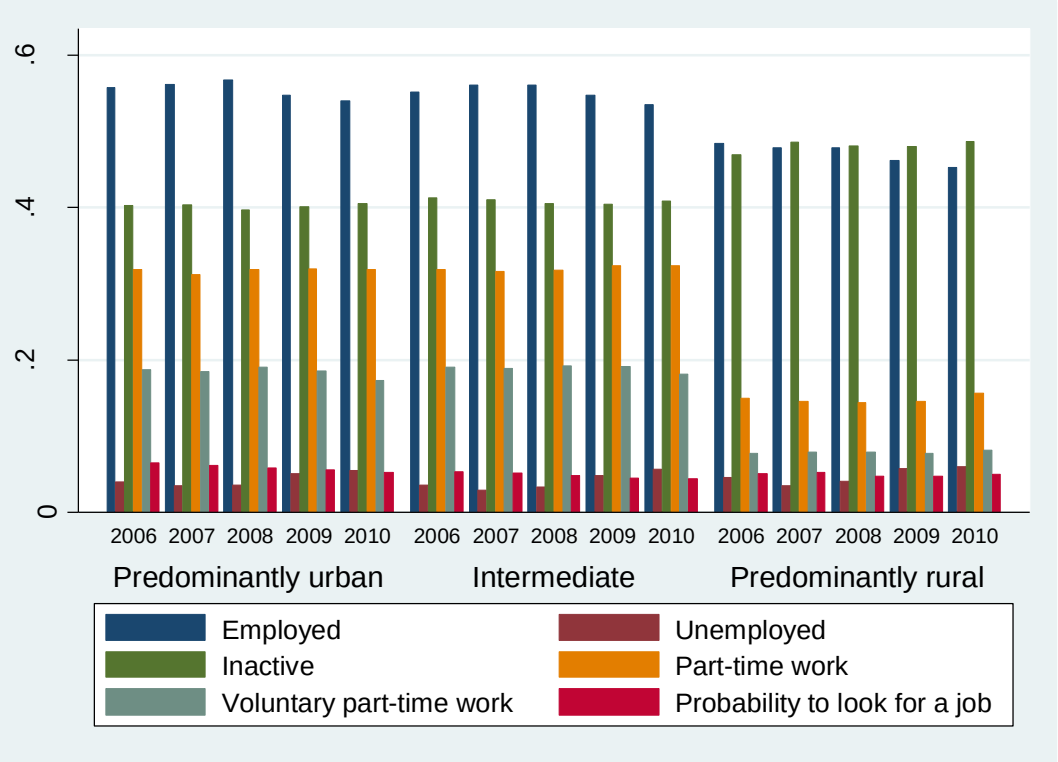
We aim to connect the quantitative dimension of the SET, as defined by Fischer-Kowalsky et al. (2012), to the urban/rural dimension as defined in NIDI's paper under Tasks 1 and 2 of WP8. We attempt to do this in three ways. First, we try to find out whether we observe any significant differences in changing labour patterns and structure between rural and urban regions. Second, we empirically analyse the impact of urbanisation on employment structure and patterns. Third, we attempt to see whether there are significant differences in the impact of SET on employment between three types of regions (predominantly urban, intermediate and predominantly rural).

4.1. Regional changes in labour structure and patterns

The data examined reveals that, on average, the employment rate declined slightly in all types of regions during the period analysed (Graph 1). It is invariably the lowest in predominantly rural regions. The unemployment rate showed a slight increase in all areas and remains at rather comparable levels between different types of settlements. This phenomenon could be explained by a mismatch between job offers resulting from the existing transition and the existing skills on the labour market.

As expected, economic activity rates were, on average, slightly higher in urban regions than in rural regions. The low rate of economic activity observed in rural settlements could be attributed to population ageing or barriers to employment.

