The relationship between geographic and labour market mobility within the European Union

In this contribution we present evidence on the relationship between geographic and labour market mobility as reported in the survey of the Eurobarometer 64.1 for all Member States of the European Union. At first glance the relationship seems straightforward: people are dependent on work and work is still predominantly tied to locations. But even if geographic mobility is not directly connected to a personal gainful labour market move, it often still implies an employment change, e.g. when following a partner or other relatives. To understand related decision-making processes on the level of individual and the household we address the following basic questions: Would people be ready to move in case of unemployment? Are the intensities of geographic and labour market mobility related? Which factors determine whether people combine geographic and labour market mobility?

Geographic and labour mobility

Links between geographic and labour market mobility can be very complex, both on the level of the individual and society at large.

From an economic point of view, geographic mobility is frequently put forward as a precondition for successful labour market integration of individuals. Possible advantages of geographic mobility are: enhancement of employment opportunities, higher economic well being, or last but not least

the prevention of unemployment. However, not everybody can make use of these options and some people, particularly families, may be more inclined to have combined trajectories of labour market and geographic mobility than others.

From a social point of view, a geographic move can be a precondition for a (subjectively) better job and consequently lead to a higher motivation and job satisfaction on the level of the individual. Also, it prevent social exclusion caused by unemployment. Possible negative effects are the loss of social networks, which may lead to the necessity to purchase certain services, such as care for elderly relatives, or own children on the market. This in turn will increase organisation costs for buying such services on the market, which

were previously organised within the wider family or social network. Difficulties to coordinate employment careers of spouses may imply a negative impact on the work life balance of all household members.

On the level of society at large the optimal matching between job openings and accordingly qualified people searching for a job is an important element of sustainable growth (European Commission, 2005; OECD, 2005). But the combination of

geographic and labour market mobility can also lead to selective migration of youth and brain drain, as well as a decrease of social cohesion in some regions.

A necessary precondition for the optimal matching between vacancies and labour force, however, is people's willingness to be mobile between jobs and between regions, within a country or national borders of member states. Currently total net migration rates are below 0.3% in most OECD countries (OECD, 2005, p. 90).

In the realm of gender mainstreaming it is of course of high importance in our topic to highlight gender differentials in the various forms of mobility. Job mobility and even broader labour market mobility belong to the major ways to overcome gender segregation. Concerning the gender issue regional context and restricted job search processes due to regional immobility are crucial to derive policy relevant conclusions.

The literature on labour market and geographic mobility (e.g. Jürges 2005, Krieger 2004, Massey

1998) shows that several forms of selectivity occur in the decision-making process for or against labour market and geographic mobility, e.g. selectivity by age or birth cohorts, selectivity according to the level of education, as well as marital and/or labour market status. However, the interrelation between geographic and labour market mobility has so far received little attention as a special focus in the literature.

The willingness to move in case of unemployment/retirement

Most economic theories of labour market processes assume that people are ready to move to where the jobs are. Is this a realistic assumption? Do European citizens commonly share this belief, also in case they would be affected themselves? This section analyses intentions to move under the individual risk of unemployment.

The readiness to be geographically mobile constitutes an important precondition to find a new job,

Brief theoretical consideration: From "bounded rationality" to "bounded mobility"

Theoretically we approach geographic and labour market mobility as interrelated processes. We can imagine reluctance within different groups in society to move wherever jobs are vacant, and job-hopping does not necessarily imply a residential move. Similar to the theoretical concept of bounded rationality (Kahnemann 2003; Simon 1982) we may find 'bounded mobility'.

Behavioural theory based on 'bounded rationality' (Simon 1982) assumes that the ability to make fully rational decisions is limited by two major factors: (1) uncertainty about the future, and (2) the costliness of the acquisition of information in the present, e.g. in from of opportunity costs of the time needed to gather information. Consequently, individuals are incapable of maximizing their utility in a strictly rational sense. Therefore they follow a strategy of 'satisficing', which means setting an aspiration level that is regarded as satisfactory. If this level is achieved a person is satisfied. If it is not achieved, a decision or strategy has to be altered or the aspiration level has to be changed. In the context of the analysis of the interrelation between geographic and labour market mobility 'bounded rationality' implies a consideration of the expected utility of changing both house and job under uncertainty and facing the costliness of information.

