
Immigrants' attitudes toward integration and citizenship in Germany, 1970–2000

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Abstract: Over the last 50 years many OECD countries have attracted large numbers of foreign immigrants. Faced with record inflows, increasingly from non-western countries, even traditional immigrant countries, such as the USA, are worried about their abilities to integrate the newcomers and are re-examining their immigration policies. This paper uses high quality data sets of five major immigrant groups in Germany to study how immigrants' attitudes toward immigration may have changed over the last thirty years. This is particularly interesting time period, because it coincides with significant political change in Western Europe, culminating so far with the creation of the European Union and European citizenship for citizens of member countries.

Keywords: international migration; assimilation; integration; citizenship; migration policy.

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1 Introduction

The post-World War II years were a period of great demographic change in Germany, mostly due to large labour immigration (Table 1) (Dietz, 2002; Moor, 2003; Zimmerman, 1998). In 2001, foreign nationals accounted for 8.9% of Germany's population (OECD, 2004a). Initially, Italy and Spain contributed most immigrants, but soon immigrants from Greece, the former Socialist Federal Republic of Yugoslavia (SFRY), and Turkey followed. Turks currently constitute the largest group of immigrants (OECD, 2004b). Since the fall of the Iron Curtain in 1991, immigration from Eastern Europe has grown dramatically (Moor, 2003; OECD, 2004a, 2004b), and Poles constitute the largest group of newcomers, by far (OECD, 2010). The mass immigration was not welcomed by all, and most European immigration destination countries have experienced backlash against the newcomers. For an analysis in of the backlash in the case of Germany, see Büchel et al. (2002). Hoffmann-Nowotny (1970, 1973) published path-breaking sociological analyses of the guest worker (German: *Fremdarbeiter*) phenomenon, and Djajić and Milbourne (1988) and Schaeffer (1984) provided theoretical economic models of guest worker migration.

Table 1 Stock of foreign population in Germany by nationality, 2002 (numbers are in 1000)

<i>Country of citizenship</i>	<i>Number of non-naturalised immigrants</i>
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	4005.8
<i>Total</i>	<i>7335.6</i>

*Members of the former Socialist Federal Republic of Yugoslavia.

Source: OECD (2004a, 2004b), from Table B.1.5 Comment: Germany's total population has been stagnant at about 82.5 million for the last 10 years

After 2000, the united Germany changed its citizenship law from one that derived a child's citizenship from that of its parents (*jus sanguinis*) to one that bestowed citizenship to all children born within its borders (*jus soli*). The nature of immigration

also changed from mostly blue collar workers in manufacturing and construction before 1990, to skilled immigration reflecting the changed demands of the German labour market. A new immigration law passed in 2000 favours skilled over unskilled immigrants. Because of such changes our empirical analysis covers the period from 1970, when the German economy had largely recovered from the war and immigration was still fairly young, until 2000, when policy, economic, and labour market changes were significantly altering the conditions of and demand for immigrant labour.

In the early post-war years, immigrants, mostly from Italy and Spain, were considered temporary residents in Germany, there only to work, save money, and soon return home. When the German economy continued to grow and need more workers, many foreign workers stayed and had their families join them; the 'guest worker' movement had turned into family immigration. With this change, including the presence of large numbers of foreign-born children attending German schools, political attention turned to integration and assimilation.

Assimilation is a process that reduces the differences between immigrants and natives (Alba and Logan, 1992; Alba and Nee, 1997; Diehl and Blohm, 2003). There are various dimensions along which to judge the degree of similarity between natives and immigrants, including language, formal education or training, on-the-job training, labour market performance, housing, family size, income, age and gender distributions, festivals, foods, customs, religion, non-religious values and attitudes, legal status (visa/citizenship), and physical appearance (Djajić, 2003). Assimilation is not equally difficult or contested, along all dimensions (e.g., Gans, 1997). Immigrants will not change and adapt at uniform rates and some dimensions, for example aspects of appearance, cannot be changed.

There are dimensions of assimilation that can only be changed by immigrants while others require both immigrants and host society to act. Changes of the visa status or citizenship acquisition belong in this latter category. In other areas, both the immigrant and host society make adjustments as demonstrated, for example, by the influence of successive large immigrant groups on host-country eating habits. It is likely that the pace of assimilation is related to the extent to which the immigrants' native society differs from that of the host country. Therefore, we expect to obtain different empirical results in the research that follows below for immigrants from Italy and Spain. The latter are fellow EU members and share religious and political traditions with Germany, while the former Yugoslav Socialist Republic or Turkey are countries with different political cultures and, particularly in the case of Turkey, different religious beliefs. Ghorpade et al. (2008) study provides insight into the role of religion in assimilation and their empirical results, using US data, point to significant differences by ethnic group.

