

Flake, Regina

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Gender Differences in the Earnings Mobility of Migrants

Regina Flake

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Abstract. This study analyzes gender differences in the intergenerational earnings mobility of second-generation migrants in Germany. Thereby it takes into account the influence of assortative mating and the parental integration. First, intergenerational earnings elasticities are estimated at the mean and along the earnings distribution. The results do not reveal large differences in the mobility – neither between natives and migrants nor between men and women. Second, intergenerational changes in the relative earnings position are analyzed. These results confirm that migrants are mostly as (im)mobile as the native population.

JEL-Classification: F22, J12, J30, J62

Keywords: International Migration, Second-Generation Migrants, Intergenerational Mobility, Marriage

Regina Flake, Ruhr Graduate School in Economics, Ruhr-Universität Bochum, Rheinisch-Westfälisches Institut für Wirtschaftsforschung. All correspondence to Regina Flake, Ruhr Graduate School in Economics, Hohenzollernstr. 1-3, 45128 Essen, Germany, Tel: +49 201 8149 514, Email: Regina.Flake@rwi-essen.de.

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1 Introduction

The analysis of the intergenerational transmission of economic status is closely related to the discussion about the rising income inequality in many countries as it shows in how far the current income distribution is fostered by inheritance of the social status from parents to children.

In Germany, second-generation migrants, i.e. the children of migrants who are born and raised in Germany, make up a large and growing share of the population. In 2010, 19.3% (15.7 million) of the German population had a migration background of which almost one third was German-born (Statistisches Bundesamt, 2011). But while traditional immigration countries like the US, Canada or Australia register a successful integration of second-generation migrants, they lack behind in terms of education and labor market outcomes in Germany (Fertig and Schmidt, 2002; Riphahn, 2003; Algan et al., 2010). This study analyzes whether a high degree of intergenerational persistence impedes the integration of second-generation migrants as disadvantages faced by the first generation of migrants are transferred to the second. This would explain the divergence in the economic outcomes of the offspring of natives and migrants.

Intergenerational earnings persistence emerges as several factors link the earnings of parents to the earnings of their children. First of all, there is a transmission of genetics, behavior, cultural traits, and environmental factors like e.g. family reputation or connections from parents to children. In addition, parents' investment in human capital contributes to earnings persistence as parents with high earnings are better able to finance and support their children's education which in turn leads to higher earnings of the children (Becker and Tomes, 1979; Chadwick and Solon, 2002). Consequently, earnings persistence results from the fact that parents transfer a certain endowment, which contributed to their own earnings in the first place, to their children. Therefore, it is an important policy task to promote equality of opportunities within the society by creating an institutional setting (like e.g. the educational system) which compensates for a lack of such a material and immaterial

endowment among children with a disadvantaged background.

In a comparison of the intergenerational earnings mobility between natives and migrants, it has to be taken into account that there are many factors which lead to differences in the earnings transmission between these two population groups. Native and migrant parents differ in observed and unobserved characteristics. Migrant parents may put, for example, a larger emphasis on their children's education than natives as the migration decision may have already been driven by expectations and hopes about their children's future possibilities in the host country. This would increase the earnings mobility of migrants if compared to natives. However, a lack of familiarity of migrants with the host country's language, the educational system and/or a lack of connections and access to important networks may reduce migrants' earnings mobility. Therefore, in theory, it is a priori unclear whether migrants are more or less mobile than natives. The empirical evidence on this issue is mixed. While Aydemir et al. (2009) find no significant differences in the intergenerational earnings elasticities between migrants and the native population in Canada, other studies for Germany and Sweden find immigrants to be less mobile than their native counterparts (Yuksel, 2009; Hammarstedt and Palme, 2006).¹

There are, however, not only differences in the earnings transmission between natives and migrants but as well between men and women. Most empirical studies find weaker intergenerational relations between daughters and their parents if compared to sons (Couch and Dunn, 1997; Chadwick and Solon, 2002; Raaum et al., 2007).² Reasons for these differences may lie, for example, in assortative mating and in labor supply decisions of women (Raaum et al., 2007). Assortative mating describes the tendency of two people with similar characteristics to marry. In terms of family earnings, a strong degree of assortative mating can increase earnings persistence as persons with a high earnings potential are more likely to marry persons with a high earnings potential likewise. This kind of mating enhances the intergenerational transmission of the earnings potential. As educational institutions are important

¹All these studies consider the relation between fathers' and their children's individual earnings.

²Chadwick and Solon (2002) and Raaum et al. (2007) consider not only individual income, but as well family income.

meeting places for potential spouses, the early tracking in the German educational system is likely to benefit assortative mating in Germany. Ermisch et al. (2006) provide evidence for this hypothesis as they find that 40-50% of the covariance between parents' and children's family income in Germany can be attributed to the spouse.

Assortative mating may be even more influential among migrants because they may not only appreciate similarities in sociodemographic and socioeconomic characteristics like education, health or occupation, but as well similarities in the ethnic background. As several studies have shown that interethnic marriages have a positive impact on the educational outcomes as well as on the income of migrants (Meng, 2005; Furtado and Theodoropoulos, 2011), interethnic marriages may also influence the earnings mobility.

In the literature, there is, however, no consensus about whether endogamous marriages are more important among male or female migrants. Using U.S. data, Chen et al. (2007) find migrant women to be more mobile in terms of marriage and earnings, while Chiswick and Houseworth (2008) find female migrants to be less likely to marry a native partner than their male counterparts. The latter could be explained by, for example, cultural norms which tie daughters relatively more to their family home. In sum, this example shows that even the gender differences in the intergenerational earnings mobility might differ between natives and migrants.

To shed more light on this issue, the study at hand takes up two current developments in the literature by expanding the analysis of the intergenerational earnings mobility simultaneously to women and migrants. The objective of this study is to find out whether high earnings persistence prevents a faster integration of second-generation migrants in Germany and whether sons and daughters of migrants are equally affected. For this purpose, two approaches are used. First, intergenerational earnings elasticities are estimated. This is done at the mean as well as along the earnings distribution by using OLS and quantile regression methods. Second, the relative earnings mobility is analyzed. Thereby, mobility is measured as intergenerational changes in the relative earnings positions.

2 Empirical Strategy

The key issue in the analysis of intergenerational earnings mobility is to find an appropriate earnings measure – irrespective of whether mobility is analyzed in terms of individual or household earnings. The most desirable measure are lifetime earnings of parents and their children. However, as lifetime earnings are rarely observable - in particular lifetime earnings of parents and children at the same time - they are often proxied by annual earnings.

While in the textbook error-in-variables framework errors in the measurement of the dependent variable (children’s earnings) lead simply to more noise, errors in the right-hand-side variable (parents’ earnings) lead to an attenuation bias in OLS estimates. Therefore, many empirical studies use averages of parents’ earnings to reduce the attenuation bias (Zimmermann, 1992; Black and Devereux, 2010).