Analogous to the concept of 'bounded rationality' we place our analysis of the relationship between labour market and geographical mobility in the framework of 'bounded mobility'. The core idea of 'bounded mobility' is that both forms of mobility are conditional on each other in a situation in which individuals face uncertainty and high costs of information. By this we mean that the optimization of labour market mobility is 'bounded' by the perceived value of the geographic location of a job and vice versa. As an example, consider a person, optimising job mobility within a predefined regional context, a city, region or country. Since job mobility is then conditional on geographic location and restricted geographic flexibility, there exists an obvious link between the two issues. It should be noted that both geographic and labour market mobility might be 'forced' by external circumstances, rather than the result of a voluntary decision.

The Eurobarometer 64.1 Mobility Survey gives a unique opportunity to assess the validity of this argument, which we frame as 'bounded mobility' within and across the Member States of the European Union.

particularly in regions undergoing economic restructuring (Sjaastad, 1962). However, especially for the low skilled and/or lower income groups of society a lack of resources may inhibit an otherwise gainful move to re-enter employment. These persons are at risk of becoming 'locked in' in an immobile situation respectively a region. In structurally weak regions with high unemployment rates people tend to substitute a lack of mobile resources, such as capital, with immobile resources such as the provision of resources within informal networks. Homeownership also strongly ties persons to a location, if real estate prices are very low and the rent in a different area is not affordable.

When asked 'if you were unemployed and had difficulties finding a job, would you be willing to move to another region or country to find one?" 31% of European citizens are ready to move both to another region or another country, and 6% even report being ready to move to another country only (not to another region). 29% are willing to move to another region only. About one third (30%) of the EU-25 population, is not ready to move in case of unemployment at all.

For a better understanding of these percentages the readiness to move in case of unemployment needs to be further differentiated by age and gender and housing (figure 1).

On the EU-25 average women are less willing to move in case of unemployment than men. 34% of females answers 'no' opposed to 24% men. In contrast, the readiness to move to another region or another country is quite similar for men and women, but men are more willing to move to either another region or another country with 36% than women (27%). This finding is in line with the claim that in Europe the traditional male bread winner family model is still of importance for propensities to be mobile. Men feel responsible to earn sufficient income and therefore would be more willing to move if they were unemployed than women (Jürges 2005). This supports the rationale that we face a higher 'bounded mobility' for women than for men in the European Union.

In line with theoretical expectations, the willingness to move in case of unemployment decreases with age. For housing we find that persons who

Figure 1. Willingness to move in case of unemployment by age, gender and homeownership (in %) 15-24 25-34 35-44 Age groups 45-54 55-64 66+ Females Gender Males Own without mortgage Own with mortgage Housing Rent social housing Rent from private landlord 10 20 30 40 50 60 70 90 100 Yes, another region same country Yes, EU country Yes, outside EU No

Source: EB64.1, W14

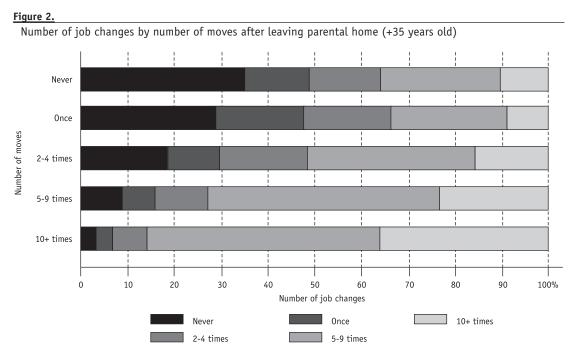
live in social housing and persons who own a house without mortgage are least willing to move in case of unemployment. These findings are quite intuitive: on one hand homeownership ties people to a location; on the other hand a lack of initial resources for making a better living in a different location seems to 'lock in' persons who live in social housing.