Complexity makes assimilation challenging to model and measure (Schaeffer, 2006). Because of concerns over acculturation and intolerance for diversity, the idea of assimilation itself has been challenged (Cannato, 2004; Gans, 1997; Portes and Zhou 1993, 1994). Empirical research leaves little doubt, however, that immigrants who do not assimilate along key dimensions, particularly that of language, end up economically disadvantaged (e.g., Carliner, 2000; Dietz, 2002; Friedberg, 2000; Gonzalez, 2000). Current thinking is that there are different paths to assimilation in the long run, including traditionally understood assimilation into the host society, assimilation into the underclass, particularly in the case of members of the second-generation who do not belong the ethnic group of the majority, and assimilation into a coherent mutually supportive ethnic minority society in the host country (Portes, 1997). History has shown that the emergence and growth of separate groups can disrupt society and lead to

inter-group conflicts that, in the worst case, can threaten society's continued existence. In other words, assimilation and integration are important to the sustainability of society in its present form and organisation. In the case of labour immigration to Germany, the sheer number of immigrant workers makes their continued presence a critical factor in sustaining Germany's economy.

Integration is the ability to function in the host society. It also has several dimensions, some of which overlap those of assimilation, such as knowledge of the host country's language, which facilitates full integration in the labour market. However, integration is different from assimilation in that someone can be almost perfectly assimilated without being very well integrated. This is the case for some second and third generation 'foreign residents', who have been born, grown up, and been educated in the host society (Portes, 1997). The conflict potential that can develop in such groups has recently been demonstrated in France where mostly North African second generation immigrants rioted in protest.

This paper explores attitudes toward assimilation and integration of immigrants from five nations and if or how they changed as the immigration movement matured.¹ Germany and other European destination countries initially assumed that immigration would be temporary. Although there has been a significant return migration, for example of Italians, for many immigrants reality turned out to be different. The recognition that most immigration is long term or permanent should be reflected in how immigrants responded to surveys that were conducted in regular intervals during a period of over thirty years, and which provide the data for our research.

This paper is organised as follows. In Section 2, we briefly discuss the surveys which provide the data for the empirical part of this study. Section 3 is a very brief review of German citizenship law and European Union (EU) laws that apply to EU citizens living in Germany. This is followed by a discussion of the models and their specifications. Section 5 presents the results, and Section 6 is a summary and discussion of conclusions.

2 The surveys and the data

The data are from a survey of foreign residents in the states (Bundesländer) of the former German Federal Republic, West Berlin, and all of Berlin after 1990. The survey only includes the following five nationalities: Italians, Greeks, Turks, Spaniards, and citizens of the former Socialist Federal Republic of Yugoslavia and its successor states. This is no disadvantage for the purposes of this study since other immigrant groups have either arrived much more recently, particularly those from Eastern Europe, or are small in size.

Foreign nationals residing in the former German Democratic Republic (GDR) are not represented because these surveys were started in the German Federal Republic (GFR) at a time when there were two Germanys. This is also not a major drawback because in the 1990s the former GDR attracted few immigrants (Statistisches Bundesamt, 2005).² This is fortunate because it justifies the continuity of the geographic coverage, which is important for the integrity of the analysis.

The surveys were conducted by the German market and opinion research company MARPLAN on behalf of the Central Archive for Empirical Social Research (Zentralarchiv für Empirische Sozialforschung, n.d.) of the University of Cologne. The sample was selected to be representative for members of the five foreign nationalities of

age 15 or older. The register of foreign nationals of the German government, which contains information about the geographic distribution of the foreign population and its attributes, provided the basis for the selection of the sample.

A systematic 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, n.d.).

3 Relevant citizenship and visa legislation

We chose the period from 1970 to 2000 because of the significant, even dramatic changes in citizenship and legislation that occurred. At the end of this period, the legal status of immigrants from EU member countries Italy, Spain, and Greece was governed by treaties of the EU. In 1993, the European Community (EC) changed its name to EU and implemented the Maastricht Treaty (European Union, 1992), which liberalised the movement of people between member countries. Citizens of member countries hold EU citizenship and are entitled 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, n.d.).³

The visa status of foreign nationals from non-EU countries is representative of the status of all immigrants before the Maastricht Treaty. They may hold one of several types residency permits. The *right* of abode (Aufenthaltsberechtigung) is similar to a 'green card' in the USA and entitles the holder to apply for and hold any available job. The right of abode is usually contingent on at least eight years of residence, during which the immigrants will only have a *permission* of abode (Aufenthaltsgenehmigung), 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 2000, Germany awarded citizenship at birth on the basis of the parents' citizenship. Thus, although 26.8% of the respondents in the year 2000 survey used in this research were born in Germany, they were nevertheless foreign nationals. Effective 1 January, 2000, a more liberal citizenship and naturalisation law took effect. All children born in Germany after this date are 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 may be granted, they seem to be rare.

