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**EDUCATING COMMUNIST CADRES: SCHOOL RE-ENTRY AND SPONSORED
EDUCATIONAL MOBILITY IN STATE SOCIALISM**

Martin Kreidl

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Contact: kreidlm@ksa.zcu.cz

ABSTRACT

This paper analyzes the participation of vocational school graduates in further education in socialist Czechoslovakia between 1948 and 1989. Students at vocational secondary schools did not acquire a complete secondary education equivalent to that offered at academic and professional high schools. Therefore, they were formally ineligible to enroll in tertiary education. However, previous analyses have shown that about 16% of all apprentices continued their education after completing vocational training and thus had a chance to attain a secondary-school diploma, and were even eligible to obtain a college education. The main question I pose in this text is: who were the apprentices that re-entered school after completing their vocational training? Were they people selected, primarily on the basis of political criteria and loyalty to the communist regime, to form the working-class cadres, or were they children from politically disloyal families who for political reasons could not follow the regular educational career and after completing their vocational training went on to study at schools they had been barred from entering immediately after completing elementary education? The analysis reveals that non-standard education was a mechanism of sponsored mobility utilized by the Communist Parties to promote loyal working class youth to become future supervisors, administrators, and/or managers.

1 INTRODUCTION

This paper analyzes the participation of vocational school graduates in higher education in five former socialist countries – Bulgaria, the Czech Republic, Hungary, Poland, and Slovakia – between 1948 and 1989. Students who during this period attended vocational secondary schools did not acquire a complete secondary education equivalent to that offered at academic and professional high schools. Therefore, they were formally ineligible to enroll in tertiary education. However, previous analyses have shown that about one in six of all vocational school graduates continued their education after completing vocational training, had a chance to attain a secondary-school diploma, and became eligible for college education. The central question posed in this paper is: who were the apprentices that re-entered school after completing their vocational training? Were they people who were selected, primarily on the basis of political criteria and loyalty to the Communist regime, to form the working-class cadres, or were they children from politically disloyal families who for political reasons were unable to proceed along the customary educational trajectory and after completing their vocational training went on to study at schools they had been barred from entering immediately at the time they completed their elementary education? Or were they drawn from still other social categories?

2 EDUCATIONAL TRANSITIONS, SECONDARY SCHOOL TRACKING AND SCHOOL RE-ENTRY IN THE SOCIALIST EDUCATION SYSTEM

In their groundbreaking book, Blau and Duncan (1967) measured educational attainment by years of schooling an individual was able to obtain. Their 'cumulative' view of education has long been considered a standard in stratification research (e.g. Featherman, Hauser 1978). Unlike Blau and Duncan, Mare (1981) proposed that education be viewed as a series of transitions from a lower educational level (grade, class, type of school) to another, higher one. Using this model, sociologists study an individual's relative chances of success in a given transition using a binomial logit model and examine how the odds of making the transition differ by socioeconomic background, among other things. Mare's logistic transition model has become the most commonly used technique for the analysis of educational inequalities over the last twenty years (see e.g. Shavit, Blossfeld 1993; Hauser, Andrew 2005), and it has helped us make headway in obtaining a better understanding of educational stratification. Recently, Breen and Jonsson (2000) proposed a multinomial extension of Mare's model. They pointed out that, while Mare's model presumes the unilinearity of educational trajectories, many education systems are horizontally structured and contain parallel alternative paths from one level to another. They argued that a logit model with a dichotomous dependent variable is incapable of adequately representing the educational choices that exist in tracked education systems, because individual educational tracks can differ in quality

of instruction and curricula, because placement and/or selection into individual tracks may be governed by different principles, and each track may lead to different cognitive, occupational, and other outcomes (see e.g. Ayalon, Shavit 2004; Breen, Jonsson 2000; Gamoran, Mare 1989; Kreidl 2004; Müller, Karle 1993; Shavit 1990; Shavit, Featherman 1988).

Secondary school tracking was a key feature of the education systems in the former socialist nations. Students had several different options after completing primary school at the age of 14 or 15. They could either not attend any secondary school, or they could attend one of the following institutions: They could go to a lower secondary vocational school with a school-leaving certificate (hereafter referred to as vocational, or lower secondary schools), which lasted two or three years, but which did not enable the student to progress to the university level, or they could attend one of a variety of other four-year secondary schools, including various types of vocational schools, professional schools, and academic secondary schools, all of which terminated in a complete secondary school diploma. These schools differed in terms of how much practical training and vocational preparation was provided on the one hand, or how many academic, college preparation classes were given on the other, but in either case all graduates of such schools possessed the certificates necessary for applying to college.¹

¹ The most important types of secondary school in this category were vocational schools granting a complete secondary degree, professional secondary schools, and academic secondary schools.

The choice to pursue vocational training after completing elementary education was long considered a dead-end within the education system of socialist countries and was believed to inevitably imply the impending termination of a person's educational career (cf. Heyns, Bialecki 1993; Matějů 1993; Nieuwbeerta, Rijken 1996; Róbert 1991; Szelényi, Aschaffenburg 1993; Wong 1998). This assertion is highlighted by data on low inter-track mobility during socialism (see e.g. Kreidl 2004). However, earlier detailed studies of the educational histories of individuals in former Czechoslovakia revealed that there was even a way out of this apparent dead-end. Approximately one in six vocational school graduates was able to continue their educational career later in life at another secondary school offering complete secondary education and qualifying students to enter university (Kreidl 2003). According to literature on this topic, similar instances of secondary school re-entry also existed in other Soviet bloc countries, including Russia (Gerber 2003) and Hungary (Róbert 1991).² However, these cases have not yet been subjected to close empirical scrutiny.

After school re-entry most students graduated successfully, and some of them even went on to university (see e.g. Kreidl 2005a). School re-entry was therefore

Professional secondary schools and diploma-granting vocational schools were oriented more towards immediate labor market entry, while *academic high schools* were designed to prepare students for tertiary study and represented the most natural, though not exclusive, steppingstone to university.

a phenomenon of profound significance for educational stratification in the former socialist countries. Nevertheless, previous research has mostly ignored the existence of school re-entry, and therefore very little is known about what mechanisms governed the processes whereby people were selected for these educational trajectories and what their implications were for educational stratification.

In the following sections of this paper two competing theoretical explanations are presented that relate to who the apprentices that returned to school and aspired to obtain complete secondary education actually were. One hypothesis is based on Turner's theory of sponsored and contest mobility and suggests that the students that re-entered school were selected for sponsorship by the Communist Party (referred to hereafter as CP) to form future cadres. The second hypothesis posits that school re-entry was a strategy used by students from politically persecuted families who were not allowed to proceed along the normal educational trajectories, i.e. acquiring complete secondary education and enrolling in college at the standard age.

I have also developed some hypotheses referring to the effect of an individual's membership in the Communist Party and the effect of their parents' membership on the odds of school re-entry, the combined effect of the political persecution of the family and its political capital, and the changing value of political capital, and some other hypotheses about the possible interactions between

² Róbert (1991) claims that non-standard educational paths were uncommon in Hungary; however, his claim is falsified by the data presented here.

the socioeconomic status of the family of origin and the political status of an individual, and about potential interactions between gender and the individual's political status and between gender and cohort. Below I will test these hypotheses, after explaining in greater detail the rationale behind each of them.