However, if the relation between current income and lifetime income varies systematically over the life cycle, the assumptions of the textbook errors-in-variables model do no longer hold (Haider and Solon, 2006; Böhlmark and Lindquist, 2006; Brenner, 2010). In this case, measurement errors in the independent as well as in the dependent variable can lead to inconsistency of the estimates. Furthermore, it is no longer clear whether measurement errors induce an amplification or an attenuation bias. For this reason, some studies advice likewise against taking single year observations of children’s earnings like it has been done in most previous research (Yuksel, 2009; Nybom and Stuhler, 2011).

Due to life cycle variations in income, the age at which earnings of children and parents are observed is an important factor in estimating intergenerational earnings mobility. Earnings at some ages are better suitable as proxies for lifetime earnings than earnings at other ages. Persons with high lifetime earnings tend to enter the labor market later but exhibit faster earnings growth. Thus, considering earnings at an early stage of the career may lead to an underestimation of lifetime earnings whereas taking earnings at a very late stage may overestimate lifetime earnings of persons with relatively high lifetime earnings.

Furthermore, Brenner (2010) shows that lifetime earnings profiles differ between natives and migrants. One explanation for this heterogeneity in earnings growth rates is that migrants undergo an assimilation process during which they acquire country specific human capital and which leads to higher earnings growth rates if compared to natives. Brenner shows that the attenuation bias over the life cycle is significantly larger among migrants than among natives. This could lead to the spurious conclusion that mobility is relatively larger among migrants. Even though Brenner confirms that taking averages of earnings contributes to reducing the attenuation bias, he warns that point estimates still need to be interpreted cautiously.

To reduce a potential bias in the estimation of the intergenerational earnings mobility, some adjustments are made. First, the sample of children is restricted to 25- to 45-year-olds. In this age, most persons – independent of their educational level – have entered the labor market. The parents’ age is restricted to 30 to 65 years. Second, the analysis is based on averages of earnings only. The earnings information of the children is based on the years 1990 to 2009, whereas earnings information for the parents is based on all currently available years from 1984 to 2009. The reason for the time restriction is that second-generation migrants are on average very young and, therefore, the number of earnings observations of second-generation migrants before 1990 is very low.³ Finally, it has to be taken into account that the individual averages of earnings are based on annual information from different years. Thus, even though earnings are inflation-adjusted, this does not control for changes of the overall earnings levels over the years.⁴ Therefore, annual earnings are weighted before taking averages. The average earnings y of person i are calculated according to the following formula:

$$\bar{y}_i^g = \frac{\sum_{t=t_g}^{2009} \left(y_{it}^g \cdot \left(\frac{\bar{y}_i^g}{\bar{y}_{2009}^g} \right)^{-1} \right)}{\sum_{t=t_g}^{2009} (d_{it})}, \quad (1)$$

³This is due to the migration history of Germany. As peaks of migration were during the phase of recruitment of so-called “guest workers” in the 1950s to 1970s followed by waves of migration due to family reunification, the children of first-generation migrants are still relatively young (Bauer et al., 2005).

⁴All earnings measures are inflation-adjusted by multiplying with the consumer price index by federal state (RWI, 2009).

where y_{it}^g are the earnings of person i in generation g (children/parents) in year t , \bar{y}_t^g are the average earnings of all persons in generation g in year t , d_{it} a dummy variable indicating whether the earnings of person i are observed in the respective year and t_g equals the year 1990 for children and 1984 for parents. To further reduce a potential bias, the sample is restricted to persons for whose fathers there are at least five earnings observations ($\sum_{t=1984}^{2009} (d_{it}) \geq 5$).

In the first part of this study, the intergenerational earnings elasticities are estimated. The elasticities describe in how far the earnings of the children are determined by the earnings of the parents. Therefore, high elasticities imply a low degree of intergenerational mobility. Age is included in the model to control for potential life cycle variations in earnings of the four population groups (native men, native women, migrant men and migrant women). The age is the average age of children and parents when the earnings are observed. As in most families the father is the main earner in the parental generation, the average age of the father is taken representatively for the parental age when household earnings are considered.

To find out whether the intergenerational earnings elasticities are significantly different between the population groups, a fully interacted model is estimated.

The baseline model is

$$\begin{aligned}
\ln \bar{y}_{ih} = & \beta_0 + \beta_1 \ln \bar{y}_{ih}^p + \beta_2 \overline{age}_i + \beta_3 (\overline{age}_i)^2 + \beta_4 \overline{age}_{ih}^p + \beta_5 (\overline{age}_{ih}^p)^2 \\
& + \beta_6 D_f + \beta_7 D_f * \ln \bar{y}_{ih}^p + \beta_8 D_f * \overline{age}_i + \beta_9 D_f * (\overline{age}_i)^2 \\
& + \beta_{10} D_m + \beta_{11} D_m * \ln \bar{y}_{ih}^p + \beta_{12} D_m * \overline{age}_i + \beta_{13} D_m * (\overline{age}_i)^2 \\
& + \beta_{14} D_m * \overline{age}_{ih}^p + \beta_{15} D_m * (\overline{age}_{ih}^p)^2 \\
& + \beta_{16} D_f D_m + \beta_{17} D_f D_m * \ln \bar{y}_{ih}^p + \beta_{18} D_f D_m * \overline{age}_i + \beta_{19} D_f D_m * (\overline{age}_i)^2 \\
& + e_{ih},
\end{aligned} \tag{2}$$

where \bar{y}_{ih} are the average weighted earnings of individual i in family h , \bar{y}_{ih}^p are the average earnings of the parents p of person i , \overline{age}_{ih}^p is the average age of the father, D_f is a female dummy and D_m a migrant dummy. The standard errors are clustered on the family level because the sample includes families with more than one child

and it is not likely that the residuals are independent across siblings.

As the degree of integration of the migrant population may influence the earnings mobility, the analysis is expanded by including different indicators of integration like ethnic marriages and the parents' years since migration.

The intergenerational earnings elasticities are estimated by OLS and by quantile regression estimation methods. The latter provides insights into variations of the degree of mobility along the earnings distribution of the children. As the German migration history is largely determined by the recruitment of low-skilled workers, a large share of first-generation migrants can be found at the lower end of the earnings distribution. Therefore, it is of particular interest whether the offspring of this important group of migrants is able to overcome their initial disadvantage.

However, as quantile regression results only provide information about changes at the earnings quantiles but not about changes within the quantiles, the second part of this study is concerned with intergenerational changes of the relative earnings positions. For this purpose, earnings quantiles are determined separately for parents and children as well as for sons and daughters. Furthermore, the children are grouped into 25- to 30-year-olds, 30- to 40-year-olds and 40- to 45-year-olds and the parents into 30- to 40-year-olds, 40- to 50-year-olds and 50- to 65-year-olds. Then the relative earnings positions within the earnings quantiles are compared between parents and children.