The new law also facilitates naturalisation by requiring a significantly shorter time of residence – eight years vs. fifteen years under the provisions of the old law – before an immigrant can request naturalisation (Foreign Office of the Federal Republic of Germany, 2004).

We anticipate that the changes discussed above are reflected in foreign residents' attitudes in several ways. First, we expect to see changes in attitudes over time, with a growing percentage of the respondents German-born and educated. We expect these individuals to be familiar with German culture and values, but also to have greater expectations of the country of their birth. We also anticipate different attitudes between EU and non-EU citizens, since after 1993 the latter have more to gain from naturalisation.

EU citizens already possess many rights ordinarily associated with citizenship in a country.

4 The models

We estimated four logit models, one each for the years 1970, 1980, 1991 and 2000, to examine how immigrants' attitudes towards immigration may have changed over the thirty years. The dependent variable, integration and/or assimilation, is not observable and we therefore use a proxy in its place, which is the planned additional length of stay in Germany. Thus, we distinguish four groups of migrants as a function of the planned additional length of stay in Germany: less than 3 years, between 3 and 5 years, 6 or more years, difficult to say, and for as long as possible.

Letting y_i^* be a latent variable whose values determine what the observed ordinal variable y_i equals and ε_i be the error term, the latent variable specification can be written as:

$$y_i^* = X_i\beta + \varepsilon_i. \quad (1)$$

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

$$y_i = \begin{cases} 0 & \text{if } \varepsilon_i \leq -X_i\beta + c_1 \\ 1 & \text{if } -X_i\beta + c_1 < \varepsilon_i \leq -X_i\beta + c_2 \\ \cdot & \\ \cdot & \\ \cdot & \\ k & \text{if } -X_i\beta + c_k < \varepsilon_i \end{cases}. \quad (2)$$

Here 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.

The average outcome is based on a set of variables (X) that include the attributes of the choices, and the characteristics of the immigrant. Thus, the probability that respondent (i) intends to stay in Germany for a specified period of time is estimated using the following model specification where the coding of the dependent variables separates the binary and ordered logit models:

$$\begin{aligned} \text{Planned Stay} = & \varphi_0 + \varphi_1 \text{Indicators of attachment to Germany} + \varphi_2 \text{Personal Attributes} \\ & + \varphi_3 \text{Family Characteristics} + \varphi_4 \text{Indicators of Economic Success} \\ & + \varphi_5 \text{Human Capital} + \varphi_6 \text{Possible Concerns} + \varphi_7 \text{Possible Attractions} \\ & + \varphi_8 \text{Perceived Attitudes} + \varphi_9 \text{Location} + \varepsilon. \end{aligned} \quad (3)$$

φ_i are the parameters to be estimated and ε is the error term. For the binary logit regression (1970 model) the dependent variable is coded 1 if the respondents' planned additional length of stay was 3 years or more and 0 otherwise,⁴ while for the ordered logit regressions (1980, 1991 and 2000 models), the dependent variables measure

five categories: less than 3 years ($y_i = 0$), between 3 to 5 years ($y_i = 1$), difficulty to say ($y_i = 2$), 6 or more years ($y_i = 3$) and for as long as possible ($y_i = 4$). The models are estimated using LIMDEP (Greene, 2000). The descriptions of the variables in the models are presented in Table 2.

Table 2 Results

Table 2 presents the results, including the measurement of goodness of fit coefficients. The measures of goodness of fit indicate that the models fit the data fairly well. The *log-likelihood*, which measures the significance of logit function, is significant at $p < 0.01$ in all models, suggesting that a relationship exists between the probability of planned additional length of stay and the suggested independent variables. The predictive power is 74% (1970 model), 78% (1980 model) and 73% (1991 model). Also, the threshold values are significant and validate the use of the ordered logit model.

In the case of the explanatory variables, the estimated results are interpreted using marginal effects which are calculated by using the average values of all other variables.⁵ The marginal effects can be thought of as being similar to partial derivatives. This is a rough equivalence only, however, since our regression functions are not differentiable. The explanatory variables in Table 2 are organised into nine categories, such as indicators of attachment to Germany, human capital, or family attributes. The results are discussed one category at a time.

