The effect of transnational educational mobility on occupational status

Do individuals from less advantaged backgrounds profit more?

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Stine Waibel & Heiko Rüger

Federal Institute for Population Research, Wiesbaden, Germany

1. Introduction

Today, studying abroad and gaining international experience during one's educational career has become more accessible due to national and supranational policies that facilitate and subsidize the freedom of movement (e.g. Erasmus). Thus, education related temporary stays abroad have ceased to be a privilege of a very small elite group as they were in the past. Ultimately, this reflects an historic trend towards individualization that is observable in all countries in the process of post-modernization (Nash, 1976: 192).

Considering its strong growth curve in recent decades, educational mobility is part of a process that Adrian Favell and his colleagues have described as the "massificafion […] of international migration opportunities linked to careers and education" (Favell et al., 2007: 17). This calls for a more theory-driven and agent-centered approach to research in order to grasp the manifold outcomes of and motivations for these migrations (ibid.). When it comes to micro-level research on expanding educational mobility in Western societies or privileged sectors of a given society, a number of approaches have been taken to theorize mobility practices as being closely tied to individual strategies of transnational (human) capital accumulation (cf. Baláž & Williams, 2005; King et al., 2011; Gerhards et al.; 2014; Salisbury et al. 2009; Wiers-Jenssen, 2008; Zweig et al., 2004). This research is inspired, on the one hand, in Sociology of Education and related work on status reproduction and intergenerational transmission of inequality. On the other hand, an economic perspective on education has been taken that links study abroad choices to investment-in-human-capital-decisions, thereby, following Gary Becker's classic educational economics approach and its leading sociological alternative, the signaling model (cp. Spence, 1973).

More specifically, it has been argued that spending part of one's education abroad gives members of the (white) middle class the possibility to accumulate valuable "transnational

capital" (socio-communicative skills, linguistic capital, international cultural competences, etc.) that sets them apart from lower-status groups – thereby, possibly, reproducing social hierarchies (for studies building on Pierre Bourdieu's capital theory, cf. Brooks & Waters, 2010; Gerhards & Hans, 2013; Finger, 2011; Li & Bray, 2006, Salisbury et al., 2009).[1] The assumption that education abroad produces socioeconomic returns earlier or later in the professional career can be seen as a continuation of Gary Becker's analysis of educational investment. Here, educational mobility is considered to be a sound investment in one's human capital producing economic returns on *increasingly globalized* national as well as international labor markets, resulting in better jobs, brighter career prospects, and higher wages (Salisbury et al., 2009). Notably, this employability-enhancing-perspective on educational mobility is now taken for granted by various stakeholders including universities, governments, employers, and graduates themselves (cf. Crossman & Clark, 2010; Stronkhorst, 2005; World Economic Forum, 2011), although thorough empirical evidence is still lacking (see below). Furthermore, based on signaling theory, it is assumed that educational mobility does not necessarily increase labor market skills *per se*, but rather functions as signal to employers about the (unobserved) ability of prospective workers (cf. Hilmer, 2002). Prominently, the argument is that in recent years the value of educational certificates to employers has declined (due to an increasing supply of education); correspondingly, in making their personnel decisions, employers increasingly rely on extracurricular activities as a means of signaling more subtle but desirable attributes on part of potential employees (cf. Hillmert & Jacob, 2005; Jackson et al., 2005).[2] Indeed, employers and human resource managers report giving considerable attention to graduates' international experience in the process of personnel selection (cf. Neeß, 2015).

2. Research question and paper outline

Following this line of reasoning, the critical claim put forward is that if mainly privileged groups of young people profit from expanded opportunities for educational mobility, such stratification reinforces levels of social inequality and reproduces advantages in the *access to* educational mobility (cf. Gerhards & Hans, 2013; King et al., 2011; Kratz, 2011; Waters & Brooks, 2011). However, it is less clear whether transnational educational mobility experiences render persons more productive and successful on the labor market in terms of wage premiums and status benefits, as could be expected following human capital and signaling theories. That is, with

