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INVESTMENT IN EDUCATION AND TRAINING AND SHIFTS BETWEEN JOBS IN THE SLOVENIAN LABOUR MARKET

Abstract

Job mobility is commonly dealt with as a function of individual resources and characteristics as well as structural factors. Labour market structures determine mobility opportunities, whereas individual resources and characteristics enable individuals to make use of these opportunities. Educational attainment is regarded as an individual resource which is likely to open firms' doors, while its impact on internal job mobility is less clear. Some people continue to invest in their human capital later on in their working lives, be it to improve their level of education or to obtain job/occupation specific qualifications. This article deals with the importance of educational attainment and the effects of completed education during employment, as well as participation in non-formal further training on job mobility processes in the Slovenian labour market. The overall job transition rate, intra-firm job transition rate and inter-firm job transition rate are taken into consideration. Retrospective data on job histories covering the period 1974-1994 are analysed, which enables us to point out differences caused by changes in labour market structures in the period of transition to a market economy.

The findings show that people with higher levels of educational attainment are more likely to change jobs, but also that labour force experience and non-formal further training seem to make up for missing educational certificates in overall job shifts and inter-firm job shift, whereas original occupation has the same function in intra-firm job shifts processes. Additionally the function of education completed during ones working life as job mobility resource is much less clear than expected.

Neither labour force experience nor further training function as a retention mechanisms i.e., they do not chain people to existing jobs; organised non-formal training supports job shifts. The transition period, significantly increases intra firm job shifts, however it does not seem to alter the significance of human capital variables and original occupations on job transition rates.

Key words: job shifts, job mobility, career development, labour market outcomes, mobility resources

INTRODUCTION

A great deal of effort has been invested in empirically estimating the relationship between education and labour market outcomes. Yet researchers have rarely directly examined the matching process by which individuals reach their positions. The perspective of "new structuralism" has recently emerged in the social stratification literature as a means of investigating the interplay between labour market structures and the process of stratification. The major contribution has been the focus on the demand side of the labour market, which represents the opportunity structure of mobility processes. Most contemporary job mobility theories view mobility as a function of both labour market structures and individual characteristics. A number of studies (Soerensen and Tuma 1981; Tuma 1985; Mayer and Caroll 1987; Blossfeld 1986; Mach, Mayer and Pohoski 1994) have employed a dynamic approach to analysing employment histories in order to investigate the mechanisms that govern labour market outcomes. This article tries to determine the impact of investment in human capital on job moves in the Slovenian labour market under labour market structures characteristic of the socialist system and under changes in these structures initiated by the transition to a market economy. Investment in educational attainment is taken into account, as is investment in specific occupational qualifications in the form of work experience and non-formal further training courses.

THEORIES ON MATCHING PEOPLE TO JOBS

Three main theoretical models on job allocation have been developed concerning the role of individual resources in the job-matching process. In the 1960s and early 1970s, the status attainment model was introduced in social mobility studies (Blau and Duncan 1967, Sewell and Hauser 1975). The model is based on the assumption that positions in the labour market are accessible to everyone who has the necessary resources. The model has been criticised for its one-sided emphasis of the relative importance of education and social origin and other individual characteristics (sex and race), and its neglecting mobility opportunities determined by labour market structures (Soerensen 1977). Furthermore, neoclassical economists have developed a powerful tool, the theory of human capital explaining labour market attainment (Becker 1975, Mincer 1974). The human capital theory postulates that changes in labour market attainment reflect differences in productivity, whereby productivity is a result of investment in human capital. Educational attainment and skills thus lead to the improvement of occupational positions. With both considered relatively constant in the process of attainment, on-the-job training and occupational experience are regarded as a major source of changes in labour market outcomes. According to Mincer (1974) training is not equally distributed through life. People invest in their human capital as long as they expect the returns on investment to exceed the costs. Therefore training takes place primarily in the first few years of employment. This explains the declining prospects of changing job later in working life.

Tuma (1985) argues that, considering the human capital theory, job moves can occur only where the worker and the employer are not in equilibrium: where there is equilibrium job change does not take place since neither the worker nor the employer can improve their position. But the human capital thesis does not say anything about the causes and frequency of disequilibrium. According to Soerensen and Tuma (1981), labour markets differ fundamentally with respect to their mechanisms for change in attainment. A perfect competition in the labour market is only possible if employment is flexible. But, as stated by Tuma (1985), a criticism of the neo-classical theory implies that employment is inflexible. Soerensen (1983) found an important source of inflexibility in the nature of employment relationships. He has developed the concept of "open" and "closed" employment relationships. In "open" employment relationships access to jobs is under the control of employers, while in "closed" relationships it is controlled by the workers.[1] A job can be occupied by a new incumbent only when the current incumbent retires, decides to leave (for a better job), or dies. The vacancy competition model applies to closed employment relationships. The pivotal mobility mechanism in this model is the creation of vacant positions and not changes in individual productivity, thus, in general education and occupational skills. A job move can occur only when there is a vacancy in the labour market.

Personal resources, such as education, social background and ability are crucial in the vacancy competition model because they determine which candidate gets access to a vacancy.

Blossfeld (1986) asserts that the vacancy competition model has introduced labour-market structure into the analysis of occupational mobility, but only with the assumption that the extension and shrinking of employment on all hierarchical levels produces a constant rate of vacancies. It is thus a model of promotion within a given inequality structure. Yet the structure of the labour market is not constant over time. He claims that labour market outcomes do also depend on specific historical conditions shaping opportunities at the time of entering the labour market, and on labour market structures at the actual historical time.

Looking at the job-matching models described above, the Slovenian labour market under socialism can be designated as a labour market where mobility regimes were governed by closed employment relationships with virtually perfect control by workers over access to jobs. Formally, candidates from the external labour market competed for vacancies under the same conditions as those from internal labour markets, and special bodies elected from workers in the firm were authorised to carry out the selection process. Qualification certificates represented the main selection criterion in the allocation process, in which not just educational credentials but also qualification certificates obtained through special assessment procedures in working organisations were taken into account. This suggests that formal recognition of qualifications gained through work experience and various forms of non-formal training might have diminished the role of educational credentials in the job-matching process.

With the transition to a market economy the most important resources of workers' control over access to jobs have been abolished, and greater flexibility in the functioning of the labour market has been assured. Since one of the goals connected with structural changes in the labour market is the adjustment of the qualifications of the workforce according to these changes, it seems reasonable to expect the value of formal education in the labour market to change and the human capital thesis to start applying in the job-matching processes.

