



THE CIRCULATION OF PEOPLE
THE OUT-MIGRATION OF YOUNG
RURAL UNIVERSITY GRADUATES:
MACRO FLOWS AND MICRO MOTIVES

Patrick Rérat



Author

Patrick Rérat

Patrick Rérat est chargé de recherche à l'Université de Neuchâtel (Institut de géographie et Groupe de recherche en économie territoriale) et chercheur invité à l'Université de Loughborough (UK). Ses recherches portent sur la géographie urbaine (gentrification, régénération de friches industrielles, étalement urbain), le développement territorial durable, le logement, les choix résidentiels et les migrations internes. patrick.rerat@unine.ch

© 2013 by the authors

ISSN: 1662-744X



Contact:
MAPS - Maison d'analyse des processus sociaux
Faubourg de l'Hôpital 27
CH - 2000 Neuchâtel
Tél. +41 32 718 39 34
www2.unine.ch/maps
maps.info@unine.ch

This paper addresses the migration of young graduates who do not go back to their rural home region after having attended university. Results from a case study in Switzerland show the need for research to combine a macro approach (analysis of the geography of graduates' migration flows) with a micro approach (analysis of the motives reported by graduates), since self-reported motives are crucial to interpreting what is hidden behind the macro results.

The results from this case study indicate that graduates are attracted to urban settings not only for the labour market, but also for the living environment and social ties. The results also highlight the fact that migration decisions cannot be reduced to a single dimension. They are complex (in the sense that motives of several natures are involved in combination) and diverse (as differences are found within even a seemingly homogeneous population group). Although work is a central factor motivating the out-migration of graduates, the importance of social ties and residential amenities is also clear.

Keywords

Highly skilled migrants Graduate migration Internal migration Out-migration Rural region

Remerciements

L'auteur remercie les institutions qui ont apporté leur soutien à cette recherche : la Fondation Anne et Robert Bloch (FARB), la République et Canton du Jura et le Secrétariat d'État à l'économie.

INTRODUCTION

In most countries, there is a growing proportion of young adults in higher education. This phenomenon provokes an increase in education-based migrations. These include the various forms of mobility involved in attending higher education institutions (moving to the university city as well as commuting on a daily or weekly basis), the moves after graduation and the subsequent spatial distribution of highly qualified young adults. Scholars have given particular attention to three places of residence – the family home, the university and the dwelling after graduation – in order to address graduate migration in the frame of home-university-labour market transition models (H-U-LT) (Hoare and Corver 2010) ¹.

The uneven geographies of graduates' moves have been highlighted in a wide range of national contexts, and it has been acknowledged that peripheral and rural regions lose graduates, while central and metropolitan regions attract them. This is notably the case in Australia (Corcoran et al. 2010), Ireland (King and Shuttleworth 1995), Italy (Iammarino and Marinelli 2011), the Netherlands (Thissen et al. 2010) and the UK (Fielding 1992b; Findlay et al. 2009). The notion of "brain drain", which was first used regarding the uneven migration of highly qualified people between countries, has thus been extended to the selective out-migration of socially mobile young people from rural areas.

The migration of young graduates has often been interpreted on a macro level, based on the characteristics of both origin and destination regions, in particular regarding their labour markets. This kind of analysis often takes for granted that graduates' migration behaviour is economically rational and/or determined by economic restructuring, but overlooks the fact that migrants may have various motives and aspirations (the micro level) that may not fully coincide with macro interpretations (Morrison and Clark 2011; Niedomysl and Hansen 2010).

Micro-analytical approaches, on the other hand, address the motivations reported by migrants themselves. In other words, the focus is not on the objective characteristics of sending/receiving regions but on the actors' representations and the way they expressed them into their life project (Efionayi and Piguet 2011).

This paper analyses the migration of young adults who do not go back to their rural home region after graduation, based on a case study in Switzerland (canton Jura). The remainder of the paper is organised as follows: The next section discusses the differences between macro and micro perspectives in migration studies, and the following section presents the spatial context, the research design and the methodology of the current study. The final section presents empirical results on graduates' migration flows (macro) and motives (micro). The conclusion to the paper

_

¹ It is important to note, however, that the migrations of young graduates are often more complex than this linear pattern. Individuals may live in more than one city during their studies, and the labour market transition may encourage several moves at different points in time, including a return to the family home, regarded as a safety net (Sage et al. 2013).

then highlights the main findings and shows the importance of combining both macro and micro scales of analysis, taking into account various "registers of action" (or ranges of motivations).

THEORETICAL DISCUSSION

Macro and micro perspectives on migration

Boyle et al. (1998) distinguish two perspectives in migration studies. The macro perspective analyses migrations at an aggregate level and explains them in relation to the spatial context in which they take place (differentials in the level of salaries or unemployment, etc.), while the microanalytic perspective is centred on individuals and explains their behaviour in the light of psychological factors such as aspirations and motivations. Boyle et al. (1998, 57) also distinguish determinist approaches (which "play down the role of the individual" and assume "migration to be an almost inevitable response to some rational situation") in contrast with humanist approaches (which consider migrants as individual actors who have a certain level of choice in their behaviour). The out-migration of highly qualified people – or the so-called brain drain – has often been addressed with macro and/or determinist approaches. This leads to coherent interpretation on a structural level, but may fail to reflect the complex decision-making process of migrants. Glaser (1978), for example, in his research among 6,500 students and graduates from 11 Southern countries, highlights the limits of the neo-classic interpretation, which puts forward income expectations as the driver of highly skilled migration:

The brain drain is usually discussed in the context of manpower economics, and it is frequently attributed to the higher salaries available in developed countries. Elegant mathematical models have been published, predicting how increases in migration are functions of increased differentials between countries in income expectations. But this favourite explanation of brain drain founders on the facts. "Everyone knows" income differences to be the most important determinant except the persons involved in the flows themselves. On the rare occasions when they are asked, the professionals usually pick income gains less frequently than many other considerations in controlling their choice of country (Glaser 1978, 120-121).