[1] Some scholars assert that transnational experience in terms of international student mobility expresses itself as a separate form of capital – i.e. mobility capital – alongside and convertible into other forms of capital (economic, social, and cultural capital) (Brooks & Waters, 2010: 154; Findlay et al., 2006: 293).
[2] The expanding level of education, thus, becomes internally differentiated in terms of *quality* (Lucas, 2001).

respect to the *socioeconomic outcomes of* educational mobility, research is in its early stages and has produced evidence that is mixed and possibly moderated by national context and field of occupation (Messer & Wolter, 2007; Netz, 2012; Oosterbeek & Webbink, 2011; Sorrenti, 2015; Wiers-Jenssen, 2011; Van Ophem et al., 2011). Moreover, hardly any attempts have been made to study the heterogeneity in returns from educational mobility for persons from different family backgrounds (for exceptions, see Di Pietro, 2013 and Parey & Waldinger, 2011). Thus, despite strong cross-national evidence for social selectivity in educational mobility, when it comes to the socioeconomic returns from educational mobility in terms of narrowing or widening inequalities in economic and occupational status attainment, we still lack ample empirical evidence.

This paper strives to address this empirical gap and investigates if, notwithstanding differential participation rates, *lower status groups will eventually experience higher returns from educational mobility than students from a more privileged background*. Hence, the assumption is that the expansion of opportunities for educational mobility might help to correct origin-based inequalities in status attainment. We claim that educational mobility endows individuals whose parents have lower levels of educational attainment with favorable social and cultural resources that individuals whose parents have a high level of education already possess. In other words, mobility may compensate for a less resourceful home environment. We will unfold the theoretical argument and derive hypotheses in the next section, and present the data as well as our conceptualization and operationalization of educational mobility afterwards. Our analyses are based on a representative sample of the German population. Germany's multi-tier education system is predisposed to produce comparatively high levels of social inequality in educational attainment (Bol & van de Werfhorst, 2013). Students transition as early as at the age of about ten into different hierarchically ordered tracks; only persons successfully completing the top tier track qualify for post-secondary and tertiary education.[3] Moreover, Germany's elaborate system of vocational training and occupationally oriented schools offers relatively smooth transitions into employment and thus provides important alternatives to university enrolment. Following the theoretical and methodological parts we will present our empirical findings in section 5. These will be discussed in light of their practical relevance in the final section.

3. Theory and hypotheses

There are several ways to explain social selectivity in transnational educational mobility. Following Bourdieu and his emphasis on the influence of habituated dispositions, transnational

[3] Mobility between tracks is possible in principle, but not very common. However, despite the fact that the German educational system has proven quite resistant to reform, a gradual opening has taken place via the introduction of new educational sequences besides existing ones allowing for "second-chance" acquisition of educational qualifications (cf. Maaz et al., 2004).

educational mobility is construed as highly dependent on family social and cultural capital. Also, migratory experiences of parents (e.g. holding an international job commonly associated with higher social status) shape the exposure to transnational educational biographies of children (Gerhards & Hans, 2013; Carlson, 2013). In addition to this cultural reproduction framework, Sociology of Education has distinguished between the *primary and secondary effects* of socialization in order to construct explanatory theories of inequality of educational opportunity (original concept developed by Boudon, 1974). This concept can be transferred to the case of transnational educational mobility (Gerhards & Hans, 2013: 103). Beyond so called *primary origin effects* that emerge, because children socialized in higher social classes encounter better learning conditions in their home environments that help them perform better at school[4], *secondary origin effects* can explain why inequalities persist. Such secondary effects arise, because individuals from different social backgrounds make different *educational choices* at various transition points during their educational careers. Thus, given the same level of ability, "children start from – and view their prospective careers from – differing class origins" (Goldthorpe, 2010: 171). Most importantly, differences in educational choices arise since individuals desire to achieve at least the same educational and occupational status as their parents and, thus, for individuals from higher social classes, there is simply a *necessity* to chose more ambitious educational options (for status maintenance considerations, see Breen & Goldthorpe, 1997).