3 SPONSORED EDUCATIONAL MOBILITY UNDER SOCIALISM

There is a remarkably uniform tendency in modern societies for higher status children to obtain more education than their less advantaged peers (e.g. Blau, Duncan 1967; Featherman, Hauser 1978; Mare 1981; Shavit, Blossfeld 1993; Treiman, Ganzeboom, Rijken 1998; Treiman, Yip 1989). Many scholars have speculated that this particular outcome – intergenerational educational reproduction – may be generated by various different underlying processes. Turner (1960), for instance, proposed that there are two distinct ideal-typical mobility regimes. In the system of so-called contest mobility, young people compete openly for upward mobility. According to Turner, contest mobility is a typical feature of the American stratification system, where only individual effort, ability, and motivation lead to success. Turner also identified the system of sponsored mobility in England. In this system the future elites are selected early in their educational career to attend select private schools. Like British private clubs, to which admittance is gained only if a current member vouches for a person, enrollment in elite private schools must

be 'sponsored' by a current member of the elites and admission cannot be obtained solely on the basis of a person's own efforts.

Li and Walder (2001) adopted Turner's approach and applied it to an analysis of the recruitment of the administrative elites in Communist China. They showed that future elites are selected from among regular Communist Party members, but Party patronage is offered only to those who enter the Communist Party at a very early age. The selected individuals are then sponsored for access to schools and higher educational institutions and later to occupy elite occupational and administrative positions. The policy of the Chinese Communist Party thus resolved, in a very subtle way, the dilemma over whether key administrative positions should be filled on the basis of political criteria or qualifications (see also Walder, Li, Treiman 2000).

4 POSITIVE AND NEGATIVE EDUCATIONAL DISCRIMINATION

Šafář (1972) applied Blau and Duncan's (1967) status attainment model to Czechoslovakian data and concluded that there were no major differences between the two stratification systems. According to Šafář, the overall goodness of fit of the model is similar despite minor differences in the individual parameters. However, Boguszak, Gabal, and Matějů (1990) re-analyzed both Blau and Duncan's and Šafář's models, and using different statistical tests rejected Šafář's conclusion. They moreover proposed an alternative status attainment model for Czechoslovakia,

which differs from Blau and Duncan's model in two significant respects. First, the respondent's education depends directly on his current occupational status, and second, a person's current occupational status was directly influenced by the father's education.

School re-entry supposedly plays a key role in explaining both these 'socialist' distinctions. According to Boguszak et al. (1990), the first of these distinctions was a result of positive political discrimination exercised in favor of insufficiently qualified but politically reliable employees in the process of filling managerial positions. Many of the 'blue-collar managers' who were promoted on the basis of political criteria lacked the formally required qualifications for the particular position. While this inconsistency was viewed as undesirable during some periods, there were high incentives for those cadres to continue their schooling, either at regular schools, evening schools, or even at special training institutions that often awarded credentials without the respective coursework. Boguszak et al. were able to illustrate this educational sponsorship of Communist cadres using data from a survey conducted among Czechoslovak experts in 1984. While among members of the Communist Party 20% had attained their education in an evening or 'special' study program, this was true for only 8% of non-Party members. Similarly, among management and state administration employees, the percentage of Communist Party members who had attended 'special' study programs was 39%, whereas only 24%

of non-Party members in the same occupational group had done so (Boguszak et al. 1990: 178).

The second socialist 'anomaly' was, according to Boguszak et al. (1990), a result of the effort on the part of politically discriminated families to undo the consequences of politically enforced downward educational mobility. Boguszak et al. claim that if higher status children could not study as a consequence of negative educational discrimination, which was quite common in some historical periods (see e.g. Hanley 2001; Kreidl 2004; Kreidl 2005b), they nevertheless inherited the cultural capital and educational aspirations of their family of origin. This drove them to enhance their education later in life, i.e. after starting employment, and they did so mostly at evening schools or through distance learning (Boguszak et al. 1990: 180).

The literature on this subject thus offers two rather contradictory interpretations of the selection of individuals into non-standard educational trajectories under socialism. On the one hand, some authors argue that school re-entry was an instrument to promote loyal Communists to positions of power and/or legitimize their past promotions, and that it represents an example of politically sponsored mobility. On the other hand, others argue that school re-entry was a strategy employed by politically persecuted families to avoid the consequences of political discrimination and secure desired educational credentials for their offspring. These two sharply contradictory interpretations will be empirically assessed below.

5 DATA, METHOD, AND VARIABLES

In this analysis the data I use has been drawn from the 'Social Stratification in Eastern Europe after 1989' survey, which was conducted in 1993 in six post-Communist countries: Bulgaria, the Czech Republic, Hungary, Poland, Russia, and Slovakia (see Treiman, Szelényi 1994 for details). However, owing to a small yet important deviation in the Russian questionnaire the comparability of the Russian educational data with that of other countries is questionable, and the decision was made not to include it in this paper.

The educational roster of this survey contains all the information required for this analysis, including a list of all schools that the respondent ever attended during his or her lifetime, the year attendance began and ended, and whether the course of study was completed successfully, i.e. the relevant certificate was obtained. The data set from the selected countries contains a total of 23,957 completed interviews, of which only 17,942 respondents completed primary education and were required to make a decision about secondary school during the socialist period, i.e. between 1948 and 1989. Out of this total of 17,942 individuals, only 6,810 (38%) entered a vocational secondary school as their first choice, and of them only 6,024 (93%) successfully graduated before the collapse of the Communist regimes in 1989 and were thus at risk of school re-entry during the Communist period – the historical period of primary focus in this paper. However, some respondents were lost owing to the absence of data on some

important questions. For 13 respondents, the information on the timing of educational progressions was inconsistent over subsequent episodes, so these respondents were not used in the analysis. Similarly, the information about gender was missing for one respondent, who was consequently also excluded from the analysis. This left a total of 6,010 cases, and these were used for the empirical analyses below. Out of the 6,010 respondents at risk of school re-entry, 1,120 (18.6%) re-entered secondary education before 1989.

The school re-entry rate in the studied sample was 13%, 13%, 22%, 31%, and 16% in Bulgaria, the Czech Republic, Hungary, Poland, and Slovakia, respectively (see Table 1). These rates vary somewhat between countries and historical periods. They range between 10% in the Czech Republic in the 1975–1989 cohort and 34% in Poland in the 1960–1974 cohort. The only exception is Bulgaria, which witnessed low re-entry rates, particularly in the youngest cohort, with only 3% of all vocational school graduates re-entering some form of complete secondary education upon graduation (Table 1). In Bulgaria school re-entry would be less significant for social stratification anyway because only a small fraction of each cohort chose to study at vocational secondary schools and were thus ever at risk of re-entering complete secondary programs later in their lives (under 10% of each cohort enrolled in vocational programs). There is no perceptible trend in the school re-entry rate in any country except Bulgaria, where school re-entry became less common in the later decades of socialism (see Table 1).

In this analysis I used a dichotomous dependent variable to indicate the commencement of further education leading to complete secondary education, and I used a discrete-time event-history technique to model the log odds that the respondent would re-enter school as a function of the amount of time passed since graduation and other covariates, formulated as:

$$\ln \left(\frac{W}{1 - W} \right) = a + \sum_{i=0}^j b_i X_i$$

where W is the probability of enrollment, and X_i is the vector j of independent variables, including the time since graduation (measured in years), and their interactions between variables.

I reshaped the original data matrix of 6,010 rows-respondents to obtain units of analysis defined as person/years. The reshaping produced a set of 91,327 observations (person/years) at risk of re-entering school. Respondents either "failed" (i.e. entered a second secondary school) or were right-censored in the year 1989. However, because the relative frequency of re-entries was very low after 20 years (fewer than five events per year), later risk sets were not analyzed. This reduced the total number of analyzed person/years to 77,150. Using this reshaped data set, the above-mentioned event-history model corresponds to the standard logistic regression model, in which, however, observations are not individuals

but individuals at a certain specific time after the completion of the first high school. The amount of time since graduation is one of the explanatory variables.