3 Data

The analysis is based on individual-level data from the German Socio-Economic Panel (SOEP).⁵ The SOEP is a longitudinal study of private households which started in 1984 and which samples more than 20,000 persons each year, including Germans, foreigners and recent immigrants. The data structure allows a direct link-

⁵The data used in this paper were extracted using the Add-On package PanelWhiz v3.0 (Nov 2010) for Stata. PanelWhiz was written by Dr. John P. Haisken-DeNew (john@panelwhiz.eu). The PanelWhiz generated DO file to retrieve the SOEP data used here and any Panelwhiz Plugins are available upon request. Any data or computational errors in this paper are my own. Haisken-DeNew and Hahn(2010) describe PanelWhiz in detail.

age between children and their parents.

The sample includes German natives, first- and second-generation migrants. A second-generation migrant is defined either as a person who is born in Germany but who does not hold German citizenship or as a migrant who arrived before the age of 6.⁶ In addition, this group comprises persons who are born in Germany, hold German citizenship and whose parents are both immigrants. The sample is restricted to persons living in West Germany and Berlin as very few migrants live in East Germany.

Using many waves of panel data bears the risk of attrition bias, i.e. a systematic drop-out of individuals out of the sample, which leads to biased estimation results. In particular among migrants, remigration or emigration of the most (un)successful persons may influence the results. However, Erlinghagen et al. (2009) analyze the probability of emigration using data from the SOEP for the years 1984 to 2005 and find that having German citizenship and being born in Germany reduces the probability of emigration significantly. Furthermore, 20 years after migration, immigrants are not more likely to emigrate than German natives. Thus, neither German-born second-generation migrants nor their parents, i.e. first-generation migrants who are by definition at least 19 years in Germany⁷, are significantly more likely to emigrate than the native control group. In the present sample, panel attrition should therefore not influence the comparison of the earnings mobility between natives and migrants.

The analysis is based on two earnings measures: the annual household income and the individual hourly wage⁸. There are several advantages and disadvantages related to these alternative earnings measures. Individual wages have the main advantage that they reflect best the earnings potential of a person and show the direct earnings transmission from the parents to the children. However, wages are only observable for employed persons. In particular for women, this restriction leads to a lower number of

⁶This is a common proceeding as young immigrants have the same educational background than their native counterparts.

⁷This results from the fact that second-generation migrants are at least 25 years old and the parents arrived either before birth of the child or at the latest when the child was 6 years old.

⁸The hourly wage is generated by dividing the monthly gross labor income by the working hours in the respective month.

observations and the sample is likely to constitute a selected subgroup. Furthermore, including zero earnings observations for non-employed persons may increase the life-cycle bias in estimated earnings elasticities (Brenner, 2010). Therefore, zero earnings observations are excluded from the analysis to make women's and men's earnings more comparable. As the data includes too few migrant mothers with non-zero wages, this study is limited to the analysis of the relation between fathers' and children's individual wages. While the employment rates of female second-generation migrants are already relatively low, this is even more pronounced in the parental generation. This could be partly explained of the immigration policy in the course of immigration due to family reunification which limited the labor market access of spouses and led to, for example, particularly low employment rates among Turkish women (Liebig, 2007). This restriction is regrettable as it is likely that mothers and fathers exert a different influence on their sons and daughters (see, for example, Couch and Dunn, 1997).

For this reason, the analysis uses the equivalent household income as the second earnings measure. The equivalent household income is the overall household income divided by equivalence weights.⁹ The household income has the main advantage that persons with zero individual income can be included in the analysis. Furthermore, in contrast to most other studies, the analysis is not exclusively focused on the relationship between children's and their fathers' earnings as the fathers' household income comprises as well mothers' earnings. The main disadvantage of this earnings measure is that it cannot be differentiated in how far the intergenerational mobility is influenced by direct earnings transmission from the parents to the children and in how far it is influenced by the choice of the partner and/or the household composition. Furthermore, children who live in the same household as their parents and share the same household labor income have to be excluded.¹⁰

⁹The weights used are the modified OECD equivalence weights which assign a value of 1 to the household head, a value of 0.5 to each additional adult member and children age 14 or older, and a value of 0.3 to each child below age 14 (OECD, 2005).

¹⁰This could lead to biased results if children living with their parents might differ significantly from children living on their own. However, comparing the intergenerational wage elasticities between these two groups does not reveal significant differences.

Table 1 presents the descriptive statistics separately for native sons and daughters and migrant sons and daughters. The first part of the table shows summary statistics for the household income. This sample comprises 2,036 persons in total. The second part of the table refers to the hourly wages and this sample comprises 1,520 persons. The children are on average 29 to 31 years old and the fathers 47 to 53. The share of married persons is higher among migrants. Looking at the sample considering the household income, 44% (35%) of native women (men) are married, whereas the respective share of migrants is 59% (48%). Within the group of married persons, the share of native Germans who are married as well to a native German accounts for 74% among women and for 79% among men. Also more than half of the married second-generation migrants are married to a partner with the same ethnic background (54% of women and 52% of men). The respective shares of married persons in the sample considering the individual wage information are lower, whereas the share of persons in ethnic marriages is higher.

The average equivalent household income (hourly wage) varies between 19,221 € (10.69 €) for migrant women and 26,757 € (14.21 €) for native men. There are three striking features with respect to both earnings measures. First, men report higher earnings than women.¹¹ Second, natives have on average higher earnings than migrants. And third, all four population groups have lower earnings than their parents, whereas this gap is less pronounced among migrants. Finally, Table 1 reveals that the children's average incomes are on average based on 5 to 8 earnings observations. The respective numbers for parents are 12 to 16.

4 Results

4.1 Intergenerational Earnings Elasticities

Table 2 presents the estimated intergenerational household income elasticities. The coefficient of the logarithm of the father's average income accounts for 0.114 and is

¹¹Looking at the household income of married persons, men and women should report the same household incomes on average. However, there seems to be a gender bias in the way the household income is reported (Chen et al., 2007).

significantly different from zero. This is the intergenerational income elasticity of native men. While both, the coefficient of the interaction between a female dummy and the father's income (0.090) as well as the coefficient of the interaction between a migrant dummy and the father's income (0.183), are positive and insignificant, the coefficient of the triple interaction between a migrant dummy, a female dummy and the father's income is negative and significantly different from zero (-0.353). The first two coefficients indicate that native women and migrant men have higher intergenerational income elasticities, i.e. are less mobile, than native men. In particular the coefficient of migrant men is more than twice the coefficient of native men. However, the differences between native and migrant men and native men and women are not significantly different from zero. Even though the coefficient of the triple interaction is negative and significant, this does not automatically indicate that migrant women have a significantly lower intergenerational income elasticity than natives or migrant men as all four coefficients have to be interpreted jointly.¹² An additional pairwise comparison of the income elasticities between all four population groups reveals that migrant women have on average a lower earnings elasticity than natives and migrant men (Table A.1). The difference is particularly pronounced between migrant men and women. However, none of these differences is statistically significant.