Turning to the choices for or against educational mobility, it is likely that secondary effects will at least partly determine the decision making process, since ability is not necessarily a prerequisite for educational mobility.[5] As has been shown for social selection in the transition to higher education (Schindler & Lörz, 2012), secondary motivations that underlie educational choices strongly differ between social groups. Lower social groups in Germany (who have already reproduced their parents' status position) are diverted into vocational tracks ("diversion theory"), they more often look for short training duration, quick financial independence, and a secure job. Similarly, German survey data that measure motivations for study abroad among *college students* show that lower status groups more often fear that study abroad prolongs their studies (thus posing an additional financial burden), that it does not necessarily benefit their labor market prospects, and that it will induce high social costs in terms of distance to family and friends (Lörz et al., 2015). Also, contextual factors, such as the motivational force of students' peer

[4] Due to increases in pre-school education, full-day (as opposed to part-time) schooling, and school support, these class-specific performance gaps should have narrowed over time. But primary effects are still the prevailing reason for unequal educational participation.
[5] Because of internationalization and the extension of mobility programs, competition for places in mobility programs is not very high.

environment likely plays a role in increasing secondary origin effects and in explaining differential study abroad participation (cf. Van Mol & Timmerman, 2013).

In sum, the family's status position serves as reference point for one's own aspirations in terms of educational attainment. Given this desire for status maintenance, individuals (and parents) from lower status groups and individuals (and parents) from higher status groups will likely differ in their cost-benefit analyses concerning the decision for or against transnational educational mobility. Individuals from less educated backgrounds are likely to anticipate higher costs (economic and social) and lesser benefit (in terms of career prospects), arriving at a *seemingly rational decision* against the acquisition of international experience.

Based on these considerations, *our first hypothesis is that children from higher social origins more often take-up transnational mobility activities*. First and foremost, we aim to reproduce and corroborate existing evidence.

We furthermore assume that if lower status groups overcome their personal constraints – such as strong social attachment to home, family, and friends, financial considerations, and fear of prolongation of studies – mobility will be a *more valuable investment* for these groups than for the high status group. The reason for this is that exposition to a foreign environment helps them develop (employment-relevant) social and (inter-)cultural competences as well as 'mobility capital' (cf. Carlson, 2013) that they were less likely to develop during childhood given their family background (cp. Di Pietro, 2013). Labor markets increasingly demand such competences associated with flexibility, mobility, and independent "upskilling" (Allmendinger et al., 2011) in societies that have progressed in the direction of knowledge-based economies. Furthermore, international mobility might allow individuals to transition into different peer environments; this "contextual mobility" could enforce a disruption in the "intergenerational transmission of context" (cp. Sharkey, 2008)[6], and thus, create opportunities for social mobility. Importantly, it has been shown that students who were internationally mobile during their studies pursued a geographically more expansive job search after graduation (Kratz, 2011). In turn, geographic mobility early in the career is intertwined with social mobility and access to more highly qualified jobs (cf. Fielding, 1992; Reichelt & Abraham, 2015; Viry et al., 2014). Considering that lower status groups tend to be more restricted in their willingness to move and often prioritize local choices (higher risk adversity and fear of losing one's identity in a place that is foreign) (cf. Rosado & Davis, 2006), mobility experiences are a way to overcome geographical constrains.

Therefore, *our second hypothesis is that educational mobility will be particularly valuable for lower status groups in terms of socioeconomic status attainment*.

[6] Sharkey uses the concept of „contextual mobility" in the context of inherited neighborhood disadvantages due to the spatial clustering of different social phenomena.

4. Data, conceptualization, and analytical procedure

As a basis for our analysis, we draw on the German retrospective survey "Working and Learning in a Changing World" (ALWA) (Antoni et al., 2011) from the German Institute of Employment Research (IAB). The survey was conducted in 2007 & 2008 and includes 10.177 retrospective computer-assisted telephone interviews (CATI). Among others, the data encompass complete monthly residential, educational, and employment histories. The sample is representative of Germany and covers individuals born between 1956 and 1988 (Kleinert et al., 2011).

For our analyses, we excluded first and second generation immigrants, because we wanted to build a *homogenous sample*. It can be expected that educational mobility of immigrants often encompasses education gained in the country of birth and is, thus, part of a migration experience that follows different types of motives (Gerhards & Hans, 2013: 103). Furthermore, for immigrants, host country-specific human capital is more crucial for status attainment (cf. Poot & Roskruge, 2013).