DATA, VARIABLES, METHOD

The analysis is based on data from the "Quality of Life in Slovenia" survey, a nationally representative data set of 1,807 individuals of 18 years and over. The data covers the period 1974-1994. Data on the working lives of respondents was collected retrospectively. It provides information on every position held in the labour market by the respondents over the 20 year period.[2]

Positions held both in and outside the labour market were first reconstructed. Only those who had held at least one position in the labour market (either employment, self-employment, or unemployment) in the observed period were selected. Taking into account this criterion, a subsample of 1,389 respondents was selected. Altogether 3,263 episodes in and outside the labour market were generated, 2,302 of these being employment episodes (jobs). Each employment episode is described by:

- the month and year of the beginning of the episode,
- the month and year of the end of the episode,

Also regarding employment episodes, information on occupational position is given along with information on whether a person had come to the position from outside or whether she/he was transferred within the firm. On the basis of this data it was possible to make a distinction between inter-firm and intra-firm job shifts.

In order to make it possible to analyse the role of investment in education and training during a working life, educational careers during working lives were also reconstructed. This was done separately for formal education and for participation in non-formal training courses. Reconstruction of marital histories and births of children was done in the same manner.

For the purpose of this analysis the following are specified as dependent variables: a) the overall job transition rate; b) the intra-firm job transition rate; and c) the inter-firm job transition rate.[3] As for independent variables, these can be divided into time-constant and time-dependent variables. Time-dependent variables such as age and labour force experience were actualised at the beginning of each episode, whereas variables such as marital state, number of children, education, and participation in non-formal training courses[4] during each employment episode were included by episode splitting (see Blossfeld, Hamerle and Mayer 1989; Rohwer 1994; Blossfeld and Rohwer 1995). In this way 8,152 sub-episodes were obtained.

OCCUPATIONAL CATEGORIES

Occupational categories were constructed from data on individual occupational positions recorded on the basis of respondents' self-assessment. The job descriptions so obtained were coded with 3-digit codes from the International Standard Classification of Occupations (ILO 1990). These 3-digit codes where then aggregated into broader occupational groups according to qualification hierarchy and occupational activities. An attempt was made to create occupational groups as homogeneous as possible with regard to levels of qualifications and occupational activities.[5] The following broader occupational groups were obtained:

a) managerial positions (top and medium executive positions in finance and politics; administrative (managerial) positions; managerial positions in consumer and social services);
b) professional occupations;
c) semi-professional occupations - technical and natural fields;
d) semi-professional occupations - other ("service") fields;

e) administrative, clerical and commercial occupations;
f) skilled service occupations;
k) skilled manual occupations;
l) unskilled and semi-skilled manual and service occupations.

LIST OF INDEPENDENT VARIABLES INCLUDED IN THE ANALYSIS:

a) Educational attainment:
- 1 - 3 year occupational training at secondary school level, dummy variable;
- 4- and 5-year secondary education, dummy variable;
- college diploma, dummy variable;
- university/post-university diploma, dummy variable;
(the reference category is represented by the compulsory schooling).
b) Individual characteristics:
- Age in months;
- Male, dummy variable (female is the reference category);
- Married, dummy variable;
(non-married - single, divorced, widowed - is the reference category);
- Number of children younger than 16 years.
c) Education completed during employment:[6]
- The period after the first educational episode at post-secondary level, dummy variable;
- The period after the first educational episode at secondary level, dummy variable;
- The period after the second educational episode at post-secondary level, dummy variable;
- The period after the second educational episode at secondary level, dummy variable;

(the period prior to each completed educational episode is the reference category).
d) Special occupational resources:
- Occupational attainment:
. Managerial position, dummy variable;
. Professional occupations, dummy variable;
. Semi-professional occupations - technical and natural fields, dummy variable;
. Semi-professional occupations - other fields, dummy variable;
. Administrative, clerical and commercial occupations, dummy variable;
. Skilled service occupations, dummy variable;
. Skilled manual occupations, dummy variable;
(unskilled and semi-skilled manual and service occupations are the reference category),
. Occupational prestige measured by Treiman's International Occupational Prestige Scale;
- Acquisition of special occupational skills:
. General labour force experience in months[7] ;
. Participation in non-formal training courses:[8]
. The period after the 1st job-related training course, dummy variable;
. The period after the 1st non-job-related training course, dummy variable;
. The period after the 2nd job-related training course, dummy variable;
. The period after the 2nd non-job-related training course, dummy variable;
. The period after the 3rd job-related training course, dummy variable;
. The period after the 3rd non-job-related training course, dummy variable;
. The period after the 4th job-related training course, dummy variable;
. The period after the 4th non-job-related training course, dummy variable;
(the period prior to the end of each training course is the reference category).

e) Inter-firm job shift, dummy variable;
(intra-firm job shift is the reference category).

f) Cohorts and Periods
- Cohort 1946-55, dummy variable;
- Cohort 1956-65, dummy variable;
- Cohort >1965, dummy variable;
(Cohort < 1946 is the reference category).
- The period from 1988 onward[9] ,dummy variable; (the period prior to 1988 is the reference category).

For the analysis of effects of independent variables on transition rates, Event History Analysis has been used (Hamerle, Mayer 1989; Blossfeld, Rohwer 1995). The analysis was performed by the TDA computer package (Rohwer 1994).

The duration of an episode is represented in the statistical model by a non-negative random variable T. The density and distribution function are denoted by f(t) and F(t) respectively. The distribution function can be specified as

$$F(t) = Pr(T<t)$$

which specifies that the random variable T is smaller than t. The corresponding density function is then

$$f(t) = dF/dt$$

and the survival function

$$S(t) = Pr(T \geq t)$$

The hazard rate, r(t) is the central variable in the model; it can be interpreted as the unobserved transition rate from a job

$r(t)=f(t)S(t)$ or a more precise definition

$$r(t) = \lim_{\Delta t \rightarrow 0 \Delta t} \frac{P(t \leq T < t+\Delta t \mid T \geq t)}{\Delta t}$$

As such the hazard rate is defined as the limit as Δ t approaches zero of the probability of an event (i.e. a job shift) occurring in the interval of time between t and t + Δ t, conditional on survival to time t and relative to that interval.

