8 GEOGRAPHIC AND OCCUPATIONAL MOBILITY

8.1 OCCUPATIONAL MOBILITY AMONG YOUTH WITH DIFFERENT EDUCATIONAL ATTAINMENT LEVELS

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During the period that follows the entry into the labour market, at the beginning of the career path, job changes and occupational changes are usually more common than in the later stages of the career path. This is a natural feature of the transition from study to work, since – as the so-called *job shopping* models describing occupational change pinpoint, at the time of the entry into the labour market – at the beginning of the career path, individuals are not yet aware either of their own competencies or their preferences regarding a job or occupation, which one can only discover through a certain amount of experience in the labour market. During this job shopping period, young workers experiment with different occupations and jobs. They learn about their own competencies and the requirements and characteristics of occupations and jobs during this period of experimentation and "shopping around", and this is how eventually they find the occupation that suits or 'fits' them (*Johnson,* 1978, *Topel–Ward,* 1992, *Longhi–Taylor,* 2013). The higher frequency of occupational changes at the beginning of the career path may also be in connection with the fact that many young people[1] who enter the labour market accept positions and occupations whose requirements do not match their qualifications (their educational attainment or specialisation), in the hope of getting promoted into a different position or occupation at a later point in time (*Sicherman–Galor,* 1990). Some of the studies examining the occupational changes that occur at the beginning of the career path indeed found that the more frequent changes in occupation characteristic of this period do serve one's progression on the career ladder (*Sichermann,* 1990), while other studies highlighted the fact that some of the less favourable occupations accepted at the beginning of one's career path, intended as only temporary, do not necessarily serve as a stepping stone for the further progression, but can entrap young workers (*Scherer,* 2004, *Buchs–Helbing*, 2016).

In this subchapter, the changes in the frequency of the occupational changes[2] of youth and the determinants of the probability of occupational mobility are analysed[3] using an individual-level panel data set extracted from the 1998–2018 waves of the Labour Force Survey conducted by the HCSO. Occupational mobility is measured through the changes in HSCO classifications[4] occurring in two consecutive quarters. Mobility is examined based on movements between the detailed, four-digit HSCO categories; the aggregated occupational groups – the two-digit HSCO categories; as well as the main occupational groups – the one-digit HSCO groups. Quarterly occupation-

1 Throughout this paper 'youth' is defined as individuals between the ages of 16 and 35. It is appreciated that this may not correspond with the general English understanding of 'youth'.

2 An occupational change may mean that an individual switches to a different workplace and a different occupation, but can also mean that they stay at the same workplace, while their position or occupation changes. This analysis encompasses both cases, it does not differentiate between occupational changes that do and do not involve a change in workplace as well.

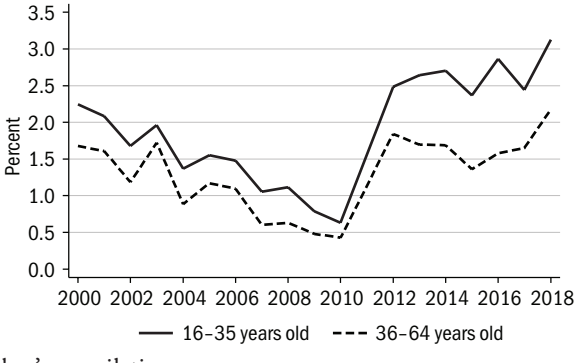
3 The labour survey of the HCSO is a representative quarterly survey, with the individual observations of approximately 70,000 people in each quarter. The sample is replaced through a rotation procedure. The individuals that belong to the households included in the sample are observed through six successive quarters, thus the data of individuals observed through successive quarters can be connected into a panel, and the occupational changes of individuals can be observed.

4 Hungarian Standard Classification of Occupations – the occupational classification system used by the HCSO.

al changes have been aggregated on an annual level, and the development of mobility is presented on an annual basis.

