Assimilation of Foreigners in Former West Germany

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ABSTRACT

Migration movements to industrialized countries have grown in number and size, and the presence of large numbers of immigrants has raised concerns about their integration and assimilation into host societies. This article is an empirical study of assimilation of foreign nationals in Germany. Their experience may hold lessons for other relatively recent immigration destinations. As expected, language is one of the most critical factors for determining integration and assimilation at the workplace and in society. Our results indicate uneven success in these two areas, and suggest that greater language skills may be required for social assimilation, compared to economic assimilation. Among the most important findings of our study are the strong and statistically significant effects of the attitudes by Germans toward immigrants, the significant influence of the region of residence, and the ambivalence of German-born foreign residents toward naturalization and continued stay. This signals the failure of past integration and assimilation policies. The results show that negative attitudes by ethnic Germans against others at work or in society, in general, reduce interest in integration and assimilation. This is neither new nor surprising and this research does not contribute new theoretical insights, but it demonstrates the magnitude and significance of the effects. The question of why different locations seemed to have different impacts on citizenship aspirations is beyond the scope of this article. The data do not provide information to pursue this question and we suspect that the causes are too complex for a short answer. As expected, non-EU citizens showed greater interest in acquiring German citizenship than EU citizens. Finally, the results also indicate that the immediate post-World War II notion of “guest workers” was not completely false. There has been significant return migration and a significant number of respondents to the survey say that they intend to return.

INTRODUCTION

Assimilation is a process that reduces differences between immigrants and natives along many dimensions, including language, education, on-the-job training and experience, labour market performance, housing, household size, income, age and gender distributions, foods, customs, religion, values and attitudes, legal status (visa, citizenship), and physical appearance (e.g., dress, hairstyle) (Djajić, 2003). Assimilation is not equally difficult or contested, and immigrants will not change and adapt at uniform rates along all dimensions (e.g., Gans, 1997); some dimensions cannot be changed, and some will not.
There are dimensions that can only be changed by the immigrants, and there are dimensions of assimilation that require the actions of both immigrants and the host society. Citizenship acquisition, for example, belongs in the latter category.

Often overlooked is that in mass immigrations, both immigrant and host societies end up making adjustments. Adjustments by host societies are made visible, for example, by the influence of successive large immigrant groups on American eating habits. We see similar trends occurring in Western Europe where ethnic foods of early immigrant groups have become common fare and are now widely available in non-ethnic restaurants and stores.

The complexity of the assimilation process is outlined in Schaeffer (2006). His discussion highlights the difficulties inherent in modeling and measuring assimilation. Possibly because of equating assimilation with acculturation, the idea of assimilation has been challenged (Portes and Zhou, 1994; Cannato, 2004). Acculturation is “the process by which the culture of a particular society is instilled in human beings” (Webster’s II New Riverside University Dictionary, 1984 and 1988: 72). It is also defined as the modification of the culture of a group or individual as a result of interacting with a different culture (Webster’s II New Riverside University Dictionary, 1984 and 1988). Both definitions imply the subordination of the original to the new culture. By contrast, while assimilation means to become more similar, it leaves open the possibility that the host society may make some of the adjustments, something that acculturation does not. In addition, in practice successful assimilation does not need to be equal along all dimensions (Schaeffer, 2006) and immigrants may retain aspects of their original culture, whereas successful acculturation implies the complete replacement of the original with the new culture. Empirical research leaves little doubt, however, that immigrants who fail to assimilate along key dimensions, particularly language, suffer economic disadvantages (e.g., Carliner, 2000; Dietz, 2002; Friedberg, 2000; Gonzalez, 2000).

The primary objective of this article is to explore empirical factors influencing assimilation. To this end, we present an econometric analysis of immigrants from Italy, Spain, Greece, the countries of the former Social Federal Republic of Yugoslavia (SFRY), and Turkey to Germany. The data used in this study come from a survey conducted in 2000.

The article is organized as follows. The next section provides a short summary of immigration to Germany and the legal status of immigrants in the country. This is followed by section 3, which describes the survey that produced the data used in this research. Sections 4 and 5 describe the variables used to measure assimilation and the model specifications, and section 6 presents and discusses the results. Finally, section 7 provides a summary and conclusions.

**BACKGROUND**

Since the end of World War II, Germany has become an important immigrant destination (Table 1) (Dietz, 2002; Moor, 2003; Zimmerman, 1998). In 2001, foreign nationals accounted for 8.9 per cent of Germany’s population (OECD, 2004). The first post-World War II immigrants were recruited primarily from Italy and Spain to meet the demand of the growing economy for blue collar workers. It was expected that they would be needed only temporarily and they were accordingly labeled guest workers. The economy did not slow down, however, and soon Greeks, citizens from the former Socialist Federal Yugoslav Republic (SFRY), and Turks were also recruited to meet Germany’s growing labour demand.

As workers stayed, they brought their families, and the nature of migration began to change toward permanent immigration. Among today’s foreign population, many have been in Germany for a long time and a significant percentage were born there. Turks currently constitute the largest group of immigrants (OECD, 2004). Following the fall of the Iron Cur-
tain in 1991, immigration from Eastern Europe has grown dramatically and become an important new source of immigrants (Moor, 2003; OECD, 2004).

The legal status of immigrants from EU member countries is governed by the Maastricht Treaty (European Union, 1992), which liberalized the movement of people between member countries. The Maastricht Treaty, which took effect in 1993, created EU citizenship and gave citizens the right to work in any EU member country, as well as to vote and stand as candidates in local and municipal elections in their place of residence (McHardy, not dated). This privilege does not yet apply to citizens from the ten new member countries that joined the EU effective 1 May 2004 (e.g., Poland) and added 105 million new EU citizens. Citizens of these new members receive preferential treatment over non-EU citizens, but will only enjoy full mobility after a transition period of between two to seven years (European Commission, 2002).