Our concept of transnational educational mobility includes all stays abroad during primary, secondary, vocational, and tertiary education, as well as volunteering abroad. Since ALWA includes complete life-course data, it was possible to match residential histories and educational histories. That way, we identified overlaps between educational episodes and residential episodes abroad. In addition, survey participants indicated if they spent at least one month in a foreign country during a given educational episode. Overall, we could identify N=724 biographies that included transnational educational mobility (8.7 percent of the sample). N=240 persons were transnationally mobile during their secondary education, N=99 during vocational education, N=373 during higher education, and N=28 volunteered abroad (unweighted case numbers).

Importantly, our conceptualization of educational mobility differs from other studies on transnational educational mobility. Our concept is embracive, includes mobility in all educational phases and is not limited to any particular mobility or exchange program. Our study is also exceptional in that we use a *representative multi-cohort sample of the German population including complete life histories* to study transnational educational mobility and its effects on status attainment. The data allow us to distinguish transnational educational mobility rates by cohort and parental background (testing hypothesis one). Testing hypothesis two, we focus on graduates from higher education institutions and estimate the effect of transnational mobility (dummy-coded) on the *achieved occupational status five years after graduation*. Five years can be

considered to be a reasonable timeframe for individuals to settle in their respective careers.[7] We apply ordinary least squares regression holding relevant socio-demographic confounding variables constant. In order to probe whether transnational educational mobility produces heterogeneous returns for different social groups, an interaction term between parental educational background and transnational mobility is introduced.

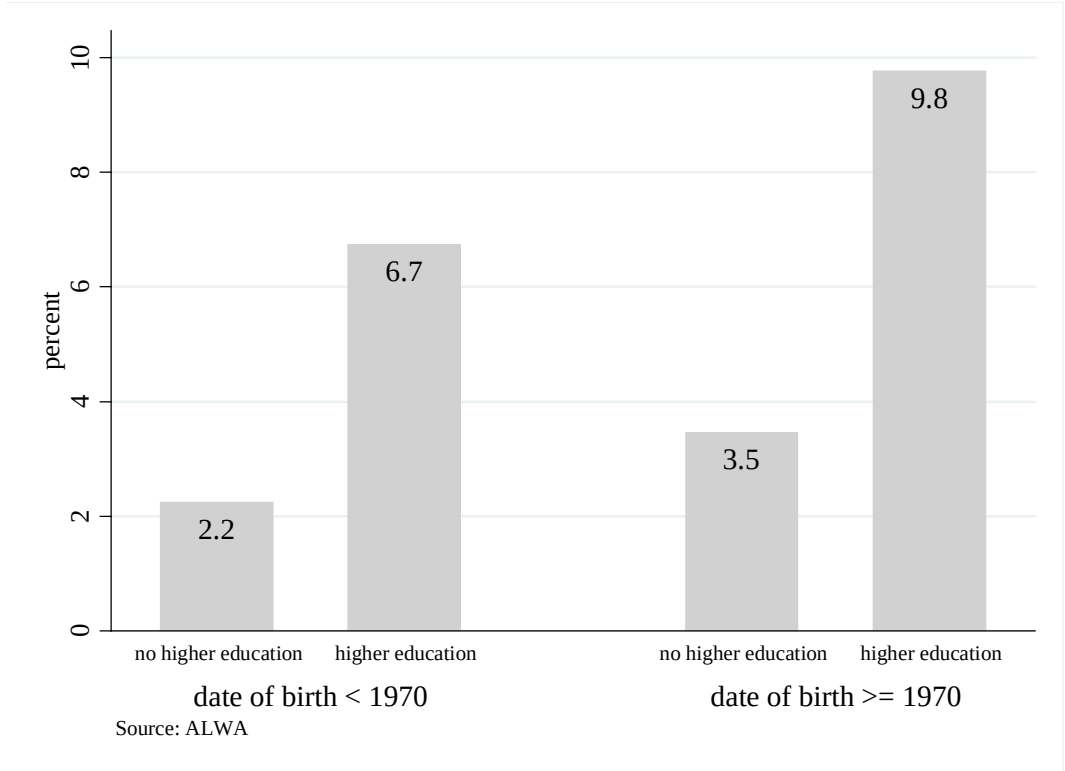
We limited the analyses to higher education graduates, since the effect of transnational mobility on occupational status would otherwise be concealed by group-specific participation in different educational tracks. We used the International Socio-Economic Index of occupational status (ISEI[8]) as measure of occupational status which ranges between 16 and 85. As demographic control variables we included age (in years) as well as the dummy-coded variables gender, region of birth (East versus West Germany), and graduation cohort (before or after 1990). Control variables accounting for competence levels and education include the number of years spent in education, self-reported competence in maths and reading (5-point-scale), self-reported English proficiency (categorized into "low", "mid", and "high"), and number of foreign languages spoken. Finally, we distinguished status groups according to the educational level of parents (mother or father has a higher education degree *versus* neither parent has a higher education degree).