Since transition rates to specified destination states have been modelled, we used competing risk models. A transition specific (i.e. the distinction between intra-firm and inter-firm job shifts) hazard rate my be defined as follows

$$rj(t \mid x) = \lim_{\Delta t \rightarrow 0 \Delta t} \frac{P(t \leq T < t+\Delta t, J=j \mid T \geq t,x)}{\Delta t}$$

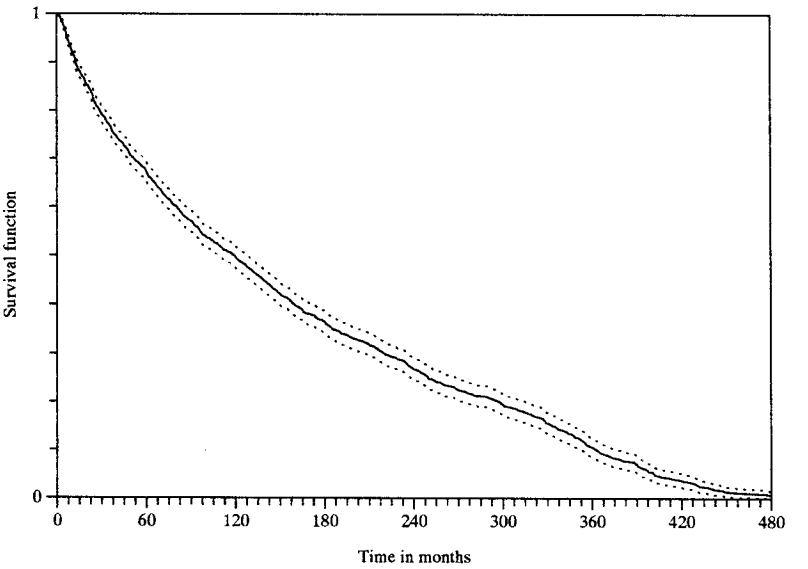
where J denotes a state variable which may take on values out of the set of destination states (1,...,m). A state specific rate is therefore the instantaneous probability of an event of type j occurring at time t, conditional on survival to time t.

RESULTS

The analysis starts with a description of the duration of a given job. For this purpose the product limit estimation (Kaplan-Meier method) of survival function has been applied (Rohwer 1994; Blossfeld, Rohwer 1995).

According to the descriptive statistics, the average length of time a job is held is about 9 years. In graph 1, the survival function in a given job is plotted[10] ; the curve shows that the survival function decreases faster in the first years of holding a job, thereafter it leaves it levels off. The decrease is faster again after some 25 years, and then it approaches zero. The presented dynamics are in accordance with general pattern characteristic elsewhere. Termination of a job at the beginning of its duration is commonly

Graph 1: Duration of jobs



explained using the human capital thesis (Mincer 1974; Becker 1975) and the dual labour market theory (Doeringer and Piore 1971). At the beginning of employment in a job the investment in job specific skills is low and therefore the costs of leaving the job are lower for both, the employee and the employer. With a longer stay in a job, specific occupational skills are acquired which discourage moving to another job, occupation or employer. There may also be other benefits after spending some time in a job which discourage job shifts, such as fringe benefits connected with seniority, promotion prospects and the like. In the context of surviving in a job in the Slovenian labour market, the probation period of newly hired employees should be mentioned. Within this period the employee is free to leave a job at any time without prior notice, and the employer has the right to dismiss a worker if during this period it turns out that he/she does not meet the requirements of the firm. Young people who enter employment for the first time after completing education have to pass a period of internship. Only after successfully completing internship they are allocated to a job which is commensurate with their qualifications. The assignment may be with the same employer or with another employer. Regarding the tendency for greater flexibility of the labour force in the period of transition to a market economy, it is likely that a probationary period, temporary internships and temporary employment are more often used in order to make it easier for numerical adjustment of the work force.

ESTIMATED BASELINE TRANSITION RATES

Maximum likelihood models have been used in order to estimate transition rates. Piecewise constant models were applied to account for duration dependence (Blossfeld, Rohwer 1995).

Table 1:
ESTIMATED BASELINE TRANSITION RATES

Duration of holding a job	overall job shifts	intra-firm job shifts	inter-firm job shifts
0 - 1 year	-5.5146**	-6.5624**	-5.3647**
1 - 5 years	-5.3628**	-6.3290**	-5.5488**
5 - 8 years	-5.6869**	-6.5117**	-5.7445**
8 - 10 years	-5.8227**	-6.5224**	-6.3148**
10 - 15 years	-5.7867**	-6.3261**	-6.3438**
15 years and over	-6.3174**	-6.6490**	-7.0659**

The duration of jobs was divided into six time periods: 0 - 1 year, 1 - 5 years, 5 - 8 years, 8- 10 years, 10 - 15 years, 15 years and over. The estimated baseline transition rates indicate that in the duration of time spent in a job there are not very notable differences; this holds true for the overall rate of transition to another job and the rate of intra-firm job shifts. The risk for the overall job shifts is slightly higher in the period of 1 to 5 years of holding the job and somewhat lower in the period from 15 years onward, while the highest risk of being transferred within the firm is characteristic of a periods from 1 to 5 years and from 10 to 15 years of holding a job. The likelihood of moving to another job within the firm is thus also somewhat higher in the later phase of holding a job. These later internal job shifts might indicate the promotion of a worker as well as protection against losing employment or worsening working conditions. On the contrary, the baseline inter-firm job transition rate indicates that a higher likelihood of moving to a job in another firm is characteristic of the first year of holding a job, while in later periods it decreases continuously. Thus the longer a person stays in the same job the less likely he/she is to move to another employer.

EFFECTS OF EDUCATIONAL ATTAINMENT ON JOB TRANSITION RATES

The attained level of education is considered the most important individual job mobility resource, regardless of whether it is dealt with from the viewpoint of the human capital theory, screening thesis, signalling thesis or credentialists' theory. The evidence is consistent in that better educational attainment enables individuals to get better positions in the labour market. Most authors stress the importance of education in entering a firm (Bills 1988; Soerensen and Tuma 1981), but there is also some evidence which confirms that education is also relevant in the case of intra-firm mobility, albeit with different effects (Di Prete and Krecker 1991). Our results confirm that the level of education attained significantly and positively affects