Citizens from non-EU countries may hold one of several types of residency permits. The right of abode (\textit{Aufenthaltsberechtigung}) is similar to a “green card” in the United States. This right is usually contingent on at least eight years of residence, during which the immigrant will only have a permission of abode (\textit{Aufenthaltsgenemigung}), a more restrictive visa. Permits are issued at the discretion of the German authorities, which consider labour market conditions and the availability of German workers.

Until the year 2000, Germany awarded citizenship at birth on the basis of the parents’ citizenship. Thus, although 26.8 per cent of the respondents in the survey used in this research were born in Germany, they were foreign nationals at the time of the survey. Effective 1 January 2000, a more liberal citizenship and naturalization law took effect. All children born in Germany after this date are automatically citizens. However, children born to foreign nationals must decide to retain their German citizenship after they turn 18 and before they turn 23. If they choose German citizenship, they may not hold any other, although exceptions can be requested. They seem to be rarely granted, however. The new law also facilitates naturalization by requiring only eight years of residence, versus 15 years required under the provisions of the old law, before an immigrant can request naturalization (Foreign Office of the Federal Republic of Germany, 2004).

\begin{table}[h]
\centering
\begin{tabular}{|l|c|}
\hline
Country of Citizenship & Number of Non-Naturalized Immigrants \\
\hline
Turkey & 1,912.2 \\
Italy & 247.7 \\
Serbia and Montenegro* & 591.5 \\
Greece & 359.4 \\
Poland & 317.6 \\
Croatia* & 231.0 \\
Bosnia-Herzegovina* & 163.8 \\
Russian Federation & 155.6 \\
Portugal & 131.4 \\
Spain & 127.5 \\
Netherlands & 115.2 \\
United States & 112.9 \\
France & 112.4 \\
United Kingdom & 112.4 \\
Other Countries & 4,005.8 \\
\textbf{Total} & \textbf{7,335.6} \\
\hline
\end{tabular}
\caption{FOREIGN POPULATION IN GERMANY BY NATIONALITY, 2002 (IN 1,000)}
\end{table}

Source: OECD (2004), from Table B.1.5.
Comment: Germany's total population has been stagnant at about 82.5 million for the last ten years.
* Countries that made up the former Socialist Federal Republic of Yugoslavia (SFRY).
THE DATA

The data used in this research are from a survey of foreign residents in the former German Federal Republic and in Berlin. The survey was conducted in Autumn 2000 and includes five nationalities: Italians (406 observations), Greeks (395 observations), Turks (401 observations), Spaniards (409 observations), and citizens of the former Socialist Federal Republic of Yugoslavia (412 observations) (Zentralarchiv für Empirische Wirtschaftsforschung, 2001). Citizens of these five countries constituted the largest groups of immigrants to Germany until the late 1980s, when immigration from other countries started to grow significantly. The only other large group not represented is Austrians, who in the 1980s was comparable in size to Spaniards (OECD, 1990). However, since Austrians are culturally and educationally very close to Germans, their assimilation is likely to be much easier. Although other nationalities may have been working in Germany for an equally long time, they have been present in much smaller numbers.

Foreign nationals residing in the former German Democratic Republic (GDR) are not represented in the survey, but this is also not a major drawback. The former GDR attracts relatively few immigrants (figures are as of 31 December 2004): 4,350 Greeks, 4,819 Italians, 1,239 Spaniards, 12,596 Turks, and 6,346 citizens of the countries of the former SFRY (Statistisches Bundesamt, 2005). Thus, only about 2 per cent of all Italian citizens in Germany reside in the former GDR other than East Berlin, and the percentages for citizens from the other four countries included in this study are even smaller. For example, less than 1 per cent of Turkish or SFRY immigrants live in the former GDR.

The survey was conducted by the German survey and opinion research company MARPLAN on behalf of the Central Archive for Empirical Social Research (Zentralarchiv für Empirische Sozialforschung) of the University of Cologne. The sample was selected to be representative of members of the five foreign nationalities of age 15 or older. The average age of the sample population was 37. The register of foreign nationals of the German government, which contains information about geographic distribution of the foreign population and its attributes, provided the basis for the selection of the sample.

A random sampling process was used. Nationalities were sampled disproportionately to assure a sufficient sample size from relatively small immigrant groups, such as Spaniards. The survey was conducted through face-to-face interviews and there are no missing data. More information about the company that conducted the survey can be found on its website (MARPLAN, no date).

The median stay in Germany of the 2,023 survey respondents was twenty years and 542 respondents (26.8%) were born there. It is because of this that we avoid the term immigrant, though in the political debate foreign nationals born in Germany are frequently referred to as second generation immigrants or “secondos.” The survey asked questions about the status of members of the five foreign nationalities, in general, but no direct questions about assimilation. Thus, in our research, we had to define indirect measures for integration and assimilation.

MEASURING INTEGRATION AND ASSIMILATION

The literature on immigrant adaptation and assimilation is based on the assumption that there is a process by which newcomers develop knowledge of culture and achieve access to the opportunities the host society has to offer. This process consists of slowly abandoning some of the old cultural and behavioral patterns in favor of the ones found in the host country (Hirschman, et al., 1999; Schaeffer, 2006).
Portes and Zhou (1993) describe the possibility that the children of immigrants may be less successful than their parents if they become alienated from the society into which they were born. This may happen even though these youths usually have language proficiency and are familiar with the dominant culture. But while they are better assimilated than their parents, they may end up less well integrated. One possible explanation for this phenomenon is that immigrants expect and accept some of the consequences that come with being considered different. Their descendents, however, having been born and grown up in, perceive themselves as part of the host society. When the dominant society frustrates their desire for acceptance, they may turn inward to their own group (Harris, 2001; Portes and Zhou, 1993; Will, 2002; Worbs, 2003).