However, these results should be interpreted with caution, since the question is likely to be sensitive to a bias caused by social desirability. Not being willing to move in case of unemployment implies a notion of own responsibility for the situation of unemployment. Nevertheless, the evidence remains rather clear cut: one out of three Europeans would not like to move even in the case of unemployment, one out of three Europeans would move within the region, one out of three would consider moving long distances across regions, and only few across country borders. Language barriers and binding forces of social networks are probably the most important barriers to cross border migration to overcome unemployment. A policy conclusion seems to be that stressing migration as a solution to unemployment is only a realistic option for a relatively restricted number of persons or families in the European Union.

Interrelated intensities of geographic and labour market mobility

To get an idea of interrelated intensities between geographic and labour market mobility we contrasted the number of job changes and the number of geographic moves for persons in the age group of 35+ (figure 2). This age group was selected to allow for sufficient time in which people are 'at risk' of moving or changing job, to get more than a snapshot of the relationship between geographic and job mobility.

The interrelation of geographic and labour market mobility is very complex, but our approximation gives a clear message: frequent job hoppers are also likely to move to new places more often. The highest percentage of persons, who never moved out of their parental home or only once afterwards, never changed job either. The majority of persons, who moved two to four times, most frequently changed jobs five to nine times. The largest share



Source: EB 64.1, W14

of persons who moved five times or more, most frequently also changed jobs five to nine times.

Relating the findings on Europeans' willingness to move in case of unemployment and the interrelated intensities of geographic and labour market mobility to each other leads to interesting implications for European policies to facilitate both forms of mobility. Imperfect capital markets, as in the case of inflexible transfer possibilities of mortgages work as an impediment to geographic mobility. Hence inflexible capital markets may contribute to the polarisation of society into two groups. The highly mobile persons in all forms of mobility on the one side, as opposed to the 'bounded rational' movers, who find it difficult to organise one or the other type of mobility on the other side.

What determines the combination of interregional geographical mobility and labour market mobility at the last job change?

The descriptive analysis showed that levels of geographic and labour market mobility tend to correspond (figure 2).

In this section we explore which factors can predict whether the last job change a person experienced was associated to an interregional geographic move with a logistic regression model. This model shows the probability to have been interregionally mobile at the last job change as opposed to the individuals who remained in the same town or region at their last job change. We define interregional geographic mobility at the last job change as: "the location of the previous job was in another country outside the EU, another country inside the EU, or another region in the same country as the current job". In this sense the term interregional geographic mobility can imply either a residential move, or an increase in the commuting time. By selecting at least another region as the minimum distance of the previous job, we assume a considerable change in geographic mobility. Also, the analysis is restricted to the population currently employed at the time of the survey.

Our regression model proceeds in four steps (table 1). Step one is limited to socio-demographic characteristics, step two adds education related information, step three additionally includes employ-

ment related characteristics, and step four also takes into account the impact of welfare state regimes. The significant effects stay remarkably stable across the four steps and the model fit increases with each step. Regarding socio-demographic background we find that men have a significant higher probability of an interregional move at their last job change than women. This is in line with the descriptive findings, and supports the notion of the persisting predominance of the male breadwinner model in the European Union. The number of children aged under ten living in the household also increases the likelihood of an interregional geographic move at the last job change. Persons with young children might be more reluctant to substitute a geographic move with long commuting times in case of an interregional job change.

Again we find the expected selectivity by education: the higher educated are more likely to have experienced interregional geographic mobility with their last job change. In addition to the general positive impact of education, we find that schooling, higher education, and training in another EU country also significantly increase the likelihood of combined geographic and labour market mobility at the last job change. This is particularly true for higher education in another EU country.

Concerning employment related characteristics we find that the probability of an inter regional move at the last job change decreases with number of unemployment spells longer than three months and also decreases if the last job change was forced (contract expired, laid off). This is in line with our hypothesis of a 'bounded mobile' group of lower educated persons in weak labour market positions, who get 'locked in' an immobile situation.

Compared to the social democratic welfare states, persons whose current job is in a southern welfare state, the new central and eastern European welfare states, or the new baltic member states have a lower propensity to have been geographically mobile across regions at their last job change. This means that these welfare state regimes have a lower influx of migrant workers and are internally less mobile over regions than the liberal, corporatist and social democratic welfare state regimes. In other words, this effect seems to reflect

the lower internal mobility of the southern and new member states and a lower attractiveness for foreign employees.