The magnitude and the relation of the coefficients are comparable to previous findings in the literature. One of the few studies analyzing intergenerational earnings mobility also in terms of the family income instead of the individual income is a study by Ermisch et al. (2006). The authors find intergenerational earnings elasticities of 0.178 for men and of 0.209 for women. Yuksel (2009) compares natives and migrants using information on individual annual labor earnings. His study finds intergenerational earnings elasticities between 0.19 and 0.26 for native men and between 0.37 and 0.40 for migrant men.

The second column in Table 2 presents the results including a marriage dummy.

¹²The negative and significant coefficient signifies that the earnings elasticity of migrant women – which is a combination of all four coefficients – is lower than the combination of the coefficient of the father's income and the two interaction terms, i.e. the coefficient of “a female migrant men”, which does not exist as a reference group.

The coefficients of the marriage dummy are larger for women than for men what indicates that marriage reduces the mobility of women relatively more if compared to men. But while the coefficients of the marriage dummy per se are not significantly different from zero, the negative coefficient for female immigrants becomes even larger in magnitude. This shows that the comparatively high degree of mobility among migrant women is driven by single migrant women. The estimated income elasticity for single second-generation migrant women is even negative.¹³ This is also in line with previous studies which have found negative earnings elasticities for daughters (Couch and Dunn, 1997; Yuksel, 2009).

To test the initial assumption that the earnings mobility may be influenced by the choice of the partner, the model specification in the third column focuses on married persons only and differentiates between ethnic and interethnic marriages. The reference group are persons in ethnic marriages. Native women and even more so migrant men who are married to a partner with the same ethnic background have significantly higher intergenerational earnings elasticities and therefore are less mobile than native men in ethnic marriages. Even though the triple interacted coefficient of migrant women is significantly negative, the pairwise comparison reveals again that the differences between migrant women and the other population groups in ethnic marriages are not statistically significant.

The coefficients of the interaction between an interethnic marriage and the father's income are negative for men and positive for women. However, only for the reference group of native men the coefficient is significantly different from zero. This indicates that men who are in interethnic marriages have a significantly lower income elasticity than men in ethnic marriages, i.e. they are more mobile and their income is less related to their fathers' income. This effect does not differ between natives and migrants. The opposite sign of the coefficient of the interaction between a female dummy and a dummy for interethnic marriages for natives as well as for migrants indicates that the mobility increasing effect of interethnic marriages is weaker for women if compared to men. Thus, the type of marriage seems to be less influential

¹³ $0.105 + 0.057 + 0.241 - 0.662 = -0.259$

for daughters' than for sons' earnings mobility and this refutes the initial hypothesis that in particular migrant women might be more tied to their family (earnings) by ethnic marriages.

Finally, the influence of the parental integration on the earnings mobility is analyzed. The parental integration measured by the fathers' years since migration before birth of the child ("ysm"). This can have an impact on the intergenerational earnings mobility as migrant parents may learn the host country's language with a longer duration of stay and may therefore be better able to support their children in school. Furthermore, preferences and attitudes may change over time. Native and migrant parents may have, for example, different degrees of aversion to earnings inequality between sons and daughters, which in turn influence the initial investment in education and therefore the earnings mobility (Bauer and Gang, 2001). If this changes with duration of stay, this should affect the earnings mobility of migrant sons and daughters to a different extent.

The results in column 4 reveal that the years since migration have a negative but decreasing effect on the income elasticity of migrant children. Thus, the longer the father has been in the host country, the more mobile are the children. This effect does, however, not differ between migrants sons and daughters as the coefficients of the interaction between the father's years since migration, the father's income and the female dummy are close to zero and not significant.

Table 3 presents the respective estimated intergenerational earnings elasticities based on individual incomes, namely the hourly wages. The coefficient of the logarithm of the father's wage accounts for 0.242 and is statistically significant. Thus, the intergenerational wage elasticity is larger than the household income elasticity. This is probably due to the fact that individual wages reflect better the earnings potential of a person which is transferred from the parents to the children in the form of education, connections, etc., whereas the household income is influenced by many additional factors like labor market participation decisions, the choice of the partner and the household composition. The coefficient of the female dummy is close to zero and insignificant which means that there are no significant differences

between native men and women. The results show further that migrant men have on average a significantly higher wage elasticity than native men. Migrant women have a negative coefficient which is, however, not significantly different from zero. Pairwise comparisons confirm that migrant women are not significantly more mobile than the other population groups (Table A.1).

It is noteworthy that while marriage reduces women’s mobility relatively more than men’s mobility in terms of the household income, the reverse is true in terms of the individual wage (column 2). As before, interethnic marriages increase women’s mobility less than men’s mobility (column 3). However, none of the relevant coefficients is significantly different from zero and thus the data do not provide empirical evidence that marriage per se or the type of marriage influence the degree of mobility in terms of wages. Finally, the results in column 4 show that there is also no evidence that the father’s years since migration have an impact on the wage elasticity. The coefficients are negligible in magnitude and not statistically significant.

When comparing the results of the household income mobility and the individual wage mobility, it has to be taken into account that the analysis of the wage elasticities is based solely on persons who are employed. This group constitutes probably a very selected subgroup as, for example, only the most successful migrants might find employment or only those married women who have a relatively high earnings potential might decide to work. Therefore, the estimated wage elasticities are not representative for the overall population. This self-selection could explain why neither the marital status nor the father’s integration have a significant impact on the earnings mobility of those persons who have already (successfully) entered the labor market. Furthermore, it could explain the opposite effect of marriage on the wage elasticity if compared to the effect on the household income elasticity.

As it is of particular interest whether low-earnings migrants are able to overcome their initial disadvantage, the earnings elasticities are reestimated using quantile regression methods. Table 5 presents the estimated coefficients at the 10th, 50th and 90th quantile. The model is comparable to the baseline model specification in column 1 in Tables 2 and 3. To better illustrate the results, Figure 1 plots the es-

estimated intergenerational earnings elasticities for the four population groups along the earnings distribution of the children. The dashed line constitutes the OLS estimates of the intergenerational earnings elasticity and the two dotted lines present the respective confidence interval (95%). The solid line presents the estimated earnings elasticities at the different earnings quantiles and the grey shaded area is the corresponding confidence interval.

As can be seen in Figure 1a, there is a downward trend in the intergenerational household income elasticity of natives. This signifies that children in lower earnings quantiles are less mobile than children in higher earnings quantiles. In particular, the estimated quantile regression coefficients of native women are above the confidence interval of the OLS estimate below the 20th earnings quantile.¹⁴

Among migrants, the estimated income elasticity is lower than the OLS estimate for women with incomes below the median income and higher than the OLS estimate above the median income, whereas the reverse is true for migrant men.