In a similar perspective, but on internal migration, Morrison and Clark (2011) observe an apparent disconnect between net flows and motives, and state that

Empirical support for models of internal labour migration are usually based on observed patterns of net flows into local labour markets with relatively low unemployment and relatively high real wages. The inference drawn from such evidence is that internal migrants move to enhance returns to their labour. However, major surveys in the USA [...], the UK [...] and Australia [...] all show that less than a third of internal migrants are motivated primarily by employment reasons. (Morrison and Clark, 2011, 1948)

Another critique addressed to macro approaches is the aggregate measurement of employment opportunities and amenities (Niedomysl and Hansen 2010). It is not only difficult to obtain relevant and reliable data, but there is also no agreement on what factors to include, how to measure them, or their relative importance for different migrant groups (ibid. 1636-37). More generally, the limitations of a strictly macro approach echo the call made by several scholars to address

migration "beyond the economic" (Fielding 1992) and to show "a greater appreciation of the non-economic issues of migration behaviour" (Halfacree 2004).

In aiming to address the out-migration of young university graduates from a rural region, this paper involves a description and interpretation of migration flows not only in terms of their origin and destination, but also of their self-reported motives. To gain more insight into these motives, the following section reviews the literature on the factors that may explain why young graduates decide not to return to their home region.

Motivations not to return to a rural region

On the basis of a review of the literature on internal migrants' motivations, four main ranges of factors have been identified: factors related to the labour market, financial elements, residential amenities and social life. Various theoretical frameworks are mobilised here in regard to the causal mechanisms (in terms of migrants' motives) they posit.

Factors related to the labour market appear, alongside the desire to attend higher education institutions, as the main driver of internal migration. It is also agreed that the importance of labour-related factors increases with distance. In the UK for instance they become prevailing in the decision to move over 25 kilometres (Owen and Green 1992). Two factors related to regional disparities in terms of labour market structure, size and dynamics are more precisely identified: current job opportunities and future career possibilities (we discuss the level of salary with the second family of factors). It is consequently necessary to take into account both the short and the long term. These factors are even more crucial in the case of young graduates who are entering the labour market and potentially very mobile.

The importance of the labour market has been highlighted by many researchers (Corcoran et al. 2010; King and Shuttleworth 1995; lammarino and Marinelli 2011; Thissen et al. 2010; Hoare and Corver 2010; Findlay et al. 2009), who have adopted various theoretical perspectives. The difference between humanist and determinist currents lies more in the interpretation of this importance and on the degree of choice or leeway of migrants. For humanist approaches, work issues are regarded as a factor that may be central but that are a factor among many others. For neo-classics, migration is seen as an adjustment factor between demand and supply of labour, and individuals move if there is a net gain between benefits and costs (Hicks 1966). Structuralist interpretations regard migrants as being forced to do so due to economic restructuring, the working of the economic system or the effects of a segmented labour market (Gordon 1995). Beyond their theoretical antagonisms, the last two approaches address migration on a macro level and consider that migrants are subject to external forces and that migration results from a labour force spatial mismatch.

The neo-classic approach was extended on a micro level by the human capital model of migration (Sjaastad 1962), which sees migration as an individual investment. An individual will maximise the difference between the benefits and costs resulting from migration not only in the short, but also in the long, term. Some authors extend this view to families (with notions of "tied-movers" and "tied-stayers") (Mincer 1978), but the conceptualisation of migration remains the same in the sense that

migrants are rational actors ("homo œconomicus"), adjusting to interregional economic disparities and moving if there is net gain to be made. Tiebout (1956) makes another extension of the neo-classic approach, highlighting financial aspects. He argues that people "vote with their feet". Individuals decide to move on the basis of a comparison between municipalities offering varying baskets of goods at a variety of prices (tax rates) in order to maximise their personal utility. This has a specific resonance in Switzerland, where tax rates greatly differ between cantons and municipalities.

Factors related to social life refer more broadly to the question of the analytical unit in migration studies (Dieleman 2001). Historically, the first researchers focused on individuals. However, when a person decides to move, he/she takes his/her decision in regard to a specific social context and to his/her ties with others. Thus researchers have extended their focus to the household in which an individual lives and then to the wider family context (parents, children and siblings living outside the household) (Mulder 2007). The partner plays a central role given that, as King (2002) states, love migration can be found in all types of migration ("[d]o not underestimate the libidinal factor in migration," p.99). 'Social life' factors also include a sense of belonging, or place attachment, which seems particularly important in return migration (Niedomysl and Amcoff 2011; Rérat 2013). Some have argued that spatial rooting is now more and more influential on career considerations among the upper-middle class (Vincent-Geslin and Kaufmann 2012). Unlike in the modern period, when the social life was subordinated to professional activities, the hierarchy of values has been inverted, or at least rebalanced, so that now professional activities have to be compatible with individuals' life aims (ibid.).

Quality of life may assume a very different meaning for each individual. Rye (2011) observes, for example, that rurality is associated with contradictory images among rural youth (dull versus idyllic). Traditionally, research has shown that factors related to the living environment dominate in short distance migration (residential mobility), such as in the case of the relocation of households between central areas and suburbs. The importance of quality of life and residential amenities in interregional migration has been highlighted in the case of some rural areas by research on amenity-led or lifestyle migration (Benson and O'Reilly 2009). In the case of urban areas, the prevailing weight of amenities is argued by Florida (2004) in respect to the so-called creative class. For this author, economic growth is based on the presence of a creative class in a city, and this presence itself attracts and induces the creation of innovative firms. This perspective postulates that firms locate where this creative class can be found and that members of the creative class choose where to live based on the characteristics of some specific urban setting (such as openmindedness, tolerance, diversity, cultural activities, etc.). This argument has raised a debate about the respective importance of amenities and job opportunities in highly skilled workers' decision to migrate (Niedomysl and Hansen 2010). Empirical results tend to show that work-related issues remain the most important (Storper and Scott 2009), and that amenities are relevant "mainly when other factors (such as jobs and affordable housing) can be fulfilled at two potential destinations" (Niedomysl and Hansen 2010, 1646).