Table 2 Variable descriptions

<i>Variable name</i>	<i>Description</i>
NATIONAL	=1 if non-EU member country (Turkey or former socialist Federal Republic of Yugoslavia); 0 otherwise
ARRIVAL	=Number of years the individual has live in Germany
VISIT	=Number of times the respondent has visited home country
MARITAL	=1 if married; 0 otherwise
FARRIVAL	=Number of years individual's family members have lived in Germany
LANGUAGE	=1 if German language causes most problem; 0 otherwise
FAMILY	=1 if there are close family relatives living in country of origin; 0 otherwise
CHILDEDU	=1 if respondent indicated children education to cause them most problems; 0 otherwise
ATTITUDEW	=1 if respondent indicated attitude of Germans at place of work to cause them most problems; 0 otherwise
MONESENT	=Amount of money sent home last year
AGE	=Age of respondent
EDUCATAI	=Number of year in school
COMPEDUC	=1 if obtained high school diploma in Germany; 0 otherwise
GSKILLS	=German language skills: 1-no skills, 2-very limited, 3-sufficient, 4-good, 5-perfect
GENDER	=1 if female; 0 otherwise

Table 2 Variable descriptions (continued)

<i>Variable name</i>	<i>Description</i>
LOCATION	=Regions in Germany: 1=northwest Germany, 2=western Germany, 3=southern Germany, 4=West Berlin
CHILDSIZE	=Number of children in household
BORN	=1 if born in Germany; 0 otherwise
HHSIZE	=Number of people in the household
VISA	=1 if respondent indicated visa issues to cause them most problems; 0 otherwise
TREATKID	=1 if respondent is worried about children treatment by Germans; 0 otherwise
RELIGION	=1 if respondent indicated religious issues to cause them most problems; 0 otherwise
AUTHORIT	=1 if respondents has problems with authority; 0 otherwise
HOMEOWNE	=1 if owner residence; 0 otherwise
ATTITUD4	=1 if positive attitude about Germans and Germany now than before; 0 otherwise
GOODS	=1 if respondent mentioned diverse supply of consumer goods as the reason they like living in German; 0 otherwise
SERVICES	=1 if respondent mentioned social services as the reason they like living in German; 0 otherwise
CLIMATE	=1 if respondent mentioned good balanced climate as the reason they like living in German; 0 otherwise
HYGIENE	=1 if respondent mentioned cleanliness/hygiene as the reason they like living in German; 0 otherwise
TREATMENT	=1 if respondent indicated poor treatment by Germans to cause them most problems; 0 otherwise

Influence of attachment to Germany: The discussion starts with four variables that can be regarded as indicators of attachment to Germany: Current nationality (NATIONAL), whether the individual was born in Germany (BORN), the year the individual arrived in Germany (ARRIVAL) and the year the individuals' family members' arrived in Germany (FARRIVAL). First, for nationality (coded 1 for non-EU member countries: Turkey and former Federal Republic of Yugoslavia; 0 otherwise) we find that during the early years (1970, 1980 and 1991) respondents from non-EU member countries were more likely to plan for additional length of stay in Germany than in 2000. The estimated marginal effects (0.064 in 1970 model, 0.058 and 0.051 for $y=4$ in 1980 and 1991 models, respectively) suggest that being Turkish or a citizen of the former Federal Republic of Yugoslavia increases the probability of planning for a longer stay by 6.4%, 5.8% and 5.1%, all other things equal. By comparing these results across the three time periods, we observe a steady decrease in the size of the marginal effects over time. A plausible explanation for this is Turkey's growing economy.

The 1970 and 1980 surveys did not ask if respondents were born in Germany, so we have data on this question only for 1991 and 2000. The estimated coefficient for both years is negative and statistically significant, suggesting that respondents who were born in Germany are more likely to plan for a short stay, all other things being equal. However, the importance of being born in Germany was relatively greater (in a negative sense) in 1991 (marginal effect of -0.367 for $y=4$) than in 2000 (marginal effect

of -0.096 for $y = 4$). This finding is compatible with the segmented assimilation theory (Portes et al., 2005).