Graph 1. Regional differences in labour structure, by year

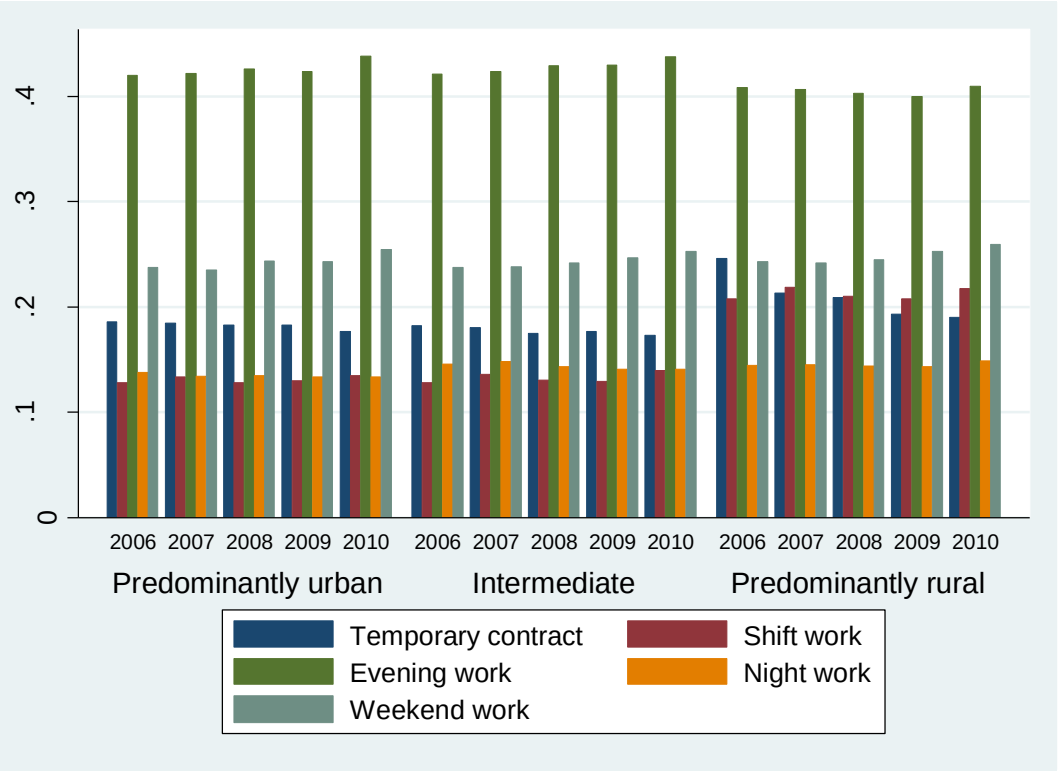


Source: Own compilation based on ELFS

While the inactivity rate is stable over time in urban and intermediate settlements, it increased in rural regions, suggesting that people without employment tend to leave the labour market instead of looking for jobs. It can be argued that this phenomenon is a consequence of the initial sectoral specialization. Since employment growth tends to be less dynamic in some sectors (such as agriculture) than in others, employment growth differentials at the regional level may simply mirror differences in initial sectoral specialization, discouraging rural workers from seeking employment.

Part time work is more developed in urban and intermediary areas. It is also in these areas that voluntary part time work is significant. Temporary contracts are more spread out in rural areas but they declined more significantly during the crisis. Other types of employment patterns do not express any significant differences, neither between regions nor during the period analysed. While individual differences are not captured by aggregate data, we need to look carefully at the individual data to understand the behaviour of people in the context of the SET.

Graph 2. Regional differences in labour patterns, by year



Source: Own compilation based on ELFS

4.2. Impact of urbanisation on labour market structure and patterns in the context of the SET

In order to understand the impact of the SET on labour behaviour, we present our regression results for labour mobility (Table A.1), desire to change jobs (Table A.2) and voluntary part time work (Table A.3).

Labour force participation and the SET

We tested the different possibilities of job mobility within the labour market. In our econometric model (multinomial logit), the probability of having a job, being unemployed, or being inactive depends on the individual's labour status the previous year. We also controlled for personal characteristics, societal transitions, and country dummies. Additionally, we attempted to control for the impact of the crisis in 2008-09.

We found that the probability of being employed is higher for men, middle-aged individuals, and people with a higher education. [1]

Changing family structure has a significant impact on the probability of being unemployed or inactive. People living alone and adults without children have a higher probability of being active, while their chances of being employed are lower. As expected, a single person living with at least one child has a lower probability of being employed.

We observe that population ageing in residential regions increases the probability of individuals being inactive or unemployed. This is not a surprise. We also observe an even higher inactivity rate and unemployment rate among the elderly than in younger cohorts.

An important finding is the impact of female employment rates on the probability of being unemployed. When women have access to jobs, the probability of being unemployed for both men and women is lower.

Knowledge spillover, approximated by training received by a person in the last four weeks, increases the chances of being unemployed and decreases the probability of being inactive. This result has to be considered with caution because of the definition of training provided in the ELFS database. It is defined as short-term training rather than a life-long learning process. Results tend to confirm this. People who are active on the labour market yet unemployed are forced to participate in this type of activity. In terms of the SET, it would be interesting to reinforce the long-term qualifications of both jobs seekers and employees looking for new jobs.

As expected, during a crisis, the probability of being unemployed or inactive increases.

All of the country dummies are statistically significant and explain the country specific effect on the probability of being unemployed or inactive. Unemployment is not the whole picture. It is not the only adjustment taking place on the EU labour market. A large part of labour adjustments to changes affecting demand is done through underemployment (or part time work). In fact, when we consider the transition matrix between labour statuses in 2009 and 2010, we notice that employment and inactivity are rather stable categories compared to unemployment. A very large number of people remain in the same category (94.06 % of employed people and 81.5% inactive). However, 43% of unemployed people in 2009 were still unemployed in 2010 and 28.75% moved to inactivity (discouraged or retired).

[1] Please see the Appendix for Table A.1

Table 1: Labour Mobility between 2009 and 2010 (in % of 2010 total labour status)

Labour status 2009	Labour status 2010			
	Employed	Unemployed	Inactive	Total
Employed	94,06	2,77	3,17	100
Unemployed	28,26	43	28,75	100
Inactive	15,45	3,05	81,5	100

Source: Own calculation based on ELFS

Desire to change job and SET

In our sample, around 5% of the working population expressed a willingness to change jobs. From a theoretical perspective, job mobility can contribute significantly to economic growth and development. On the other hand, empirical evidence shows that stable employment relationships and relatively long job tenures are positively correlated with productivity. Results of the impact of the SET on people's willingness to change jobs are provided in Table A.2.

The desire to change jobs was higher for women, youth (up to 26 years old) and better-educated people. Being unemployed 12 months prior reduces an individual's probability of looking for another job.[2]

Individuals living in households with at least two adults and children have the lowest desire to look for another job, whereas individuals living alone or only with adults are keener to change jobs. Being trained increases the willingness among employees to look for another job, which fits with another result we already mentioned previously, when we found that jobseekers may be supported by gaining long-term qualifications rather than by attending short trainings.