Other explanatory variables included in the analysis are the father's and the mother's education (measured in years of school attendance), as measures of the family's cultural capital, and the socioeconomic status of the family of origin, which I measured using the 'International Socio-Economic Index of Occupational Status' (ISEI, see Ganzeboom, De Graaf, Treiman 1992) of the household head at the time the respondent was 14 years old. If the father was employed and his occupation was known, the father's occupation was used; otherwise the mother's occupation was substituted. Family size was measured by the number of siblings a respondent had; the measure was topcoded at four siblings.³ I used a dichotomous variable to distinguish between men and women (only 40% of the sample were women because vocational education was much more common among men than women), and the parents' membership in the Communist Party

³ All interval variables were centered on their means before being entered into the analysis. However, for easier interpretation, the descriptive statistics reported in Table 5 refer to scales before centering. I used a dummy replacement for missing data for all interval explanatory variables. The mean value of years of schooling was 9.14 in the case of the father's education and 8.15 in the case of the mother's education. 319 respondents (5%) failed to state their father's education, and 153 (3%) their mother's education. The average socioeconomic status was 32 on the ISEI scale. The measure of socioeconomic background was missing in 324 cases (5%). The average respondent had 2.14 siblings (on the topcoded scale). 97 respondents did not report the number of siblings.

as a measure of the political status of the family. Owing to the large number of responses that were missing for the question on the political status of the parents, respondents were divided into three groups: (1) those respondents who had at least one parent who was at some point a Communist Party member, (2) those respondents whose parents were never either of them Communist Party members, and finally (3) those respondents who did not indicate the political status of their parents. I used two dummy variables to contrast the first and the third group with the second. Finally, I used the respondent's membership in the Communist Party as a time-varying covariate.⁴ Three different political statuses of respondents were distinguished: (1) never a member, (2) currently a member, (3) responded that once was a member, but had been expelled or quit. Former members of the Communist Party were expected to have poorer educational prospects than individuals who were never members. Also, I measured the political desirability of a person's background with a single dichotomous variable that indicates whether or not any family property (parents' or grandparents' land, business, etc.) had been confiscated after the Communist revolution in 1948. About 33% of the sample had parents or grandparents on either side whose property was expropriated by Communist

⁴ The survey contains the exact information about the history of a respondent's political activities, i.e. the exact year when he or she joined the Communist Party. Unfortunately, similarly detailed information is not available for the respondent's parents.

revolutionaries (see Table 2). Descriptive statistics for all independent variables in the analysis are presented in Table 2.

6 MODELING SCHOOL RE-ENTRY AND TESTING ADDITIONAL HYPOTHESES

6.1 Modeling the effect of time on school re-entry

In the search for an adequate model, I employed the criteria of classical inference and – mostly as a secondary criterion – the BIC coefficient proposed by Adrian Raftery (Raftery 1995)⁵. The analysis involves four steps. First, the effects of time on the log odds of school re-entry are estimated in order to determine the basic shape of the hazard function. Then, other covariates are added to the model and it is checked for any resulting changes in the shape of the hazard function. Third, various interactions between covariates pertaining to other hypotheses are tested for. And finally, the estimated coefficients of the selected models are presented.

⁵ I used the following formula to compute BIC: $BIC = -\chi^2 + p_k * \ln(N)$, where χ^2 is the LR statistic for comparing the null and the actual model, and p_k is the number of degrees of freedom associated with that test. Two alternative Ns can be used in discrete-time event-history analysis, one referring to the total number of exposure units (here person/years), the other referring to the number of events (here school re-entries). While there seems to be little consensus regarding what is more appropriate statistically (cf. Raftery 1995; Xie 1994). The more conservative option is chosen here and the number of total exposure units is used.

Table 3 presents the goodness of fit statistics of a series of models designed to determine the shape of the hazard function. Model 1 postulates the discrete effect of time and is thus the saturated model of the effect of time, and Figure 1 portrays the probability of school re-entry as predicted from it. It is evident that the predicted probability of school re-entry is greatest in the first year after the completion of vocational training, and it is clearly non-linear. Approximately 8.4% of vocational training graduates at risk enrolled in another secondary school immediately after completing their vocational education. After that the chance of school re-entry drops significantly, to approximately 2.1% in the second year and then to 1.3% in the third year. Afterwards, the re-entry rate continues to decline by small amounts until it drops below 1% in the sixth year and below 0.5% after 13 years, and it remains below that level up to the end of the period under observation (see Figure 1).

I estimated Models 2 and 3 in an attempt to find a more parsimonious model capable of capturing the non-linearity of the relationship between time and school re-entry. Model 2 specifies only the linear effect of time, and Model 3 adds a dichotomous variable for an immediate transition to a second secondary school. While the simple linear model is statistically inferior in comparison with the saturated model (L^2 difference of 994.4 with only 19 degrees of freedom, p-value 0.000 and a significantly greater BIC statistics – see Table 3), Model 3 yields relatively satisfactory statistics of fit in comparison to Model 1. Model 3 has a significantly lower BIC (-1339.5 vs. -1159.3 in model 1) and it is also good

enough when compared to the saturated model using classical inference ($L^2= 22.3$ with 18 degrees of freedom, p-value 0.218). Therefore, I consider Model 3 a parsimonious representation of the hazard function over the risk time.

The probability of success predicted from Model 3 is displayed in Figure 2 together with the prediction from the saturated model. Model 3 reproduces the values from the saturated model with satisfactory substantive accuracy, and it also seems to correspond well with our intuitive understanding of the schooling process.

The effect of time on the log odds of re-entering school remains unaltered when country dummies are added to the model (see statistics of fit for Models 4, 5, and 6 and contrasts between models in Table 3). Similarly, the shape of the hazard persists even when all the other covariates are added to the model. In the analysis I added these additional covariates in two steps. I first added the other relevant explanatory variables (i.e. cohort, respondent's sex, father's education, mother's education, main breadwinner's occupational status, number of siblings, parents' Communist Party membership, respondent's Communist Party membership, and a dummy for family property confiscation⁶, see Model 10 in Table 3). Because the last of these variables is not part of the standard set of predictors of educational transitions in sociological research, and because I want to maintain a minimal level of comparability of this study with other pieces of research, I also estimated

⁶ All models also contain dummy variables indicating initially missing values substituted by the mean. Their estimated coefficients are not shown in any model.

all the models without this covariate (see, e.g., Model 11 in Table 3).⁷ Given that the results of model selection do not differ regardless of whether or not the last covariate is used, it is the models with the complete set of covariates that are mainly discussed in the following paragraphs.

6.2 An additive model of all covariates

The pattern of effects estimated using Model 10 is on the whole consistent with the general hypotheses (see Table 7). The education of both parents and the socioeconomic status of the family of origin increase the log odds that a respondent re-enters school, while the number of siblings reduces the odds of re-entry. A respondent's own membership in the Communist Party strongly increases the odds of re-entry, and the effect of terminated membership is very strong yet statistically insignificant (Z -statistic= -1.17), which is not surprising given that only very few individuals left the Communist Party during the Communist period. The coefficient for the Communist Party membership of a respondent's parents is also positive, but again it is not statistically significant (Z -statistic= 0.78). Respondents from families that were negatively impacted by property confiscation

⁷ Although the statistics of fit are reported here for both models in subsequent tables, the estimated coefficients and standard errors are shown for the complete model only. It turns out that information on property confiscation does not affect what models are statistically acceptable and the sizes and statistical significance of estimated effects in those models.

had a higher chance of re-entering school after completing their vocational training than their counterparts in families that had not lost any property (see Table 7). The fact that we find both the positive effect of Communist Party membership and of property confiscation in the model at the same time suggests that there is no simple either/or relationship between the theories of sponsored mobility and the compensation of political persecution. I will explore these two effects and their possible interactions in more detail below. The individual coefficients of Model 10 and their respective test statistics are presented in Table 7.