The last two indicators of attachment to Germany, ARRIVAL and FARRIVAL, were transformed into variables that measured the number of years the individual or family members had lived in Germany so as to also include those born in Germany. The estimated coefficient for the respondents' year of arrival is negative in the years 1970, 1980, and 1991, but positive in 2000. These results suggest that in the earlier years, the longer a person had already lived in Germany the more likely he or she would plan to return to country of origin, all other things equal. As the migration movement matured, however, respondents who had stayed in Germany for a long time were more likely to plan for an even longer stay. The positive effect in the 2000 model is expressed by the size of the variable's marginal effect, which is larger than the combined effects of the 1970, 1980 and 1991 models. For the variable measuring 'Family Members' Arrival', data was available for only 1970 and 1980. The estimated coefficient in both years is highly significant and positive, suggesting that respondents with family members who have lived in Germany for a long time are more likely to plan for an additional stay in Germany, all other things being equal.

Personal attributes: The effect of age is negative and significant in the 1991 and 2000 models indicating that older individuals are less interested in integration (long additional stay) than younger individuals. These effects are predicted by the assimilation literature. Gender has a relatively small influence on the desire for a long stay in Germany across time periods (marginal effect of -0.031 , 0.023 and -0.0060 for the 1970, 1980 and 2000 models, respectively), and the coefficients are not statistically significant. The negative effect for the 1970 and 2000 coefficients suggests that women are slightly less likely than men to be interested in staying longer, while the 1980 results suggest the opposite. Overall, personal characteristics were relatively more influential in the later than in the earlier years.

Family characteristics: We consider marital status (MARITAL), presence of children in the household (CHILDS), household size (HHSIZE), number of times the individual visited home country (VISIT) and the presence of close family relatives who are still living in the country of origin (FAMILY). The latter are also indicative of the pull maintained by the foreign resident's native country and we therefore expect their coefficient to have a negative sign.

The estimated coefficient for being married (MARITAL) is significant only in the 1980 model with marginal effect of 0.216 . Similarly, the presence of children in the household has a positive effect on planned additional length of stay in Germany with marginal effects of 0.020 and 0.023 in the 1980 and 2000 models, respectively. Having relatives in the country of origin (FAMILY) has the expected negative effect, but is statistically significant only in the 1991 and 2000 models. Although its marginal effect is relatively small (-0.004), the variable measuring the number of times the individual has visited the home country (VISIT) is statistically significant in the 1970 model. Lastly, household size was measured only in 1991 but the variable is shown to significantly influence planned length of stay in Germany. Overall, family characteristics were fairly influential over the 30 year period.

Indicators of economic success: We use homeownership (HOMEOWNE), household income (INCOME) and amount of money the individual sent home the year before the

survey (MONESENT) as indicators of economic success. First, homeownership is a measure of economic success, particularly in Germany, where homeownership rates are much lower than in the USA and other West European countries, with the exception of Switzerland. Because the market for owner-occupied housing is narrower and a home is not acquired as routinely as in, say, the USA, homeownership is also indicative of a stronger commitment to the host society. Data on this variable were available only in 1991 and 2000 and the estimated coefficient has the expected positive sign in both time periods, but is statistically significant only in the 1991 model. Its marginal effects are relatively high (0.076 for $y = 4$), indicating that (1991 data) respondents who were homeowners were 7.6% more likely to plan for a longer stay, all other things being equal.

Data on household income were not available in 1980. Therefore, we used responses to the question asking respondents to indicate how much money they sent home the year before the survey was conducted (MONESENT) as a measure of economic success in 1980. The estimated coefficients for both variables (household income and money sent to home country) are negative and statistically significant. One possible explanation for the negative sign is that economic success makes maintaining ties to the country of origin easier. Wealthier individuals may maintain a second home and travel there more frequently. They may also enjoy enhanced social status in their region of origin because of their success. Also, if immigrants come to Germany to earn enough to invest into a house 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, so that without additional information the resulting estimates are inconclusive. Finally, it is also possible that immigrants committed to the eventual return home send more money than other individuals, everything else being equal.

Human capital: Education, measured by years of schooling, has a relatively small positive effect on the planned length of additional stay (marginal effect of 0.010 for $y = 4$) in 1980 but a large effect (marginal effect of 0.075 for $y = 4$) in 2000. For 1970 and 1991, education is shown to have no significant effect on planned length of stay. Having earned the high school diploma in Germany (DIPLOMA) also has a positive effect on the planned length of additional stay but is only significant in 1970 and 1991. The marginal effects are estimated at 0.053 and 0.023, respectively. Although the combined effects of these first two measures of education are fairly large, they are still not as large as German language skills (GSKILLS). The marginal effect of German language skills are estimated at 0.038 for the 1970 model, 0.069 and 0.109 for the 1980 and 2000 models, respectively, and all coefficients are statistically significant at the 5% level or higher. These results show the importance of language skills as a prerequisite for integration and assimilation (e.g., Friedberg, 2000; Gonzalez, 2000; Alba and Logan, 1992; Krivo 1995; Myers and Lee, 1998).