Interesting results emerge when controlling for work conditions. People with short-term contracts want to change jobs more frequently than people employed on a permanent basis. This is not surprising, as people prefer to have job stability. At the same time, employees who found a job after having been unemployed for one year tend to stop looking for another job. This might underline the fact that the desire for job mobility remains labour market driven, given that people look for jobs when they have to. Employees doing shift work are also less interested in getting a new job. Given that shift work is a classical labour pattern in general practiced within traditional sectors (industries or hospitals, etc.), this confirms the idea that there is no spontaneous shift towards green jobs.

Another interesting result is shown with respect to population ageing. The older the population in the region is, the lower its willingness to change jobs. Nevertheless, the job rate

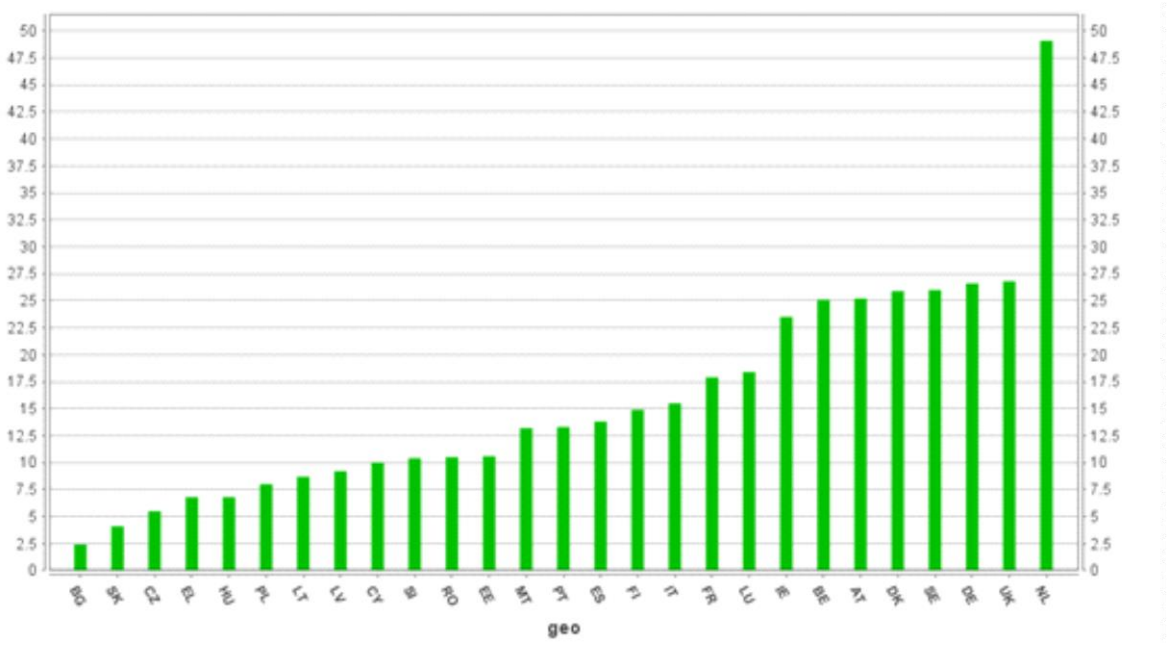
[2] Please see the Appendix for Table A.2

among younger people is low within the EU. The core of the European labour market is still focused on highly skilled 30 to 50 year olds having stable job positions, as confirmed by our regression results.

Part time work and the SET

As we can see in Graph 3, part time employment is especially developed in the North of Europe (The Netherlands, Germany, Sweden, Denmark…), where flexicurity was developed. The concept of "flexicurity" is an important part of the EU's policy agenda, and is also linked to the discussion on job mobility in Europe. We can observe that the countries in which the population is more concentrated in urban areas are also the ones in which part time employment is booming.

Graph 3. Part-time employment across Europe in 2011



Source: Eurostat, 2012

The regressions show that women, rather than youth and the uneducated, are the most likely to work part-time. People living in households without children have lower chances of choosing part-time employment. The same applies for working one-member households with children. Voluntary part-time employment is highest among individuals that live in households with at least two adults and children.

When the population in a region ages (i.e. a higher life expectancy is observed), the new employment organisation is often uneasy to setup with new technologies. Older population may have more difficulties to learn new competences. [3]

Table 2. The impact of urbanisation on labour market structure – marginal effects

	Predominantly rural *(Ref: Predominantly urban)*	**Intermediate**
Probability of being unemployed	-0.002***	-0.002***
Probability of being inactive *(Ref: Probability of being employed)*	-0.004***	-0.012***
Desire to change jobs	-0.003***	-0.002***
Willingness to work part-time	-0.052***	-0.003

Source: Own compilation based on ELFS

Note: Marginal effects are derived from the regressions of labour structure presented in the Appendix (see Tables A.1-A.3)

Urbanisation increases the chances of voluntary part-time employment (Table 2). Urban settlements offer more job opportunities than rural ones. Unemployment rates are lower in large urban areas and because the economy is very dynamic in those areas, the bargaining power is not so weak for the workers.

An interesting finding is the probability of being employed in rural versus urban regions. Results show that it is more difficult to be employed in a predominantly urban region, whereas the probability increases in intermediate or predominantly rural regions (see marginal effects). The state of Brandenburg in Germany may provide an explanation for this result. While the urban regions were heavily impacted by the recession in 2009 (i.e. Frankfurt/Oder), rural areas did not evolve much (i.e. the Uckermark), as they already presented lower job rates before the crisis. Rural regions could not fall much deeper, while urban areas had many jobs to lose. At the same time, jobs in rural regions tended to be more closely related to local or regional markets (agriculture, SME, etc.) and therefore were more protected from the immediate effects of the global crisis (such as the automobile sector).

