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## ABSTRACT

### Human Capital and Ethnic Self-Identification of Migrants<sup>\*</sup>

The paper investigates the role of human capital for migrants' ethnic ties towards their home and host countries. Pre-migration characteristics dominate ethnic self-identification. Human capital acquired in the host country does not affect the attachment to the receiving country.

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## **1. Introduction**

Globalisation today has brought an important challenge: ethnic identification. The rising size of migration and international terrorism has caused concerns about integration and safety. How and why do individuals identify with their own or new ethnic groups? The issue of ethnic self-identification, that is the question of how to label oneself as a member of a certain ethnic community, is especially difficult for international migrants who have to decide whether and how strongly to identify with their country of origin and their host country.

Ethnic identity appears to be potentially endogenous, and its determinants are not properly understood. Economists have only recently begun to model and to empirically validate this important issue (Bodenhorn and Ruebeck, 2003; Chiswick, 2006; Constant et al., 2006; Duncan and Trejo, 2005). The economic framework suggests to model ethnicity in the context of home production (Becker, 1981), using human capital acquired in the home and host country as the key driving forces.

This paper analyzes survey-based measures of ethnic self-identification with their countries of origin and their host country using German panel survey data. A range of explanatory variables including pre- and post-migration characteristics are examined. The analysis is conducted for males and females separately in order to shed light on possible gender differences of ethnic self-identification. Section 2 explains the data and statistical models. Section 3 presents the empirical results. Section 4 summarizes.

## **2. Data and models**

The annually conducted, nationally representative German Socio-economic Panel (GSOEP, SOEP group, 2003) is used. We follow Constant et al. (2006) and choose a

sample that contains only first-generation permanent migrants and takes 2001 as the base year of observation. The data set contains 606 female and 640 male long-term migrants and can be divided into the most important groups of Turks, ex-Yugoslavians, Italians, Greeks, Spaniards, and “other ethnicities”.

Ethnic self-identification is measured by two direct survey questions: The first question asked the respondents to specify how German they feel. The answers were grouped into three categories, ranging between deep attachments to Germany (category 1), moderate attachment (category 2) and hardly any attachment at all (category 3). The second question in the survey asked for the respondents’ connections to their country of origin. The answers were again grouped into three categories, ranging between strong (category 1), moderate (category 2) and weak connections (category 3). In the spirit of the home production framework, we assume that these ethnic identities are formed using ethnic and human capital, religion and exposure to the home and receiving countries.

To analyze these two variables econometrically, we apply ordered probit models for both dependent variables separated for men and women respectively and include a larger set of pre- and post-migration characteristics of individuals. Table 1 contains the list of explanatory variables: Pre-migration characteristics include age at entry, age at entry squared, and dummies for religion (with reference status: non-religious), human capital from home (with reference category: no education at home), and ethnic origin (with reference group: Turkish). The post-migration characteristics are dummies capturing human capital acquired in Germany (with reference: some degree in Germany), large city, married, and children under 16 years, and the continuous variables years since migration and years since migration squared.

### **3. Empirical Results**

Most migrants had substantial educational exposure at home and in Germany: For instance, 37.3% of the males and 44.8% of the females had some schooling in the country of origin, and only 17.0% of the males and 22.1% of the females got no educational degree in Germany. This substantial variation in the measured human capital from the host and home countries allows us to examine well their effects on ethnic self-identification together with the other pre- and post-migration characteristics.

The first two columns of Table 1 show the results for the determinants of how German migrant men and women feel. For males, the categories religion, education in the home country, and ethnicity are significant, which means that only pre-migration characteristics play a role in determining the migrants' feelings for Germany. For females, the categories religion, education in the home country, ethnicity, years since migration, years since migration squared, and married, and therefore both pre- and post-migration characteristics are important. These findings are supported by the results of the corresponding likelihood-ratio tests as presented in Table 2: For both men and women, pre-migration characteristics are highly significant, whereas the impact of post-migration characteristics is insignificant for men but significant for women.

Columns three and four of Table 1 contain the results for the determinants of how connected to their origin migrant men and women feel. For males, the categories education in the home country, ethnicity, large city, and married, and therefore both pre- and post-migration characteristics are important. For females, the categories age at entry, religion, ethnicity, and education in Germany, although only the variable "no degree in Germany", play a role. Therefore, again pre- and post-migration

characteristics are important. In the corresponding likelihood-ratio tests in Table 2, the effect of pre-migration characteristics for both men and women is again highly significant, whereas the effect of post-migration characteristics is significant for men and insignificant for women.