The degree of assimilation is likely to differ along many dimensions including education, language, culture and values, and labour market performance (Djajić, 2003). Because of the problems of direct measurement, particularly of assimilation as defined in Schaeffer (1995), we use the immigrants’ stated intention to acquire German citizenship as an indication of a high degree of assimilation. Since becoming German requires relinquishing the original citizenship, we assume that an individual would apply for citizenship only if feeling fairly well integrated and assimilated.

While the desire to become a citizen signals a high degree of assimilation, individuals may feel well integrated and assimilated, but not be ready to give up their current citizenship to become German citizens. Though they may not wish to become citizens, by stating that they wish to stay in Germany for “as long as possible” they still express a sense of integration and belonging. If they were alienated from the host society they would look for alternatives elsewhere. Thus, we use the planned length of stay as an alternative measure of integration and assimilation.

Based on the migration and assimilation literatures (e.g., Alba and Nee, 1997), we hypothesize that demographic characteristics (gender and age), personal characteristics (nationality, place of birth, length of stay in Germany, and marital status), the characteristics of family members (their place of residence, and the number of children under 18 years of age), human capital (educational attainment, country where their formal education was obtained, and German language skills); employment status and economic success (employment status, household income, and homeownership) influence integration and assimilation. In addition, we consider concerns of immigrants regarding their children (education and religion) and their visa. Finally, we include “environmental” variables such as the attitudes of Germans toward immigrants at work and in general, in our empirical analysis.

Table 2 presents the dependent variables of our two models. Almost half (48.9%) of the respondents answered that they were not very interested in acquiring German citizenship and only 14.9 per cent said that they were very interested. There are, however, significant differences by nationality. As expected, citizens of non-EU member countries Turkey and Yugoslavia expressed greater interest in naturalization since the marginal gain from naturalization is greater than for EU citizens. The requirement to relinquish the current citizenship adds to the cost of naturalization and in Germany dual citizenship is tolerated only in rare circumstances. An alternative explanation is offered by Diehl and Blohm (2003), who link the higher naturalization rates of Turks to a greater status gain than for, say, Italians. In either case, the greater interest in citizenship by non-EU citizens is less likely to signal a stronger commitment to the host society than that of EU citizens, than stronger incentives.

The responses concerning planned additional length of stay showed much greater agreement between respondents by nationality, though Greeks seemed to be more ambivalent about staying than the other four nationalities. Turks and Yugoslavs were somewhat more interested in staying in Germany “as long as possible” than citizens of EU member countries.
Table 3 provides a summary of the explanatory variables used in our analysis and presents descriptive statistics and expected signs of their influence on integration and assimilation of immigrants.

**MODEL SPECIFICATIONS**

The data suggested ordered logit regression as the most appropriate approach to empirical estimation. For the reasons discussed above we developed two models, one using the interest in becoming a naturalized citizen, and the other the planned length of stay as approximate measures of assimilation. When assimilation is measured by interest in acquiring Germany citizenship, respondents (i) had three choices: not interested ($y_i = 0$), somewhat interested ($y_i = 1$) and very interested ($y_i = 2$). The average outcome was based on a set of variables ($X$) that included the attributes of the choices, and the socioeconomic, personal, and demographic characteristics of the immigrant.

Letting $y_i^*$ be a latent variable whose values determine the observed ordinal variable $y_i$ and letting $\epsilon_i$ be the error term, the latent variable specification can be written as:

$$y_i^* = X_i\beta + \epsilon_i$$

Thus, the actual realizations of the dependent variable are assumed to follow,

$$y_i = \begin{cases} 
0 & \text{if } \epsilon_i \leq -X_i\beta + c_1 \\
1 & \text{if } -X_i\beta + c_1 < \epsilon_i \leq -X_i\beta + c_2 \\
\vdots & \\
k & \text{if } -X_i\beta + c_k < \epsilon_i
\end{cases}$$

There are $k$ possible discrete outcomes and $c_1$ (more generally one of the cut-off points) cannot be identified separately from the intercept and is set to zero.

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**TABLE 2**

**DEPENDENT VARIABLES: RESPONSES BY NATIONALITY**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Greece N = 395</th>
<th>Italy N = 406</th>
<th>Spain N = 409</th>
<th>Turkey N = 401</th>
<th>Yugoslavia* N = 412</th>
<th>Total N = 2023</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - not very</td>
<td>Interest in Acquiring German Citizenship (%)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2 - somewhat</td>
<td>56.0</td>
<td>60.8</td>
<td>57.5</td>
<td>29.7</td>
<td>33.1</td>
<td>48.9</td>
</tr>
<tr>
<td>3 - very</td>
<td>33.2</td>
<td>28.4</td>
<td>31.5</td>
<td>39.9</td>
<td>36.6</td>
<td>36.2</td>
</tr>
<tr>
<td>1 - less than 3 years</td>
<td>10.8</td>
<td>10.8</td>
<td>11.3</td>
<td>30.4</td>
<td>30.3</td>
<td>14.9</td>
</tr>
<tr>
<td>2 - 3 to 5 years</td>
<td>3.9</td>
<td>2.7</td>
<td>3.9</td>
<td>2.7</td>
<td>4.4</td>
<td>3.6</td>
</tr>
<tr>
<td>3 - difficulty to say</td>
<td>9.3</td>
<td>6.9</td>
<td>9.3</td>
<td>3</td>
<td>7.7</td>
<td>7.2</td>
</tr>
<tr>
<td>4 - more than 6 years</td>
<td>8.5</td>
<td>14.3</td>
<td>8.5</td>
<td>6</td>
<td>6.6</td>
<td>8.7</td>
</tr>
<tr>
<td>5 - as long as possible</td>
<td>45.5</td>
<td>44.3</td>
<td>45.5</td>
<td>55.1</td>
<td>47.6</td>
<td>47.2</td>
</tr>
</tbody>
</table>