On the whole, migration choice appears to be rather complex as it may be influenced by many factors (Table 1). Indeed, as argued by Boltanski and Thévenot (2006), actions can be justified by

several coexisting principles. Drawing on the work of sociologists at the Swiss Federal Institute of Technology of Lausanne (Pattaroni et al. 2009; Thomas 2013), these factors can be classified into the following broad registers of action: utilitarian (labour market considerations), calculating (financial elements), social and affective (social life) and sensitive (amenities and living environment). For a deeper understanding of migrants' motivations and of the articulation of the various registers of action, a survey and interviews were carried out among young graduates.

Table 1: Factors and registers of action in internal motivations

Factors	Example of dimensions	Register of action
Factors related to the	Job opportunities	Utilitarian
labour market	Future career	
	perspectives	
Factors of	Level of salary	Calculating
economic/financial	Tax rates	
nature	Housing prices	
Factors related to social	Partner	Social and affective
life	Circle of friends/family	
	members	
	Clubs and societies	
	(social activities)	
	Desire for change	
Factors related to	Life setting and	Sensitive
residential amenities	amenities	
	Cultural and leisure	
	offerings	
	Urban way of life and	
	values	
	Centrality and	
	accessibility	

CASE STUDY AND METHODOLOGY

Spatial context

This paper addresses the migration behaviours of young university graduates coming from Canton Jura, a French-speaking region located in the northwest of Switzerland. Jura displays the characteristics of a peripheral and rural region in the context of Switzerland². In 2010, there was a total of 70,000 inhabitants (ranked 20th out of 26 cantons in terms of size). The demographic growth is less dynamic than in the rest of the country (population increase of 2.0% in Jura versus

² It is important to note that what is meant by peripheral and rural is highly context-dependent and varies greatly between countries.

9.2% in the whole country between 2000 and 2010; rank 22nd). There is an overrepresentation of low skilled workers and of jobs in the agricultural and industrial sectors, and consequently an underrepresentation of highly skilled workers and jobs in the service sectors. The per capita income in Jura accounts for only 70% of the Swiss value (rank 26th).

Switzerland has been characterised over the last four decades by rapid metropolitan growth, from both a demographic and an economic point of view (Rérat and Lees 2011). While this has not been the case in Jura, the canton is not far from Basel, Switzerland's third largest city; however, since Basel is German-speaking, the language barrier prevents Jura from fully benefiting from its proximity to the city.

Target population

This paper is taken from a wider research project whose aim was to investigate the various migration patterns and behaviours of young graduates from Jura. The target population for this study is defined as all young people from Canton Jura (that is to say, whose family lived in the region when they left high school), who graduated from university between 2000 and 2010. It is important to note some specificities of this population. A great majority of graduates had to move to attend university, meaning that they had a first experience of migration on their own, of living in an urban context and of building social ties outside their home region. During their studies, most interviewees adopted multi-local practices in the sense that they lived in a student dwelling located near their higher education institution as well as living (partly) at their family home (at week-ends and during semester breaks).

In order to identify subjects for the study, it was not possible to send a survey to a random selection of graduates, as no address lists exist. Therefore, the snowball sampling method was chosen: 60 of the researcher's acquaintances belonging to the target population were contacted in an email that presented the research objectives and requested the email addresses of relevant graduates. When a new address was received, the same message was sent, creating a multiplier effect. An email was also sent to all members of the cantonal administration, and a press conference was organised for that purpose a few days before Christmas, a period during which most graduates visit their family.

This approach was found to be very successful: 550 emails were sent to the researcher and 1,280 individuals were identified. A total of 924 people filled in the online questionnaire (response rate of 72%), of which 498 had graduated from a regular university and 248 from a university of applied science; these 746 graduates formed the sample addressed in this study³. The sample represents more than 40% of the total number of graduates from regular universities and 30% of graduates from universities of applied science who came to university from Canton Jura between 2000 and 2010. Data for both kinds of graduates have been aggregated given a very high correlation

__

³ The remaining were graduates participating in further full-time education.

between their answers.

While it is important to consider the proportion of the target population that received and completed the questionnaire, the issue of representivity is even more important. Biases may occur, as members of the target population do not all have equal probability of being reached through snowball sampling. As there is little official data available, only a few comparisons can be made between the target population and the sample. There are very few noticeable differences, and those that do exist (such as the overrepresentation of graduates from the University of Neuchatel, since the researcher studied and works there and thus has more contacts there) relate to features that neither increase nor decrease the propensity to return to one's home region, and therefore do not affect the reliability and representivity of the sample.

Graduates were asked about their migration trajectory (former and current places of residence), profile (position in the life course, professional career, etc.), motivations (factors taken into account in the decision to migrate) and opinions of their home region. In accordance with the mixed method principles that guided our research, qualitative information was also collected to complete the statistical results. Plenty of space was given for comments on the questionnaire, in order to obtain some qualitative information. Ten in-depth interviews were also conducted with graduates before sending out the questionnaire, covering differing cases in terms of migration behaviour, marital status and type of degree. They gave input to the questionnaire design and were then used in the interpretation of statistical results.

EMPIRICAL RESULTS AND DISCUSSIONS

In this section, the spatial distribution of graduates' current places of residence is analysed, and then their self-reported motives for not returning to their home region are considered in the light of the survey results. A typology is then elaborated which categorises the graduates according to the factors affecting their migration decision. The probability of a return migration under the hypothesis of an equivalent job in the home region is then analysed in respect to their typology, and finally, qualitative material taken from questionnaires and interviews is used to gain a finer understanding of the out-migrants' motivations.