6.3 The nature of the effect of Communist Party membership on school re-entry

Some more specific hypotheses about who returns to school and when can be tested by adding interaction effects to Model 10. First, I want to explore the relationship between a respondent's Communist Party (CP) membership and the political status of his/her parents. There are two competing hypotheses regarding the effects of parental and the respondent's membership in the Communist Party on the school re-entry transition. The first hypothesis is that the effects may be additive (Hypothesis 1A). This hypothesis is drawn from Wong (1998), and it claims that CP membership is a measure of the additional social capital that individuals may mobilize to increase their educational prospects. If, as some argue,

individuals obtain this capital from more frequent interaction with other Communists at Party meetings and during other Party-organized activities, then the more Party members there are in a family, including the respondent him/herself and his/her parents, the more social capital there is, and thus the greater the chance of school re-entry.

The second hypothesis is that the effects of the respondent's membership in the Communist Party and that of his or her parents are not additive, but rather interact (Hypothesis 1B). Membership in the CP was traditionally considered a sign of loyalty to the regime in the literature (see e.g. Walder 1995), a quality that was required to reach certain 'closed' stratification positions (Sørensen 1983). However, it was enough if the respondent was from a loyal family, i.e. he or she need not have had the attributes of 'loyalty' him/herself. A larger number of Party members in the family did not increase credibility beyond what was derived from the fact that at least one member of the family had loyal attributes. This corresponds to the results of a statistical model in which these two effects interact. Essentially, I expect that the major difference would be between respondents who themselves were not Communist Party members and whose parents were CP members neither and all other respondents, who should experience higher odds of school re-entry.

Model 12 tests the two hypotheses by adding to Model 10 an interaction between the respondent's current membership in the Communist Party and parental membership in the Communist Party. The quality of the model is clearly somewhat

enhanced by this modification. A comparison of Models 10 and 12 results in $L^2= 3.8$ with 1 degree of freedom, which is exactly at the margin of standard statistical significance level (p-value= 0.051), as is a comparison of Models 13 and 11 ($L^2= 3.9$ with 1 degree of freedom). According to BIC the more parsimonious Model 10 is preferable to Model 12, and Model 13 is preferable to Model 11. Nevertheless, the comparisons of Models 10 and 12 and Models 13 and 11 present convincing evidence that the effects are interactive rather than additive. Therefore, I reject Hypothesis 1A and conclude that the relationship between the respondent's and the parents' membership in the Communist Party is interactive. This suggests that membership in the Communist Party functioned as a sign of the loyalty of the entire family and thus as a form of political capital rather than a source of social capital. Estimated coefficients and standard errors of Model 12 are presented in Table 7.

6.4 The effects of Communist Party membership over the life course

Li and Walder (2001) demonstrate that membership in the Communist Party was an important net advantage in the occupational attainment process under socialism, but was so only in the early stages of a person's career. Later in life its importance declined significantly, as the tendency was for only young Communists to be chosen for Party patronage, educational sponsorship

and occupational promotions. From the Chinese experience it is possible to derive a general hypothesis that CP membership really only matters at the beginning of a person's life course. Therefore, I expect that the effect of the respondent's membership in the Communist Party on the log odds of re-entering school decreases as people age (Hypothesis 2).

Hypothesis 2 is tested in Models 14 and 15 by adding the interaction between time at risk and the respondent's own current Communist Party membership to Models 10 and 11. It turns out that there is a significant interaction between the respondent's CP membership and time. The L^2 for a comparison of Models 14 and 10 is 5.1 with 1 degree of freedom, which implies a p-value of 0.024, i.e. a statistically significant difference (BIC again favors the more parsimonious model). Therefore, according to the criteria of classical inference, Model 14 is preferable to Model 10. However, contrary to expectations, the interaction between time and the respondent's CP membership is positive ($b= 0.049$, see Table 7), which means that the effect of a person's membership in the CP increases slightly over time! Hypothesis 2 is therefore clearly refuted by Model 14 and I conclude that the advantages in school re-entry associated with Communist Party membership grew rather than declined over a person's life-course.

6.5 Positive or negative discrimination?

The theories outlined in sections 3 and 4 of this paper suggest that school re-entry could be both a mechanism of Communist-sponsored mobility and a mobility avenue for the children of the politically persecuted. It remains to be shown what the relationship between these two theories is. One possible interpretation would suggest that only children from politically 'reliable' families would ever be chosen for Communist sponsorship (Hypothesis 3A), while the political involvement of the students from persecuted families is itself of no real value for educational mobility. This interpretation suggests that there was a particular pattern of interaction between parental persecution and the respondent's CP membership. Alternatively, the status of the parents and that of the respondent may operate independently of each other, suggesting an additive model instead (Hypothesis 3B).

Yet another option is that while every vocational school graduate could potentially become a Communist Party member, children with politically undesirable backgrounds had to display extra effort and devotion to the official ideology in order to become CP members. *If they were, however, allowed to join the Party, they were likely to be seen as more devoted to the regime than regular members and thus had better chances for political sponsorship than others.* This again suggests an interaction between the respondent's CP membership and a family's political

persecution (Hypothesis 3C), yet an interaction different in nature than that mentioned in Hypothesis 3A.

Model 16 adds to Model 10 the interaction between political persecution and the respondent's CP membership. This modification again leads to a borderline improvement of the model fit ($L^2= 4.3$ with 1 degree of freedom, p-value= 0.039, see Table 4). Consequently, I can reject Hypothesis 3B and accept either Hypothesis 3A or 3C. An examination of the individual coefficients in Model 16 (see Table 7) reveals that while the main effect of the respondent's CP membership remains significant and positive in Model 16, the interaction is also positive and significant. Therefore, it seems that school re-entry operated as both a second chance for the politically persecuted and as a mechanism for educating future Communist cadres. Interestingly, though, it appears that these two selection principles combined to give an extra advantage to children from politically persecuted families who were willing to 'deny' their heritage and become actively involved in the activities of the Communist Party.

6.6 Differences between cohorts in Communist affiliation effects

While it is interesting to note that active Communists enjoyed some advantages over non-Communists in the stratification process, one could argue that, as the nature of the Communist regimes changed over time, the relative value

of political capital must have changed, too. For instance, it could be argued that in the early stages of Communism policies were designed to equalize educational opportunities among social classes, while the later stages were marked by the development of a new class of political leaders and officials (Djilas 1957; Konrad, Szelényi 1979; Kubat 1963), for whom the socioeconomic background of students mattered less and who – particularly after some attempts at counter-revolution in the second half of the 1950s and later during the 1960s – established new promotion and sponsorship policies by taking into consideration overt demonstrations of political loyalty rather than the social background criteria previously employed (see e.g. Alan 1998 for biographical evidence on the changing value of Communist affiliation in Czechoslovakia, and Hanley 2001, 2003 for related empirical evidence). Similarly, the 1980s constituted a period of new economic policy in most former socialist countries, most notably in Hungary, and, to a lesser extent, also in Poland and other countries. So it could be expected that at that time the importance of meritocratic and achievement criteria would grow and the significance of the political principles governing the allocation of people to schools and/or jobs would wane. This would appear to warrant an investigation into the changing value of the respondent's and the parental political statuses for school re-entry. Specifically, I expect the strongest effect of CP affiliation in the middle cohort and weaker perhaps even insignificant effects in the oldest and youngest cohorts (Hypothesis 4).

I can test this hypothesis by adding to Model 10 (see Table 4) the interaction between the cohort and the respondent's CP membership (Model 18) and the interaction between parental CP membership and the cohort (Model 20). Both sets of interactions appear to be just marginally statistically significant. A comparison of Model 18 and Model 10 yields $L^2 = 4.1$ with two degrees of freedom (p-value= 0.123), and a comparison of Model 20 and Model 10 returns L^2 of 5.3, again with two degrees of freedom (p-value= 0.070, see Table 4); in both cases BIC favors the more parsimonious model. Therefore, there is only inconclusive evidence that the value of CP affiliation for school re-entry changed over time. Moreover, a closer look at the pattern of coefficients in Models 18 and 20 (see Table 7) shows that they only weakly follow the pattern predicted in Hypothesis 4. The effect of the respondent's own political affiliation appears to grow somewhat between the oldest and the middle cohorts and weaken again between the middle and youngest cohorts as predicted by the theory. There is less evidence of a predictable trend regarding the effect of parental political capital on the chances of the child re-entering school (see Table 8). Hence, the analysis doesn't confirm Hypothesis 4.