Note: Yugoslavia means the territory of the former Socialist Federal Republic of Yugoslavia (SFRY).
### Table 3

**Explanatory Variables and Their Expected Influence on Integration and Assimilation**

<table>
<thead>
<tr>
<th>Variable Name</th>
<th>Variable Definition</th>
<th>Sample Mean</th>
<th>Standard Deviation</th>
<th>Expected Influence</th>
</tr>
</thead>
<tbody>
<tr>
<td>NATIONALITY =1</td>
<td>if non-EU member country (Turkey or former Socialist Federal Republic of Yugoslavia); 0 otherwise</td>
<td>0.40</td>
<td>0.49</td>
<td>+</td>
</tr>
<tr>
<td>BORN = 1</td>
<td>if born in Germany; 0 otherwise</td>
<td>0.27</td>
<td>0.44</td>
<td>+</td>
</tr>
<tr>
<td>ARRIVAL = 1</td>
<td>if arrived before 1986; 0 otherwise</td>
<td>0.74</td>
<td>0.44</td>
<td>+</td>
</tr>
<tr>
<td>LENGTH OF STAY =</td>
<td>number of years a respondent has lived in Germany at the time the survey was conducted</td>
<td>21.09</td>
<td>10.37</td>
<td>?</td>
</tr>
<tr>
<td>AGE</td>
<td>respondents age</td>
<td>37.60</td>
<td>13.48</td>
<td>–</td>
</tr>
<tr>
<td>FEMALE = 1</td>
<td>if female; 0 otherwise</td>
<td>0.45</td>
<td>0.50</td>
<td>?</td>
</tr>
<tr>
<td>MARITAL STATUS = 1</td>
<td>if married; 0 otherwise</td>
<td>0.59</td>
<td>0.49</td>
<td>?</td>
</tr>
<tr>
<td>CHILDREN = 1</td>
<td>number of children under 18 years in the household</td>
<td>1.17</td>
<td>0.91</td>
<td>+</td>
</tr>
<tr>
<td>RELATIVES = 1</td>
<td>if there are close family relatives living in country of origin; 0 otherwise</td>
<td>0.63</td>
<td>0.37</td>
<td>–</td>
</tr>
<tr>
<td>EMPLOYMENT</td>
<td>employment status: 1 = full-time employment, 2 = part-time employment from 15 to 34 hours/week, 3 = hourly employment of less than 15 hours/week, 4 = temporarily unemployed, 5 = not working, including retired, student, or homemaker</td>
<td>2.66</td>
<td>1.87</td>
<td>+</td>
</tr>
<tr>
<td>PROFESSION = 1</td>
<td>type of profession: 1 = highly skilled worker, craftsman, or technician, 2 = professional (e.g., lawyer, dentist, etc.) or self-employed, 3 = blue collar worker or clerical employee or equivalent, 4 = semi-skilled or unskilled worker or employee</td>
<td>1.86</td>
<td>1.64</td>
<td>+</td>
</tr>
<tr>
<td>OWNERSHIP = 1</td>
<td>if owner residence</td>
<td>0.09</td>
<td>0.29</td>
<td>+</td>
</tr>
<tr>
<td>INCOME</td>
<td>monthly household income after tax: 1 = less than DM1,000, 2 = between DM1,000 to less than DM2,000, 3 = between DM2,000 to less than DM3,000, 4 = between DM3,000 to less than DM 4,000, 5 = between DM4,000 to less than DM5,000, 6 = between DM5,000 to less than DM7,500, 7 = DM7,500 or more</td>
<td>4.00</td>
<td>1.50</td>
<td>+</td>
</tr>
<tr>
<td>EDUCATION = 1</td>
<td>years of schooling</td>
<td>8.71</td>
<td>2.01</td>
<td>+</td>
</tr>
<tr>
<td>GERMAN DIPLOMA = 1</td>
<td>if obtained high school diploma in Germany; 0 otherwise</td>
<td>0.59</td>
<td>0.93</td>
<td>+</td>
</tr>
<tr>
<td>SKILLS</td>
<td>German language skills: 1-no skills, 2-very limited, 3-sufficient, 4-good, 5-perfect</td>
<td>2.10</td>
<td>0.93</td>
<td>+</td>
</tr>
<tr>
<td>LANGUAGE = 1</td>
<td>if respondent indicated German language to be a major problem; 0 otherwise</td>
<td>0.03</td>
<td>0.17</td>
<td>–</td>
</tr>
<tr>
<td>VISA</td>
<td>if respondent indicated visa issues to cause them most problems; 0 otherwise</td>
<td>0.09</td>
<td>0.28</td>
<td>–</td>
</tr>
<tr>
<td>Variable Name</td>
<td>Variable Definition</td>
<td>Sample Mean</td>
<td>Standard Deviation</td>
<td>Expected Influence</td>
</tr>
<tr>
<td>---------------</td>
<td>---------------------</td>
<td>-------------</td>
<td>--------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>RELIGION</td>
<td>= 1 if respondent indicated religious issues to cause them most problems; 0 otherwise</td>
<td>0.04</td>
<td>0.19</td>
<td>–</td>
</tr>
<tr>
<td>CHILD EDUCATION</td>
<td>= 1 if respondent indicated children education to cause them most problems; 0 otherwise</td>
<td>0.04</td>
<td>0.21</td>
<td>–</td>
</tr>
<tr>
<td>ATTITUDE</td>
<td>= 1 if respondent indicated attitude of Germans at place of work to cause them most problems; 0 otherwise</td>
<td>0.15</td>
<td>0.50</td>
<td>–</td>
</tr>
<tr>
<td>TREATMET</td>
<td>= 1 if respondent indicated poor treatment by Germans to cause them most problems; 0 otherwise</td>
<td>0.44</td>
<td>0.50</td>
<td>–</td>
</tr>
<tr>
<td>LOCATION</td>
<td>= regions in Germany: 1 = northwest Germany, 2 = western Germany, 3 = southern Germany, 4 = West Berlin</td>
<td>2.31</td>
<td>0.73</td>
<td>–</td>
</tr>
</tbody>
</table>