Possible concerns: Living in a country where you do not hold citizenship or have historical roots can be difficult. Thus, the survey asked respondents about possible concerns, including difficulties linked to language (LANGUAGE), visa problems (VISA), the children's education (CHILDEDU), the children's treatment by Germans (TREATKID), religion (RELIGION), and the authorities (AUTHORIT).

The importance of language that was demonstrated by the estimated 'Skills' coefficient was reinforced by the estimates obtained for 'Language'. The estimated coefficients for LANGUAGE are statistically significant at the 10% level or higher in all

models, with estimated marginal effects of -0.017 , -0.088 and -0.024 for the 1980, 1991 and 2000 models, respectively, implying that language problems reduce the probability of an interest in a longer stay. These results seem to indicate the dual role of language as a means for economic success as well as for social integration.

We were concerned about collinearity between the variables 'Language' and 'Skills', but testing revealed no problems. Maybe this means that the responses do not relate to the same language issues. Maybe 'Skills' relate more the ability to function at work and in society, in general, and 'Language' to the sense of social inclusion. Combined with work experience, a relatively narrow vocabulary can be sufficient to do well in many jobs, but insufficient to interact at a high level with native German speakers. Prejudice against those speaking German with a foreign accent may exacerbate problems (see discussion of the results of the Attitude variables below).

The effect of visa problems (VISA) and concerns expressed about religion (RELIGION) on planned additional length of stay does not reach the 10% level of statistical significance. We expected that concerns over children's education and the way children are treated would have a negative impact on integration. In both 1980 and 2000 models the coefficient for children education had the expected negative sign but was statistically significant only in the 1980 model. As for concerns about treatment of children (TREATKID), data was available only in 1991 and the estimated coefficient is statistically significant. The estimated marginal effects (-0.061 for children education and -0.104 for treatment of children) suggests that, concerns over children's education and treatment of children reduces the probability of longer stay by 6.1% and 10.4%, respectively. The 1991 questionnaire also asked respondents whether they had problems with authorities (AUTHORIT). The estimated coefficient for this variable is statistically significant with marginal effects of -0.076 , meaning that having problems with the authorities reduces the interest in longer stay by 7.6%.

Possible reasons for liking to live in Germany: Living in a country with a high quality of life is attractive. The 1970 survey asked respondents about possible quality of life factors that may make a longer stay in Germany attractive, including moderate climate (CLIMATE), cleanliness (HYGIENE), social services (SERVICES) and the supply of consumer goods (GOODS). The importance of these indicators is demonstrated by the size of their marginal effects (0.068 for climate, 0.089 for hygiene, 0.079 for variety of goods and 0.057 for services) which are larger than the effects of the negative concerns of visa, children education, religion and problems with authority. Thus, these quality of life indicators counteract the negative effects that would discourage integration.

Perceived attitudes of the native population: Integration can be made easier or harder, depending on laws (e.g., visas, work permits) or attitudes and behaviours 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 (ATTITUDEW), how they are treated by Germans in general (TREATMENT) and their attitude toward Germany and Germans (ATTITUDB4). Portes and Zhou (1993) argue that negative attitudes by natives toward immigrants are likely to reduce integration, and our results concur. The coefficients for the two variables attitude of Germans at place of work and poor treatment by Germans are highly statistically significant and the variables' marginal effects (-0.020 , -0.082 and -0.030 in 1980, 1991 and 2000, respectively for attitude of Germans at place of work; and -0.069 in 2000 for poor treatment by Germans) are almost as large as the language skills estimates. Thus, xenophobic attitudes counteract positive effects of

language acquisition and other measures to encourage integration. A worsening of attitudes toward foreigners decreases by 2.0, 8.2, and 3.0%, respectively, the probability that a foreign resident expresses an interest in integration.

In the 1970 survey respondents were asked about their attitude about Germans and Germany (ATITUDB4). The variable is coded as 1 if a respondent indicated positive attitude and 0 otherwise. The estimated coefficient is positive and statistically significant with marginal effects of 0.031, suggesting that, individuals who have a positive attitude towards Germany and Germans are more likely to plan a longer stay, all things being equal.