But even though migrant men at the lower end of the earnings distribution have higher earnings elasticities than migrant men at the higher end of the earnings distribution, Table 5 shows that at the 10th quantile of the household income, migrant men are not significantly less mobile than native men. Only at the median income, migrant men are indeed significantly less mobile than native men. Table 5 shows further that the coefficient for migrant women is negative and significant at the 10th income quantile. A pairwise comparison of the earnings mobilities confirms that second-generation women are significantly more mobile than native women and migrant men at the lower end of the earnings distribution.¹⁵ Migrant women do, however, not differ significantly from native men. In summary, these results weaken concerns that in particular low-earnings migrants reveal a low degree of intergenerational mobility if compared to natives. In contrast, second-generation migrant women at the lower end of the earnings distribution are relatively mobile.

¹⁴The large confidence intervals of the quantile regression coefficients are due to the low number of observations in each earnings quantile. Therefore, statements about the significance of the differences between OLS and quantile regression coefficients are problematic.

¹⁵Results of the pairwise comparison of the quantile regression coefficients are available from the author upon request.

Figure 1b and the second part of Table 4 present the respective results for the intergenerational wage elasticities. While natives and migrants do not differ significantly in the earnings mobility at the 10th income quantile, migrant men at the higher end of the income distribution are significantly less mobile than comparable natives. In contrast, migrant women are significantly more mobile than migrant men and natives at the 90th income quantile. Again, these results do not provide evidence for a particularly low degree of mobility among low-earnings migrants.

Nevertheless, quantile regression results still do not provide a complete image of the intergenerational earnings mobility. The inference about changes within the earnings distribution in comparison to changes along the earnings distribution is still limited. Even a low degree of mobility in lower earnings quantiles would be less reason for concern if there is sufficient fluctuation within the earnings distribution, i.e. if persons are able to change their relative earnings position. For this reason, the next section presents an analysis of intergenerational changes in the relative earnings positions.

4.2 Relative Earnings Mobility

Table 5 presents the shares of persons in different earnings quantiles conditional on the age (see Section 2). It is noticeable that the share of migrants – among children as well as among parents – in the lower earnings deciles is higher than the share of natives. Above the median income (wage), the share of migrants almost never equals or exceeds the share of natives in the respective earnings decile.

Table 6 presents the share of persons who have improved their relative earnings position compared to their parents (“upward mobility”) and the share of persons who have worsened their relative earnings position (“downward mobility”). Women exhibit a higher degree of upward mobility than men, whereas this difference is larger among migrants than among natives. While second-generation migrant women show less downward mobility than migrant men, the degree of downward mobility is comparable between native men and women. These patterns are even more pronounced among married persons.

To analyze whether the differences in mobility between the population groups are significant, a linear probability model of the probability of having a higher (lower) earnings position compared to the parents is estimated.¹⁶ Again, the particular influence of ethnic marriages on the earnings mobility is taken into account. Tables 7 and 8 present the respective results.

Table 7 shows that, on average, there are no differences between the four population groups in the probability of upward mobility in terms of the household income. All the coefficients are close to zero and not statistically significant. Controlling for marriage, column 2 shows that married men have a significantly lower probability to improve their relative earnings position than single men. The coefficient of the female dummy is negative, but small and insignificant. Even though the coefficient of the interaction of the female and the marriage dummy is positive and significant, this does not allow direct inference about the difference between single and married women or the difference between married men and married women as all three coefficients have to be interpreted jointly again. Therefore, columns 3 and 4 consider married persons only. First, these results reveal that the differences between married men and married women are not significant. Second, controlling for the type of marriage shows that, with exception of native women, persons in interethnic marriages are more likely to improve their earnings position than persons in ethnic marriages. These differences are, however, only significant for native men. Among native women, the reverse is true, i.e. native women with a native spouse are more likely to improve their earnings position than native women with a non-native spouse.

Columns 5 to 8 present the respective results for the individual hourly wages. Column 5 shows that migrants are on average more likely to improve their relative earnings position than natives. There are no significant differences in the probability of upward mobility between men and women. As before, there is neither evidence that the marital status nor evidence that the type of marriage influence the relative mobility in terms of individual labor earnings.

Table 8 presents the analogue results for the probability of downward mobility

¹⁶Using a probit estimation does not alter the results.

which mainly confirm the results of Table 7. There are few differences between the population groups and if at all migrants are less likely to worsen their relative earnings position than comparable natives.

5 Conclusion

This study analyzes gender differences in the intergenerational earnings mobility of second-generation migrants in Germany and compare these to German natives.

The results show that there are no large differences in the intergenerational earnings elasticities – neither between men and women nor between natives and migrants. Gender differences are relatively more pronounced among the migrant population whereby migrant women reveal on average a higher degree of mobility than migrant men. Against the initial hypothesis, not migrant women but, if at all, migrant men in ethnic marriages are relatively less mobile than comparable migrant men in interethnic relationships. Furthermore, the parental integration measured by the father’s years since migration increases the mobility of migrant children significantly. The explanation for this could be that better integrated parents are better able to support their children and therefore increase their earnings potential. The quantile regression results confirm the main OLS results and moreover weaken concerns that in particular low-earnings migrant are less mobile than comparable natives.

In terms of relative mobility, there are also few differences between the population groups. There is a slight tendency that migrants are more likely to improve their relative earnings position from one generation to the next and less likely to worsen their relative earnings position.

In summary, the results of this study suggest that second-generation migrants are on average as (im)mobile as the native population. Thus, low earnings mobility is not a migrant-specific issue in Germany. However, given the more unfavorable economic background of second-generation migrants, these results indicate as well that migrants are not able to overcome their initial disadvantage and considerably improve their earnings position if compared to natives.