Note: DM = Deutsche Mark. The DM was Germany’s currency until the introduction of the Euro in 1999. In 1999 DM1.00 was worth approximately US$0.60. The currency remained in circulation until 2002, but it was not longer traded in international currency exchanges after the introduction of the Euro in 1999.
The first model uses the interest in becoming a naturalized German citizen as the dependent variable. It is specified as follows:

\[
\text{CITIZENSHIP} = \gamma_0 + \gamma_1 \text{Non-EU} + \gamma_2 \text{Born} + \gamma_3 \text{Arrival} \\
+ \gamma_4 \text{Employment} + \gamma_5 \text{Age} + \gamma_6 \text{Ownership} \\
+ \gamma_7 \text{Education} + \gamma_8 \text{Diploma} + \gamma_9 \text{Location} \\
+ \gamma_{10} \text{Income} + \gamma_{11} \text{Skills} + \gamma_{12} \text{Female} \\
+ \gamma_{13} \text{Language} + \gamma_{14} \text{Visa} + \gamma_{15} \text{ChildEducation} \\
+ \gamma_{16} \text{Religion} + \gamma_{17} \text{Attitude} + \gamma_{18} \text{Treatment} \\
+ \gamma_{19} \text{MaritalStatus} + \gamma_{20} \text{Children} \\
+ \gamma_{21} \text{Profession} + \gamma_{22} \text{Relatives} + \varepsilon_1
\] (3)

The dependent variable CITIZENSHIP is ordered, representing the degree of interest in acquiring German citizenship, and we interpret it as a proxy for assimilation. The independent variables and their influence on assimilation are summarized in Table 3. The parameters $\gamma_i$ show the actual effect and will be estimated using ordered logit regression; $\varepsilon_1$ represent the error term.

Becoming a citizen expresses a degree of assimilation, a commitment to the host country, and maybe the desire to become even more fully assimilated. Very rarely does Germany accept dual citizenship. Since EU citizens would gain comparatively few additional rights, they are thought to be less willing to incur the emotional cost of giving up their current citizenship than non-EU citizens (i.e., Turks and SFRY nationals). We expect these differences to be reflected in the regression results.

Because differences in the incentives of citizenship acquisition between EU and non-EU immigrants are likely to be significant, we are estimating a second model that uses planned length of stay as a proxy for integration and assimilation. We expect less variation of results by nationality in this second model because there are no significant differences by nationality in incentives or costs concerning the additional length of stay. The second model is specified identically to the first, except for the dependent variable and the replacement of the explanatory variable “Arrival” with “Length of Stay.” The former separates immigrants into two groups, namely those who have been in Germany long enough to meet the residency requirement for naturalization and those that do not yet meet it. We expect being eligible to have a positive effect on the interest in naturalization. “Length of Stay” is the number of years the immigrant has lived in Germany at the time of the interview.

\[
\text{STAY} = \phi_0 + \phi_1 \text{Non-EU} + \phi_2 \text{Born} + \phi_3 \text{Length of Stay} \\
+ \phi_4 \text{Employment} + \phi_5 \text{Age} + \phi_6 \text{Ownership} + \phi_7 \text{Education} \\
+ \phi_8 \text{Diploma} + \phi_9 \text{Location} + \phi_{10} \text{Income} + \phi_{11} \text{Skills} \\
+ \phi_{12} \text{Female} + \phi_{13} \text{Language} + \phi_{14} \text{Visa} \\
+ \phi_{15} \text{ChildEducation} + \phi_{16} \text{Religion} + \phi_{17} \text{Attitude} \\
+ \phi_{18} \text{Treatment} + \phi_{19} \text{MaritalStatus} + \phi_{20} \text{Children} \\
+ \phi_{21} \text{Profession} + \phi_{22} \text{Relatives} + \varepsilon_2
\] (4)

In this model the dependent variable (STAY) is measured as follows: difficult to say/not sure, less than three years, three to five years, more than six years, and as long as possible. We estimate the probability that a respondent intends to stay in Germany for a specified
period of time; \( \varepsilon_2 \) is the error term and \( \phi_i \) are the parameters to be estimated. Both models (3 and 4) were estimated using LIMDEP (Greene, 2000).

RESULTS

Because the two models are not independent of each other and the comparison of the results enhances their interpretation, we report them together in Table 4. The table also reports the marginal effects of the explanatory variables, which are calculated by using the average values of all other variables. The marginal effects can be thought of as being similar to partial derivatives. As a measure of goodness of fit, the table reports the log likelihood for the models, which both have a significance level of \( p < 0.01 \). Their predictive power is 72.86 per cent (model 1) and 61.49 per cent (model 2), respectively. The threshold values are significant and validate the use of the ordered logit model. We organized the explanatory variables into nine categories, such as indicators of attachment to Germany, human capital, or family attributes (Table 4). We present the results one category at a time.

Influence of Attachment to Germany: We start with three variables that can be regarded as indicators of attachment to Germany: Non-EU citizenship, whether the individual was born in Germany, and the year of arrival (used in model 1), or the length of stay up to time of survey (used in model 2). We found that nationality had a statistically significant effect on citizenship aspiration (model 1), but was not significant on planned additional length of stay (model 2). The estimated marginal effects (0.022 for \( y = 2 \)) in model 1 suggest that being a non-EU citizen increases the probability of an interest in naturalization by 2.2 per cent, all other things equal.