A positive value of an estimated effect parameter implies a reduced attachment to the underlying latent variable feeling German or connected to the origin. It is noteworthy that none of the educational categories in Germany has any effect on the attachment to Germany, and only no degree in Germany is associated with an increased attachment towards home among females. Education at home reduces the affiliation towards Germany, and strengthens male feelings for home. As a consequence, human capital acquired at home is neither a good predictor of integration nor, if acquired in the host country, a convincing instrument to foster it.

That pre-migration characteristics play such an important role in determining how connected you feel to your country of origin seems rather surprising; one would expect a dominating effect of post-migration characteristics, that is of experiences made in the host country. Yet, post-migration characteristics hardly play a role in shaping people's attitudes. Males do not seem to adjust their feelings for the host country Germany after arrival, but change their feelings for their country of origin; females adjust their feelings for Germany but freeze their image of their country of origin after migration.

#### **4. Summary and conclusions**

This paper provides an alternative empirical approach to the concept of ethnic self-identification with acknowledging that the respective feelings for the host country and the country of origin need not be mutually exclusive but can be fluid and situational.

In testing a comprehensive range of explanatory variables, we find that pre-migration characteristics dominate the feelings of first-generation migrants towards ethnic self-identification for both males and females, whereas post-migration characteristics have a very differing impact on men and women and the different parts of ethnic self-identification. In general, however, post-migration characteristics never reach the importance of pre-migration characteristics. In particular, human capital acquired at home lead to lower identification with the host country for males and females, while males only have a higher affiliation with the original ethnicity. Education in the host country does not increase the likelihood of feeling closer to the natives.

These surprising results have important repercussions on how host countries like Germany should conduct their integration policies: That living in the host country does not systematically change the ethnic self-identification of migrants can be either due to the relative unimportance of post-migration characteristics for the integration process, i.e. be due to the unwillingness of migrants to attach themselves to the host country; or it can be due to failing incentives and efforts of the host country, i.e. the unwillingness of the host country to integrate the migrants. The former would imply that successful integration is totally unrelated to any efforts made by the host country, and that host countries can only ensure integration by selecting those people willing to integrate based on their pre-migration characteristics. Measures to both better pre-select migrants as well as to facilitate integration seem profitable.



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Table 1. The effect of pre- and post-migration characteristics on ethnic self-identification (ordered probit models)