Participation in training increases the chances of voluntary part-time employment. Again, these results do not reflect the real impact of skills transition, but rather the individual choices to work part-time in order to upgrade one's qualifications. On the other hand, this is an important result, which suggests that an elastic labour market encourages employees to invest their time in Life-Long Learning .

[3] Please see the Appendix for Table A.3

Individuals that were unemployed a year before the survey are more likely to accept part-time work. Again, labour market flexibility might allow a number of countries to reduce their unemployment figures and to adjust more efficiently to demand shocks.

Specific working conditions, like weekend, evening, or night work, have a negative impact on being employed. This is due to the specificity of these types of jobs. In such jobs, part-time workers usually work 12-hour shifts.

In the next section, we test if these results are similar across different types of settlements (rural, urban and intermediate).

4.3. Impact of the SET on labour market structure and patterns in different types of regions

We assume that labour patterns are different across various types of settlements. We think that individual behaviour on the labour market depends on the kind of settlement. This is especially important when it comes to labour market changes in the context of the SET.

Here we present the results of the regressions for three main labour market behaviours in the SET context: labour force participation, the desire to change jobs and voluntary short-term work.

Employment, Unemployment and inactivity across types of settlements (mlogit)

We present the results of the multinomial regression in the appendix (Table A.5). Across different type of settlements, individual characteristics affect the probability of being unemployed or inactive in a similar way. We have standard results: women, youth, the elderly and less educated people have the highest probability of being unemployed or inactive. This is similar for urban, intermediate, and rural settlements.

The main differences in the results come from the impact of SET variables on labour market participation. First, in rural areas, the fertility rate does not reduce the probability of being inactive. On the contrary, in urban and intermediate areas we see a negative effect. This is probably due to the demographic structure of the population: on average, in rural areas, the population is older.[4]

[4] Please see the Appendix for Table A.5

In rural areas, when life expectancy increases, the probability of being inactive also increases. However, life expectancy has no effect on labour market participation in urban and intermediate areas.

In rural areas, training in the last month increases the probability of being inactive. It has exactly the opposite effect in urban and intermediate areas.

Desire to look for another job across types of settlement (probit)

We run a logit regression and we present the results in Table A.6 in the appendix. In all types of settlements, apart from education, we find similar results for individual characteristics. Many highly-educated people want to change jobs in urban and intermediate areas, while in rural regions, this is not significant. There are many more educated people in urban areas compared to rural areas.

Again, the main differences in results come from the impact of the SET variables on the desire to change jobs. In rural settlements, the fertility rate does not affect the will to change jobs, while in urban and intermediate regions, it reduces the probability of wanting to change jobs.[5]

In rural areas, the female employment rate decreases the probability of looking for another job. In the same type of region, training does not affect the will to change jobs.

The 2008-2009 crisis affected rural and urban / intermediate areas differently. In rural regions, the crisis did not affect the desire to change jobs, while in urban and intermediate regions, the crisis increased the will to change jobs.

Voluntary short-term work across types of settlements (probit)

We run a logit regression on intended short-term work and we present the results in the appendix in Table A.7. In all types of settlements, apart from gender, we found similar results for individual characteristics. Women are usually, on average, more interested in part-time jobs. However, in rural areas, women are indifferent.[6]

Except for urban areas, the fertility rate increases the probability of intentional short-term work. On the other hand, in urban areas, the female employment rate increases the probability of short-term work.

Finally, the crisis reduced the probability of intended short-term work, but only in rural areas. Elsewhere, the crisis did not have a significant effect.

[5] Please see the Appendix for Table A.6
[6] Please see the Appendix for Table A.7

4.4. Mid-term perspective and policy recommendations

Based on our regression results and using labour surveys, drawing a mid-term perspective is a challenging task. However, we can highlight the main trends and behaviours observed in urban areas versus rural areas in the SET context.

First, there has been noticeable growth in short-term work, especially in urban areas. The opposite was observed in rural areas during the crisis. The desire to have more time for family and personal development is probably one of the reasons for these changes on the labour market (Fischer-Kowalsky et al. (2012)).

Second, the development of the services sector is an on-going process, which goes hand in hand with a highly-educated population.

Third, urbanization is linked to high employment rates, especially for women. In addition a high fertility rate increases the overall labour force participation rate, mostly for young fathers, in urban areas.