Young graduates' migration field

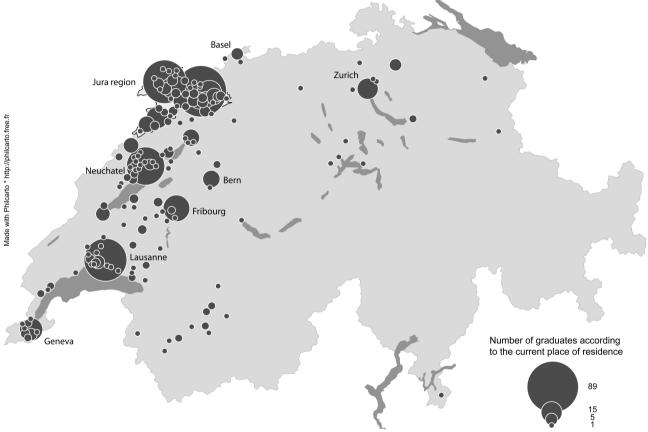
According to the survey, 43.8% of young people from Canton Jura (327 of the 746) who graduated between 2000 and 2010 have returned to live there. Looking at the results in detail, we notice that regular university graduates are less likely to return than those who studied in a university of applied science (40% versus 51.6%).

The propensity to return is thus not negligible. Although it is difficult to draw comparison with foreign case studies (due to differences in the proportion of young adults attending university, the size of the regions and the time span under scrutiny, for example), this proportion may seem quite high, especially given that Jura is among the cantons with the lowest share of return migrants. Some special features of the Swiss context explain this result. On the one hand, due to the federal organisation of the country, the administration is decentralized across the 26 cantons composing

Switzerland, which guarantees a certain level of job opportunities in the public sector all over the country. On the other hand, the short distances between cantons make it possible to reach some urban labour markets even from a peripheral region.

The other graduates live abroad $(4.7\%)^4$ and in the rest of Switzerland (51.5%). Their destinations reveal the attraction of urban centres such as Lausanne, Neuchatel, Fribourg and Geneva (Figure 1). This complies with the brain drain hypothesis, which argues that rural regions lose highly qualified young adults in favour of central areas. However, the geographical distribution of graduates does not strictly reflect the urban hierarchy. Several factors make the centre–periphery model more complex.





The first factor is linguistic, as most migrations remain confined to the French-speaking part. This is not specific to the population under study but more general to internal migration within Switzerland (Schuler et al. 2007). In details, 80.1% of Jura graduates live in French-speaking municipalities, 3.4% in municipalities with a strong French-speaking minority (25-35% of the population) and only

⁴ It is worth noting that this figure corresponds to very diverse situations (long-term moves as well as short-term stays such as language or (post)doctoral study).

16.4% in German-speaking regions.

Second, the location of higher education institutions plays an important role, since a quarter of graduates remain in the canton where they studied. The distance of the university from Jura is important because the choice of university is based partly on proximity. This is exemplified by Neuchâtel, which hosts the closest regular university to Jura and has the biggest cohort of students from Jura (about one third of them attend that university). This explains why this city represents the first destination for university graduates (and the second if universities of applied science are taken into account), even though its demographic weight (33,000 inhabitants) is inferior to that of Geneva (187,000), Lausanne (128,000) and even Fribourg (35,000).

Finally, the map shows that some graduates have settled in municipalities near the urban centres, which shows the beginning of a phenomenon of suburbanisation, which in the Swiss context could be motivated by the housing market in core cities (high prices; housing shortage) and the general preference of families to live in a less dense area (more child-friendly environment, access to home ownership, proximity to nature, etc.).

The attraction of urban centres for young graduates appears clearly on a macro level. The following part of the analysis adopts a micro perspective, focusing on graduates' self-reported motives not to go back to Jura, based on the questionnaire and interviews.

Factors in the decision not to return

Motivations to settle elsewhere than in Jura are first related to the labour market (Figure 2)⁵: two thirds of graduates say that a job opportunity was very important in their decision and a fifth that it was important (a total of almost 90%). The second criterion refers to career possibilities, i.e. future job opportunities (30.6% important and 35% very important). The third criterion was the partner, which underlines the importance of the graduates' life course and personal elements⁶.

⁵ The question asked was "What was the importance of the following elements in your decision not to come back in Jura?" Interviewees could choose a response from a five-point Likert scale ("not important at all", "not very important", "moderately important", "important", "very important").

⁶ It is worth noting that this result relates to all graduates and that not all of them lived in a couple when they made the decision (35.4% lived in another kind of household at the time of the survey).

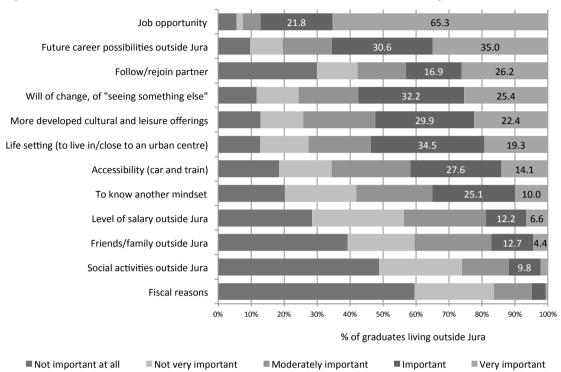


Figure 2: Importance of the motivations not to return to the home region (source: questionnaire)

Factors seen as (very) important by more than half of the interviewees in the decision to live in another region than Jura include the desire for change (32.2% and 25.4%), more developed cultural and leisure offerings (29.9% and 22.4%), and living in an urban setting (34.5% and 19.3%). Also important are accessibility (which is higher in central regions) and the desire to get to know another mindset.