6.7 Class background and political loyalty

Some authors argue that membership in the Communist Party was a particularly efficient career strategy for students from the lower classes, because they possessed two ideologically favorable qualities: lower class origin and political loyalty. Walder, Li and Treiman (2000), on the one hand, have shown that the Communist regime in China offered two different channels of upward occupational mobility: education or membership in the Communist Party. They demonstrated that membership in the Communist Party was the prevalent career strategy among less educated people. A recent paper by Hanley and Treiman (2003) duplicated this analysis but using data from six Eastern and Central European countries. Their findings are very similar and thus confirm the general applicability of the 'dual career path' model. It implies that the positive effect of respondent's Communist Party membership was stronger among lower class respondents than among the middle and upper class individuals.

Other authors maintain that school re-entry compensated for the political persecution of children from former elite and otherwise politically undesirable families. Boguszak et al. (1990) claim that school re-entry and 'special' forms of study, such as, for example, evening courses, represented a second chance for politically persecuted children under Communism. If a child was unable to follow the desired educational trajectory for political reasons, e.g. was not allowed to enroll

in an academic secondary school after primary school graduation and had to matriculate at a vocational school instead, he/she could attempt to re-enter the desired school later in life.⁸ This interpretation suggests that non-Communist upper class students had an extraordinarily strong motivation to re-enter school after graduating from a vocational school.

Both theories lead to the same conclusion and predict interactions between measures of socioeconomic background and the respondent's current Communist Party affiliation: the effect of parental SES was weaker among students who were Communist Party members, or, in other words the positive benefits associated with CP membership were greater among lower status students (Hypothesis 5). Model 22 serves to test Hypothesis 5 with the addition of three interaction terms to Model 10: the interaction between the father's education and the respondent's CP membership, the interaction between the mother's education and the respondent's CP membership, and the interaction between the head of household's ISEI

⁸ This was a possibly efficient strategy for multiple reasons. First, the regime itself could have changed its attitude towards dissidents and other disloyal citizens over time and could have become more benevolent towards its opponents before they reached the age for school re-entry. Second, CP administrators could have decided that the child 'had been taught enough of a lesson' and that no further persecution or re-socialization was necessary. Third, because vocational education was mostly training for manual workers, vocational school graduation may have given a person a politically more desirable working class status, which would outweigh the politically problematic status of a person's parents.

and the respondent's CP affiliation. Collectively these three interactions do not increase the quality of the model very much ($L^2= 3.4$ with 3 degrees of freedom, see Table 5 – which is not a statistically significant improvement), but the results may be affected by the high collinearity between all three SES measures.

Therefore, I estimated Models 24, 26, and 28 by adding only one interaction at a time to Model 10. But even these models provide little evidence of an interaction. Model 24 contains the interaction between the father's education and the respondent's CP membership, and statistically it is no better than Model 10 ($L^2= 1$ with 1 degree of freedom, see Table 5). Model 26 contains the added interaction between the mother's education and the respondent's CP affiliation, and even this does not represent an improvement of fit ($L^2= 0.8$ with 1 degree of freedom). In Model 28 the interaction between the ISEI and the respondent's CP membership is added, but again this fails to improve the fit of the model ($L^2= 0.0$ with 1 degree of freedom). I cannot find any evidence then that CP membership would offer a particularly strong advantage to lower class kids, or that non-Communist upper class children would experience greater chances of re-entering school than their CP-member counterparts.

6.8 Gender and sponsored mobility

Model 10 somewhat surprisingly revealed that, overall, men were no more likely to re-enter school than women (see Table 7). But this finding likely obscures a trend in the effects of gender on educational stratification. Socialist countries, like many other societies, first experienced a narrowing of the gender gap in education and then its reversal in the second half of the 20th century (Buchmann et al. 2003; DiPrete et al. 2003; Gerber, Hout 1995; Shavit, Blossfeld 1993; Mare 1995; Kreidl 2004; Treiman, Ganzeboom, Rijken 1998). Not letting the gender effect vary between cohorts may result in what is shown in Table 7: the male advantage in the older cohorts and the female advantage in the younger cohorts average out and only an insignificant overall effect can be seen. Therefore, I must allow gender to interact with the cohort variable, as in Model 30, in order to see if the effect of gender indeed varied between cohorts (Hypothesis 6). Model 30 is statistically significantly superior to Model 10 ($L^2= 10.1$ with 2 degrees of freedom, see Table 6), as is Model 31 to Model 11 ($L^2= 9.8$ with 2 degrees of freedom, see also Table 6). This comparison confirms that the effect of gender on the log odds of school re-entry did change over time. The estimated coefficients and standard errors of Model 30 are presented in Table 8, and they confirm that while men had higher chances of re-entering school in the oldest cohort, there was no difference between men and women in the middle cohort, and women were

somewhat better off in the youngest cohort, although the coefficient for gender is only marginally statistically different from zero in the youngest cohort ($Z = -1.72$, $p\text{-value} = 0.085$).

Hypothesis 7 claims that the value of CP membership varied by gender. I expect then that the CP effect is stronger for men than for women (i.e. an interaction between gender and CP membership), because it was mostly men who occupied positions of power in the Communist parties in Central and Eastern Europe and among the economic and administrative elites (Wong 1996; Hanley 2003). It is therefore likely that only men were serious candidates for politically sponsored mobility. The gender difference in sponsored mobility is tested in Models 32 and 33 by adding the interaction between gender and the respondent's CP membership to Models 10 and 11, respectively. However, the models are not statistically superior to Models 10 and 11 (see Table 6 for the goodness of fit statistics). There is no statistically significant difference between men and women in terms of the effect of current Communist Party membership on the log odds of school re-entry. Similarly, a comparison of Models 10 and 34 and Models 11 and 35 demonstrate that the interaction between parental CP membership and the respondent's gender is not statistically significant either (see Table 6 for the parameters of the statistical tests).

7 CONCLUSIONS AND DISCUSSION

The classic models of educational attainment are inadequate for describing educational transitions in former socialist societies. Not even the multinomial transition model as formulated by Breen and Jonsson (2000) is fully accurate, unless it makes allowances for less standard progressions through the system of secondary education – specifically, the possibility of returning to second secondary school after completing a first secondary school, de facto nullifying the consequences of the original choice of high school. The discussion above shows that opting for vocational training without a school-leaving diploma, which was considered a dead-end within the framework of many education systems in Central and Eastern Europe, did not necessarily lead to the termination of the education process. Approximately one-sixth of all vocational school graduates – quite a large proportion of each cohort – went on to enroll in another secondary school after completing vocational training and were able to acquire the secondary school-leaving diploma, which opened up another avenue for obtaining post-secondary education. Indeed, as earlier research has shown, many people were able to continue on to university after obtaining their secondary school diploma in this rather non-standard fashion (see Kreidl 2005a). Most school re-entrants continued their studies immediately after completing vocational training; many, however, went back to school after an interruption of several years.

To a significant degree an apprentice's decision to pursue further education was a choice that was contingent upon the social and economic characteristics of the family of origin, and the decision to re-enter school was, in this sense at least, similar to other educational transitions. Nevertheless, some aspects of secondary school re-entry were specific to this particular educational hurdle. Most notably, school re-entry was a frequent mechanism for educating Communist cadres, to a degree not previously identified. Vocational school graduates who joined the Communist Party vastly increased their chances for further education and probably also for subsequent occupational promotion. In the course of a person's life, the advantages related to membership in the Communist Party increased, so even middle-age workers still had the chance to join the Party and start building a career.