the job-to-job transition rate: the higher the attained level of education the stronger the effect on the transition rate compared to compulsory education. This holds equally true for the overall job transition rate (model 1 in table 2), for the internal job transition rate (model 1 in table 3.1), and for the inter-firm job transition rate (model 1 in table 3.2).[11] Such results correspond with the principle of the human capital theory that more investment in education raises the marketability of the worker. Taking into account the functioning of the labour market under socialism, it seems appropriate to look for an additional explanation of the obtained results also at the opportunity structures. According to some findings regarding labour market outcomes in countries with different educational systems, educational opportunities and specific structures of educational systems are as important in terms of labour market mobility regimes as are an individual's attributes. Allmendinger (1989) and Koenig and Mueller (1986) claim that in countries where educational systems are closely linked to the occupational structure and provide highly standardised and certified educational outcomes, people without the required training certificates are limited in their access to jobs in the relevant occupations. Given that in the Slovenian labour market occupational positions at each qualification level strongly correlate with particular level and type of education, the number of vacant positions with particular qualification demands creates mobility opportunities for individual educational categories. Official statistical data for the observed period indicate that the proportion of those employed in the traditional industrial sector decreased, while the share of those employed in the service sector increased. Also, the greatest educational discrepancies are found at the lowest and highest qualification levels (Mohorčič Špolar, Ivančič 1996). At the lowest qualification level there is over-employment, while there is a shortage of the employed with higher level qualifications. As a result, those with higher levels of education have more opportunities for moving to another job. However, as stated by Tuma (1985), according to the human capital theory job shifts occur only if and when the employee and the employer are in disequilibrium. Considering the wage system with small wage differentials that was characteristic of the socialist period, the higher probability of job shifts by better educated workers can in addition be explained by their feeling under-rewarded, which makes them search for jobs with higher rewards.

The fact that the attained level of education is important for inter- as well as intra-firm job shifts (model 1 in tables 3.1, 3.2)[12] can be linked to the absence of internal labour markets with job ladders that would enable the internal promotion of workers on the basis of special occupational skills and seniority.

EFFECTS OF AGE, GENDER AND FAMILY SITUATION ON TRANSITION RATES

Individual characteristics such as age, sex, marital status and number of dependent children are treated as "individual constraints" to job mobility processes (Soerensen 1975); they affect the transition rate regardless of individual resources. Results presented in model 2 in table 2 are in favour

of such an assumption. The effect of age on the overall job transition rate is significant and negative, which confirms the assumption that the capacity to change job decreases with age. This is in accordance with the job-matching thesis (Granovetter 1986, *Jovanovic 1979*) and with the human capital thesis. Workers later on in life are less ready to move to other jobs[13], and employers also refuse to hire older workers since they consider them less trainable and their working capacity reduced. Accordingly they do not expect returns on investment to justify the hiring costs. Such an assumption is additionally confirmed by the finding that age does not significantly affect the rate of intra-firm job shifts, whereas it seems to be an obstacle in the case of inter-firm job shifts (model 2 in tables 3.1 and 3.2).

Furthermore, results indicating the effect of gender on overall job transition rate are consistent with those in other countries (Caroll and Mayer 1986, DiPrete and Soule 1988): being a male significantly and positively affects the probability of changing job (model 2 in table 2). The lower female job-to-job transition rate can be explained by the traditional view of labour market participation of women, according to which the women's career is primarily within the family. Accordingly, women's employment is still often treated as supplementary even though we are talking about full-time employment. Socialist regimes were not able either to guarantee that legally established equal rights for men and women would necessarily be applied in everyday life. Additionally, women themselves often do not aspire to career development. The gender-specific division of family roles forces them to sacrifice their occupational careers to the well-being of the family. As a result women often prefer to have stable jobs without additional responsibilities. Benefits, such as the organisation of working time to suit family obligations, can compensate for more prestigious labour market positions. It is expected that differences in investment in human capital cause differences in women's labour market careers, but this is not a question addressed by this analysis.

It is typical for sex to affect both the intra-firm and the inter-firm job transition rates significantly (model 2 in table 3), the effect being somewhat stronger in the case of intra-firm job shifts.

Married people also display higher job stability than unmarried people. Such a result can be connected with the additional responsibilities that people take on when they get married. In addition, marriage more often takes place in the already stabilised life period when one settles in a job. Unlike marriage, the number of children younger than 16 years does not significantly affect the likelihood of moving to another job, either intra-firm or inter-firm.

Controlling for personal characteristics does not alter the significance of effects of educational attainment on job shifts, again this holds true for overall job transition rate as well as intra-firm and inter-firm job transition rate.

EFFECTS OF COMPLETING EDUCATION DURING WORKING LIFE ON RATES OF JOB SHIFTS

Not all people finish their educational careers at the time of their entering employment. Some return to education later on in their working lives, be it to make up for missing opportunities during their youth or to advance their educational level. Formal education is explicitly dealt with as an investment in human capital which is easily transferable between firms and industries, it is thus presumed that the acquisition of higher levels of education improves labour market attainment.

Since educational credentials formally play an important role in the Slovenian labour market, transitions to jobs at higher qualification levels are expected to occur via educational channels. Consequently it is assumed that educational achievements during employment are followed by job shifts. However, empirical evidence points to a somewhat different conclusion. The effects of two finished educational episodes at secondary and post-secondary level have been estimated in models 3 in tables 2, 3.1 and 3.2. According to the results, only the period after the second episode at secondary level significantly and positively affects the job-to-job transition rate14 , while other completed episodes do not show significant effects. Given these results it appears that investment in formal education later on in one's working life is not as significant an individual's job mobility resource as it was expected to be. This can be clarified by job-matching practices developed in the past. Although access to jobs was formally limited by educational credentials, both the shortage of suitable qualifications and the existing wage system supported the allocation of jobs to workers without the required educational certificates. Some of these workers later acquired the required credentials. Additionally, the educational requirements of particular jobs change over time and their incumbents may be required to improve their attained educational level. It is thus more likely that workers go back to school in order to fulfil the formal requirements of their job than to advance their occupational career. Regarding our findings, this seems especially true for those who finish post-secondary education.[15] Educational upgrading later on in one's working life, both at the secondary and at the post-secondary level, thus seems to have a compensatory rather than a cumulative effect in job mobility processes; that is, people first occupy jobs with higher educational requirements which they only belatedly satisfy.

Are there any differences between the effects of completed formal educational episodes while in employment on transition rates in the case of inter-firm job shifts and those in intra-firm job shifts? From models 3 in tables 3.1 and 3.2 it is evident that the periods after educational episodes do not have significant effects on the rates of intra-firm job shifts, whereas the second educational episode at secondary level significantly increases the likelihood of inter-firm job shifts.

Based on these findings the conclusion can be drawn that advancing the level of formal education later on in one's working life most likely represents an investment only in so far as it helps an employee keep his/her occupational position, since it less often facilitates job shifts.

EFFECTS OF OCCUPATIONAL RESOURCES ON TRANSITION RATES

Occupational resources in this analysis are as follows: original occupational position, occupational prestige, labour force experience, and qualifications acquired in non-formal further education and training. Attained occupational position and occupational prestige represent one's occupational achievement, whereas labour force experience and non-formal further training are dealt with as special occupational qualifications (skills).