Proximity of friends and family as well as social activities (and the availability of clubs and societies) outside Jura do not appear as determinant factors. This may be explained by the temporary nature of student life in terms of circle of friends. Financial and economic criteria seem to be of much less importance: less than one graduate out of five says that the level of salary played a (very) important role in the migration decision. With regard the level of taxation (which varies greatly between cantons), 4.1% saw it as important and 0.7% (i.e. three individuals) as very important. For an overwhelming 83.7%, its role in their decision to migrate was perceived to be either unimportant or somewhat important.

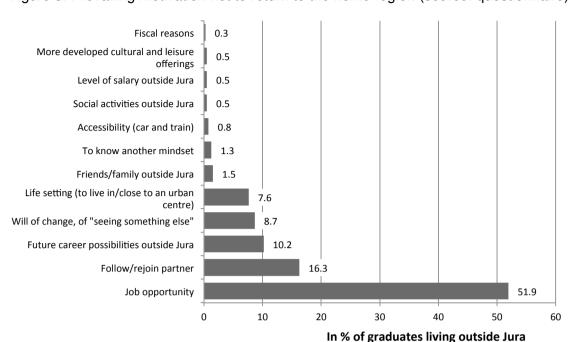


Figure 3: Prevailing motivation not to return to the home region (source: questionnaire)

By taking into account the most important factors as stated by graduates, the pregnancy of the labour market is observed both in the short term (job opportunity: 51.9%) and the long term (future career possibilities: 10.2%). To follow/re-join the partner appears second (16.3%). Elements related to amenities, i.e. desire for change and desire to live in an urban context, are less important (8.7% and 7.6%). The remaining factors are only rarely quoted.

Three differences based on life course position are to be mentioned. Firstly, job opportunity is more important for single people (56.8%) than for people living in childless couples (50.0%) or in couples with children (41.7%). The same gradient is found for living in an urban setting (9.6%; 7.6%; 1.2%). The gradient is reversed, however, for the importance of the partner (4.8%; 18.6%; 29.8%).

Graduates were also asked another question, in order to isolate the existence of a job opportunity ("Under the hypothesis of an equivalent job in Jura, would you have come back?"). Even though the notion of an equivalent job may be quite theoretical, it is interesting to observe that 14.5% answered "yes" and 30.7% "probably", while 18.3% said "no" and 36.4% "probably not". These results mean that for about 45% of graduates, the truncated labour market of the home region represented a major constraint preventing a return migration. At the same time, 55% of them would not have considered settling in Jura. This last result highlights the fact that the migration decision is influenced by much more than just work considerations. In this light, the very high score associated with the existence of a job opportunity (as seen above) may imply that this is a necessary condition in the migration of young adults entering the labour market, but it may also represent for some respondents a convenient answer which is seen as more socially acceptable.

Typology of migrants according to their motivations

The results presented up to now concern all graduates who decided not to return to Jura after graduation. However, this population is not monolithic, and differences between graduates are

hidden beneath aggregate trends. In order to get an idea of this diversity, multivariate analyses have been carried out.

First, principal component analysis (PCA) was conducted on the importance of the criteria that may have influenced graduates' decision not to return. Four components were identified (Table 2)⁷:

- The first component is the urban-rural gradient that refers to urban amenities. It measures the graduates' desire to change residential context (desire for change) and, more specifically, to live in an urban setting (cultural offerings, etc.).
- The second component is the financial gradient. It distinguishes graduates according to the relative importance allocated to economic aspects such as the level of salaries and taxes.
- The third component is the work career gradient. It brings into opposition graduates who stressed the importance of entering the labour market (present and future job opportunities) with those whose migration behaviour is explained by their attachment to their partner.
- The fourth component is the social ties gradient. It gathers together graduates who valued the proximity of friends and those who valued social activities. This component is also positively correlated to the desire to follow the partner⁸.

It is interesting to note that these components correspond to the four different registers of action discussed in the theoretical part: utilitarian (job opportunities), sensitive (rural/urban setting), social (partner, friends, etc.) and calculating (financial elements).

_

⁷ PCA was conducted with SPSS on the 12 items (the Likert scale was considered as a continuous scale) with orthogonal rotation (varimax). The four components explain 62.4% of the total variance (respectively 24.2%, 13.4%, 12.6% and 12.2%).

⁸ The fact that the item "partner" is correlated with two axes shows that behind the importance of this factor lie two different logics. Some graduates follow/re-join their partner maybe at the detriment of their professional life. Some others may stay in the region where they studied, where the partner lives as well as a part of their circle of friends.

Table 2: Summary of the factor analysis results

	Rotated factor loadings						
Items	Component 1: urban-rural gradient	Component 2: financial gradient	Component 3: work career gradient	Component 4: social ties gradient			
Job opportunity			0.84				
Future career possibilities			0.71				
Level of salary		0.78					
Follow or re-join partner			-0.40	0.38			
Proximity of friends and family outside Jura				0.79			
Social activities				0.72			
Desire for change, to "see something else"	0.76						
Living environment (in/close to an urban centre)	0.81						
More developed cultural and leisure offerings	0.82						
To know another mindset	0.77						
Accessibility (car and train)	0.5						
Fiscal reasons		0.85					
Housing prices							

Summary of the factor analysis results for the motivations of out-migration (only factor loadings above 0.4) (source: questionnaire)

Each graduate was characterised by a factor loading on each component. On this basis, a hierarchical cluster analysis (Ward's logarithm) was conducted to establish a typology. The number of groups (6) was chosen by examining the dendrogram, and the validity of the clustering was tested by crossing it with qualitative materials. Table 3 shows the average factor loadings for the individuals in each group; a value below zero does not mean that the factor is not important in absolute terms but that it is less important in comparison with the total of interviewees.

