

Job Attractiveness and Distance as Predictors of Willingness to Move

Alice Reissová¹, Eliška Nacházellová¹, David Cihlár²

¹ Faculty of Social and Economic Sciences, Jan Evangelista Purkyně University in Ústí nad Labem, Czech Republic

² Faculty of Education, Jan Evangelista Purkyně University in Ústí nad Labem, Czech Republic

Abstract – The aim of this paper is to find out whether young and educated people are willing to move for an attractive job and if so, whether the willingness to move will change with increasing distance from their place of residence. The survey found that college students (N = 690) are most willing to move for attractive work within the county (region) in which they currently reside. A smaller proportion is also willing to move within their home country, but in the case of labour migration abroad the declared willingness decreases significantly. The willingness to move decreases with increasing distance from the current place of residence. Statistically significant differences in willingness to move were also found between full-time and part-time students, with a statistically significantly lower willingness in the case of part-time students. In the case of international mobility, students declare that they would prefer temporary mobility to permanent mobility. However, employers need to offer competitive remuneration as well as career development opportunities, and local governments need to pay attention to factors that contribute to satisfaction with living and living arrangements.

Keywords – Brain drain, brain gain, willingness to move, attractive work.

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Corresponding author: Alice Reissová,
Faculty of Social and Economics Sciences, Jan Evangelista Purkyně University in Usti nad Labem, Czech Republic
Email: alice.reissova@ujep.cz

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1. Introduction

The issue of labour migration is far from being a recent issue. Humans have been migrating since ancient times and the literature describes these natural phenomena through the lens of many disciplines (e.g. sociology, geography, cultural anthropology, demography, psychology, etc.). Many different theories and concepts are known (the concept of North-South migration is probably one of the best known). Different authors look at different variables and then attempt, usually using an interdisciplinary approach, to make some comparisons or identify key predictors. The negative impacts of migration are not only in the economic sphere, but also in the social, cultural, political, demographic and other spheres [1], which is why migration - and migration of highly skilled labour in particular - has received considerable attention.

High-skilled labour migration (also referred to as the "brain drain" phenomenon) is primarily motivated by people moving to find attractive work. The attractiveness of a job can be determined by the level of financial remuneration, but also by other benefits such as the opportunity to work in top teams, the possibility to work with state-of-the-art technologies, etc.

Torrisi and Pernagallo [2] addressed labour migration issues in the context of job and life satisfaction. They concluded that workers who work abroad show higher job satisfaction and in all the parameters studied and, as a consequence, they show a higher quality of life and a lower willingness to return to their home country, in this case Italy. On the other hand, employees who work in their home country show lower job satisfaction, lower quality of life, and tend to migrate.

Job satisfaction or dissatisfaction can be saturated by a number of variables. Employees are motivated to migrate to work not only by various incentives but also by career growth opportunities or perceived organizational policies [3].

Also, in a large longitudinal study in Australia, it was found that on the one hand, having a satisfying job has a positive effect on people's stability in their place of residence, but people with high skills are more likely to show a tendency to move, or at least consider moving more often [4]. Clark and Lisowski [5] studied this issue more broadly. They took into account a range of variables that may influence the propensity to move - both family context and economic factors. Using logistic regression models, they confirmed that certain life events have an impact on mobility, but neither education nor income was identified as a predictor. They concluded that higher levels of satisfaction with housing and community contribute to stability. This finding is surprising, but the authors themselves point out the need to verify and extend the findings.

Similarly, Kim, Pagliara, and Preston [6] developed a model to estimate the probability of moving. They also see housing and variables that are closely related to housing (transportation, location, amenities, etc.) as a very important factor.

Thus, housing and living arrangements are likely to have a significant impact on migration. This is shown not only by the recent studies mentioned above, but also by earlier studies [7].