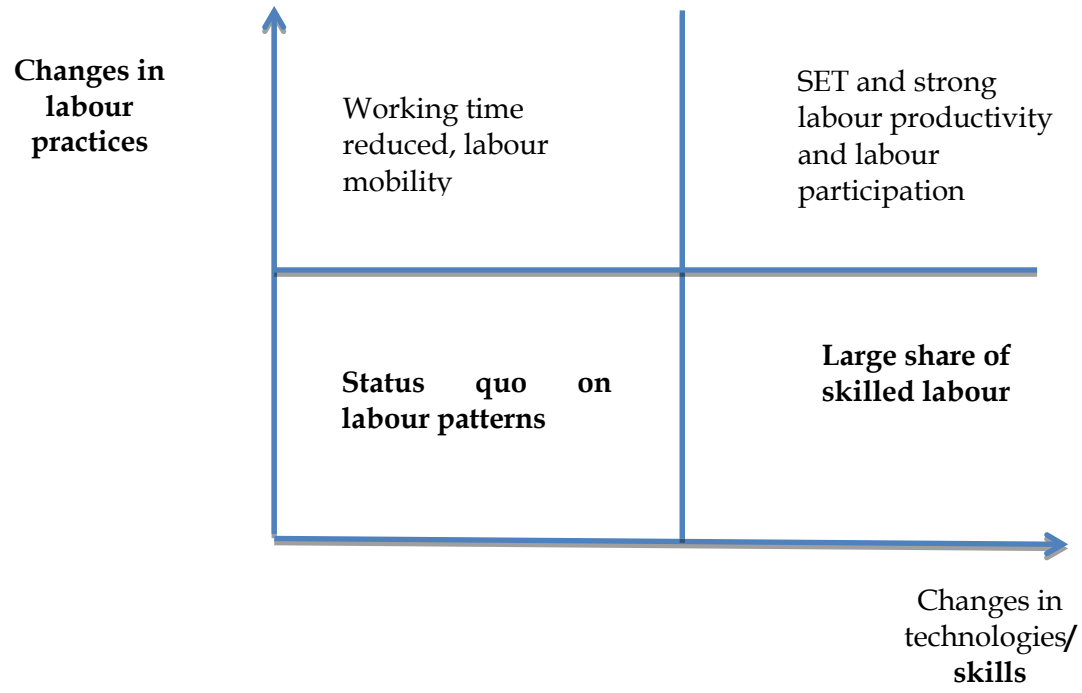
Fourth, in the SET context, general competence versus more specific competence may help people find new jobs and be able to move from one job to another. Job to job mobility is going to grow, especially in urban areas.

The main conclusion from our empirical work with the ELFS is that labour reallocation can be a strong driving force for the SET. Education and general competences (i.e. not specific to particular investment) may help the transition from “old” jobs to “new” jobs.

Government policies related to the labour market can help job mobility and short term work. Indeed, labour reallocation is probably going to happen with time reallocation. More efficient and productive jobs may require part time work.

The government can push for labour legislation changes, but it can also protect and train workers in order to ease their labour mobility.

Graph 4. Mid-term technological/skills changes and labour changes



Conclusions

During the analysed period, no significant changes in employment structure and patterns between urban and rural regions are observed. The employment rate is still lower in rural regions than in intermediate and urban regions. The same applies for the inactivity rate. The unemployment rate is rather stable and at a comparable level in all types of regions. This phenomenon could be explained by a mismatch between job offers resulting from the existing transition and existing skills on the labour market.

Second, the urbanisation transition has had a positive effect on the labour market. First, the chances of voluntary part-time employment increase in urban settlements. Moreover, urban areas offer a larger number of job opportunities when compared to rural areas. Unemployment rates are lower in large urban areas and because the economy is very dynamic in those areas, the bargaining power is not so weak for the workers.

On the other hand, the urbanisation transition brings a certain level of insecurity to the labour market. Results confirm that urban regions are more sensitive to cyclical changes in the economy. Urban regions offer better job opportunities and the possibility to change jobs and advance in one's career during prosperous times. But at the same time, they have more jobs to lose during the crisis. In contrast, rural regions are less influenced by global shocks. They do not evolve much during prosperous times, as they are more closely related to local or regional markets, and they cannot fall much during the crisis period.

Across the different types of settlements, individual characteristics affect the probability of being unemployed or inactive in a similar way. We have standard results: women, youth, the elderly and the less educated people have the highest probability of being unemployed or inactive. This is similar for urban, intermediate and rural settlements.

References

Berry, B.J.L and Y.S. Cohen (1973), Decentralisation of commerce and industry. The restructuring of metropolitan America, Urban Affairs Annual Review (7)

De Beer, J., van der Gaag, N., van der Erf, R. and C. Huisman (2012). Migration, urbanization and competitiveness: what regions are most vulnerable to the consequences of a declining working age population? NEUJOBS Working Paper

Brewer, M., Dickerson, A., Gambin, L., Green, A., Joyce, R. and R. Wilson, (2012), Poverty and inequality in 2020. Impact of changes in the structure of employment. Joseph Rowntree Foundation Report.

European Commission, DG for Agriculture (2006), Study on Employment in Rural Areas.

European Commission (2008), "Regions 2020. An Assessment of Future Challenges for EU Regions", Commission Staff Working Document

ESPON (2011), „Demographic and Migratory Flows affecting European Regions and Cities", Final report conducted within the ESPON 2013 Programme

European Commission (2010), Employment in Europe 2010 report, Brussels

European Commission (2011), Employment and social development in Europe 2011, Brussels

Fischer-Kowalsky, M., Haas, W., Wiedenhofer, D., Weisz, U., Pallua, I., Possanner, N. and A. Behrens (2012), "Socio-Ecological Transitions: Definition, Dynamics and Related Global Scenarios", NEUJOBS Working Paper.

Kiehl, M. and S. Panebianco (2002), The urban-rural employment shift in Western Europe. An empirical analysis of the employment development in Britain, Germany and Italy. Paper presented at the 42nd Congress of the European Regional Science Association (ERSA)

Koch, R. (1980), Counterurbanisation wuch in Westeuropa, IZR (2)

OECD (2011), Report on Employment and social development in Europe, Paris

OECD (2011),Regions at Glance, Regional contribution to change in employment, Paris

Rendall et al. (2003) “Estimation of annual international migration from the Labour Force Surveys of the United Kingdom and the continental European Union”, Statistical Journal of the United Nations ECE 20 (2003) 219-234

Styczyńska, I. and C. Zaman (2012) Agglomeration in Europe in the context of Socio-Ecological Transition. NEUJOBS Working Paper

Vining, D.R. and T.Kontuly (1977), Population dispersal from major metropolitan regions: an international comparison, Philadelphia, Regional Science Research Institute Discussion Paper 100.