Table 3: Average factor loadings according to the six types of graduates (source: questionnaire)

Types	Proportions	Component 1 (urban- rural)	Component 2 (financial elements)	Component 3 (work/career)	Component 4 (social ties)
Type 1: Job opportunists	13.9%	-0.71	1.40	0.19	-0.01
Type 2: Constrained and pragmatic	19.7%	-1.11	-0.36	-0.11	-0.57
Type 3: Convinced migrants	17.8%	0.66	0.93	0.33	0.17
Type 4: Urban seekers	20%	0.90	-0.57	-0.11	-0.70
Type 5: Rooted city-dwellers	24.1%	0.07	-0.68	0.39	0.92
Type 6: Others	4.6%	0.07	-0.26	-2.95	0.03

The first group (13.9% of the total) was more likely than other graduates to leave Jura for financial and work-related issues, and is therefore labelled "job opportunists". These young working people have on average a very weak score in respect to the urban gradient, and thus although a majority (still) live in an urban centre (54.4%), the decision not to go back to Jura was neither motivated by the residential context nor by a rejection of rurality. A significant proportion actually lives in a rural municipality (19.3% versus 11% for all graduates). This explains why 60% of graduates belonging to group 1 would have come back to Jura if they had found an equivalent job (against 43.7% for the total) (Figure 4). Finally, it is worth noting the very gendered nature of this category (only a quarter of these graduates are female, against a little more than half for the total) and the relatively small proportion of people not living in a couple (27.8% versus 39.6%).

The second group (19.7%) has negative scores on all axes. They are "constrained and pragmatic" migrants since, for them, the choice to leave Jura does not seem to be the result of a strategy but more the consequence of an opportunity or of an isolated factor (to follow their partner / a job in an unknown region, etc.). A clear majority would have stayed in their home region if there had been an equivalent job opportunity (71.2%; the highest proportion among the six groups), which shows that their migration behaviour was in most cases the consequence of constraints.

For the third group (17.8%), out-migration resulted from the convergence of all criteria. The "convinced migrants" seem to "have it all" in their migration decision, since they put more weight than average on residential context, financial elements, work career and social ties. Only a third of them would have considered returning to Jura for an equivalent job.

The fourth group (20%) corresponds to the "urban seekers". They have given comparatively much more importance to living in another canton (or country) and in an urban setting. Only a quarter of them would have considered a return migration if they had found a job in their home region. On the other hand, they assigned a below-average score to the other components – especially the social

ties gradient. This is explained by the fact that in this group more than half of graduates do not live in couple (versus 39.6% for all graduates) and that some of them settled in another region than the one in which they studied and built a social network.

The fifth group gathers almost a quarter of the graduates (24.1%). They are called the "rooted city-dwellers". Financial elements (salary and taxes) have an even weaker importance for them than for the others, while living in an urban setting was a little more important than average. It would, however, be erroneous to minimise the importance of this factor, as more than two thirds of these graduates live in an urban centre (versus 57.1% of all graduates). It rather seems that a job opportunity enables them to enter the labour market in the region where they studied and are already socially integrated.

The last group is also the smallest (4.6%). These graduates are distinguished from the others by a very low score for work and career. Despite the small size of the group, a certain level of heterogeneity is observed, so that it is difficult to label it. These graduates may be working in Jura without living there, or working in a self-employed capacity or active all over the French-speaking part of the country. Living environment and social life are slightly more important than average and an equivalent job in Jura would have had very little impact on their migration behaviour (only one out of ten would have come back).

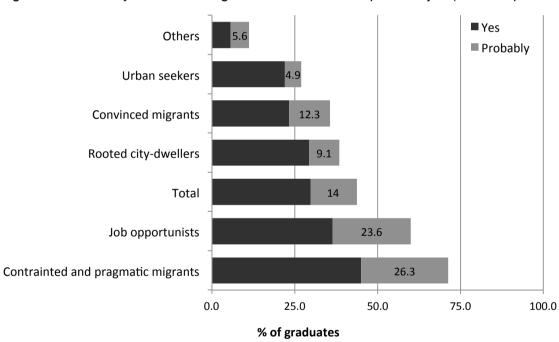


Figure 4: Probability of a return migration in case of an equivalent job (source: questionnaire)

Qualitative aspects

The analysis of the interviews and comments in the questionnaire deepens our understanding of how the various factors are combined in the graduates' migration decisions.

The factor that is quantitatively the most frequent refers to the entry into the labour market (utilitarian logic of action). It may be either a push factor (the lack of job opportunities in Jura) or a pull factor (the existence of a job opportunity in another region):

There are very few job offers in my field in Jura. Since my first job search in May 2007, there might have been four or five offers...

The importance of the labour market is even more marked for dual-career couples:

Being a couple of two university graduates, there are few work opportunities corresponding to both our education in Jura.

There was an opportunity for me at that time in Jura, but I decided to re-join my partner who has less chance to find a job there in his field.

If I had been single, I would have come back to Jura. But as my partner has studied a very specific field, jobs corresponding to his education are rare!!!

In the graduates' responses, the labour market represents a constraint that is felt or experienced in various ways. For some, not being able to find a job in the home region was anticipated and accepted ("It has never bothered me"), while some others lived it as a sacrifice ("I knew as soon as I decided to study [a specific field in management] that I could not live in Jura any more, and I had to put it behind me" or "I had no other choice but to be expatriated"). Here, the labour market clearly represents a determinant structural constraint.

Many graduates highlighted the role of the partner and also of friends (social and affective register):

I am always asking myself "If my boyfriend did not come from [the German-speaking part], if I had been single, what would I have done?" I think that I would have considered differently the job offer I got in Jura. [...] But frankly, love, that plays a big role!

Would I have come back? Well, that's difficult to say... I didn't exclude it but the distancing that would have been implied with my circle of friends would certainly have tipped the scales against the no...