The departure of highly educated and skilled people represents a significant loss for a country. It is an economic loss, both in terms of the contribution of these people to the country's economy and the high value added of their work, and in terms of the circulation of money (high earners primarily buy goods and services in their place of residence, thus supporting local entrepreneurs and enabling the further development of the region). The economic loss to the country is also in the wasted investment in the education of these people, especially in systems where education is paid for by the state. With educated people, not only does the know-how go, but the country also experiences a socio-cultural loss, because these people are usually not only the carriers but also the promoters of the cultural and social life of the area. These economic losses have led in the past to considerations of introducing a special so-called Blagwati tax on brain drain (Note: Jagdish Blagwati proposed the introduction of the tax in the 1970s). This tax was intended to compensate less developed economies for the loss that the departure of skilled labour represented for them. Economists working on this issue concluded that such a tax would not hold up as a compensation mechanism for a number of reasons [8].

The problem of brain drain is far from being a problem only for developing and less economically developed countries [9], as it may seem at first sight.

Even in an economically developed country, for example, an economic crisis can play a significant negative role and can affect several generations very strongly. Such as in Italy, where migration flows have intensified since the 1990s. A number of studies have subsequently responded to this situation [10], [11], [12], [13], [14], [15], [16]. More broadly, this issue has been followed, for example, by Bartolini, Gropas and Triandafyllidou [17], who compared the situation in Italy, Portugal, Spain, and Greece.

The Brain Drain phenomenon has also received attention in Turkey, where the dropout rate of young university graduates increased by 50% between 2011 and 2020 [18].

Vittorietti *et al.* [16] investigated, Italian university students' attitude towards mobility, which was assessed by calculating the distance between the individual persistence diagram and the theoretical student persistence diagram. This idea inspired the hypotheses in this study, which addresses the question of whether the willingness to move for an attractive job decreases with increasing distance from the place of residence.

2. Methodology

The methodological design was based on a quantitative approach. The questions were formulated with the stated objective in mind, i.e. to find out whether there is a link between the form of study and willingness to work mobility.

The substantive question was formulated as follows:

"What steps are you willing to take to be able to get an attractive job in the field you have studied?". The question was designed as a closed-ended question, with respondents selecting a response option for each of the options below on a 4-point Likert scale (1 definitely yes; 2 rather yes; 3 rather no; 4 definitely no):

- 1 Relocation within the county
- 2 Relocation within the Czech Republic
- 3 Relocation abroad (temporary)
- 4 Moving abroad (permanently)

Sociodemographic data such as age, gender, place of residence, university attended, and form of study (full-time or part-time) were also collected.

Hypotheses formulated:

H1: The highest willingness to job mobility among full-time and part-time students will be found within the region where the student resides.

H2: The willingness of students to move for attractive jobs will decrease with increasing distance from their place of residence.

H3: The willingness to move abroad, either temporarily or permanently, will be significantly lower for part-time students.

H4: There is a relationship between type of study (full-time/part-time) and willingness to move across modalities (within the region, within the home country, abroad - temporarily and abroad permanently).

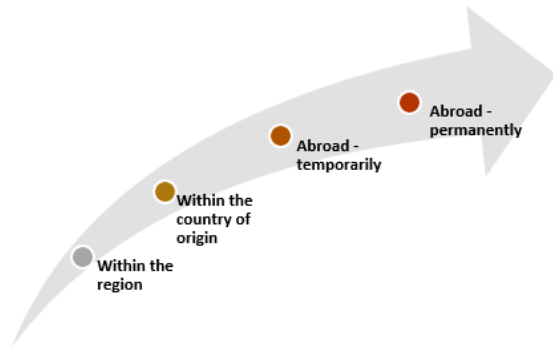


Figure 1. The concept of job mobility

The sample consisted of 690 university students, of which 392 respondents were full-time students and 298 part-time students.

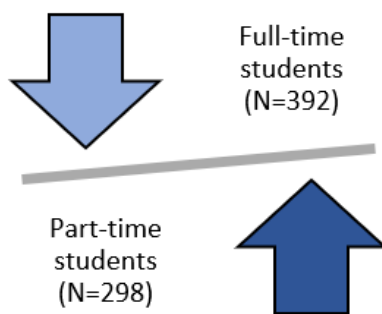


Figure 2. Sample size

The data was collected through a professional market research agency.