|                                       | <b>Feel German</b> |                    | <b>Feel connected to the origin</b> |                     |
|---------------------------------------|--------------------|--------------------|-------------------------------------|---------------------|
|                                       | <b>Female</b>      | <b>Male</b>        | <b>Female</b>                       | <b>Male</b>         |
| <b>Pre-migration characteristics</b>  |                    |                    |                                     |                     |
| Age at entry                          | 0.017<br>(1.14)    | 0.023<br>(1.50)    | -0.026*<br>(-1.69)                  | -0.013<br>(-0.81)   |
| Age at entry squared                  | 0.000<br>(-0.03)   | 0.000<br>(-0.75)   | 0.000<br>(1.53)                     | 0.000<br>(0.00)     |
| Muslim                                | 0.199<br>(0.66)    | 0.386*<br>(1.81)   | -0.171<br>(-0.54)                   | 0.314<br>(1.35)     |
| Catholic                              | -0.563*<br>(-1.89) | -0.128<br>(-0.57)  | 0.107<br>(0.35)                     | 0.357<br>(1.45)     |
| Other Christian                       | -0.277<br>(-0.94)  | 0.062<br>(0.29)    | 0.001<br>(0.00)                     | 0.379<br>(1.59)     |
| Other religions                       | 0.205<br>(0.52)    | 0.567*<br>(1.85)   | -1.226**<br>(-2.45)                 | -0.023<br>(-0.07)   |
| College in home country               | 0.638*<br>(1.94)   | 0.530*<br>(1.81)   | -0.314<br>(-0.90)                   | 0.144<br>(0.48)     |
| Vocational training in home country   | 0.180<br>(0.93)    | 0.269<br>(1.56)    | -0.089<br>(-0.44)                   | -0.205<br>(-1.14)   |
| Complete schooling in home country    | 0.292<br>(1.45)    | 0.500***<br>(2.78) | -0.243<br>(-1.15)                   | -0.438**<br>(-2.35) |
| Incomplete schooling in home country  | 0.637*<br>(2.29)   | 0.098<br>(0.43)    | -0.124<br>(-0.43)                   | 0.015<br>(0.06)     |
| Ex-Yugoslavian                        | -0.174<br>(-1.22)  | -0.049<br>(-0.36)  | 0.303*<br>(2.05)                    | -0.115<br>(-0.81)   |
| Greek                                 | -0.031<br>(-0.15)  | 0.495**<br>(2.44)  | -0.625***<br>(-2.58)                | -0.420*<br>(-1.94)  |
| Italian                               | 0.416*<br>(2.18)   | 0.206<br>(1.14)    | -0.526**<br>(2.56)                  | -0.425*<br>(-2.18)  |
| Spanish                               | 0.266<br>(0.90)    | 0.627**<br>(2.36)  | -0.329<br>(-1.03)                   | -0.676*<br>(-2.32)  |
| Other ethnicities                     | -0.172<br>(-1.11)  | -0.326*<br>(-2.14) | -0.127<br>(-0.78)                   | 0.164<br>(1.04)     |
| <b>Post-migration characteristics</b> |                    |                    |                                     |                     |
| No degree in Germany                  | -0.277<br>(-1.03)  | 0.272<br>(1.37)    | -0.503*<br>(-1.81)                  | -0.297<br>(-1.43)   |
| Higher degree in Germany              | -0.154<br>(-0.85)  | -0.046<br>(-0.31)  | -0.225<br>(-1.21)                   | 0.131<br>(0.85)     |
| University degree in Germany          | -0.443<br>(-1.50)  | -0.087<br>(-0.36)  | 0.000<br>(0.00)                     | -0.218<br>(-0.88)   |
| Large city                            | 0.155<br>(1.55)    | 0.029<br>(0.30)    | -0.131<br>(-1.24)                   | -0.181*<br>(-1.78)  |
| Years since migration                 | -0.041*<br>(-1.88) | 0.003<br>(0.14)    | 0.020<br>(0.83)                     | -0.022<br>(-0.99)   |
| Years since migration squared         | 0.001*<br>(1.67)   | 0.000<br>(-0.81)   | 0.000<br>(-0.68)                    | 0.000<br>(0.92)     |
| Married                               | 0.330**<br>(2.44)  | 0.069<br>(0.51)    | -0.168<br>(-1.18)                   | -0.275*<br>(-1.99)  |
| Children under 16                     | 0.124<br>(1.05)    | 0.039<br>(0.33)    | -0.029<br>(-0.23)                   | 0.043<br>(0.35)     |

|                        |          |          |          |          |
|------------------------|----------|----------|----------|----------|
| $\mu_1$                | -0.631   | 0.174    | -0.545   | -0.585   |
| $\mu_2$                | 0.463    | 0.464    | 1.047    | 0.691    |
| Number of observations | 606      | 640      | 606      | 640      |
| Log likelihood         | -582.770 | -638.603 | -490.111 | -554.302 |
| Pseudo-R <sup>2</sup>  | 0.0834   | 0.0536   | 0.0639   | 0.0437   |

The reference group is non-religious Turkish, has no education in the home country, and some degree in Germany. See Veall and Zimmermann (1996) for an overview of Pseudo-R<sup>2</sup> measures. Dependent variable “feel German”: “To what extent do you view yourself as a German?” =1 if completely, for the most part; =2 if in some respects; =3 if hardly at all, not at all. Dependent variable “feel connected to the origin”: “To what extent do you feel that you belong to the culture of the country where you or your family comes from?” =1 if to a very large extent, to a large extent; =2 if in some respects; =3 if hardly, not at all. \* is significant at 95%, \*\* is significant at 99%, and \*\*\* is significant at 99.5%. z-values in parentheses.

Table 2. Likelihood-ratio test of the effect of pre- and post-migration characteristics (tested against the full model)

|  | <b>Female</b>    | <b>Male</b>      |
|--|------------------|------------------|
| <b>Feel German:</b>                      |                  |                  |
| Effect of pre-migration characteristics  | 62.00***<br>(15) | 54.27***<br>(15) |
| Effect of post-migration characteristics | 18.69**<br>(8)   | 11.84<br>(8)     |
| <b>Feel connected to the origin:</b>     |                  |                  |
| Effect of pre-migration characteristics  | 42.50***<br>(15) | 32.10***<br>(15) |
| Effect of post-migration characteristics | 8.90<br>(8)      | 13.66*<br>(8)    |

Table shows chi-squared values with degrees of freedom in parentheses

\* significant at 95% \*\* significant at 99% \*\*\* significant at 99.5%