OCCUPATIONAL ACHIEVEMENT

The results suggest that only two original occupational groups significantly affect the overall job transition rate: administrative and clerical occupations, and skilled service occupations; in both of these occupational groups there is an increased likelihood of transition to another job (model 4 in table 2). Because of the considerable decrease in the proportion of unskilled and semi-skilled workers in the last 20 years, the significant effect of this occupational group on transition rates was expected, yet the results do not correspond with this expectation. It may be assumed that discrepancies in occupational skills prevent workers from moving to other occupations, instead they leave and either remain unemployed or move to states outside the labour market (early retirement), while young people with more advanced qualifications occupy new jobs. Furthermore, it is also possible that the strong correlation between individual occupations and particular educational levels cancels out occupational effects on transition rates. The significant effects of administrative, clerical and commercial occupations and skilled service occupations on the job shift rate may indicate that these occupations are educationally less homogeneous and are not bound to particular industry, therefore they afford more opportunities for crossing occupational and educational boundaries. However, more detailed scrutiny would be needed for a satisfactory explanation.

Results presented in model 4 in tables 3.1 and 3.2 show that none of the original occupational groups significantly affects the intra-firm job transition rate, whereas in skilled service occupations the likelihood of inter-firm job shifts is substantially increased. In other words, occupational groups do not differ in the likelihood of moving to another job within firms, while only those employed in skilled service occupations are more likely to move to other firms than unskilled and semi-skilled manual and servant occupations.

After controlling for original occupational positions the significance of effects of educational attainment on the intra-firm transition rate alters: only university education remains significant. This could suggest that occupational attainment offsets the effect of some levels of education in internal

mobility processes, while in inter-firm mobility processes educational attainment is more significant than attained occupational position. On the other hand the finding that occupational prestige has a significant and negative effect on the inter-firm job transition rate and is non-significant in intra-firm mobility leads to the conclusion that those who occupy less prestigious jobs are more likely to move between firms, whereas in the case of intra-firm mobility occupational prestige is not relevant (models 5 in tables 3.1 and 3.2).

LABOUR FORCE EXPERIENCE AND PARTICIPATION IN NON-FORMAL FURTHER TRAINING

In the human capital theory (Thurow 1975, Becker 1964) and dual labour market theory (Doeringer and Piore 1971) investment in training is positively associated with job security and the internal promotion of workers. The extent of labour force experience is usually a measure of the acquisition of job-specific human capital. The longer workers stay in a job the more job and firm-specific human capital they acquire, and this chains them to a particular job and to a particular firm. Accordingly, a negative effect of labour force experience on the inter-firm job shift rate is expected, while it is assumed that labour force experience facilitates internal job shifts. Yet as Wholey (1990) points out, the length of time an employee spends in a job could indicate a lot of things, for instance that a person has reached his/her maximum level of competence, which indicates that he/she has lost the necessary human resources to start in a new job. Our results point to the non-significance of labour force experience on job transition rates, this applying equally to job shifts in general, intra-firm job shifts and to inter-firm job shifts.

However, occupational skills are not only acquired through on-the-job training; people often attend organised training courses in the external educational market. It is usually claimed that firms are more willing to invest in job-related training, while individuals themselves usually invest in more general qualifications which are valued by the external labour market.

For the purpose of this analysis non-formal further training is divided in job-related training and non-jobrelated training. It is assumed that job-related training constrains external job mobility, while training which is not related to a job does not affect job shifts.

The estimated effects (model 6 in table 2) suggest that the first training has a significant effect on the overall job shift rate. Given that people most often participate in educational and training events at a relatively young age (Ivančič 1995) and that this is when job shifts most often occur, it is understandable that when searching for another more suitable job additionally acquired qualifications are utilised. Also, training is often acquired outside firms in the education market; it is thus not tailor-made and skills obtained are easily transferable between firms and industries. Moreover, it is appearent that non-formal further training does not negatively affect job shifts, rather it has either significant and positive effect or non-significant effect. Further inspection of the estimated effects of non-formal further

training on intra-firm and inter-firm job transition rates (model 6 in tables 3.1 and 3.2) also indicates that the intra-firm job transition rate is not significantly affected by the first participation in training, it is further participation that actually matters, and both job-related courses and non-job-related courses are significant. On the other hand in the case of inter-firm mobility the participation in non-job-related courses seems more important than that in job-related courses.

The results obtained thus support the assumption that the acquisition of more general skills increases the opportunities for external job mobility, whereas job-orientated training is more likely to increase the likelihood of internal job mobility. At the same time these findings reveal that further training does not function as having a "holding" power in mobility processes; it does not negatively influence the risk of moving to another job.

It was assumed that labour force experience and further training represent an additional mobility resource complementary to the attained level of education. Yet, looking at model 6 in tables 2, 3.1 and 3.2 it is evident that after entering these variables in the mobility model the significance of individual educational levels on transition rates changes. In the case of the overall job transition rate and inter-firm job transition rate only college education remains significant, while the significance of educational levels for intra-firm job shift rate disappears. This suggests that qualifications acquired through work experience and non-formal further training balance, in the job-matching process, formal qualifications obtained in the educational system, and this decreases the significance of educational credentials in job mobility processes. Such a conclusion is also supported by findings regarding career development in a working organisation (Čibron 1989).

EFFECTS OF COHORTS AND THE TRANSITION PERIOD ON RATES OF JOB SHIFTS

The period covered by this study, 1974 - 1994, is characterised by deep economic, social and political changes. In the second half of the 1980s processes of restructuring of the labour market started which have fundamentally affected the behaviour of workers in the labour market. We have attempted to capture the effects of these changes on mobility processes in the labour market by estimating cohort effects and period effects. A cohort design is used that consists of 10-year birth cohorts from 1936 to 1965, whereas those born prior to 1936 are aggregated into the same birth cohort, and likewise those born after 1965. Since the birth cohort prior to 1936 and the 1935 - 45 birth cohort showed very similar survival functions they have been aggregated into one cohort. As for period effects, the period following 1987 has been included in the analysis.

Starting with the cohort effects, the results obtained indicate that compared to the cohort born prior to 1946, all three successive birth cohorts significantly, positively and strongly affect the likelihood of transition to another job. The younger the birth cohort the greater the increase in the transition rate. Cohort effects similar to those on the overall job transition rate are also characteristic of intra-firm job shifts and inter-firm job shifts

(model 7 in tables 3.1 and 3.2). How can these differences be explained? The key explanation can most likely be found in the changed labour market conditions which the youngest birth cohort experienced at the time of entering the labour market. Reduction of jobs has greatly restricted the chances for permanent employment. It is likely that temporary employment and internships account for a large proportion of the job shifts of this cohort. On the other hand, each cohort experienced different educational opportunities which determined the course of its labour market career. It may be assumed that younger cohorts have adapted to advanced qualifications that much better fit new job requirements than those of older cohorts; they are therefore expected to have more chances to get access to new jobs created by advanced technology.