This effect of Communist Party membership on educational mobility has not been documented previously. I posited two reasons as to why the effect has remained hidden: (1) In the past authors were concerned exclusively with the highest level of education attained, they did not study educational paths in detail, and this obscured the transition analyzed in this paper – a transition in which Communist Party sponsorship was arguably the strongest; (2) None of the previous research included information on the year the respondent joined the Communist Party, and therefore this factor was not used as a time-varying covariate. Consequently, scholars ignored the dynamic relationship between CP membership

and school progressions in state socialism and failed to identify the magnitude of their correlation.

Membership in the Communist Party represented political rather than social capital; it was a sign of loyalty and not an additional network of social contacts. The analysis in this paper shows that although the political activities of respondents played a key role in determining their education, the political status of the family of origin was also a resource, albeit one of much less significance. Nevertheless, the political status of the parents had a positive effect only on the educational outlook of those vocational school graduates who themselves were not politically active. In the case of vocational school graduates who were Communist Party members the political capital of their parents did not bring any additional advantages. This suggests, as outlined above, that Communist Party membership indeed functioned as a source of political rather than social capital. This finding adds a new piece of empirical evidence to the ongoing debate over the nature and proper interpretation of the correlation between the respondent's and/or the parents' affiliation with the Communist Party and the enhanced educational chances of respondents.

Interestingly, secondary school re-entry also served as an avenue that the children of the politically persecuted could use to obtain their desired level of education. Given that some higher status students were banned from attending academic and professional secondary schools on the basis of political criteria

(see e.g. Kreidl 2005c), it is likely that they sought alternative ways of obtaining the educational credentials they wanted. One of the alternatives may have been a detour leading through vocational school, secondary school re-entry, followed by college entry. There are several reasons why this strategy could work. First, admissions to secondary schools differed between schools and school types, and obviously also over time as the ideology and everyday practices of the Communist regimes changed, too. Simply applying to a different school, or waiting for a more favorable time, may have enhanced the odds that even a student with a politically frail profile would be admitted. Second, unsuccessful applicants to upper secondary schools became – often only temporarily – unskilled manual workers. Having a manual occupation was frequently viewed as a more important criterion for school admission than the parental political record, and perhaps as an unintended consequence of political persecution students were often able to obtain their educational credentials anyway.

The estimated effect of membership in the Communist Party was particularly high for the children of the politically persecuted, for whom the effect of CP membership was almost twice as high as for other members. Literature on this subject does not offer any intuitive explanation for this finding. One hypothesis is that it reflects a self-selection effect. It is likely that only extremely career-oriented children from politically persecuted families ever became members of the Communist Party. Because this is such a highly select group

of active Communists, it is likely that they would have experienced an above-average chance of re-entering school.

In this analysis I found little evidence of a 'dual-path' model of attaining a secondary school diploma. Unlike studies of occupational mobility in China (Walder, Li, Treiman 2000) and in Central and Eastern Europe (Hanley, Treiman 2004), where upward occupational mobility was based either on human capital as approximated by educational attainment, or on political capital, this paper does not indicate that the value of education would have varied according to Communist Party membership. The analysis did, however, reveal that the value of political capital varied over time in a rather predictable way.

While this study shows that even non-standard educational careers are stratified on socioeconomic background, it left aside some very important issues. For instance, it does not indicate what the implications of the existence of non-standard educational trajectories were for the landscape of educational stratification. Did they enhance or diminish socioeconomic inequality in access to schooling? Breen and Jonsson (2000) have shown that the effect of parental social class on the odds of success in educational transitions was *stronger* in less common attainment paths. However, they recognize that this finding is hard to generalize to other societies with different education systems and at different stages of educational expansion. A natural sequel to this paper would be a study that looks into the impact of non-standard educational mobility on educational inequality.

This kind of research is of growing importance as the incidence of interrupted educational careers is increasing in many countries (see e.g. Corman 1983; Entwisle, Alexander, Olson 2004; Jacob, Hillmert 2003; Schömann, Becker 1993; Jacobs, Stoner-Eby 1998; Tittle, Denker 1977) while the demand for such careers is growing as well (e.g. Jacob, Hillmert 2003), and the educational reforms that promote such careers are spreading (e.g. Berggren 2005). Furthermore, these non-standard educational careers may have profound implications for comparative educational stratification research, because they are likely to be governed by different principles than standard careers, and this could be the source of a bias in comparisons between countries and between historical periods, when there are differences in the incidence of non-standard careers. Therefore, it is imperative that sociologists provide insight into the stratification of non-standard careers and study their implications.

8 TABLES AND FIGURES

Table 1: Secondary school re-entry rates among vocational school graduates by country and cohort, former socialist countries, 1948 – 1989. Number of cases at risk is reported in parentheses.

	Cohort			Total
	1948-1959	1960-1974	1975-1989	
Bulgaria	12% (86)	18% (97)	3% (30)	13% (213)
Czech Republic	13% (643)	15% (965)	10% (459)	13% (2,067)
Hungary	24% (253)	25% (538)	17% (422)	22% (1,213)
Poland	28% (166)	34% (549)	29% (492)	31% (1,207)
Slovakia	17% (338)	16% (755)	14% (512)	16% (1,605)
Total	17% (1,486)	21% (2,904)	17% (1,915)	19% (6,305)

Note: only enrollment in a complete secondary program is included, cohorts are based on year of graduation from primary education (7th, 8th or 9th grade depending on country and cohort) as in previous tables.

Table is based on interviews conducted in 1993, so particularly rates for the most recent cohort are likely to be downwardly biased due to unfinished schooling in the youngest cohort.

Table 2: Descriptive statistics of independent variables in the analysis. Vocational school graduates in Central and Eastern Europe, 1948 – 1989. N= 6,010.

	Mean	Standard deviation
Male	0.60	--
Father's education	9.14	2.71
Father's education missing	0.05	--
Mother's education	8.15	2.43
Mother's education missing	0.03	--
No. of siblings	2.14	1.26
No. of siblings missing	0.02	--
Main earner's ISEI	32.00	11.22
Main earner's ISEI missing	0.05	--
Parents not CP members	0.20	--
Parents CP membership – missing	0.08	--
Respondent CP member (ever) ⁹	0.13	--
Respondent ever left CP (ever) ¹	0.02	--
Family property confiscated in 1948	0.33	--

Note: See text for individual variables' value coding; education, occupation, and sibling scales before centering (see text for details). Standard deviations are not shown for dichotomous variables as in that case they are simple a function of the mean.

⁹ As time-varying covariates in the analysis, because value may change within individuals over time, this statistics is shown merely as background information. Only entries and exits from the CP during the time period under investigation count.

Table 3: Goodness-of-fit statistics for selected discrete-time event-history models of secondary school re-entry, Central and Eastern Europe, 1948-1989. Number of persons/years at risk= 77,150, number of individuals= 6,010, number of events 1,120.