5. Empirical findings

Figures 1 and 2 show the transnational educational mobility rates in high school and in higher education, respectively. In both cases, we see that mobility rates have increased over time – reflecting the proliferation of educational mobility opportunities – and that mobility rates differ according to the educational background of the parents (supporting hypothesis one). In high school (see figure 1), the size of the relation between family background (having at least one parent with a higher education degree) and educational mobility has even somewhat increased over time; Cramér's V is .10 for the older cohort and .13 for the younger cohort.

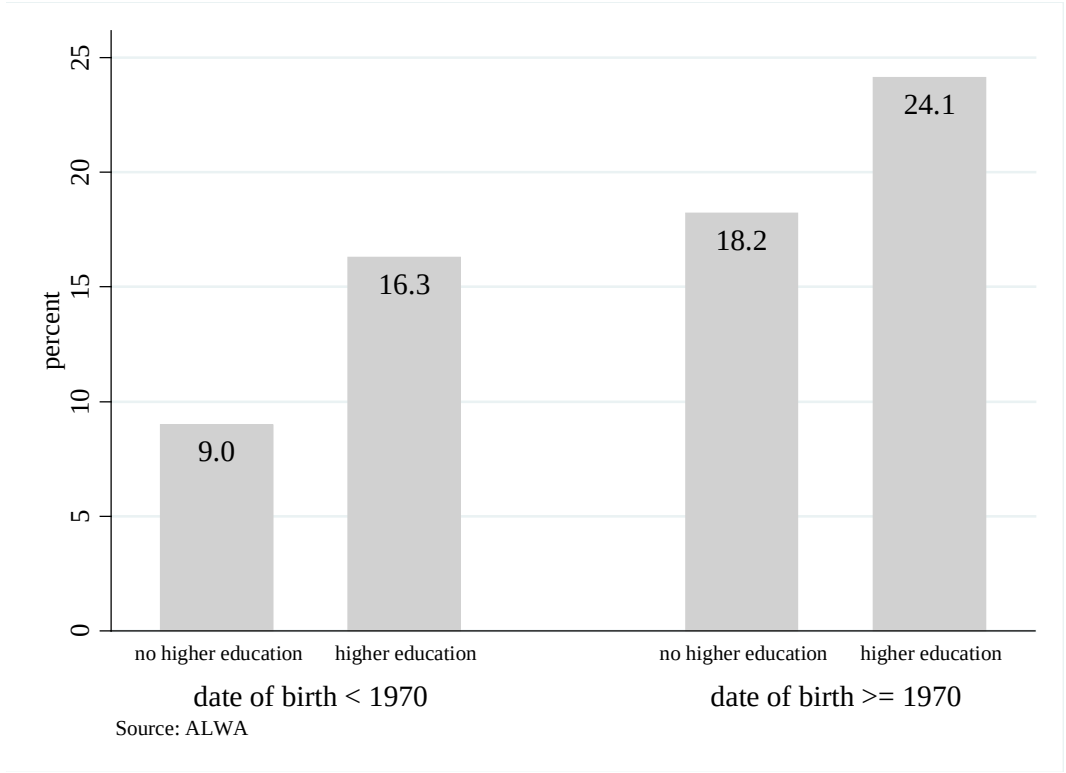
[7] Running our regressions, we used different time specifications, but the results did not change substantially.
[8] ISEI is derived from the International Standard Classification of Occupations (ISCO-88).