Appendix

Table A.1. Multinomial regression by labour status

Variable	Unemployed	Inactive
Personal characteristics		
Women	0,317*** (0,009)	0,464*** (0,006)
Age	-0,129*** (0,002)	-0,285*** (0,001)
Age2	0,001*** (0,000)	0,004*** (0,000)
Higher education *(Ref: at maximum lower secondary)*	-1,138*** (0,013)	-1,015*** (0,009)
Secondary education	-0,663*** (0,108)	-0,644*** (0,008)
Societal transition		
Changing family structure (Ref: At least- two hh members with children)		
One member household	0,332*** (0,013)	-0,318*** (0,012)
Only adults	0,037*** (0,009)	-0,512*** (0,008)
One hh member with child(ren)	0,511*** (0,022)	0,339*** (0,015)
Population ageing		
Fertility rate	3,349*** (0,274)	-4,678*** (0,191)
Life expectancy	0,633*** (0,014)	0,041*** (0,011)
Female labour activity		
Female regional employment rate	-0,199*** (0,806)	0,011*** (0,004)
Urbanisation (Ref: Predominantly urban regions)		
Predominantly rural regions	-0,081*** (0,005)	-0,022*** (0,008)
Intermediate regions	-0,083*** (0,010)	-0,059*** (0,007)
Skills transition, knowledge spillover		
Training within last four weeks	0,121*** (0,012)	-0,369*** (0,008)
Other		
Crisis period	0,073*** (0,010)	0,079*** (0,007)
Labour inactivity year before	-0,988*** (0,009)	3,588*** (0,007)
Czech Republic *(Ref: Germany)*	-0,211** (0,009)	0,856*** (0,066)
Finland	-0,299***	1,803***

Variable	Unemployed	Inactive
Personal characteristics		
	(0,092)	(0,086)
Netherlands	-1,492*** (0,095)	0,419*** (0,067)
Spain	-2,833*** (0,068)	0,464*** (0,045)

Source: Own calculations based on ELFS.

Table A.2. Probability to look for another job

Variable	Coefficient
Personal characteristics	
Women	0,179*** (0,013)
Age	0,108*** (0,005)
Age2	-0,002*** (0,000)
Higher education *(Ref: at maximum lower secondary)*	0,161*** (0,018)
Secondary education	0,081*** (0,018)
Societal transition	
Changing family structure (Ref: At least two hh members with children)	
One member household	0,434*** (0,020)
Only adults	0,078*** (0,015)
One hh member with child(ren)	0,573*** (0,032)
Population ageing	
Fertility rate	-3,292*** (0,385)
Life expectancy	-0,001** (0,007)
Female labour activity	
Regional female employment rate	-0,000 (0,007)
Urbanisation (Ref: Predominantly urban regions)	
Predominantly rural regions	-0,127*** (0,019)
Intermediate regions	-0,096*** (0,015)
Skills transition, knowledge spillover	
Training within last four weeks	0,058*** (0,017)
Work conditions	
Short term contract	1,022*** (0,016)
Person usually works during weekends	-0,062*** (0,017)
Person usually working at night	-0,027 (0,014)
Person usually working in the evening	0,126*** (0,016)
Person usually doing shift work	-0,152*** (0,022)
Other	
Crisis period	0,084 (0,018)
Labour unemployed year before	-1,389*** (0,025)

Variable	Coefficient
Personal characteristics	
Czech Republic *(Ref: Germany)*	-0,759*** (0,121)
Finland	0,701*** (0,091)
Netherlands	1,832*** (0,135)
Spain	0,204** (0,089)
No of observations	870 851
R^2	0,45

Source: Own calculations based on ELFS.

Table A.3. Probability to have not constraint short time work

Variable	Coefficient
Personal characteristics	
Women	0,492*** (0,020)
Age	0,052*** (0,004)
Age2	-0,001*** (0,000)
Higher education *(Ref: at maximum lower secondary)*	-0,093*** (0,020)
Secondary education	-0,073*** (0,018)
Societal transition	
Changing family structure (Ref: At least two adults hh members with children)	
One member household	-2,151*** (0,028)
Only adults	-1,685*** (0,017)
One hh member with child(ren)	-0,224*** (0,033)
Population ageing	
Fertility rate	-0,172 (0,0536)
Life expectancy	-0,325*** (0,028)
Female labour activity	
Regional female employment rate	0,034*** (0,008)
Urbanisation (Ref: Predominantly urban regions)	
Predominantly rural regions	-0,212*** (0,025)
Intermediate regions	-0,011 (0,016)
Skills transition, knowledge spillover	
Training within last four weeks	0,719*** (0,022)
Other	
Crisis period	0,013 (0,514)
Labour unemployed year before	1,222*** (0,048)
Czech Republic *(Ref: Germany)*	-1,012*** (0,136)
Finland	0,078** (0,012)
Netherlands	0,103 (0,155)
Spain	-0,375*** (0,102)
Work conditions	
Short term contract	-0,506*** (0,021)