As we argued earlier, non-EU citizens have a greater incentive to acquire citizenship than EU citizens, but the difference between EU and non-EU citizens is expected to be less pronounced for planned length of stay because most long-term foreign residents will have the relative security of the right of abode. Since the average stay of survey participants is over 20 years (standard deviation 10 years, Table 2), and EU citizens who have a job automatically have the right of abode, this applies to the vast majority in the sample, and almost two-thirds of foreign residents in Germany in December 2002 had been in the country for ten years or more (OECD, 2004). Thus, although the results for planned stay in Germany (model 2) show that non-EU citizens are more likely to plan for a long stay, the difference between them and EU citizens is small and not statistically significant. The small difference may exist because non-EU citizens may find it more difficult to return once they have left, while EU citizens have the right to return to look for work at any time and to stay indefinitely if they find employment.

As expected, being born in Germany contributes positively to the interest in German citizenship, but the statistical significance is below the 10 per cent level. There is ambivalence toward citizenship and integration among German-born foreign residents. The marginal effects show that immigrants fall into two camps, one that is very interested in citizenship acquisition and one that is not. This impression of ambivalence is reinforced by the results in model 2. Those who were born in Germany are significantly more likely to plan for a short stay as shown by the marginal effects (0.0119 for \( y = 0 \) and of \(-0.0960 \) for \( y = 4 \)).

The variable “Arrival” is used in model 1 and the variable “Length of Stay” in model 2. The two variables, while not identical, are closely related and have been derived from the same survey response (year of arrival in Germany). We simplified the variable in model 1 to distinguish only between those who had arrived before 1986 (eligible for citizenship at the time of the survey) or after 1986 (ineligible for citizenship). In model 2, we transformed the
<table>
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**Assimilation of foreigners in West Germany**

© 2010 The Authors. International Migration © 2010 IOM
| Categories of Factors Influencing Assimilation and Integration | Variable Names | Model 1 | | | Marginal Effects | Coefficients | Std. Error | y = 0 | y = 1 | y = 2 | Model 2 | | Marginal Effects | Coefficients | Std. Error | y = 0 | y = 1 | y = 2 | y = 3 | y = 4 |
| Location | LOCATION | -0.095** | 0.042 | 0.033 | -0.007 | -0.026 | 0.079** | 0.037 | -0.0284 | -0.0009 | -0.0016 | -0.0004 | 0.0313 |
| | Mu(1) | 0.365*** | 0.023 | | | | 0.076*** | 0.010 | | | | | |
| | Mu(2) | N.A. | | | | | 0.272*** | 0.018 | | | | | |
| | Mu(3) | N.A. | | | | | 0.507*** | 0.024 | | | | | |
| Model Prediction | 72.86 | | | | | 61.51 | | | | | | |
| Log-Likelihood | -1588.810 | | | | | -2384.744 | | | | | | |
| Chi-squared | 214.0468 | | | | | 168.1540 | | | | | | |
| Sample Size | 2023 | | | | | 2023 | | | | | | |

Notes: ***, **, and * denote levels of statistical significance of 1, 5, and 10 percent, respectively. The marginal effect shows the effect of a change in the variable on the coefficient if all other variables are held constant. All explanatory variables are categorical variables.
variable into one that measured the number of years the individual had lived in Germany so as to also include those born in Germany.

In model 1, eligibility for citizenship (arrival before 1986) has the expected positive effect on interest in citizenship at the 5 per cent level of statistical significance, but the marginal effects reflect the ambivalence we found for the “Born in Germany” variable. Both the marginal effects for $y = 0$ (not very interested) and $y = 2$ (very interested) are positive, while the marginal effect for $y = 1$ (somewhat interested) is negative. In contrast to the ambivalent result for “Arrival” in model 1, the results in model 2 show that the longer a person has already lived in Germany (“Length of Stay”), the longer the planned additional stay. The coefficient is significant at the 1 per cent level and the marginal effects are equally clear with positive signs only for $y = 3$ (more than six years) and $y = 4$ (as long as possible).

**Personal Attributes:** The effect of age is the same in both models and indicates that older individuals are less interested in assimilation (citizenship; model 1) and integration (long additional stay; model 2). In both models the coefficients are significant at the 1 per cent level. The marginal effects are also unambiguous in both models (Table 4). These effects are predicted by the assimilation literature.

Female immigrants show relatively less interest in assimilation than their male counterparts (marginal effect of $-0.081$), but the influence on plans for a long stay in Germany, while also negative, is small (marginal effect of $-0.0060$). In both models, the coefficients are not statistically significant.

**Family Characteristics:** We consider marital status, the number of children under 18 years of age, and close family relatives who are still living in the country of origin. The latter is also an indicator of the pull maintained by the foreign resident’s native country and we therefore expect its coefficient to have a negative sign. In model 1, the number of children under 18 has a positive effect on the interest in becoming a German citizen and is statistically significant at the 10 per cent level. Marital status has a positive effect, and relatives in the country of origin a negative effect on citizenship aspirations, but both are statistically insignificant.

First, the presence of children under 18 years of age has a strong positive effect on the planned additional length of stay (model 2). Its estimated marginal effect is smaller on the additional stay ($0.023$ for $y = 4$ in model 2) than on naturalization ($0.042$ for $y = 2$ in model 1), but statistically significant at the 5 per cent level. However, the negative effect of family members left behind is larger (marginal effect of $-0.293$ for $y = 4$ in model 2 versus $-0.013$ for $y = 2$ in model 1) and significant at the 5 per cent level. In model 2, the marginal effects of the “Relatives” variable are negative for $y = 2$ (“difficult to say, uncertain”) and for $y = 4$ (“as long as possible”), which could mean that relatives left behind reduce uncertainty ($y = 2$) but also reduce the desire to stay ($y = 4$).