International comparisons indicate that the frequency of occupational changes is low in Hungary (*Boeri–Flinn,* 1997, *Berde–Scharle,* 2004, *Varga,* 2018a, 2018b). The mobility of youth (not older than 35 years) is higher in the job shopping period and much lower in the later stages of the career path, but even the mobility occurring at the beginning of the career path is low by international standards. *Figure 8.1.1* shows that between 2004 and 2010, the frequency of occupational changes decreased continuously, and the mobility of youth hardly surpassed that of older groups. For a part of the period, the continuous decrease was probably related to the economic recession, as occupational mobility is pro-cyclical – as demonstrated by numerous studies (*Murphy–Topel,* 1987, *Carrillo-Tudela–Visschers* (2016). After 2010, occupational changes became more frequent both among youth and among older groups, but the mobility of youth increased at a higher rate, increasing the difference between age categories. In 2018, somewhat more than 3 per cent of 16–35-olds changed occupations, which is still extremely low in international comparison (*Varga,* 2018b).

Figure 8.1.1: The share of those changing occupations among youth in employment (between the ages of 16–35) and among older groups in employment (36–64), 2000–2004, (four-digit HSCO groups, percentage)



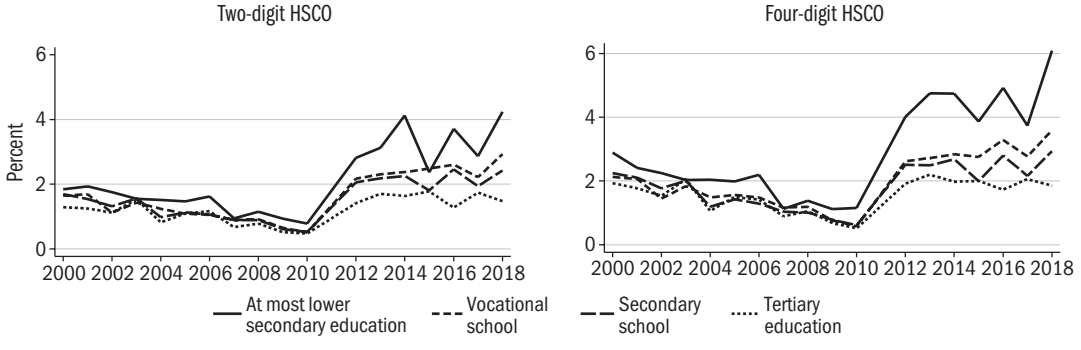
Source: Author's compilation.

The low level of occupational mobility is partly explained by the labour market institutions, the high proportion – in international comparison – of occupations that require specific qualifications (*Varga*, 2018b), and the particularities of the education system as well. The intensity of occupational mobility is also related to the extent to which the education system provides specialised knowledge or general knowledge (*Lindberg,* 2009). This is because one of the preconditions of occupational mobility is the transferability of (at least a part of) workers' competencies and knowledge from one occupation to the other. In countries where the education policy emphasises the acquisition of general

knowledge and encourages participation in lifelong learning, occupational mobility is typically higher, and adaptation to the changing demands of the labour market is easier; while in countries where the intended primary function of the education system is the transference of vocation-specific knowledge, mobility is typically lower.

Comparing the changes in youth's occupational mobility by educational attainment categories (*Figure 8.1.2*), what emerges is that after 2010, with the strengthening of mobility, the differences established based on educational attainment categories increased. Both on the level of occupational groups (two-digit HSCO group) and detailed occupational categories (four-digit HSCO group), those with the eighth grade of elementary school or less as their attainment level changed occupations the most frequently, while those with a higher education diploma changed occupations the least frequently. There are no significant differences between those with a secondary school diploma and those with a vocational qualification but no secondary school diploma (skilled worker or vocational school graduate).

Figure 8.1.2: The share of youth (between the ages of 16–35) changing occupations among youth in employment, by educational attainment categories, 2000–2018



Source: Author's compilation.

We examined the probability of the occupational changes of youth via simple probability models as well. On the one hand, via binary outcome models, which examine the probability of an occupational change on the levels of two-digit and four-digit HSCOs (yes/no), whose results are shown in *Table 8.1.1.* On the other hand, via multiple outcome models, which distinguished between the individual moving upwards or downwards within the occupational hierarchy,[5] or remaining at the same level, as a result of the occupational change. The results of this are presented in *Table 8.1.2.*

5 The direction of the occupational change was defined based on switches between one-digit HSCO-groups, omitting the "Occupations of the armed authorities" occupational group from the analysis, and creating a separate group for those working as public workers, regardless of the occupation they work in. I considered the position of the public workers' group to be at the bottom of the hierarchy. The HSCO classification system is established on the basis of a hierarchy: proceeding through the levels by the main groups, the level of formal qualifications and other skills needed for the occupations keeps increasing. I considered an occupational change as upward mobility if the classification of the new occupation by one-digit HSCO-group had a lower value; I considered it downward mobility if the value become higher; and if its value remained unchanged, I considered its position unchanged within the occupational hierarchy.