Subsequently, the data was processed using MS Excel and Statistica 13 statistical software. Chi-square test was used to test the null hypothesis that the variables are independent of each other in order to determine any association. The null hypothesis was rejected with a probability of error of less than 5%, i.e. when our p-value fell below 0.05.

3. Results

On the basis of the investigation it was possible to answer the previously formulated hypotheses. First, the data were descriptively evaluated. Tables 1 to 4 show both the absolute and relative frequencies of the respondents' answers. The chi-square test was used to determine whether there was an association between the factors under study.

Table 1. Relationship between type of study and moving to an attractive job within the region

	1 DY	2 RY	3 RN	4 DN	Total
FT	154	132	80	26	392
%	39	34	20	7	
PT	59	92	88	59	298
%	20	31	30	20	
Total	213	224	168	85	690

Note: FT = full-time students; PT = part-time students; 1 DY = definitely yes, 2 RY = rather yes, 3 RN = rather no, 4 DN = definitely not
Pearson Chi-square: 50,8443, $df=3$, $p=0,000000$

Table 1 above shows that there is a statistically significant relationship between the two variables (i.e. type of study and willingness to move for an attractive job). The willingness of students to relocate for an attractive job within the region where they live is statistically significantly higher for full-time students.

Table 2. Relationship between type of study and moving to an attractive job within the Czech Republic

	1 DY	2 RY	3 RN	4 DN	Total
FT	77	126	126	63	392
%	20	32	32	16	
PT	38	64	94	102	298
%	13	21	32	34	
Total	115	190	220	165	690

Note: FT = full-time students; PT = part-time students; 1 DY = definitely yes, 2 RY = rather yes, 3 RN = rather no, 4 DN = definitely not
Pearson Chi-square: 35,1775, $df=3$, $p=0,000000$

Even when the willingness to move for an attractive job within the whole country was measured, the willingness to move was found to be statistically significantly higher among full-time students than among part-time students. Within their home country, more than half of full-time students are willing to move for an attractive job, but only about one third of part-time students.

Table 3. Relationship between type of study and moving abroad for an attractive job (temporary)

	1 DY	2 RY	3 RN	4 DN	Total
FT	48	117	131	96	392
%	12	30	33	24	
PT	31	59	74	134	298
%	10	20	25	45	
Total	79	176	205	230	690

Note: FT = full-time students; PT = part-time students; 1 DY = definitely yes, 2 RY = rather yes, 3 RN = rather no, 4 DN = definitely not
Pearson Chi-square: 32,7000, $df=3$, $p=0,000000$

More than 40% of the full-time students surveyed expressed their willingness to move abroad temporarily for an attractive job. This is a very high number. Surprisingly, almost a third of part-time students also responded positively. This means that if part-time students decide to move for an attractive job, it makes little difference whether they move within their home country or whether they move abroad. However, they only responded in this way if it is temporary international mobility.

Table 4. Relationship between type of study and moving abroad for an attractive job (permanent)

	1 DY	2 RY	3 RN	4 DN	Total
FT	25	54	122	191	392
%	6	14	31	49	
PT	14	27	66	191	298
%	5	9	22	64	
Total	39	81	188	382	690

Note: FT = full-time students; PT = part-time students; 1 DY = definitely yes, 2 RY = rather yes, 3 RN = rather no, 4 DN = definitely not
 Pearson Chi-square: 16,2798, df=3, p=,000994

Table 4 clearly shows that the willingness to be permanently mobile abroad is significantly lower. About 20% of full-time students and 14% of part-time students responded positively to this option. Again, a statistically significant association was found between the two variables.

Table 5 shows the differences in willingness to move between the different forms of study (i.e. full-time and part-time) by modality. The individual modalities are the target locations to which respondents would be willing to move for attractive jobs. The target locations differ mainly according to the distance from the current residence.