**Employment Status:** Our results suggest that employment status is not a key determinant, but that the type of profession is important. Respondents who were employed in skilled professions were more likely to express an interest in naturalization than those in less skilled jobs. Employment has the expected positive sign in both models. “Profession,” which is an indicator of professional skills, has a slightly larger effect on citizenship aspirations (model 1) than “Employment” (marginal effect of $0.016$ versus $0.012$) for $y = 2$ (very interested) and is statistically significant at the 5 per cent level. The statistical significance of “Employment” is below the 10 per cent level. The effect on the planned additional stay (model 2) is reversed with “Profession” having a smaller effect than “Employment” (marginal effect of $0.0201$ versus $0.0277$ for $y = 4$). The estimated coefficient for employment in model 2 is statistically significant at the 5 per cent levels.

**Indicators of Economic Success:** Homeownership is a measure of economic success in Germany, where homeownership rates are much lower than in the United States and other west
European countries, with the exception of Switzerland. Because a home is not acquired and sold as “routinely” as in, say, the United States, homeownership is also indicative of a stronger commitment to the host society. The estimated coefficient for homeownership has the expected sign in both models but does not reach a level of significance of 10 per cent. Its marginal effect for \( y = 2 \) (model 1) is 0.039 and 0.0440 for \( y = 4 \) (model 2).

The effect of the monthly household income on citizenship aspirations (model 1) is positive, but the estimated coefficient of income on the planned additional length of stay (model 2) is negative. Both estimates are statistically significant at the 10 per cent level or higher. One possible explanation for the negative sign in model 2 is that economic success makes it easier to maintain ties to the country of origin, for example through the purchase of a home and more frequent visits. Economic success may enhance the migrant’s social status in the region of origin, which could be an incentive to maintain strong ties. Also, if immigrants come to Germany to earn enough to invest into a home or business at home (target savers), then greater economic success would explain shorter planned stays, while other immigrants who came to stay may instead be reinforced in their decision by economic success.

**Human Capital:** Education, measured by years of schooling, has a relatively small effect on citizenship aspirations (model 1, marginal effect of 0.038 for \( y = 2 \)) and is statistically significant at the 10 per cent level. Its effect is almost twice as large (marginal effect of 0.075 for \( y = 4 \)) on the planned length of stay (model 2) and statistically significant at the 1 per cent level. Having earned the high school diploma in Germany has a similar marginal effect in both models, however, only the model 1 estimate is statistically significant at the 10 per cent level.

Although the combined effects of these first two measures of education are fairly large, they are not as large as German language skills. The estimated marginal effect for language skills in model 1 is 0.042 for \( y = 2 \) and in model 2 it is 0.110 for \( y = 4 \); both are statistically significant at the 1 per cent level. These results underline the importance of language skills as a prerequisite for assimilation and reinforce one of the major results of the migration literature (e.g., Alba and Logan, 1992; Friedberg, 2000; Gonzalez, 2000; Krivo, 1995; Myers and Lee, 1998).

We note that the human capital variables have a larger effect on the planned additional stay than on citizenship aspirations, whereas in the case of family characteristics the opposite is the case. This may indicate that the planned length of additional stay is more of an economic decision and is therefore more strongly influenced by human capital factors that influence earning potential.

**Possible Concerns:** Living in a country where you do not hold citizenship or have historical roots can be challenging. The survey asked respondents about possible concerns, including difficulties linked to language.

The importance of language that was demonstrated by the estimated “Skills” coefficient was reinforced by the estimates obtained for “Language.” The estimated coefficient in model 1 was statistically significant at the 1 per cent level, with estimated marginal effects of −0.044 for \( y = 2 \) in model 1, implying that the presence of language problems reduces the probability of an interest in naturalization by 4.4 per cent. With an estimated marginal effect of −0.024 for \( y = 4 \), the effect of language on the planned length of stay (model 2) is sizeable, but much smaller than on citizenship aspirations. The results indicate the dual role of language as a means for economic betterment and success as well as for social adjustment and integration.

We were concerned about the existence of collinearity between the variables “Language” and “Skills”, but testing revealed no problems. This suggests that the responses do not relate to the same language issues. Maybe “Skills” relates largely to the ability to function at work and in society, in general, and “Language” to the sense of social inclusion. A relatively nar-
row vocabulary can be sufficient to perform well in many jobs, but insufficient to interact at a high level with native German speakers. Prejudice against foreign speakers of German may further exacerbate problems (see discussion of the results of the “Attitude” variables below).

Visa problems have a large and statistically highly significant effect on citizenship aspirations (model 1, marginal effect of 0.091 for $y = 2$). The response may indicate a desire to rid oneself of visa concerns through naturalization. By contrast, the effect of visa problems in model 2 is negative, much smaller (marginal effect of $-0.013$ for $y = 4$), and does not reach the 10 per cent level of statistical significance.

Concerns expressed about religion may capture cultural distance. The estimated marginal effect in model 1 is large (0.048 for $y = 2$) and statistically significant at the 1 per cent level. This is a somewhat counterintuitive result since it implies that individuals who perceive religion as a major problem are more interested in naturalization than otherwise identical individuals. The estimated marginal effect in model 2 was also large (0.069 for $y = 4$), but it was not statistically significant at the 10 per cent level. The data do not provide additional detail that would allow further analysis.

We expected that concerns over children’s education would have a negative effect on assimilation and integration. In both models the coefficient had the expected negative sign and in model 1 it was statistically significant at the 10 per cent level. In model 1 the estimated marginal effect for $y = 2$ (very interested in citizenship) is $-0.021$; that is, concerns over children’s education reduces the probability of an interest in naturalization by 2.1 per cent, which is small relative to other factors.