Some graduates have pointed out sensitive factors related to the living environment (see the terms "taste" and "affinity" in the quotations) and more specifically to the attractiveness of urban centres ("dynamic") in regard to rural regions ("too quiet"):

As far as I am concerned, it is a matter of affinity, of taste. I like the big city like Geneva where I live or others. Jura is a rural region with all that goes with that: few inhabitants, few opportunities for work in my field, little anonymity... And nothing could really change that. I love my canton and I am thinking about returning to live there but not in the near future.

I'm more of a town mouse than a country mouse! I have always liked the city more than the countryside. I would not like to live in the countryside near Lausanne either...

For graduates having spent a few years in dynamic cities, where the job, commercial, cultural offerings are important, it is not always easy to come back to a "too quiet" region.

On the whole, while one factor may be the main determinant in the decision not to return to the rural home region, the decision is most often the result of a conjunction of factors related to the labour market, social ties and the living environment:

Working full-time and having taken roots in Lausanne due to my associative involvement, it is hard to imagine returning to Jura even if I go there regularly. [...] Moreover most of my friends here are exiles like me!

What is clear for me is that there is almost no job opportunity for me in Jura. I had for a short period a part-time job but that was not enough to make a living. Then, I rather identify myself with urban lifestyles, I need movement around me, to have plenty of entertainment, restaurants, etc. [...] And then a third element, that's the mindset which is, let's say, not really like a village community but... I think there is an extremely strong social control in Jura and that's something that bothers me actually. I need a certain form of anonymity.

Another dimension appearing in the responses is the temporality of a possible return migration. To go back to one's rural home region is sometimes seen as premature after graduation. Some wish to acquire work experience first, while others intend to live for a few more years in another residential context. In these cases, a return to Jura may be postponed to a more or less defined time in the future. Whether or not these people will indeed realise this return project remains open. Residential aspirations may indeed change over time as graduates develop their career and social life outside their home region.

SUMMARY AND CONCLUDING DISCUSSION

This paper addresses the out-migration of young graduates who originate from a Swiss rural region. The survey showed that the majority do not return after graduation (54.2%). This result is in accordance with many studies, conducted in a wide range of national contexts, which highlight the uneven geography of the migration flows of highly qualified young adults and the imbalance between rural, peripheral or industrial regions (the "losing" regions) and urban or metropolitan regions (the "winning" regions). Based on a questionnaire and interviews, the paper explains in detail why some graduates decide not to return to their home region, combining a macro approach (migration flows) and a micro approach (self-reported motives).

On a macro scale (spaces), graduates' destinations reveal the regional disparities in terms of labour market size and the attraction of urban centres. Several elements related to the Swiss context make this urban-rural gradient seem at first sight more complex. Migration flows remain confined to the French-speaking part (since language represents a hindering factor for migration), and the location of higher education institutions plays an important role. As the choice of university is based partly on proximity, the destination hierarchy does not strictly comply with the urban hierarchy. Indeed, 25% of university graduates stay in the region where they studied. In other words, "migrating to learn" is not only "learning to migrate" (Li et al. 1996), but also the discovery of and then the settlement in another place (due to living environment and social ties).

Translated to the micro scale, the rural character of the home region has two sets of implications. Self-evidently, the urban–rural gradient means for graduates disparities in terms of opportunities in the labour market. Furthermore, the location of universities in urban centres implies that most graduates have to move there. This first independent migration is the beginning of a distancing from the graduates' place of origin and implies the building of new social ties and the experiment of a new residential context. These three dimensions are found in the three main families of motivations reported by graduates (job opportunities, partner's aspirations, urban setting).

Job-related factors appear to be the most important in the graduates' migration decisions, which seems at first glance to confirm traditional approaches – either neo-classic or structuralist – that

interpret internal migration as a consequence of differentials in the labour market. Job-related factors do explain the loss recorded by Jura, but only partially. It would be erroneous to reduce young adults' mobility to economic or financial elements. Our results show that internal migration is more than an adjustment variable between labour demand and supply (55% would not have returned to their home region even for an equivalent job). Migration choices are indeed plural and diverse.

Criteria related to social life play an important role. This is especially the case for proximity of the partner, confirming the importance of love in migration (King 2002), even though it is often overlooked in respect to the other motives. Attachment to their new place of residence is also shown by the fact that one quarter of graduates remain in the region where they studied. Other elements, however, such as social activities (clubs, societies) and the graduates' circle of friends, appear less central than in return migration (Niedomysl and Amcoff 2011; Rérat 2013). This may be due to the many changes that go with the period: fellow students may go back to their home region, go to another region or stay in the city of study.

The impact of life setting and residential amenities is also to be noted. The different scores associated with these factors regarding degree of importance show them to be important. But they not are dominant as Florida (2004) postulates. They are actually combined with work and personal reasons. This confirms the interpretation by Niedomysl and Hansen (2011) that amenities are relevant when some other factors (job, partner's aspirations) are fulfilled. Moreover, the attractiveness of central areas and urban amenities may be decreasing over the life course, as illustrated by a suburbanisation process that has been started by graduates living in family households.

It is interesting to note that neither the figure of the homo œconomicus nor a calculating register of action as postulated by the neo-classic approach are clearly identified. If work-related issues are central, strictly economic and financial elements play only a negligible role in the decision-making process.

On the whole, our results highlight two important principles in migration and mobility studies. First, there is a need to combine macro and micro approaches (Morrison and Clark 2011). Self-reported motives are crucial for interpreting what is hidden behind macro results. In the case of young graduates, the attraction of urban centres is not just a question of labour market, but also of life setting and social ties. Second, migration decisions cannot be reduced to a single dimension. They are complex (in the sense that several registers of action are involved and combined) and diverse (as differences are found within even a seemingly homogeneous population group).

REFERENCES

Benson, M. & K. O'Reilly. 2009. Lifestyle Migration. Expectations, Aspirations and Experiences. Farnham: Ashgate.

Boltanski, L. & L. Thévenot. 2006. On Justification. The Economies of Worth. Princeton: Princeton University Press.