Conclusion and policy implications

The large majority of Europeans is ready to move in case of an individual risk of unemployment (figure 1). Older persons are less willing to untie their bonds and women are less willing to move than men in case of unemployment. Persons in rented social housing as well as persons owning a house without mortgage are the least willing to move. Different human capital endowments are most likely

the source for the differences in the willingness to move. A reluctance to move is probably based on very different motivations: a deliberate choice to stay vs the impossibility to move.

The tendency towards interrelated intensities of geographic and labour market mobility suggests a complementary relationship between the two forms of mobility (figure 2). This complementarity between geographic and labour market mobility implies a mutually reinforcing effect, which can lead to the accumulation of inequality over the life course for persons, who do not have the initial resources or (language) skills to be more mobile.

The probability to have experienced a geographic move at the last job change is higher for men and

<u>Table 1.</u>
Determinants of geographic mobility at last job change

	Step 1	Step 2	Step 3	Step 4
Gender: male (ref. female)	0.213***	0.241***	0.298***	0.284***
Age	-0.008	-0.016	-0.023	-0.016
Age^2/1000	0.199	0.285	0.354	0.242
Family status: With partner (ref. without partner)	-0.005	-0.001	-0.060	-0.076
No. of kids age <10	0.169***	0.141***	0.139**	0.101*
Age full-time education		0.053***	0.045***	0.034***
School in other EU country		0.289*	0.212	0.122
Higher education in other EU country		0.546***	0.466**	0.452**
Training in other EU country		0.443**	0.371*	0.462**
Employment status: self-employed (ref. employed)			0.005	0.065
No. of unemployment spells (> 3 month)			-0.075*	-0.065*
No. of job changes			0.007	-0.008
Permanent contract in current job (ref: other)			-0.034	-0.084
Sector of current employment: services (ref. production)			0.057	0.036
Public (ref. production)			0.342***	0.295**
Last job change LM forced			-0.368***	-0.388***
Welfare state regime: corporatist (ref. social-democratic)				-0.008
Liberal (ref. social-democratic)				0.012
Southern (ref. social-democratic)				-0.720***
New CEE (ref. social-democratic)				-0.824***
New Baltic (ref. social-democratic)				-0.437***
McFaddens Pseudo-r2	0.005	0.023	0.030	0.045
Chi2	37.921	174.026	180.869	277.108
No. of Cases	8.576	8.437	6.763	6.763

^{*} p < 0.05, ** p < 0.01, *** p < 0.001, only population currently employed

Source: EB 64.1, W14

increases with both educational level as well as education abroad (table 1). These results support the conclusion that EU programmes, such as the Sokrates and Leonardo programme, are effective in promoting propensities to combine geographic and labour market mobility throughout the later employment career. In contrast, a weak labour market position indicated by a forced job change and a high number of unemployment spells reduces this probability. This leads to the conclusion that the inter-European exchange programmes especially benefit the well educated who are more likely to combine geographic and labour market mobility anyway. Therefore facilitated access to these programs and/or special programmes directed to the initially lower educated could pay off in a higher willingness to be mobile of broader groups of society and thus reduce the social selectivity of these institutional arrangements.

Overall the findings show that mobility on the labour market as well as across borders are easily accomplished for the young, the well endowed and well educated. However, most other persons would probably benefit from receiving some sort of assistance that can facilitate their geographic and job mobility within the European Union or abroad. This finding supports the need to have 'EURES' counters or similar guidance services for the less well informed, but ready to move persons in each of the member states. These information brokers operate broadly speaking as mobility agencies and thereby assist in the aim to make transitional or mobile labour markets work in practice.

Finally, welfare regimes have a not-to-be-neglected impact on the combination of geographic and labour market mobility in each of the member states of the European Union. The findings in this contribution suggest that job security and housing security as well as flexibilities in both areas seem to be

linked to each other. This poses a challenge to policy making in this field for member states as well as the European Union as a policy coordinator. In a wider sense living and working conditions are closely linked to job and geographic mobility and studying one without due recognition of the processes in the other field might yield suboptimal outcomes.

Anette Fasang
Sara Geerdes
Klaus Schömann
International University Bremen
Jacobs Center for Lifelong Learning

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