**Perceived Attitudes of the Native Population:** Assimilation and integration can be made easier or harder, depending on laws (e.g., visas, work permits, see our earlier discussion) or attitudes and behaviors of members of the native population relative to foreign nationals. Survey participants were asked about attitudes of Germans toward them at their place of work and about their treatment by Germans, in general. Portes and Zhou (1993) argue that negative attitudes by natives toward immigrants are likely to reduce assimilation, and our results concur. The coefficients for the two variables attitude of Germans at place of work and poor treatment by Germans are statistically highly significant and the variables’ marginal effects are almost as large as the language skills estimates. Thus, xenophobic attitudes counteract positive effects of language acquisition and other measures aimed at integration and assimilation. As argued by Portes and Zhou (1993), they may also contribute to ambivalent attitudes by foreign nationals born in Germany and explain the large variance in attitudes toward citizenship acquisition among them. In model 1 the marginal effect for $y = 2$ is estimated to be $-0.039$ for attitudes of Germans at place of work and $-0.036$ for poor treatment by Germans. Thus, a worsening of attitudes toward foreigners will decrease by some 3.9 and 3.6 per cent, respectively, the probability that a foreign resident will express an interest in naturalization.

It is, of course, also possible that poorly integrated and assimilated foreign residents perceive the native population as less friendly, in other words, that the cause-effect relationship could be the opposite of the one just described. While we cannot exclude this as a possibility, we think it is relatively unlikely because the results show that foreign residents born in Germany also react strongly to perceived attitudes. In their case, language skills and schooling would suggest a high degree of integration and assimilation.

**Location:** The location variable is statistically significant at the 5 per cent level. The negative sign in model 1 indicates that the northern German states (Bundesländer) are perceived as more welcoming than other regions and the marginal effects are relatively large (Table 4). In model 2 “Location” is also statistically significant at the 5 per cent level and sizeable (marginal effect of $+0.035$ for $y = 4$), but has the opposite sign. That is, immigrants living in southern Germany or Berlin seem to be more likely to plan for longer stays. These
opposing results most likely reflect the stronger economies of southern Germany, and particularly of Bavaria. A weaker economy in northern Germany is compatible with greater citizenship aspirations, so that these opposing results do not imply a contradiction. However, the results raise questions about the existence of the difference that the data do not allow us to answer.

SUMMARY AND CONCLUSIONS

Among the most important findings of our study are the strong and statistically significant effects of the attitudes by Germans toward immigrants, the significant influence of the region of residence, and the ambivalence of German-born foreign residents toward naturalization and continued stay. The results signal the failure of past integration and assimilation policies. The tensions felt by “secondos,” as the children of immigrants are sometimes referred to, are well known and are increasingly reflected in the popular literature and in movies. A wider knowledge of the foreign residents’ perspective could help counteract misinformation and misperceptions. Like other European countries, Germany has political parties and splinter groups that seek to capitalize on xenophobic sentiments. If left unchecked, the impact of the efforts of such groups can be significant. Our empirical results show that negative attitudes by ethnic Germans against others at work or in society, in general, reduce interest in integration and assimilation. This is neither new nor surprising and our research does not contribute new theoretical insights, but it demonstrates the magnitude and significance of the effects.

The attitudes of Germans toward foreign residents who were born in Germany have particularly important policy implications on long-term integration and assimilation. Children born to immigrants and German-born foreign nationals make up a significant share of all births. To either lose this pool of young people or keep them but have many of them be ambivalent about their attachment to the country of their birth is not in Germany’s long-term interest.

To some extend integration and assimilation require a choice between two countries, and such a choice has economic as well as emotional consequences. In our study we use two measures: (1) naturalization which, in Germany, requires giving up one’s current citizenship and (2) integration into German society, implied by a long planned additional stay. It is obvious that in most cases the economic and emotional costs and benefits of staying for a long time, even for the rest of one’s life, are not the same as making the same choice and also giving up one’s current citizenship. It is therefore expected that the estimated coefficients of the two models are different. While we believe that psychic factors play an important role in both models, they play a lesser role in model 2, because giving up one’s citizenship cannot easily be reversed, unlike a plan to stay for a very long time.

The question of why different locations seemed to have different impacts on citizenship aspirations is beyond the scope of this article. The data do not provide information to pursue this question and we suspect the causes are too complex for a short answer. It is, however, an important issue. If we want to encourage integration and assimilation, then we need to know if there are societal traits that either encourage or discourage the desired outcomes.

The results also indicate that while many immigrants stay, the immediate post-World War II notion of guest workers is not completely false. There has been significant return migration of Italians, in particular, and a significant number of respondents to the survey say that they intend to return. A government-sponsored integration and assimilation policy should consider differences in plans and motivations among immigrants and members of the second generation.

In summary, assimilation and integration are multidimensional processes that work best if they are supported by both the immigrant and native populations (Schaeffer, 2006).
ACKNOWLEDGEMENTS

We acknowledge partial support for this research from the West Virginia Agriculture and Forestry Experiment Station. Dale Colyer, Mehmet Tosun, and two referees of this journal provided us with helpful comments and suggestions. The usual caveat applies.

NOTE

1. The data are available from the Zentralarchiv für Empirische Sozialforschung, subject to approval of the purpose for which they are to be used. There is a fee for producing and shipping the data CD.

REFERENCES

Alba, R., and J.R. Logan

Cannato, V.J.

Carliner, G.

Diehl, C., and M. Blohm

Dietz, B.

Djajic’, S.

European Commission

European Union

Foreign Office of the Federal Republic of Germany

Friedberg, R.M.

Gans, H.J.

Gonzalez, A.

© 2010 The Authors. International Migration © 2010 IOM
Greene, W.

Harris, P.A.

Hirschman, C., et al. (Eds)

Krivo, L.J.

MARPLAN

McHardy, N.G.

Moor, P.
2003 “Arbeitsmarkt und Immigration”, paper written for the chair of economics and finance, Professor M. Thum Technical University, Dresden.

Myers, D., et al.

OECD

Portes, A., and M. Zhou

Schaeffer, P.V.

Statistisches Bundesamt

Webster’s II New Riverside University Dictionary

Will, G.

Worbs, S.

Zentralarchiv für Empirische Sozialforschung

Zimmermann, K.F.