Variable	Coefficient
Personal characteristics	
Person usually works during weekends	-0,071*** (0,021)
Person usually working at night	-0,036 (0,028)
Person usually working in the evening	-0,140*** (0,028)
Person usually doing shift work	-0,184*** (0,027)
R^2	0,22
No of observations	157 463

Source: Own calculations based on ELFS

Table A.4. Selected Descriptive statistics between regions

Variable	Predominantly urban	Intermediate	Predominantly rural
Personal characteristics			
Women	52,14%	51,19%	50,98%
Age	43,91	44,03	45,79
Higher education	24,43%	16,88%	13,21%
Secondary education	38,85%	44,00%	45,41%
At max lower secondary	36,72%	39,11%	41,38%
One member household	14,63%	10,17%	10,59%
Only adults	40,86%	42,28%	45,38%
One hh member with child(ren)	4,62%	3,34%	2,85%
At least two adults hh members with children	39,89%	44,20%	41,18%
Training within last four weeks	18,75%	16,10%	14,25%
Regional female employment rate	61,92%	61,7%	59,2%
Regional fertility rate	1,56	1,55	1,55
Regional life expectancy	79,34	79,06	78,53

Table A.5. Multinomial regression by labour status

	Predominantly urban		**Intermediate**		**Predominantly rural**	
Variable *(Ref: Employed)*	Unemployed	Inactive	Unemployed	Inactive	Unemployed	Inactive
Women	0,180*** (0,013)	0,349*** (0,009)	0,329*** (0,017)	0,438*** (0,012)	0,495*** (0,016)	0,689*** (0,012)
Age	-0,129*** (0,003)	-0,264*** (0,002)	-0,133*** (0,004)	-0,299*** (0,002)	-0,128*** (0,004)	-0,311*** (0,002)
Age2	0,001*** (0,000)	0,004*** (0,000)	0,001*** (0,000)	0,004*** (0,000)	0,001*** (0,000)	0,004*** (0,000)
Higher education *(Ref: at maximum lower secondary)*	-1,132*** (0,019)	-1,024*** (0,013)	-1,125*** (0,027)	-0,874*** (0,019)	-1,161*** (0,028)	-1,275*** (0,021)
Secondary education	-0,652*** (0,016)	-0,610*** (0,011)	-0,629*** (0,021)	-0,557*** (0,014)	-0,730*** (0,021)	-0,815*** (0,015)
Societal transition						
Changing family structure (Ref: At least- two hh members with children)						
One member household	0,285*** (0,021)	-0,278*** (0,016)	0,398*** (0,031)	-0,273*** (0,027)	0,361*** (0,031)	-0,473*** (0,027)
Only adults	0,020 (0,015)	-0,465*** (0,012)	0,100*** (0,018)	-0,542*** (0,015)	0,005 (0,017)	-0,558*** (0,015)
One hh member with child(ren)	0,576*** (0,030)	0,351*** (0,019)	0,445*** (0,044)	0,374*** (0,029)	0,446*** (0,043)	0,318*** (0,035)
Population ageing						
Fertility rate	3,523*** (0,386)	-5,584*** (0,264)	3,217*** (0,524)	-6,002*** (0,351)	3,425*** (0,599)	0,638 (0,472)
Life expectancy	0,597*** (0,021)	0,014 (0,016)	0,699*** (0,028)	0,031 (0,022)	0,587*** (0,032)	0,096*** (0,027)
Female labour activity						
Female regional employment rate	-0,184*** (0,008)	0,024*** (0,005)	-0,208*** (0,011)	0,011 (0,006)	-0,233*** (0,014)	-0,049*** (0,011)
Skills transition, knowledge spillover						
Training within last four weeks	0,170*** (0,018)	-0,524*** (0,012)	0,056** (0,025)	-0,638*** (0,016)	0,104*** (0,026)	0,333*** (0,019)
Other						
Crisis period	0,044***	0,138***	0,096***	0,129***	0,101***	-0,047***

	Predominantly urban		**Intermediate**		**Predominantly rural**	
	(0,016)	(0,012)	(0,020)	(0,015)	(0,018)	(0,014)
Labour inactivity year before	-0,94*** (0,015)	3,601*** (0,011)	-0,971*** (0,018)	3,710*** (0,014)	-1,049*** (0,017)	3,466*** (0,013)
Czech Republic *(Ref: Germany)*	-0,406*** (0,122)	0,842*** (0,091)	0,102 (0,166)	1,116*** (0,119)	-0,611*** (0,217)	0,043 (0,178)
Finland	-0,404*** (0,102)	0,756*** (0,100)	-0,715** (0,028)	0,775*** (0,087)	-0,414*** (0,032)	-0,711*** (0,071)
Netherlands	-1,638*** (0,135)	0,746*** (0,094)	-1,465*** (0,183)	0,954*** (0,125)	-1,368*** (0,214)	-1,429*** (0,163)
Spain	-2,677*** (0,093)	0,582*** (0,063)	-2,79*** (0,127)	0,714*** (0,084)	-3,293*** (0,152)	-0,413*** (0,116)
R^2	0,536		0,555		0,561	

Source: Own calculations based on ELFS.