Boyle, P., K. Halfacree & V. Robinson. 1998. Exploring Contemporary Migration. Essex: Longman.

Corcoran, J., A. Faggian & P. McCann (2010) Human Capital in Remote and Rural Australia: The Role of Graduate Migration. Growth and Change, 41, 192-229.

Dieleman, F. M. (2001) Modelling residential mobility: a review of recent trends in research. Journal of Housing and the Built Environment, 16, 249-265.

Efionayi, D. & E. Piguet. 2011. Partir ou rester? La migration dans le projet de vie des étudiants universitaires d'Afrique de l'ouest. Rapport de synthèse. Neuchâtel: Institut de géographie et Forum Suisse des Migrations.

Fielding, A. 1992a. Migration and culture. In Migration Processes and Patterns. Volume 1. Research Progress and Prospects, eds. A. Champion & A. Fielding, 201-212. London: Belhaven Press.

--- (1992b) Migration and social mobility: south east England as an escalator region. Regional Studies, 26, 1-15.

Findlay, A., C. Mason, D. Houston, D. McCollum & R. Harrison (2009) Escalators, elevators and travelators: the occupational mobility of migrants to South-East England. Journal of Ethnic and Migration Studies, 35, 861-879.

Florida, R. 2004. The rise of the creative class: and how it's transforming work, leisure, community and everyday life. New York: Basic Books.

Glaser, W. 1978. The brain drain: emigration & return. Oxford: Pergamon Press.

Gordon, I. (1995) Migration in a segmented labour market. Transactions of the Institute of British Geographers, 20, 139-155.

Halfacree, K. (2004) A Utopian Imagination in Migration's Terra Incognita? Acknowledging the Non-Economic Worlds of Migration Decision-Making. Population, Space and Place, 10, 239-253.

Hicks, J. 1966. The Theory of Wages. London: Macmillan.

Hoare, A. & M. Corver (2010) The Regional Geography of New Young Graduate Labour in the UK. Regional Studies, 44, 477-494.

lammarino, S. & E. Marinelli (2011) Is the grass greener on the other side of the fence? Graduate mobility and job satisfaction in Italy. Environment and Planning A, 43, 2761-2777.

King, R. (2002) Towards a New Map of European Migration. International Journal of Population Geography, 8, 89-106.

King, R. & I. Shuttleworth (1995) The Emigration and Employment of Irish Graduates: The Export of High-Quality Labour From the Periphery of Europe. European Urban and Regional Studies, 2, 21-40.

Li, F. L. N., A. Findlay, A. J. Jowett & R. Skeldon (1996) Migrating to Learn and Learning to Migrate: A Study of the Experiences and Intentions of International Student Migrants. International Journal of Population Geography, 2, 51-67.

Mincer, J. (1978) Family Migration Decisions. Journal of Political Economy, 86, 749-773.

Morrison, P. S. & W. A. V. Clark (2011) Internal migration and employment: macro flows and micro motives. Environment and Planning A, 43, 1948-1964.

Mulder, C. H. (2007) The Family Context and Residential Choice: a Challenge for New Research. Population, Space and Place, 13, 265-278.

Niedomysl, T. & J. Amcoff (2011) Why Return Migrants Return: Survey Evidence on Motives for

Internal Return Migration in Sweden. Population, Space and Place, 17, 656-673.

Niedomysl, T. & H. K. Hansen (2010) What matters more for the decision to move: jobs versus amenities. Environment and Planning A, 42, 1636-1649.

Owen, D. & A. E. Green. 1992. Migration patterns and trends. In Migration processes and patterns. Volume 2: Research progress and prospects, eds. A. Champion & A. Fielding, 17-38. London: Belhaven Press.

Pattaroni, L., M.-P. Thomas & V. Kaufmann. 2009. Habitat urbain durable pour les familles. Lausanne: Lasur-EPFL.

Rérat, P. (2012) Gentrifiers and their choice of housing: characteristics of the households living in new developments in Swiss cities. Environment and Planning A, 44, 221-236.

--- (2013) Highly qualified rural youth: Why do young graduates return to their home region? Children's Geographies, forthcoming.

Rérat, P. & L. Lees (2011) Spatial capital, gentrification and mobility: evidence from Swiss core cities. Transactions of the Institute of British Geographers, 36, 126-142.

Rye, J. F. (2011) Youth migration, rurality and class: a Bourdieusian approach. European Urban and Regional Studies, 18, 170-183.

Sage, J., M. Evandrou & J. Kalkingham (2013) Onwards or Homewards? Complex Graduate Migration Pathways, Well-being, and the "Parental Safety Net". Population, Space and Place, DOI 10:1002/psp.1793.

Schuler, M., P. Dessemontet, C. Jemelin, A. Jarne, N. Pasche & W. Haug. 2007. Atlas des mutations spatiales de la Suisse. Zurich: Editions Neue Zürcher Zeitung.

Sjaastad, L. A. (1962) The Costs and Returns of Human Migration. The Journal of Political Economy, 70, 80-93.

Storper, M. & A. J. Scott (2009) Rethinking human capital, creativity and urban growth. Journal of Economic Geography, 9, 147-167.

Thissen, F., J. Droogleveer Fortuiln, D. Strijker & T. Haartsen (2010) Migration intentions of rural youth in the Westoek, Flanders, Belgium and in the Veenkoloniën, The Netherlands. Journal of Rural Studies, 26, 428-436.

Thomas, M.-P. 2013. En quête d'habitat: choix résidentiels et différenciation des modes de vie familiaux en Suisse. Neuchâtel: Editions Alphil-Presses universitaires suisses.

Tiebout, C. M. (1956) A Pure Theory of Local Expenditures. The Journal of Political Economy, 64, 416-424.

Vincent-Geslin, S. & V. Kaufmann. 2012. Mobilité sans racines. Plus loin, plus vite... plus mobiles? Paris: Descartes & Cie.