Model	L ²	d.f.	p-value	BIC
Age effects only:				
M1: discrete time effects only	1384.4	20	0.000	-1159.3
M2: linear effect of time	994.4	1	0.000	-983.1
M3: 2+dummy for year 0	1362.1	2	0.000	-1339.5
Add country dummies				
M4: M1+ country dummies	1559.2	24	0.000	-1289.1
M5: M2+ country dummies	1175.4	5	0.000	-1119.2
M6: M3+ country dummies	1536.7	6	0.000	-1469.2
Add other covariates:				
M7: covariates only ¹⁰	586.7	20	0.000	-361.7
M8: covariates + discrete time effects	1792.4	40	0.000	-1342.2
M9: covariates + linear effect of time	1412.4	21	0.000	-1176.0
M10: M9 + dummy for year 0	1769.3	22	0.000	-1521.7
M11: M10 - any family property confiscated	1756.3	21	0.000	-1520.0
Contrasts				
M1-M2	390.0	19	0.000	-176.2
M1-M3	22.3	18	0.218	180.2
M3-M2	367.7	1	0.000	-356.4
M4-M5	383.7	19	0.000	-169.9
M4-M6	22.4	18	0.213	180.1
M6-M5	361.3	1	0.000	350.0
M8-M7	1205.5	20	0.000	980.5
M8-M9	380.0	19	0.000	166.2
M8-M10	23.1	18	0.189	179.5
M10-M9	356.9	1	0.000	-345.7

¹⁰ Cohort 1948 – 1960, cohort 1961 – 1974, sex, father’s education, mother’s education, ISEI, number of siblings, parents’ Communist Party membership, missing parents’ Communist Party membership, respondent Communist Party member, respondent expelled Communist Party member, political persecution of parents/grandparents, and dummy indicators of mean-replaced missing values.

Figure 1: Predicted probabilities of school re-entry as a function of discrete time (Model 1), vocational school graduates only, Central and Eastern Europe, 1948 – 1989.

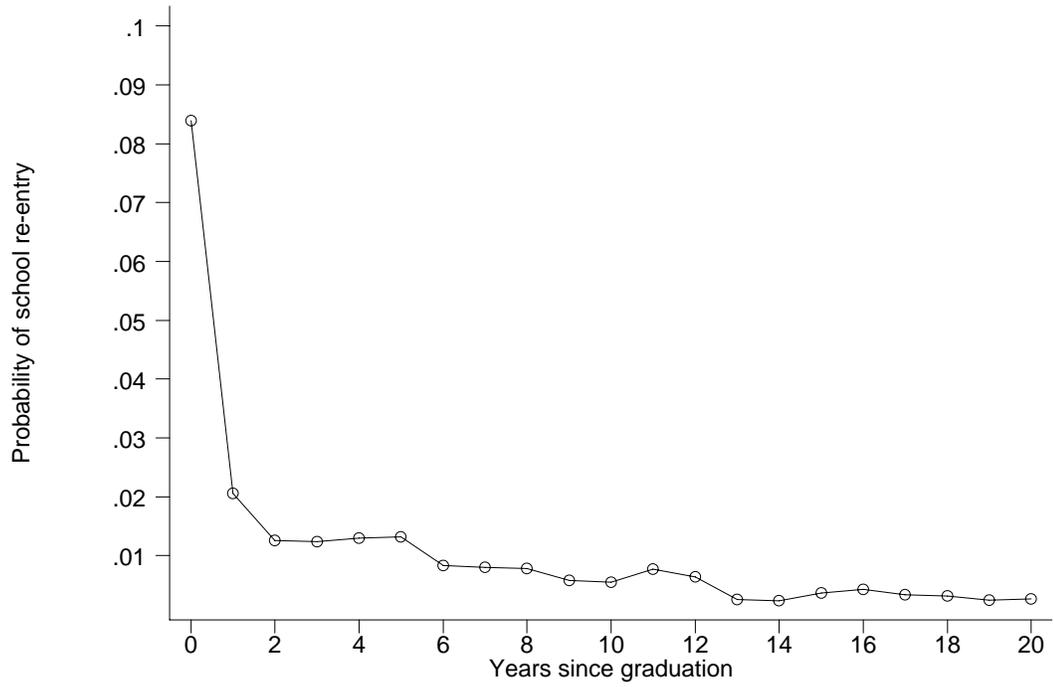


Figure 2: Predicted probability of school re-entry as a function of time from models 1 and 3, vocational school graduates in Central and Eastern Europe, 1948-89.

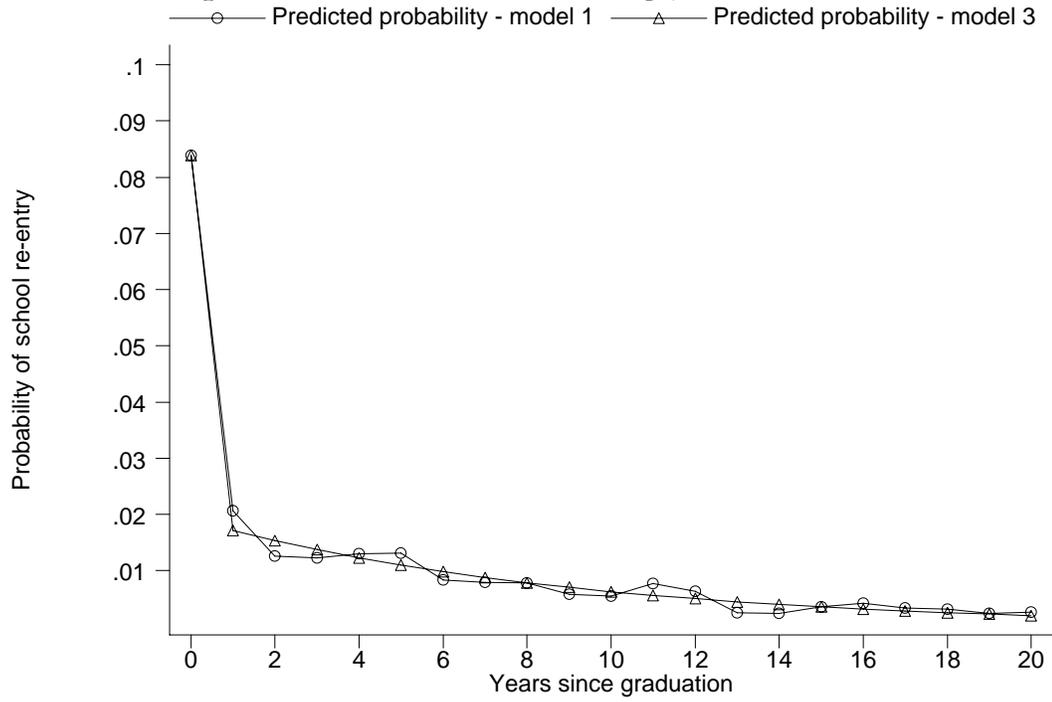


Table 4: Goodness-of-fit statistics for selected discrete-time event-history models of secondary school re-entry, Central and Eastern Europe, 1948 – 1989. Number of person/years= 77,150, number of persons= 6,010, number of events 1,120.

Model	L²	d.f.	p-value	BIC
M10 (repeated from Table 3)	1769.30	22	0.000	-1521.7
M11: M10 - political persecution of the family	1756.3	21	0.000	-1520.0
Add interactions with CP membership				
M12: M10+ parents CP* respondent CP	1773.1	23	0.000	-1514.3
M13: M11+ parents CP * respondent CP	1760.2	22	0.000	-1512.6
M14: M10+ respondent CP * linear time ¹¹	1774.4	23	0.000	-1515.6
M15: M11+ respondent CP * linear time	1761.3	22	0.000	-1513.8
M16: M10+ respondent CP * property confiscated	1773.6	23	0.000	-1514.7
M17: M10+ parents CP * property confiscated	1770.0	23	0.000	-1511.2
M18: M10 + respondent CP * cohort	1773.4	24	0.000	-1503.3
M19: M11 + respondent CP * cohort	1760.7	23	0.000	-1501.8
M20: M10 + parents CP * cohort	1774.6	24	0.000	-1504.5
M21: M11 + parents CP * cohort	1761.8	23	0.000	-1503.0
Contrasts				
M12-M10	3.8	1	0.051	7.4
M13-M11	3.9	1	0.048	7.4
M14-M10	5.1	1	0.024	6.1
M15-M11	5.1	1	0.025	6.2
M16-M10	4.3	1	0.039	7.0
M17-M10	0.7	1	0.400	10.5
M18-M10	4.1	2	0.123	18.4
M19-M11	4.3	2	0.114	18.2
M20-M10	5.3	2	0.070	17.2
M21-M11	5.5	2	0.063	17.0

¹¹ The statistical significance of the interaction between respondent's CP membership and dummy for immediate transition was tested as well (model not reported) and it turned out to be insignificant (Z-statistic of the interaction added to model 14 or model 15 was 0.15 in both cases (p=0.882).