Unlike cohorts, the transition period does not significantly affect the overall job- transition rate and inter-firm job shifts, but its effect on the intra-firm job transition rate is statistically significant and positive.[16] As stated by DiPrete (1993) restructuring of enterprises and industries usually produces a cascade of lateral and downward internal shifts in response to the elimination of jobs. Thus, our finding that the transition period significantly increases the chance of internal mobility might indicate the internal "reorganisation effect" of structural changes. Furthermore, it is likely that the restructuring of the labour market in the period of transition has in the first place increased the rate of job shifts of younger cohorts, whereas the value of investment in formal education and non-formal further training in the mobility processes does not seem to have changed substantially.

Table 2:
EFFECTS ON THE OVERALL JOB TRANSITION RATE, PIECEWISE-CONSTANT MODELS (COMPETING RISKS)

	MODELS							
	1	2	3	4	5	6	7	8
Period 0 - 12 months	-5.9286**	-5.1544**	-5.1385**	-5.1765**	-4.7975**	-5.3763**	-4.8959**	-7.2885**
Period 12 - 60 months	-5.7501**	-4.9044**	-4.9025**	-4.9383**	-4.5532**	-5.1570**	-4.6728**	-7.0094**
Period 60 - 96 months	-5.8447**	-4.9178**	-4.9276**	-4.9580**	-4.5700**	-5.1849**	-4.7200**	-6.9802**
Period 96 - 120 months	-6.2353**	-5.2616**	-5.2787**	-5.3102**	-4.9169**	-5.5503**	-5.0912**	-7.2672**
Period 120 - 180 months	-6.1128**	-5.1200**	-5.1475**	-5.1759**	-4.7821**	-5.4234**	-4.9742**	-7.0500**
Period >=180 months	-6.6198**	-5.6326**	-5.6424**	-5.6680**	-5.2698**	-5.9042**	-5.4843**	-7.1892**
Level of education								
Vocational training	0.2948**	0.2131**	0.1895*	0.1219	0.1705*	0.0669	0.0515	-0.0702
4-,5-year secondary education	0.4428**	0.4489**	0.4118**	0.3168**	0.4059**	0.2365	0.2340	0.0802
College diploma	0.7460**	0.8098**	0.8044**	0.7576**	0.9030**	0.6374**	0.6689**	0.4893
University/post-university diploma	1.0574**	1.1977**	1.2003**	1.1020**	1.2772**	0.7881*	0.7973*	0.4708
Individual characteristics								
Age		-0.0026**	-0.0026**	-0.0028**	-0.0028**	0.0004	-0.0005	0.0028
Men		0.1650**	0.1557**	0.2170**	0.2192**	0.2230**	0.2183**	0.1733
Married		-0.4923**	-0.4158**	-0.4175**	-0.4038**	-0.3847**	-0.3438**	-0.1002
No. of children < 16 years		0.0509	0.0467	0.0506	0.0447	0.0481	0.0808	-0.0005
Finished schooling while in employment								
Period after the 1st educational episode at postsec.level			-0.1426	-0.1494	-0.1646	-0.1889	-0.1498	-0.1252
Period after the 1st educational episode at second. level			0.2008	0.1623	0.1493	0.1579	0.1752	0.0617
Period after the 2nd educational episode at postsec. level			0.0909	0.0986	0.0281	0.0168	-0.0043	-0.1625
Period after the 2nd educational episode at second. level			0.7442**	0.7485**	0.7369**	0.7110**	0.6732**	0.4528**
Occupational resources								
Occupational attainment								
Managerial position				0.2303	0.4787**	0.5047**	0.4979**	0.5519**
Professional occupations				0.1358	0.4458*	0.4296*	0.4688*	0.6194**
Semiprofessional occupations - technical				0.0705	0.2592	0.2640	0.2395	0.2087
Semiprofessional occupations - other				0.0468	0.2155	0.2040	0.2042	0.2451
Administr. and clerical occupations				0.3061**	0.4842**	0.4809**	0.4607**	0.4796**
Skilled servant occupations				0.3474**	0.3482**	0.3795**	0.3811**	0.3724**
Skilled manual occupations				0.0204	0.0936	0.0909	0.0895	0.0656
Occupational prestige					-0.0144**	-0.0149**	-0.0148**	-0.0130**
Labour force experience and non-formal training								
General labour force experience						-0.0033	-0.0031	-0.0028
Period after the 1st jobrelated course						0.6088**	0.5968**	0.5834**
Period after the 1st non-jobrelated course						1.4538**	1.5525**	1.9823**
Period after the 2nd jobrelated course						0.4597**	0.4117**	0.2728
Period after the 2nd non-jobrelated course						0.5475**	0.4954*	0.3129
Period after the 3rd jobrelated course						0.2956*	0.2866*	0.3630**
Period after the 3rd non-jobrelated course						0.0708	0.1511	0.0951
Period after the 4th jobrelated course						-0.6067	-0.5446	-0.5746
Period after the 4th non-jobrelated course						-0.0197	0.0269	-0.3870
Inter-firm job shifts							-0.4007**	-0.1830**
Married*male							0.0667	0.1746
Cohort/Period								
Cohort 1946 - 1955								1.1643**
Cohort 1956 - 1965								1.4657**
Cohort > 1965								1.9195**
Period >1987								-0.0967

Notes:
Number of episodes = 8,152;
Number of events = 898;
**p<0.05; *p<010;

Table 3.1:
ESTIMATED EFFECTS ON THE INTRA-FIRM JOB TRANSITION RATE, PIECEWISE CONSTANT MODELS (COMPETING RISKS)