Figure 1: Educational mobility rate of high school students by parental education and birth cohort



In contrast, in higher education (see figure 2), status group differences in educational mobility have decreased over time; Cramér's V is .11 for the older cohort and .07 for the younger cohort. In addition, the difference in mobility rates between those with a higher educated parent and those without is not significant in the group of individuals born after 1970 (chi-squared (1) = 3.60; p = 0.058). Our data and our criteria of differentiation thus indicate that educational mobility in higher education has become less socially selective. It seems that opportunity structures for study abroad, at least in higher education, have been promoted and changed the cost-benefits analyses of those who have hitherto been less inclined to mobility (cp. also Smith, 1980: 78; Opper, 1987: 27). Referring back to our theoretical assumption, it may be that secondary origin effects have somewhat decreased with respect to transnational educational mobility at a higher educational level.

Figure 2: Educational mobility rate of higher education graduates by parental education and birth cohort



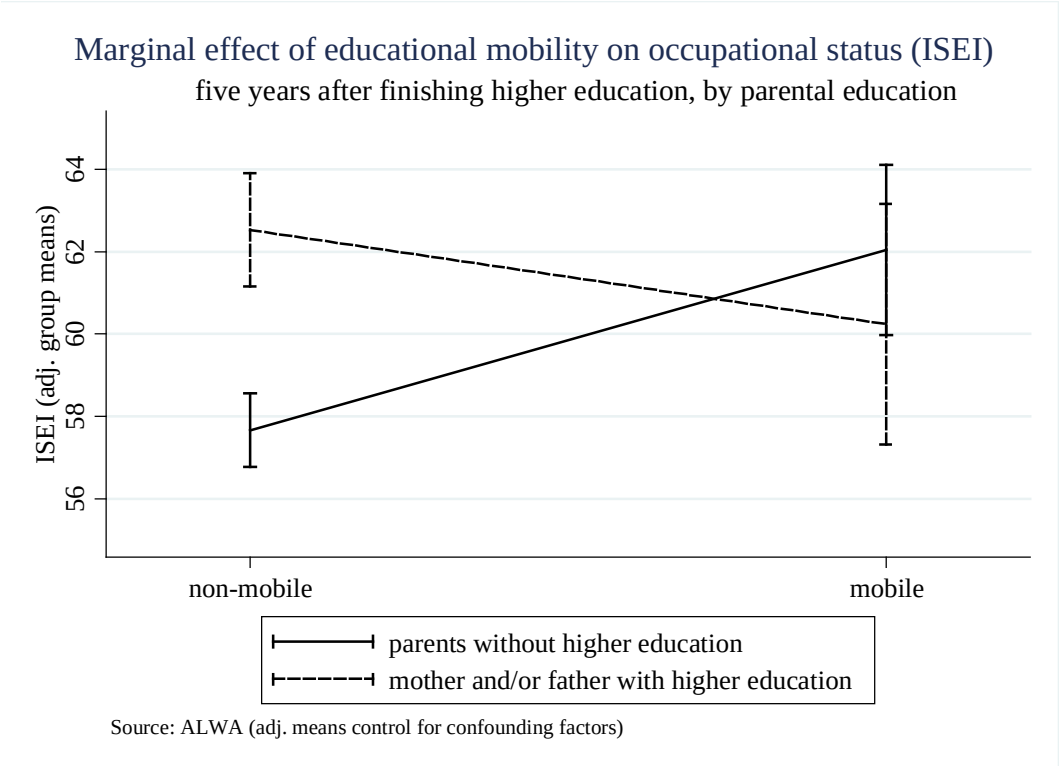
The results of the linear regressions testing our second hypothesis are presented in table 1. Cumulating in our final model (M5), we run several intermediate regressions in which the independent control variables are successively added. Model 1 specifies the univariate effect of transnational educational mobility on the occupational status (ISEI) five years after graduation; transnational mobility contributes on average to a 5.45 increase in the ISEI score. In model 2, we add demographic control variables; the size of the effect of transnational mobility remains nearly the same. However, adding indicators of competence and educational achievement next (M3), the effect of transnational mobility becomes substantially smaller but remains statistically significant. At the same time the explained variance notably increases. Adding the educational level of the parents (at least one parent has a higher education degree) in model 4, the effect of transnational mobility becomes insignificant. As we have seen above, transnational mobility depends on the parental educational level, which in turn affects the level of occupational achievement (origin effect), so that transnational mobility does not explain any additional variance in occupational status.