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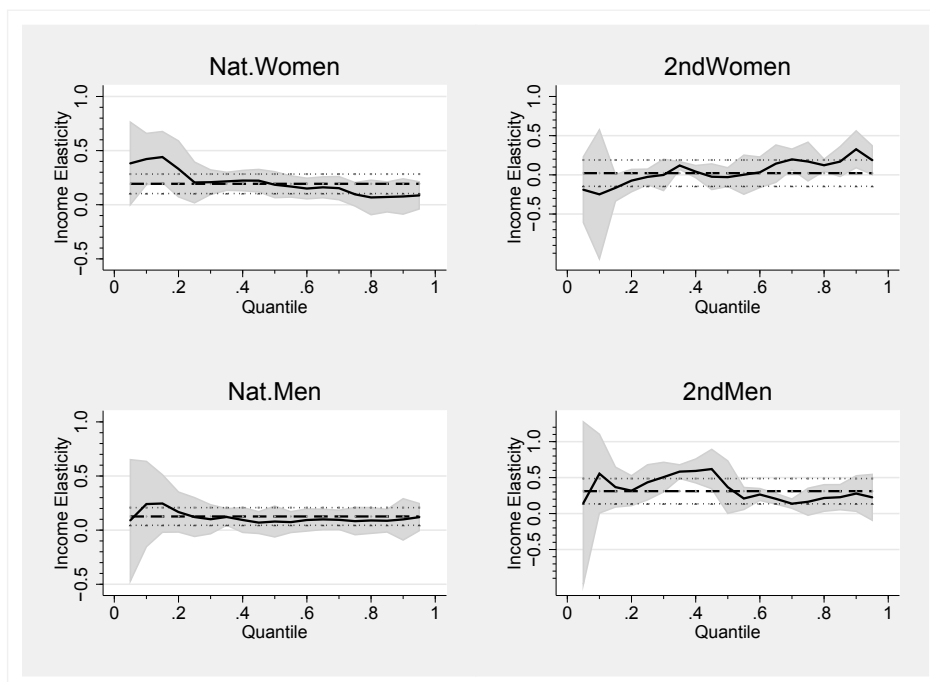
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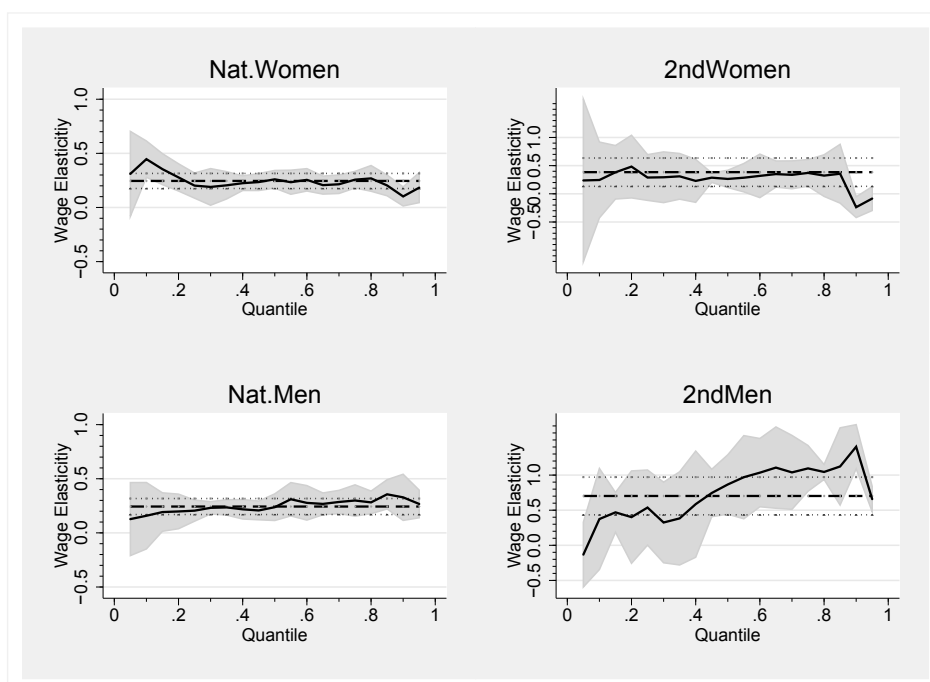
Figures and Tables

Figure 1: Quantile Regression Coefficients

(a) Household Income



(b) Hourly Wage



NOTE.—Graphs made using the user-written Stata command “grqreg” (Azevedo, 2004).

Table 1: Descriptive Statistics

	HOUSEHOLD INCOME				HOURLY WAGE			
	Natives		Second-Gen. Migrants		Natives		Second-Gen. Migrants	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
DAUGHTERS								
Age	29.5	3.7	28.7	3.2	29.1	3.7	28.6	3.6
Married	44.4	49.7	59.1	49.3	32.4	46.8	38.9	49.0
Ethnic marriage	74.2	43.8	53.5	50.1	78.4	41.3	58.6	49.6
Hh income/wage	24,011	12,366	19,221	11,184	11.88	3.26	10.69	3.31
No. of income obs.	7.2	5.5	6.3	5.1	5.3	4.2	4.5	3.7
Age of father	51.5	6.1	51.4	6.6	50.1	5.3	46.8	6.0
Hh inc./wage of father	33,793	14,740	22,313	12,446	19.23	5.81	16.45	3.58
No. of income obs.	14.5	6.4	15.1	6.4	11.8	5.3	12.3	5.4
Number of observations	840		176		570		120	
SONS								
Age	30.7	4.0	30.4	3.9	30.0	3.8	28.7	2.8
Married	34.7	47.6	48.2	50.1	27.5	44.7	35.4	48.0
Ethnic marriage	79.0	40.8	51.7	50.2	86.6	34.1	55.7	50.0
Hh income/wage	26,757	13,309	22,525	13,605	14.21	4.56	13.63	4.67
No. of income obs.	7.8	5.5	6.9	4.8	6.6	5.2	5.2	4.4
Age of father	53.0	6.2	51.9	6.2	51.2	5.5	49.6	4.8
Hh inc./wage of father	34,493	15,825	24,432	11,830	19.75	6.02	17.00	3.11
No. of income obs.	13.7	6.1	15.5	6.3	11.5	5.2	13.4	6.3
Number of observations	829		191		657		173	

NOTE.—Weighted numbers.

Table 2: Intergenerational Household Income Elasticities (OLS)

	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)
Hh income of father	0.114* (0.067)	0.105 (0.090)	0.191*** (0.067)	0.114* (0.068)
Inc. × married		0.014 (0.122)		
Inc. × interethn. marriage			-0.413** (0.195)	
Inc. × female	0.090 (0.096)	0.057 (0.137)	0.180* (0.106)	0.090 (0.097)
Inc. × female × married		0.113 (0.181)		
Inc. × female × interethn. marriage			0.252 (0.265)	
Second-gen. migrant × inc.	0.183 (0.168)	0.241 (0.255)	0.454** (0.190)	0.367** (0.143)
inc. × married		-0.116 (0.311)		
inc. × interethn. marriage			-0.241 (0.282)	
inc. × ysm				-0.154*** (0.059)
inc. × ysm ²				0.012*** (0.004)
inc. × female	-0.353* (0.203)	-0.662* (0.344)	-0.537* (0.277)	-0.438* (0.240)
inc. × female × married		0.490 (0.402)		
inc. × female × interethn. marriage			0.313 (0.387)	
inc. × female × ysm				0.054 (0.097)
inc. × female × ysm ²				-0.003 (0.007)
R ²	0.139	0.152	0.207	0.144
F	9.275	8.270	6.520	8.982
N	2,036	2,036	907	2,036

NOTE.— Weights are used. Standard errors are adjusted for repeated observations on family level. Further control variables are age, age square as well as the age of the father and its square.