Table 5. Willingness to move by form of study (data in %)

	Full-time students				Part-time students			
	1 DY	2 RY	3 RN	4 DN	1 DY	2 RY	3 RN	4 DN
Region	39	34	20	7	20	31	30	20
CZ	20	32	32	16	13	21	32	34
AbroadT	12	30	33	24	10	20	25	45
AbroadP	6	14	31	49	5	9	22	64

Note: 1 DY = definitely yes, 2 RY = rather yes, 3 RN = rather no, 4 DN = definitely not; AbroadT = abroad temporarily, AbroadP = abroad permanently

Now it is possible to answer the formulated hypotheses:

It has been confirmed that the highest willingness to job mobility among full-time and part-time students was found within the region where the student lives (H1).

As the distance from the place of residence increases, the willingness of students to relocate for attractive jobs decreases (H2). This was also found to be true for both full-time and part-time studies.

The willingness to move abroad, either temporarily or permanently, will be significantly lower for part-time students (H3).

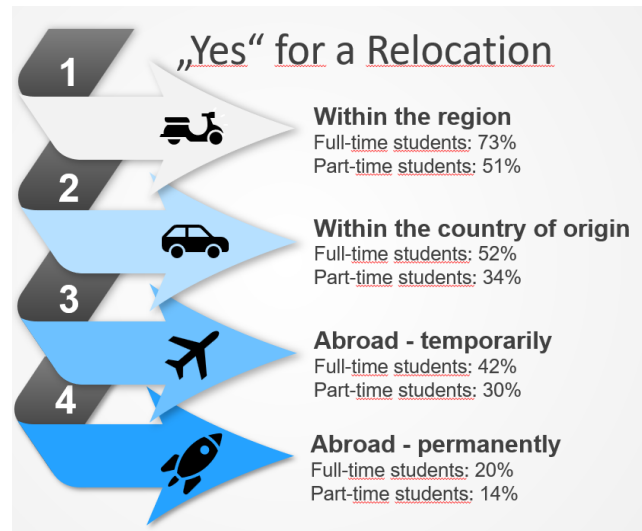


Figure 3. Willingness to work mobility by distance from home

A surprising finding was that part-time students were almost as willing to be mobile for work within their home country as they would be to move abroad (if it was a temporary move). However, reluctance to move dominates (Table 5).

Based on all the above p-values, it was confirmed that there is a relationship between shame type and each modality (H4).

4. Discussion

Efforts to survey the attitudes of university students, respectively to predict the degree of mobility, especially international mobility, are currently evident in a number of European countries. In the former Eastern Bloc countries, for example, the work of Nagy and Vathy [19] is well-known, as he surveys the attitudes of young educated people and focuses on mobility issues,

Other authors also look for push and pull factories that affect the mirage of educated people in Europe [20]. Attractive employment is undoubtedly one potential factor that strongly attracts young and educated people. In contrast, some studies conclude that the economic factories that are associated with getting an attractive job may not always be decisive. In particular, the level of housing and subjective satisfaction with housing seems to be very important for people's stability [6].

Maleszyk and Kędra [21] also state that housing and housing satisfaction are very influential however, they consider unemployment and unfavourable financial situation as key drivers of mobility. The supply of attractive jobs is likely to be a stronger predictor in an economic cycle where the unemployment rate in the market is higher and the overall financial situation is worse.

This became clear during the economic crisis in Southern Europe, when young Italians, Greeks, Portuguese and Spaniards in particular started to show significant mobility tendencies [17].

But other factories such as workload can also influence mobility [22].

Ciriaci [12] concludes in his investigations that the quality of the university can also influence student mobility and migration. It is evident that it is not easy to predict the mobility of a highly skilled workforce. There are undoubtedly a number of factors that influence migration. Economic factories in particular (salary, benefits, career development) are likely to play a role in a large number of cases, but also socio-cultural factors and, as the results of the studies mentioned above suggest, satisfaction with the quality of housing may be a significant factor in the consideration process.