	MODELS						
	1	2	3	4	5	6	7
Period 0 - 12 months	-7.0071**	-6.6538**	-6.6310**	-6.5334**	-6.2514**	6.6929**	-9.4427**
Period 12 - 60 months	-6.7883**	-6.2887**	-6.2814**	-6.1857**	-5.9016**	-6.3689**	-8.8947**
Period 60 - 96 months	-6.8999**	-6.3081**	-6.3234**	-6.2292**	-5.9435**	-6.4180**	-8.6666**
Period 96 - 120 months	-6.9631**	-6.3118**	-6.3340**	-6.2445**	-5.9583**	-6.4473**	-8.5857**
Period 120 - 180 months	-6.6862**	-6.0065**	-6.0317**	-5.9403**	-5.6542**	-6.1500**	-8.1304**
Period >=180 months	-6.9819**	-6.3102**	-6.3153**	-6.2152**	-5.9222**	-6.3862**	-7.8567**
Level of education							
Vocational training	0.3588**	0.2909*	0.2665*	0.2397	0.2769*	0.1856	0.1033
4-5-year secondary education	0.4973**	0.4974**	0.4582**	0.2467	0.3150	0.1690	0.0964
College diploma	0.7647**	0.7934**	0.7625**	0.5169*	0.6288**	0.4261	0.5560
University/post-university diploma	1.0597**	1.0908**	1.0608**	0.8672**	0.9884**	0.7065	0.7741
Individual characteristics							
Age		-0.0009	-0.0009	-0.0013*	-0.0013*	0.0010	0.0019
Men		0.3416**	0.3373**	0.35997**	0.3565**	0.3411**	0.3890**
Married		-0.6992**	-0.6835**	-0.6803**	-0.6671**	-0.6329**	-0.1175
No. of children < 16 years		-0.0416	-0.0492	0.0477	-0.0505	-0.0528	-0.1103
Finished schoolings while in employment							
Period after the 1st educational period at postsec.level			0.3266	0.2880	0.2856	0.1937	0.3011
Period after the 1st educational period at second. level			0.4675	0.4120	0.4049	0.4088	0.2739
Period after the 2nd educational period at postsec. level			0.1344	0.1764	0.1401	0.0161	-0.2107
Period after the 2nd educational period at second. level			0.4728	0.4976	0.4869	0.3467	0.0035
Occupational resources							
Occupational attainment							
Managerial position				0.4685	0.6501*	0.6159*	0.6024
Professional occupations				0.1591	0.3898	0.1964	0.3406
Semiprofessional occupations - technical				0.4644*	0.5928**	0.5817**	0.4370*
Semiprofessional occupations - other				0.0713	0.1843	0.1715	0.1556
Administrative and clerical occupations				0.3788*	0.4985**	0.4793**	0.4074*
Skilled servant occupations				-0.2190	-0.2235	-0.1796	-0.2525
Skilled manual occupations				-0.0701	-0.0197	-0.0346	-0.0678
Occupational prestige					-0.0103	-0.0096	-0.0063
Labour force experience and non-formal training							
General labour force experience						-0.0024	0.0017
Period after the 1st jobrelated course						-0.0877	0.0339
Period after the 1st non-jobrelated course						-0.1380	0.6187
Period after the 2nd jobrelated course						0.6298**	0.4264*
Period after the 2nd non-jobrelated course						1.0675**	0.5223
Period after the 3rd jobrelated course						0.6276**	0.7016**
Period after the 3rd non-jobrelated course						-1.7018*	-1.6594
Period after the 4th jobrelated course						-8.8545	-8.8500
Period after the 4th non-jobrelated course						-8.1684	-8.6276
Cohort/Period							
Cohort 1946 - 1955							1.5117**
Cohort 1956 - 1965							2.0772**
Cohort > 1965							2.7464**
Period >1987							0.7445**

Notes:
Number of episodes = 5721;
Number of events = 331;
**p<0.05; *p<0.10

Table 3.2:
ESTIMATED EFFECTS ON THE RATE OF INTER-FIRM JOB TRANSITIONS, PIECEWISE CONSTANT MODELS (COMPETING RISKS)

	MODELS						
	1	2	3	4	5	6	7
Period 0 - 12 months	-5.8769**	-4.6750**	-4.6617**	-4.7577**	-4.4546**	-5.2179**	-7.7631**
Period 12 - 60 months	-6.0333**	-4.7234**	-4.7247**	-4.8177**	-4.5118**	-5.3064**	-7.7469**
Period 60 - 96 months	-6.1957**	-4.7521**	-4.7667**	-4.8527**	-4.5432**	-5.3504**	-7.6416**
Period 96 - 120 months	-6.7486**	-5.2394**	-5.2634**	-5.3444**	-5.0324**	-5.8629**	-8.0680**
Period 120 - 180 months	-6.7645**	-5.2367**	-5.2657**	-5.3434**	-5.0308**	-5.8644**	-7.9161**
Period >=180 months	-7.4537**	-5.9474**	-5.9552**	-6.0319**	-5.7131**	-6.5296**	-8.14.05**
Level of education							
Vocational training	0.4889**	0.3662**	0.3458**	0.2659**	0.3053**	0.1736	0.0418
4-,5-year secondary education	0.5179**	0.5255**	0.4949**	0.4559**	0.5273**	0.3163	0.1666
College diploma	0.8250**	0.9438**	0.9237**	0.9395**	1.0471**	0.6817**	0.5784*
University/post-university diploma	1.1748**	1.4090**	1.4101**	1.3995**	1.5443**	0.8446	0.5920
Individual characteristics							
Age		-0.0042**	-0.0042**	-0.0043**	-0.0042**	0.0000	0.0027
Men		0.2535**	0.2458**	0.2933**	0.2930**	0.1992**	0.3338**
Married		-0.6171**	-0.5952**	-0.5994**	-0.5879**	-0.5800**	-0.0941
No. of children < 16 years		0.0483	0.0508	0.0559	0.0518	0.0544	-0.0072
Finished schooling while in employment							
Period after the 1st educational episode at postsec.level			-0.4717	-0.4491	-0.4594	-0.4503	-0.422
Period after the 1st educational episode at second. level			-0.0607	-0.1053	-0.1174	-0.1004	-0.1828
Period after the 2nd educational episode at postsec. level			0.3528	-0.3587	0.3044	0.3558	0.1429
Period after the 2nd educational episode at second. level			0.8400**	0.8313**	0.8132**	0.8299**	0.5601**
Occupational resources							
Occupational attainment							
Managerial position				0.1103	0.2988	0.3571	0.3642
Professional and scientific occup.				0.0582	0.2954	0.3832	0.5303*
Semiprofessional occupations - technical				-0.0763	0.0757	0.1131	0.0108
Semiprofessional occupations - other				0.0886	0.2261	0.2280	0.2082
Administr. and clerical occupations				0.1531	0.2932	0.2900	0.1928
Skilled servant occupations				0.5182**	0.5112**	0.5452**	0.4758**
Skilled manual occupations				0.1262	0.1834	0.1875	0.1558
Occupational prestige					-0.0116**	-0.0125**	-0.0098**
Labour force experience and non-formal training							
General labour force experience						-0.0044	-0.0028
Period after the 1st jobrelated course						0.9303**	0.8946**
Period after the 1st non-jobrelated course						1.8512**	2.3254**
Period after the 2nd jobrelated course						0.2995	0.1543
Period after the 2nd non-jobrelated course						0.5889*	0.2686
Period after the 3rd jobrelated course						0.0102	0.0504
Period after the 3rd non-jobrelated course						0.5171*	0.4647*
Period after the 4th jobrelated course						0.4196	0.5107
Period after the 4th non-jobrelated course						1.5879**	1.1410
Cohort/Period							
Cohort 1946 - 1955							1.2894**
Cohort 1956 - 1965							1.8499**
Cohort > 1965							2.3346**
Period >1987							0.2595