* p<0.10, ** p<0.05, *** p<0.01

Table 3: Intergenerational Wage Elasticities (OLS)

	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)
Wage of father	0.242*** (0.050)	0.198*** (0.064)	0.322*** (0.071)	0.242*** (0.050)
Wage \times married		0.131 (0.093)		
Wage \times interethn. marriage			0.091 (0.201)	
Wage \times female	0.003 (0.068)	0.070 (0.085)	-0.177 (0.115)	0.003 (0.069)
Wage \times female \times married		-0.194 (0.137)		
Wage \times female \times interethn. marriage			0.227 (0.252)	
Second-gen. migrant \times wage	0.456* (0.233)	0.433 (0.291)	0.641* (0.344)	0.511** (0.203)
wage \times married		0.062 (0.349)		
wage \times interethn. marriage			-0.543 (0.496)	
wage \times ysm				0.001 (0.069)
wage \times ysm ²				0.001 (0.003)
wage \times female	-0.321 (0.272)	-0.302 (0.321)	-0.543 (0.415)	0.004 (0.326)
wage \times female \times married		0.026 (0.473)		
wage \times female \times interethn. marriage			0.707 (0.899)	
wage \times female \times ysm				-0.095 (0.124)
wage \times female \times ysm ²				0.002 (0.009)
R ²	0.305	0.314	0.444	0.321
F	18.185	14.637	12.150	16.974
N	1,520	1,520	512	1,520

NOTE.— Weights are used. Standard errors are adjusted for repeated observations on family level. Further control variables are age, age square as well as the age of the father and its square.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 4: Intergenerational Earnings Elasticities (Quantile Regression)

		Quantiles		
	OLS Coef. (SE)	10th Coef. (SE)	50th Coef. (SE)	90th Coef. (SE)
HOUSEHOLD INCOME				
Hh income of father	0.114* (0.067)	0.273 (0.178)	0.062 (0.065)	0.129 (0.090)
Inc. × female	0.090 (0.096)	0.091 (0.219)	0.133 (0.091)	-0.053 (0.119)
Second-gen. migrant × inc.	0.183 (0.168)	0.296 (0.285)	0.330** (0.166)	0.128 (0.117)
inc. × female	-0.353* (0.203)	-0.908** (0.373)	-0.444** (0.218)	0.075 (0.167)
R ²	0.139			
F	9.275			
Pseudo R ²		0.136	0.067	0.070
N	2,036		2,036	
HOURLY WAGE				
Wage of father	0.242*** (0.050)	0.150** (0.065)	0.232*** (0.041)	0.320*** (0.079)
Wage × female	0.003 (0.068)	0.295*** (0.094)	0.020 (0.060)	-0.215** (0.101)
Second-gen. migrant × wage	0.456* (0.233)	0.121 (0.208)	0.494*** (0.170)	1.158*** (0.138)
wage × female	-0.321 (0.272)	-0.345 (0.285)	-0.286 (0.222)	-1.077*** (0.183)
R ²	0.305			
F	18.185			
Pseudo R ²		0.151	0.179	0.207
N	1,520		1,520	

NOTE.— Weights are used. Standard errors are adjusted for repeated observations on family level. Further control variables are age, age square as well as the age of the father and its square.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table 5: Earnings Quantiles

	HOUSEHOLD INCOME								HOURLY WAGE							
	DAUGHTERS				SONS				DAUGHTERS				SONS			
	Natives		Sec.-Gen. Migrants		Natives		Sec.-Gen. Migrants		Natives		Sec.-Gen. Migrants		Natives		Sec.-Gen. Migrants	
	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>	<i>Mean</i>	<i>SD</i>
<10th	6.0	23.8	8.1	27.4	7.2	25.8	13.8	34.5	8.9	28.5	21.3	41.1	9.8	29.8	14.6	35.4
10-20th	6.1	23.9	18.4	38.9	7.6	26.6	13.8	34.6	9.6	29.5	10.6	31.0	9.8	29.8	7.7	26.8
20-30th	8.3	27.6	20.6	40.6	9.1	28.8	15.5	36.3	9.0	28.6	12.3	33.0	9.2	28.9	14.6	35.4
30-40th	8.0	27.1	6.0	23.8	9.6	29.5	9.7	29.7	10.5	30.7	8.6	28.2	11.0	31.3	6.6	24.9
40-50th	10.1	30.2	9.9	29.9	11.6	32.0	12.9	33.7	9.3	29.1	13.3	34.1	10.0	30.0	10.2	30.3
50-60th	11.5	32.0	4.2	20.1	10.9	31.1	6.4	24.6	10.9	31.2	3.6	18.6	10.9	31.1	9.1	28.9
60-70th	12.9	33.5	6.5	24.7	11.4	31.8	3.6	18.7	10.9	31.2	7.1	25.7	9.8	29.8	10.0	30.1
70-80th	12.3	32.9	7.1	25.8	12.0	32.5	8.5	28.0	10.9	31.2	7.8	27.0	10.4	30.6	4.1	19.9
80-90th	12.2	32.7	10.2	30.4	9.5	29.4	11.0	31.3	9.7	29.6	7.6	26.6	9.9	29.9	6.7	25.1
>90th	12.7	33.3	8.9	28.6	11.1	31.5	4.8	21.4	10.3	30.4	7.8	26.9	9.2	28.9	16.3	37.1
FATHERS																
<10th	7.3	26.0	23.5	42.5	8.3	27.5	25.0	43.4	11.3	31.6	16.2	37.0	9.1	28.8	9.8	29.8
10-20th	7.9	26.9	14.1	34.9	10.6	30.7	15.6	36.4	10.4	30.6	14.6	35.5	9.3	29.1	7.7	26.8
20-30th	8.3	27.6	28.2	45.2	9.3	29.1	12.7	33.4	4.9	21.6	23.0	42.2	12.4	32.9	16.7	37.4
30-40th	12.6	33.2	14.0	34.8	8.2	27.5	9.4	29.3	9.9	29.9	5.3	22.4	9.3	29.1	9.7	29.7
40-50th	10.1	30.2	9.9	29.9	10.0	30.1	10.9	31.2	9.6	29.5	9.7	29.7	7.9	27.0	22.5	41.9
50-60th	10.9	31.2	3.1	17.3	10.9	31.2	6.0	23.8	10.3	30.5	10.7	31.0	8.8	28.4	15.7	36.5
60-70th	12.5	33.1	2.3	14.9	10.1	30.2	8.1	27.3	11.5	32.0	10.9	31.3	9.2	28.9	7.0	25.6
70-80th	10.2	30.3	0.6	7.4	11.7	32.2	7.6	26.6	12.6	33.2	3.5	18.6	9.8	29.8	8.4	27.8
80-90th	10.0	30.1	3.0	17.3	10.8	31.1	3.7	19.0	9.0	28.7	3.0	17.3	13.2	33.9	1.7	13.1
>90th	10.2	30.2	1.5	12.1	10.0	30.0	1.0	9.9	10.4	30.6	3.1	17.3	11.0	31.3	0.7	8.1
N	689		137		730		168		570		120		657		173	

NOTE.—Weighted numbers. All values in %.