- Table 1 about here -

However, the basis of hypothesis two was essentially that mobility is an economically rewarding investment especially for less advantaged groups. Consistent with this argument, the interaction term between parental education and transnational mobility included in model 5 turns out

significant. As both variables in the interaction term are dummy-coded, the reported coefficient of -6.66 represents the mean mobile/non-mobile difference in occupational status for individuals with at least one higher educated parent *minus* the mobile/non-mobile difference in occupational status for individuals without a parent that has a higher education degree (controlling for covariates). This interaction is visualized in figure 3. The two slopes indicate the effects of transnational educational mobility on occupational status for the high status group (dashed line) and the lower status group (solid line), respectively. While for the lower status group the adjusted mean ISEI score (controlling for covariates) significantly increases for those with transnational educational mobility experiences, the adjusted mean ISEI score for the high status group even slightly decreases for individuals with mobility experience (however, this decrease is not significant). Eventually, what we can observe is a convergence between the two groups. Controlling for competences and education, children of higher educated parents on average attain a higher occupational status after finishing education (see model 4, significant effect of parental education).[9] But these differences in status attainment disappear if we only look at mobile individuals (see figure 3 where the confidence intervals for the mobile groups overlap).

Figure 3: Visualization of interaction effect between mobility and parental eduction



Source: ALWA (adj. means control for confounding factors)

[9] Erikson and Jonsson (1998), for example, specify a model showing that family background affects labor market success beyond individuals' own educational achievement and work experience.

6. Discussion

As expected, transnational educational mobility is dependent on the educational background of parents. Our analyses show that social selection has slightly increased with respect to transnational mobility during secondary education, while selection has decreased with respect to transnational mobility during higher education. A possible explanation is that the opportunity structure for mobility in higher education (scholarships and financial support, increase of exchange programs) has expanded more than in secondary education, possibly altering the cost-benefit analyses of students who used to be less inclined to mobility. In contrast, transnational mobility during secondary education is still more restricted by families' economic, cultural and social resources.

We can also conclude that, if we were *not* to take into account differential effects, transnational mobility as such would not account for variations in occupational status. Transnational mobility is correlated with family background as well as educational and competence variables, all of them being more important predictors of occupational status.

However, we find that transnational educational mobility may indeed play a role in affecting graduates' labor market outcomes later in life for those from less advantaged backgrounds, while having no (additive) effect for those from more advantaged backgrounds. Therefore, for lower status groups but not for higher status groups, educational mobility seems to actually constitute an investment and produce professional benefits. For high status groups, mobility may more often be associated with "consumption" (cp. Findlay et al., 2006 on youth mobility cultures and consumption geographies). In a similar way, a cross-country study on Erasmus mobility has found "mobility for consumption'' to be more prevalent in higher income countries and "mobility for investment'' in search of better employment opportunities to be more prevalent in lower income countries (Souto Otero, 2008).

We are aware that the causality of this central finding can be called into question. After all, it is possible that the difference between mobile graduates and their non-mobile peers might reflect differences in unobserved individual characteristics such as personality, motivation, and aspirations that are likely to influence career outcomes independently from the mobility experience. However, we have attempted to reduce this selectivity by including control variables that to some extent account for a possible selection bias. Furthermore, findings of studies that have used specific methodological approaches to control for selection effects (i.e. Instrumental Variable Estimation) are in line with the evidence we present in that the effect of educational

mobility on employment outcomes may be moderated by family background (Di Pietro, 2013; Oosterbeek & Webbink, 2011; Parey & Waldinger, 2011).