Notes:
Number of episodes = 5721;
Number of events = 600;
**p<0.05; *p<0.10;

CONCLUSION

Mobility is commonly dealt with as a function of individual resources and characteristics as well as structural factors. Labour market structures determine mobility opportunities, while individual resources and characteristics enable individuals to make use of these opportunities. This analysis has primarily focused on investigating the effects of human capital variables on overall job shifts, intra-firm job shifts and inter-firm job shifts; the level of education attained, completed educational episodes during employment, labour force experience, and participation in non-formal further training represent these variables. Since the data covers a period of important structural changes, the effects of these changes are also estimated.

It has been found that survival over time in a given job creates a shape which is consistent with general expectations: somewhat faster decrease in the beginning, which than slows down, and faster decreases again only at the end of a working life. It also seems that only the inter-firm job shift rate shows somewhat stronger duration dependence - a higher initial transition rate which then decreases constantly. Men are more likely than women to move between jobs, while age above all constrains inter-firm job shifts.

Our findings regarding the effects of educational attainment seem to be in accordance with the predictions of the human capital theory: higher levels of education are more likely to move to another job. This holds true for overall job shifts, internal shifts and inter-firm shifts. However, the findings that labour force experience and non-formal training cancel out the significance of effects of formal educational attainment suggest that job/occupation specific qualifications are more likely than general qualifications to facilitate job mobility. Accordingly, occupational qualifications gained outside the educational system do not represent an occupational resource cumulative to educational credentials, as claimed by the human capital thesis, but more likely function in the job-matching process as a compensation for missing formal education. It can be argued that labour market institutions and arrangements characteristic of the socialist period have to a large extend determined such a position of educational credentials in job mobility processes. The feeling of being under-rewarded encourages better educated workers to search for jobs with rewards more commensurate with their investment in education. Furthermore, our findings indicate that completing formal education during employment functions as a compensatory factor for incumbents of jobs without required educational certificates rather than an individual mobility resource. In closed employment relationships a job shift is possible only if a vacancy occurs; improvement of formal education is thus not automatically followed by a transition to another job, but only if such a job is vacant. As far as investment in formal education later on in one's working life functions as a mobility resource it facilitates inter-firm job transitions. At the same time it holds true that non-formal further training does not bind workers to their jobs; it supports job mobility, whereby non-job related training seems to be more important for inter-firm shifts while both, jobrelated and non-job related training facilitate intra-firm shifts.

A strong cohort effect on job shifts was also discovered. Younger cohorts display significantly higher rates of moving between jobs, this applying to all types of shift. As for the transition period it can be argued that in addition to producing a chain of internal job shifts as a consequence of the restructuring of working organisations, its most obvious effect is the increased job mobility of the youngest cohort. The analysis has not discovered any significant changes in the role of investment in human resources in job shifts in the period of transition. However, firmer conclusions regarding gains and losses of individual educational categories in teh labour market would only be possible with careful scrutiny of the directions of job shifts and of whether they were voluntary or involuntary.

NOTES

1 Workers gain control of access to jobs through a variety of means: specific qualifications for a job, educational credentials, collective action, etc. A closed employment relationship is typical of primary labour markets, whereas secondary ones are governed by an open employment relationship. Thus human capital theory is more likely to apply to secondary labour markets (Soerensen and Tuma 1981).

2 A more detailed description of the data collected by the "Quality of Life Survey" is given in Drobnič 1995 .

3 In addition to the overall job transition rate, effects on transition rates to self-employment, to unemployment, to retirement and to (unspecified) states outside the labour market were also estimated in the same models, but are not presented in this article.

4 Only training courses of at least 30 hours were included.

5 Some inconsistencies can be found in the way occupations were classified:

a) different managerial levels are aggregated into the same group; as a consequence the group is not homogeneousregarding qualifications, additionally it also differs in the degree of autonomy and responsibility;

b) semi-professional occupations are split into two groups since it is assumed that they are highly gender-biased. The same may also be justified in the case of professionals, yet because of the small number in this category, division was not performed;

c) the number of semi-skilled and unskilled service occupations was very small; these occupations were added to semi-skilled and unskilled manual occupations. In this way qualification homogeneity was preserved, but at the same time the homogeneity of occupational activities was violated.

6 A maximum of four educational episodes had been completed by one person, yet the 3rd and the 4th schooling showed only few numbers, and were therefore dropped from the analysis.

7 A proxy for general labour force experience has been constructed. To the legal school leaving age (15 years of age, this age also representing the transition to secondary education) the average time needed to finish a particular level of education was added. It was assumed that the first entry into employment occurred immediately after completing education, and that the employment career was not interrupted by non-employment spells.

8 Originally seven subsequent participation in training courses had been recorded, but only the first four participations showed high enough number to be included in the analysis.

9 Since the interviews were conducted in May, June and July 1994, this period includes the years 1988-1993 and the first half of the 1994.

10 All employment episodes are included, regardless of their destination states.

11 In the case of overall job moves, compared with primary education having a university or a post-university degree increases the risk of leaving the original job for another job by about 188%, college education by about 111%, 4- and 5- year secondary education by 56 %. The lowest increase applies to vocational secondary education, about 34 %.

12 In the case of intra-firm job shifts, vocational education increases the transition rate by about 43%, 4- and 5 year secondary education by about 64 % , a college diploma by about 115 % and university and post-university diplomas by about 188 %. For inter-firm shifts the corresponding figures are as follows: 63%; 68 %; 128 %, and 224 %.

13 According to the job-matching thesis (Jovanovic 1979, Granovetter 1986) young people at the beginning of their employment career shop around for a job which best matches their expectations and abilities, while later on they settle in a job.

14 The period after the completed second educational episode at secondary level increases the transition rate by about 110 %.

15 According to statistical data, the largest share of workers with post-secondary education is employed in service sector, especially in social services (education, health, research); reforms of these services often bring about a requirement for higher levels of education.

16 According to the results the period of transition increases the risk of internal job shifts by about 110 %.

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