It was mentioned in the introduction that the brain drain phenomenon is a burden for both economically developed and less developed countries. Interestingly, when we talk about labour migration, the motives for labour mobility are very similar in both types of economies. For example, Shumba and Mawere [23] conducted a survey in Zimbabwe and found that the primary motives for labour migration are low wages and low job satisfaction. Other economic factories (financial collapse, exchange rate instability) but also the political situation in the country ranked next.

There may be certain specificities in individual countries that may apply to the country as a whole, or only to certain fields and specialisations, or to certain parts (regions) of the country. For example, in Hungary, Czibere and Schranz [24] noted gender differences in labour migration, especially for people with the highest education. In Bulgaria, for example, the spa and tourism industry is affected by the brain drain phenomenon [25]. Probably the most structurally widespread and the one most often studied is the issue of brain drain in the health sector. The departure of doctors, but also other highly qualified health professionals, is very noticeable in many countries [26], [27], [28], [29].

In the Czech Republic, Netek *et al.* [30] identified 11 underlying factors that predicted the outflow of skilled people from a given city and identified the region within the country where these people were leaving.

Thus, it was not out-migration to another country, but migration within a country. Among these 11 basic factors they included balance of long-term migration (migration saldo), daily commute balance (commuting saldo), geographical distance, proportion of unemployed persons reachable, population density, proportion of population aged 15-29, labour market balance for university graduates, proportion of tertiary economic entities, number of available flats, price per square metre of flat, quality of life index. From the above overview of factors it is evident that work, respective job opportunities, availability of housing, and distance of residence and related commuting play an important role in the migration of people within the country.

Overall, it can be summarized that while gender does not tend to influence labour migration (with the exception of a few studies, e.g. the aforementioned study by Czibere & Schranz [24]), age, marital status, education, job satisfaction (both with income and future prospects), do.

Also, from the data presented in this paper, it is evident that the age and background of the respondent speaks into the results. It is likely that the age and family factor resonates strongly here, with the combined stage having already established a family background or job and finding it more difficult to leave or travel than for students who are just starting to build a background (i.e. full-time students). This makes it all the more possible to identify the group to target when making job offers and what job benefits to offer them.

The non-economic factories that can be considered as the strongest predictors of job mobility then include career opportunities, quality of life and future prospects [17].

The brain drain phenomenon, which appears to be a negative factor with a negative impact on the economy of the country, can become an advantage if young and highly educated people leave their country only temporarily and return after a certain period of time. Thus, human capital returns, enriched by newly acquired knowledge and experience. In such a case, we speak of brain circulation [31]. The results of this survey showed that a significantly higher proportion of respondents declared their willingness to temporary labour migration abroad than to permanent migration. The Czech Republic and individual countries should therefore pay considerable attention to the factors that are attractive to young and educated people and that will make them actually return to their home country. At company level, working with talent is very important. If employers also create attractive development programmes for their talented employees, they will contribute to their stabilization [32].

5. Conclusion

This study investigated the willingness of university students to work mobility. The results show that the declared willingness of full-time students is statistically significantly different from the declared willingness of part-time students. Both groups declare the highest willingness to move within the region where they currently reside in search of an attractive job. The willingness decreases significantly if they were to move outside this region but within their home country. Willingness decreases even more if they move abroad. In this case, a surprising finding was that part-time students who reported very similar willingness to move within their home country as to move abroad. However, in the case of international mobility, they preferred temporary mobility, as did the full-time student, meaning that they wanted to return to their home country after a certain period of time.

These findings are optimistic for the Czech Republic. It is well known that temporary labour mobility (brain circulation) is very beneficial for a given country both economically and socio-culturally. However, it is important to take into account that this is a declarative statement of intent, which may differ considerably from reality. Both employers and local governments will have a major influence. Employers create the working conditions, set the financial remuneration for the work done, create a system of benefits, both financial and non-financial. Local governments and municipalities can influence a number of factors that have a major impact on housing, cleanliness, and safety of the city, transport infrastructure and services, cultural, sporting and social life. These are all factors that can influence the decision-making of young and talented people in real.

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