Using an exceptional data set in terms of representativeness, complete life histories, and multiple cohorts, our results bear important practical implications. Since "many forms of resources and barriers crystallize in class" (Erikson & Jonsson, 1998: 34) mobility opportunities are not seized to an equal extent by all members of society. Therefore, bringing more people from educationally disadvantaged families into mobility programs may be an important contribution to improving the employment prospects of students from disadvantaged backgrounds. Hence, while our findings support Bourdieu's theory of reproduction of class differences through family resources, in contrast to Bourdieu, we argue that educational systems can offer opportunities that have the potential to make-up for limited *inherited* family capital. In that sense, educational institutions and policy makers can take advantage of new opportunities to gain additional qualifications such as international experiences. They can actively produce a variation in social positions independent of family background. Starting from the concept of secondary origin effects, and thus considering the choices for or against study abroad based on group specific cost-benefit analyses, an important way to increase positive decisions could be to increase information about possible future benefits, to promote mobility as early as possible in the educational career (in order to expand peer environments that influence future mobility decisions or reduce social costs), and to prevent that mobility prolongs the course of one's studies. With respect to reducing class differentials in educational attainment, Jackson et al. (2007:224) have similarly advocated policies "aimed at overcoming the resource and informational constraints that bear on children from less advantaged backgrounds".

All in all, the relationship between educational mobility and status attainment deserves more differentiated research to further corroborate our findings. We are also aware that occupational status is only one way to measure labor market success, other indicators being income, ease of transition into the labor market, as well as qualitative and subjective aspects of the job (satisfaction, contract duration, etc.). Moreover, causal mechanisms deserve more attention in the future.

Table 1: Linear regression models for the prediction of occupational status five years after finishing eduction

	M1	M2	M3	M4	M5
	Unstandardized coefficients				
Educational mobility	5.45***	4.92***	1.92*	1.72	4.38***
	(0.93)	(0.95)	(0.96)	(0.98)	(1.14)
DEMOGRAPHIC CHARACTERISTICS					
Age		0.20	-0.06	-0.04	-0.05
		(0.10)	(0.10)	(0.10)	(0.10)
Men		-3.56***	-2.55***	-2.46**	-2.30**
		(0.76)	(0.77)	(0.76)	(0.76)
Presence of children		-1.86*	-1.67*	-1.64*	-1.64*
		(0.79)	(0.73)	(0.73)	(0.73)
Born in West Germany		1.90	0.35	1.08	1.12
		(1.05)	(0.98)	(1.00)	(1.00)
Cohort (graduation before 1990)		-3.54**	0.62	0.95	1.10
		(1.13)	(1.11)	(1.10)	(1.11)
INDICATORS OF COMPETENCE / ABILITY					
Years of education			1.52***	1.49***	1.49***
			(0.19)	(0.19)	(0.19)
Competence maths, self-assessed			2.34***	2.38***	2.37***
			(0.35)	(0.35) c	(0.35)
Competence reading, self-assessed			1.35***	1.26***	1.24***
			(0.35)	(0.35)	(0.35)
Competence English medium (*ref.: low*)			-2.60	-2.95	-2.82
			(1.67)	(1.68)	(1.69)
Competence English high (*ref.: low*)			1.64	1.31	1.41
			(1.86)	(1.85)	(1.85)
Nr. of languages spoken			2.62***	2.29***	2.31***
			(0.36)	(0.37)	(0.37)
PARENTAL EDUCATION & INTERACTION					
Parent with higher education				3.90***	4.86***
				(0.79)	(0.85)
Mobile*parent with higher education					**-6.66*** **
					(1.96)
Constant	58.66***	53.09***	32.99***	31.54***	31.49***
	(0.41)	(4.09)	(4.08)	(4.09)	(4.08)
R^2	0.012	0.034	0.17	0.18	0.19
N	1829	1829	1827	1805	1805

* p‹0.05, **p‹0.01 ,***p‹0.001

Note: OLS regression; robust standard errors in parentheses; dependent variable: ISEI 5 years after finishing education

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