Table 5: Goodness-of-fit statistics for selected discrete-time event-history models of secondary school re-entry, Central and Eastern Europe, 1948 – 1989. Number of persons/years at risk= 77,150, number of persons= 6,010, number of events 1,120.

Model	L^2	d.f.	p-value	BIC
Model 10 (repeated from Table 3)	1768.0	20	0.000	-1542.9
Model 11 (repeated from Table 3)	1756.3	21	0.000	-1520.0
Add interactions with parental SES				
M22: M10+ SES ¹² * respondent CP	1772.8	25	0.000	-1491.4
M23: M11+ SES * respondent CP	1759.7	24	0.000	-1489.6
M24: M10+ father's educ. * respondent CP	1770.3	23	0.000	-1511.5
M25: M11+ father's educ. * respondent CP	1757.2	22	0.000	-1509.6
M26: M10+ mother's educ. * respondent CP	1770.1	23	0.000	-1511.3
M27: M11+ mother's educ. * respondent CP	1757.2	22	0.000	-1509.7
M28: M10 + ISEI * respondent CP	1769.3	23	0.000	-1510.5
M29: M11 + ISEI * respondent CP	1756.3	22	0.000	-1508.8
Contrasts				
M22-M10	3.4	3	0.328	51.5
M23-M11	3.4	3	0.333	30.4
M24-M10	1.0	1	0.315	31.4
M25-M11	0.9	1	0.345	10.4
M26-M10	0.8	1	0.366	31.6
M27-M11	0.9	1	0.340	10.3
M28-M10	0.0	1	0.849	32.4
M29-M11	0.0	1	0.899	11.2

¹² Father's education, mother's education, and ISEI.

Table 6: Goodness-of-fit statistics for various discrete-time event-history models of secondary school re-entry, Central and Eastern Europe, 1948 – 1989. Number of persons/years= 77,150, number of persons= 6,010, number of events 1,120.

Model	L^2	d.f.	p-value	BIC
Model 10 (repeated from Table 3)	1768.0	20	0.000	-1542.9
Model 11 (repeated from Table 3)	1756.3	21	0.000	-1520.0
Add interactions with gender				
M30: M10+ male * cohort	1779.4	24	0.000	-1509.3
M31: M11+ male * cohort	1766.2	23	0.000	-1507.3
M32: M10+ male * respondent CP	1770.9	23	0.000	-1512.1
M33: M11 + male * respondent CP	1757.7	22	0.000	-1510.2
M34: M10+ male * parents CP	1770.3	23	0.000	-1511.4
M35: M11 + male * parents CP	1757.1	22	0.000	-1509.6
Contrasts				
M30-M10	10.1	2	0.007	33.6
M31-M11	9.8	2	0.007	12.7
M32-M10	1.6	1	0.204	30.8
M33-M11	1.4	1	0.236	9.8
M34-M10	1.0	1	0.331	31.5
M35-M11	0.8	1	0.366	10.4

Table 7: Estimated coefficients and S.E. (in parentheses) of selected discrete-time event-history models of secondary school re-entry, Central and Eastern Europe, 1948 – 1989. Number of persons/years= 77,150, number of persons= 6,010, number of events= 1,120.

	Model 10	Model 12	Model 14	Model 16
Year at risk	-0.112 (0.009)	-0.112 (0.009)	-0.121 (0.010)	-0.112 (0.009)
Dummy for immediate transition	1.535 (0.083)	1.534 (0.083)	1.500 (0.084)	1.536 (0.083)
Cohort (1975 – 89 is reference)				
1948 – 1960	-0.045 (0.100)	-0.046 (0.100)	-0.041 (0.099)	-0.040 (0.100)
1961 – 1974	0.044 (0.081)	0.044 (0.081)	0.050 (0.081)	0.043 (0.081)
Male	0.029 (0.065)	0.026 (0.065)	0.026 (0.065)	0.032 (0.065)
Father's education	0.026 (0.015)	0.026 (0.015)	0.026 (0.015)	0.026 (0.015)
Mother's education	0.067 (0.016)	0.067 (0.016)	0.067 (0.016)	0.067 (0.016)
ISEI	0.019 (0.003)	0.019 (0.003)	0.019 (0.003)	0.019 (0.003)
Number of siblings	-0.046 (0.027)	-0.046 (0.027)	-0.045 (0.027)	-0.046 (0.027)
Parents CP members	0.061 (0.078)	0.110 (0.081)	0.063 (0.078)	0.062 (0.078)
Respondent CP member	0.970 (0.120)	1.133 (0.141)	0.614 (0.205)	0.772 (0.159)
Respondent former CP member	-1.179 (1.004)	-1.184 (1.004)	-1.124 (1.004)	-1.183 (1.004)
Family property confiscated in 1948	0.256 (0.071)	0.255 (0.071)	0.256 (0.071)	0.212 (0.074)
Interactions				
Respondent CP * parents CP		-0.473 (0.247)		
Respondent CP * year at risk			0.049 (0.022)	
Resp. CP * property confiscated				0.477 (0.230)
Constant	-4.289 (0.121)	-4.296 (0.121)	-4.247 (0.122)	-4.278 (0.121)

Note: coefficients associated with dummy variables identifying missing values replaced with means as well as country dummies – a total of 9 effects – are not shown in any model.

Table 8: Estimated coefficients and S.E. (in parentheses) of various discrete-time event-history models of entry into post-vocational education, Central and Eastern Europe, 1948 – 1989. Number of persons/years= 77,150, number of persons= 6,010, number of events= 1,120.

	Model 18	Model 20	Model 34
Year at risk	-0.112 (0.009)	-0.112 (0.009)	-0.112 (0.009)
Dummy for immediate transition	1.532 (0.083)	1.536 (0.083)	1.535 (0.083)
Cohort (1975 – 89 is reference)			
1948 – 1960	0.027 (0.065)	-0.010 (0.109)	-0.438 (0.162)
1961 – 1974	-0.065 (0.102)	-0.011 (0.091)	-0.101 (0.121)
Male	0.018 (0.082)	0.030 (0.065)	-0.236 (0.130)
Father's education	0.025 (0.015)	0.024 (0.015)	0.026 (0.015)
Mother's education	0.068 (0.016)	0.068 (0.016)	0.069 (0.016)
ISEI	0.019 (0.003)	0.018 (0.003)	0.019 (0.003)
Number of siblings	-0.046 (0.027)	-0.047 (0.027)	-0.048 (0.027)
Parents CP members	0.061 (0.078)	-0.026 (0.157)	0.063 (0.078)
Respondent CP member	-0.015 (0.594)	0.969 (0.120)	0.954 (0.120)
Respondent former CP member	-1.169 (1.004)	-1.184 (1.004)	-1.203 (1.004)
Family property confiscated in 1948	0.254 (0.071)	0.254 (0.071)	0.258 (0.071)
Interactions			
Respondent CP * Cohort 1948 – 1960	1.007 (0.628)		
Respondent CP * Cohort 1961 – 1974	1.070 (0.611)		
Parents CP * Cohort 1948 – 1960		-0.200 (0.233)	
Parents CP * Cohort 1961 – 1974		0.229 (0.183)	
Male * Cohort 1948 – 1960			0.612 (0.195)
Male * Cohort 1961 – 1974			0.251 (0.156)
Constant	-4.262 (0.121)	-4.270 (0.124)	-4.137 (0.134)

Note: coefficients associated with dummy variables identifying missing values replaced with means as well as country dummies are not shown in any model.

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