Location: The location variable is statistically significant at the 10% level or higher in all models. The negative sign in the earlier years (1970 and 1980) indicates that northern German states (Bundesländer) were perceived as more welcoming than other regions and the marginal effects are relatively large (−0.041 and −0.032 for $y=2$ and $y=4$, respectively). In general, we found a negative association between (degree of) southern residence and interest in integration (additional length of stay). In 2000, ‘Location’ is also statistically significant at the 5% level and sizeable (marginal effect of 0.035 for $y=4$), but has the opposite sign. That is, following the significant political changes in Western Europe in the 1990s, immigrants living in southern Germany or Berlin are more likely to plan for longer stays. In the case of southern Germany, this may also reflect the more dynamic economies relative to those in northern Germany.

Table 3 Binary and ordered logit results for integration measured by planned length of stay

Categories of Factors Influencing Integration		1970 Binary model		1980 Ordered model		1991 ordered model		2000 Ordered model	
		Coefficients	Marginal effect	Coefficients	Marginal effect: $y=4$	Coefficients	Marginal effect: $y=4$	Coefficients	Marginal effect: $y=4$
	CONSTANT	6.368***	1.512	7.118***	2.616	3.155***	1.225	4.589***	1.8256
Indicators of	NATIONAL	0.155**	0.064	0.158***	0.058	0.130**	0.051	0.016	0.0063
Attachment to	BORN	–	–	–	–	−0.945**	−0.367	−0.216***	−0.0960
Germany	ARRIVAL	−0.103***	−0.025	−0.075***	−0.028	−0.016***	−0.006	0.011***	0.0851
	FARRIVAL	0.204***	0.048	0.137***	0.050	–	–	–	–
Personal	AGE	–	–	0.002	0.001	−0.016***	−0.006	−0.017***	−0.0715
Attributes	GENDER	−0.130	−0.031	0.063	0.023	–	–	−0.015	−0.0060
	MARITAL	−0.034	−0.008	0.216***	0.079	0.047	0.018	−0.018	−0.0170
Family	HHSIZE	–	–	–	–	0.034	0.013	–	–
Characteristics	FAMILY	–	–	−0.109	−0.040	−0.039***	−0.077	−0.171**	−0.0293
	CHILDDGER	–	–	0.187***	0.020	–	–	0.065**	0.0226
	VISIT	−0.004**	−0.001	0.004	0.001	–	–	–	–
Indicators of	MONESENT	–	–	−0.002**	−0.012	–	–	–	–
Economic	INCOME	–	–	–	–	–	–	−0.069***	−0.0274
Success	HOMEOWNE	–	–	–	–	0.195***	0.076	0.111	0.0440
	EDUCATIO	0.014	0.003	0.130**	0.010	−0.005	−0.002	0.105***	0.0752
Human	DIPLOMA	0.222*	0.053	0.031	0.011	0.059**	0.023	0.043	0.0181

Table 3 Binary and ordered logit results for integration measured by planned length of stay (continued)

Categories of factors influencing integration	Variable name	1970 Binary model		1980 Ordered model		1991 ordered model		2000 Ordered model	
		Coefficients	Marginal effect	Coefficients	Marginal effect: y = 4	Coefficients	Marginal effect: y = 4	Coefficients	Marginal effect: y = 4
Capital	GSKILLS	0.267**	0.038	0.165***	0.069	–	–	0.276***	0.1097
	LANGUAGE	–	–	–0.032*	–0.017	–0.227***	–0.088	–0.071**	–0.0241
Possible	VISA	–	–	–	–	0.119	0.046	–0.032	–0.0125
Concerns	CHILDEDU	–	–	–0.155**	–0.061	–	–	–0.073	–0.0289
	TREATKID	–	–	–	–	–0.267*	–0.104	–	–
	RELIGION	–	–	–	–	0.287	0.112	0.173	0.0688
	AUTHORIT	–	–	–	–	–0.196**	–0.076	–	–
Reasons for	GOODS	0.332***	0.079	–	–	–	–	–	–
Liking to live in	SERVICES	0.241*	0.057	–	–	–	–	–	–
Germany	CLIMATE	0.286**	0.068	–	–	–	–	–	–
	HYGIENE	0.376***	0.089	–	–	–	–	–	–
Perceived	ATITUDEW	–	–	–0.064**	–0.02	–0.197*	–0.082	–0.076***	–0.0302
Attitudes of	TREATMENT	–	–	–	–	–	–	–0.174***	–0.0693
Germans	ATITUDB4	0.131***	0.031	–	–	–	–	–	–
Location	LOCATION	–0.172**	–0.041	–0.109*	–0.032	–	–	0.075**	0.0349
	Mu (1)	–	–	0.870***	–	0.586***	–	0.622***	–
Threshold	Mu (2)	–	–	2.107***	–	2.128***	–	1.826***	–
Parameters	Mu (3)	–	–	2.220***	–	2.345***	–	2.063***	–
	Model prediction	74%	–	78%	–	73%	–	61.490	–
	Log-L	–883.468	–	–1766.484	–	–1290.245	–	–2358.850	–
	Chi-square	102.820	–	183.038	–	104.090	–	295.698	–
	Sample size	1318	–	1450	–	1144	–	2023	–

*, **, ***Denote significance at the 1, 5 and 10%levels, respectively.