Table A.6. Probability to look for another job

Variable/ Coefficient	Predominantly urban	Intermediate	Predominantly rural
Personal characteristics			
Women	0,101*** (0,018)	0,216*** (0,025)	0,386*** (0,033)
Age	0,114*** (0,006)	0,113*** (0,008)	0,072*** (0,010)
Age2	-0,002*** (0,000)	-0,002*** (0,000)	-0,001*** (0,000)
Higher education *(Ref: at maximum lower secondary)*	0,178*** (0,024)	0,185*** (0,035)	-0,041 (0,048)
Secondary education	0,043* (0,024)	0,129*** (0,033)	0,135*** (0,045)
Societal transition			
Changing family structure (Ref: At least two hh members with children)			
One member household	0,417*** (0,025)	0,453*** (0,040)	0,516*** (0,059)
Only adults	0,078*** (0,021)	0,040 (0,028)	0,145*** (0,036)
One hh member with child(ren)	0,482*** (0,043)	0,758*** (0,059)	0,631*** (0,083)
Population ageing			
Fertility rate	-3,404*** (0,507)	-3,486*** (0,727)	-1,432 (1,089)
Life expectancy	-0,088*** (0,029)	-0,100** (0,043)	0,038 (0,055)
Female labour activity			
Regional female employment rate	0,003 (0,009)	0,025* (0,013)	-0,061** (,022)
Skills transition, knowledge spillover			
Training within last four weeks	0,062*** (0,022)	0,057* (0,033)	0,045 (0,049)
Work conditions			
Short term contract	0,853*** (0,022)	1,129*** (0,031)	1,384*** (0,038)
Person usually works during weekends	-0,098*** (0,025)	0,037	-0,119** (0,049)
Person usually working at night	-0,048 (0,032)	-0,022 (0,042)	0,029 (0,059)
Person usually working in the evening	0,130*** (0,026)	0,115*** (0,031)	0,133*** (0,046)
Person usually doing	-0,128***	-0,166***	-0,209***

Variable/ Coefficient	Predominantly urban	Intermediate	Predominantly rural
Personal characteristics			
shift work	(0,031)	(0,041)	(0,051)
Other			
Crisis period	0,103*** (0,025)	0,061* (0,034)	0,050 (0,039)
Labour unemployed year before	-1,430*** (0,037)	-1,434*** (0,047)	-1,160*** (0,047)
Czech Republic *(Ref: Germany)*	-0,979*** (0,164)	-0,535** (0,0227)	-1,215*** (0,352)
Finland	0,741*** (0,122)	0,924*** (0,161)	0,741*** (0,025)
Netherlands	1,913*** (0,181)	1,729*** (0,259)	1,353*** (0,374)
Spain	0,348*** (0,119)	0,544*** (0,167)	-0,836*** (0,248)
No of observations	299 574	192 948	169 425
R^2	0,085	0,091	0,133

Source: Own calculations based on ELFS.

Table A.7. Probability to have not constraint short time work

Variable/ Coefficient	Predominantly urban	Intermediate	Predominantly rural
Personal characteristics			
Women	0,577*** (0,026)	0,518*** (0,037)	0,044 (0,059)
Age	0,041*** (0,006)	0,077*** (0,008)	0,036*** (0,0125)
Age2	-0,001*** (0,000)	-0,001*** (0,000)	-0,001*** (0,000)
Higher education *(Ref: at maximum lower secondary)*	-0,090*** (0,026)	-0,137*** (0,037)	-0,003 (0,060)
Secondary education	0,118*** (0,025)	-0,011 (0,032)	0,090* (0,053)
Societal transition			
Changing family structure (Ref: At least two adults hh members with children)			
One member household	-2,199*** (0,035)	-2,369*** (0,058)	-1,380*** (0,099)
Only adults	-1,791*** (0,023)	-1,768*** (0,030)	-1,121*** (0,048)
One hh member with child(ren)	-0,125*** (0,043)	-0,399*** (0,062)	-0,429*** (0,101)
Population ageing			
Fertility rate	-1,529*** (0,578)	1,302* (0,722)	3,075** (1,122)
Life expectancy	-0,325*** (0,039)	-0,362*** (0,056)	-0,288*** (0,066)
Female labour activity			
Regional female employment rate	0,056*** (0,011)	0,005 (0,014)	-0,016 (0,021)
Skills transition, knowledge spillover			
Training within last four weeks	0,824*** (0,028)	0,556*** (0,039)	0,611*** (0,068)
Other			
Crisis period	0,043 (0,029)	0,036 0,038)	-0,142*** (0,049)
Labour unemployed year before	1,202*** (0,072)	1,192*** (0,091)	1,129*** (0,093)
Czech Republic *(Ref: Germany)*	-0,367* (0,191)	-2,071*** (0,249)	-1,465*** (0,353)
Finland	0,514* (0,201)	-0,357** (0,086)	-0,748* (0,201)
Netherlands	0,494** (0,215)	-0,271 (0,290)	-0,825* (0,434)
Spain	-0,037*** (0,142)	-0,891*** (0,191)	-0,794*** (0,271)
Work conditions			
Short term contract	-0,507***	-0,470***	-0,659***

Variable/ Coefficient	Predominantly urban	Intermediate	Predominantly rural
	(0,028)	(0,039)	(0,051)
Person usually works during weekends	-0,052* (0,028)	-0,136*** (0,036)	0,032 (0,061)
Person usually working at night	-0,071* (0,038)	-0,015 (0,048)	0,085 (0,089)
Person usually working in the evening	-0,146*** (0,025)	-0,170*** (0,032)	-0,054 (0,057)
Person usually doing shift work	-0,253*** (0,037)	-0,060 (0,048)	-0,174** (0,068)
R^2	0,2315	0,228	0,135
No of observations	63 125	37 265	12 976

Source: Own calculations based on ELFS