Table 6: Relative Earnings Mobility

	Daughters		Sons	
	<i>Native</i>	<i>Sec.-Gen.</i>	<i>Native</i>	<i>Sec.-Gen.</i>
HOUSEHOLD INCOME				
Upward Mobility	47.2	52.1	47.3	52.1
Downward Mobility	39.8	29.3	40.6	31.3
Number of observations	689	137	730	168
MARRIED PERSONS				
Upward Mobility	49.6	46.5	40.9	47.4
Downward Mobility	36.1	28.5	46.7	34.9
Number of observations	315	88	291	95
HOURLY WAGE				
Upward Mobility	43.8	42.6	41.2	56.4
Downward Mobility	43.8	39.3	44.6	31.5
Number of observations	570	120	657	173
MARRIED PERSONS				
Upward Mobility	43.7	38.4	43.5	56.1
Downward Mobility	45.5	40.4	39.5	25.5
Number of observations	197	54	190	71

NOTE.— Weighted numbers. All values in %.

Table 7: Upward Earnings Mobility

	HOUSEHOLD INCOME				HOURLY WAGE			
	FULL		MARRIED		FULL		MARRIED	
	SAMPLE		PERSONS		SAMPLE		PERSONS	
	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)
Married		-0.102* (0.053)				0.007 (0.060)		
Interethn. marriage				0.241** (0.122)				0.172 (0.157)
Female	-0.001 (0.036)	-0.057 (0.047)	0.086 (0.056)	0.160*** (0.058)	0.004 (0.042)	0.005 (0.054)	0.002 (0.068)	0.000 (0.070)
Female × married		0.144** (0.073)				-0.003 (0.087)		
Female × interethn. marriage				-0.382** (0.160)				-0.036 (0.211)
Second-gen. migrant	0.048 (0.062)	0.061 (0.094)	0.064 (0.082)	0.089 (0.100)	0.145** (0.071)	0.150 (0.102)	0.137 (0.089)	0.042 (0.121)
× married		0.003 (0.124)				-0.013 (0.131)		
× interethn. marriage				-0.191 (0.214)				0.140 (0.226)
× female	0.001 (0.098)	0.089 (0.134)	-0.095 (0.137)	-0.244 (0.151)	-0.150 (0.108)	-0.115 (0.154)	-0.190 (0.136)	-0.163 (0.163)
× female × married		-0.184 (0.196)				-0.076 (0.198)		
× female × interethn. marriage				0.534* (0.304)				-0.070 (0.327)
R ²	0.001	0.008	0.006	0.030	0.005	0.005	0.006	0.027
F	0.325	1.005	0.799	1.624	1.493	0.760	1.092	2.280
N	1,724	1,724	789	789	1,239	1,239	507	506

NOTE.— Weights are used. Standard errors are adjusted for repeated observations on family level. Further control variables are age, age square as well as the age of the father and its square.

* p<0.10, ** p<0.05, *** p<0.01

Table 8: Downward Earnings Mobility

	Household Income				Hourly Wage			
	FULL		MARRIED		FULL		MARRIED	
	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)	Coef. (SE)
Married		0.097* (0.053)				-0.037 (0.059)		
Interethn. marriage				-0.294*** (0.097)				-0.109 (0.132)
Female	-0.008 (0.036)	0.058 (0.047)	-0.106* (0.055)	-0.188*** (0.057)	0.018 (0.043)	-0.004 (0.055)	0.060 (0.066)	0.070 (0.070)
Female × married		-0.164** (0.072)				0.064 (0.085)		
Female × interethn. marriage				0.430*** (0.142)				-0.027 (0.187)
Second-gen. migrant	-0.092 (0.062)	-0.094 (0.090)	-0.118 (0.088)	-0.221** (0.090)	-0.120* (0.071)	-0.107 (0.097)	-0.127 (0.095)	-0.089 (0.117)
× married		-0.024 (0.126)				-0.021 (0.131)		
× interethn. marriage				0.421** (0.174)				-0.031 (0.181)
× female	-0.013 (0.094)	-0.030 (0.138)	0.042 (0.133)	0.108 (0.124)	0.048 (0.102)	0.011 (0.143)	0.077 (0.140)	0.221 (0.163)
× female × married		0.071 (0.195)				0.066 (0.198)		
× female × interethn. marriage				-0.418 (0.279)				-0.323 (0.252)
R ²	0.004	0.011	0.016	0.046	0.005	0.006	0.010	0.036
F	1.523	1.451	1.836	3.081	1.379	0.814	1.307	4.311
N	1,724	1,724	789	789	1,239	1,239	507	506

NOTE.— Weights are used. Standard errors are adjusted for repeated observations on family level. Further control variables are age, age square as well as the age of the father and its square.

* p<0.10, ** p<0.05, *** p<0.01

A Appendix

Table A.1: Intergenerational Income Elasticities (OLS)

	Men	Women	Natives	Migrants	Nat.Men& Sec.Wom.	Nat.Wom.& Sec.Men
HOUSEHOLD INCOME						
Hh income of father	0.133** (0.067)	0.196*** (0.072)	0.114* (0.067)	0.297* (0.155)	0.125* (0.067)	0.202*** (0.072)
Inc. × female			0.090 (0.096)	-0.262 (0.181)		
Second-gen. migrant × inc.	0.147 (0.167)	-0.169 (0.125)			-0.092 (0.118)	0.055 (0.177)
R ²	0.141	0.115	0.130	0.106	0.141	0.124
F	10.126	7.862	12.684	3.593	11.547	7.668
N	1,020	1,016	1,669	367	1,005	1,031
MARRIED PERSONS						
Hh income of father	0.184** (0.071)	0.374*** (0.091)	0.184*** (0.067)	0.643*** (0.182)	0.181*** (0.069)	0.372*** (0.091)
Inc. × interethn. marriage	-0.410** (0.195)	-0.162 (0.183)	-0.402** (0.195)	-0.662*** (0.208)	-0.389** (0.197)	-0.165 (0.182)
Inc. × female			0.186* (0.105)	-0.354 (0.262)		
Inc. × female × interethn. marriage			0.237 (0.264)	0.574** (0.287)		
Second-gen. migrant × inc.	0.446** (0.207)	-0.084 (0.218)			0.109 (0.210)	0.263 (0.211)
inc. × interethn. marriage	-0.246 (0.293)	0.094 (0.277)			0.322 (0.285)	-0.490* (0.284)
R ²	0.187	0.207	0.154	0.223	0.172	0.223
F	4.152	7.461	4.829	4.391	6.048	5.867
N	416	497	696	217	425	488
WAGE						
Wage of father	0.244*** (0.050)	0.244*** (0.049)	0.242*** (0.050)	0.698*** (0.230)	0.241*** (0.050)	0.245*** (0.049)
Wage × female			0.003 (0.068)	-0.318 (0.267)		
Second-gen. migrant × wage	0.459** (0.229)	0.135 (0.160)			0.137 (0.163)	0.456** (0.230)
R ²	0.272	0.218	0.306	0.270	0.323	0.218
F	22.986	10.452	30.206	7.382	24.013	13.461
N	830	690	1,227	293	777	743

NOTE.— Weights are used. Standard errors are adjusted for repeated observations on family level.

* p<0.10, ** p<0.05, *** p<0.01