Table 8.1.1: Factors influencing the probability of occupational change, binary outcome probit estimates (changes occupation: yes/ no)

	Two-digit HSCO	Four digit HSCO
Variable	marginal effect dy/dx	
Male	0.0009**	0.0013***
	(0.0003)	(0.0034)
Eighth grade of elementary school	–0.0000	0.0015
	(0.00049)	(0.0006)
Vocational qualification but no secondary school diploma (skilled worker or vocational school graduate)	–0.00003	–0.0002
	(0.00036)	(0.00042)
Higher education diploma	–0.0019***	–0.0015**
	(0.0004)	(0.00048)
Number of years of experience	0.0004**	0.0006***
	(0.00013)	(0.00015)
Number of years of experience squared	–9.81E-06	–0.0000
	(0.00001)	(0.00001)
Number of years spent at a particular employer	–0.0026***	–0.0031***
	(0.00007)	0.00008
Public worker	0.0044***	0.0098***
	(0.00092)	(0.00119)
Working abroad	0.0051***	0.0068***
	(0.00122)	(0.00143)
Year	Yes	Yes

Reference category: Females, with a secondary school diploma, year: 1998.
Standard errors in brackets.
Significant at the ***1 per cent, **5 per cent, *10 per cent levels.
Source: Author's compilation.

Males are more likely to change occupations both by two-digit and four digit categories than females, and are also more likely to move downwards within the occupational hierarchy. Those with a higher education diploma are significantly less likely to change occupations, but if they do, they are less likely to move downwards or stay within the same occupational level than the reference category of those with a secondary school diploma. Between the other educational attainment categories, there are no differences in the probability of an occupational change.

Those with the eighth grade of elementary school as their educational attainment are more likely to move upwards, which could be explained by the fact that a great proportion of these has public worker status, which is considered the lowest in the hierarchy. Youth with a vocational qualification but no secondary school diploma are more likely to stay within the same main occupational category. The longer time someone has spent at a certain employer, the less likely they are to switch to a different occupation. Those working as public workers or working abroad are more likely to switch.

Table 8.1.2: Factors influencing the direction of occupational change, multinomial logit estimates[a]

Variable	Switches within the same main occupational category	Moves upwards	Moves downwards
	marginal effect dy/dx		
Male	–0.0003	0.0010***	0.0003
	(0.00022)	(0.00014)	(0.00011)
Eighth grade of elementary school	–0.0000	0.0009***	0.0001
	(0.00035)	(0.00027)	(0.00019)
Vocational qualification but no secondary school diploma (skilled worker or vocational school graduate)	–0.0007**	0.0007	–0.0001
	(0.00025)	(0.00019)	(0.00013)
Higher education diploma	–0.0010***	0.0005	–0.0005***
	(0.00029)	(0.00026)	(0.00015)
Number of years of experience	0.000**	0.0003***	0.0005
	(0.0001)	(0.00006)	(0.00005)
Number of years of experience squared	–9.81e-06	–0.0000***	–9.36e-07
	(0.00000)	(0.00000)	(0.00000)
Number of years spent at a particular employer	–0.0017***	–0.0010***	–0.0004***
	(0.00005)	(0.00003)	(0.00003)
Public worker	–0.0067***	0.0099***	0.0008
	(0.0002)	0.00096	(0.00031)
Working abroad	0.0015	0.0020***	0.0014*
	(0.00075)	(0.0006)	(0.00053)
Year	Yes	Yes	Yes

[a] Switches to occupation within the same level = 1, moves upwards = 2, moves downwards = 3, reference outcome (does not change occupations) = 0.
Reference category: Females, with a secondary school diploma, year: 1998.
Standard errors in brackets.
Significant at the ***1 per cent, **5 per cent, *10 per cent levels.
Source: Author's compilation.

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