6 Summary and conclusions

Integration and assimilation are complex processes and progress is difficult to evaluate and measure (Schaeffer, 2006). The measurements used in this paper are chosen based on availability and can give us only approximate insights into the integration and assimilation of permanent foreign residents in Germany from Italy, Greece, Spain, the countries that make up the former Socialist Republic of Yugoslavia, and Turkey.

The results show that migration movements change over time, as demonstrated by the different results obtained for the years 1970, 1980, 1991, and 2000. The survey responses in 1970 and 1980 show a much higher desire of returning home than responses in the

later years. This is likely because the average stay in Germany among immigrants and their offspring had increased as the migration movement got older and with duration, integration and assimilation improved. A second reason is that among the early immigrant groups, many of those who wished to return to their home country had done so by the year 2000. For example, in the 1990s the number of new immigrants to and the size of the Italian immigrant population in Germany had been decreasing (negative net migration) (OECD, 2000). A third reason could be that the earliest immigrants came from countries that have more in common with Germany socially, culturally, and politically, than those who arrived later. For example, the predominantly Muslim Turks appear to face more antagonism by natives and be in conflict with school authorities over educational issues, particularly as they relate to girls, than the other immigrant groups studied here. Muslim immigrants also seem to have more difficulties integrating in other European destination countries, such as France or Great Britain, as exemplified by controversies over the wearing of head scarves or full-body swimsuits.

We also see some of the adjustments made by the host society reflected in the surveys. For example, in the early surveys there are no questions about naturalisation or staying in Germany permanently, while such questions are prominently represented in the later surveys. As argued by Schaeffer (2006), this reflects that the assimilation process works not only on the foreign national populations, but also on the native society. As immigrants become more familiar with the host society, bring their family, and raise children there, their attachment grows and their initial plans of returning home may change, particularly if hoped-for opportunities back home do not materialise. The results indicate that this may have happened.

The analyses also confirm results from the literature, particularly regarding the importance of language and family as factors influencing decision making. What is interesting is that foreign nationals who were born in Germany express less desire of staying than those who are not native-born. This could signal the failure of assimilation and integration policies and should be cause for concern. It is therefore encouraging that the negative impact was much smaller in 2000 than in 1991, but it was still large and highly significant. Clearly, additional research is necessary as we cannot draw conclusions with confidence from just these two results. The relevant questions were not asked in the 1970 and 1980 surveys. Given the changing nature of labour markets and the increased demand for skilled immigrants, we expect that language skills will become more, not less important in the future.

Schaeffer (2006) claims that assimilation works on both the native population and foreign resident populations and that both contribute to the process. Our results provide some support for this claim in that the attitudes of members of the native population vis-à-vis foreigners have a fairly strong and statistically significant impact on our measures of integration. While this may seem 'obvious' the result is useful because it provides a quantitative estimate of the strength of the effect, and it call attention to an issue that is often neglected in public discussion of assimilation where, for political reasons, the burden of the responsibility for integration and naturalisation is put on the foreign nationals and the impact of negative attitudes and actions by members of the native population is often ignored.

Although all survey samples were drawn from the same populations, several important questions have been changed over time, so that the samples cannot be pooled and are not perfectly comparable over the whole period. On the other hand, the changes

in the survey questions are themselves a reflection of the maturation of the migration movement and, to some extent, changes in the attitudes in the host society.

Significant additional work, both empirical and theoretical, is needed to gain a better understanding of the process of integration and assimilation. It is likely that in the detail it will differ by place, time, and nationality, but we believe that there are insights that have general applicability. The importance of such research is great as most industrialised countries have turned into immigrant nations and are dealing with assimilation, ready or not. Additional research is also necessary because of the changing nature of international labour migration, which includes a fast-growing share of skilled and highly-skilled individuals relative to the predominant blue collar labour migration, particularly in Europe, prior to about 1990 (Saxenian, 2005; Schaeffer, 2005; Schwanen, 2000).

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Notes

- ¹In the USA, for example, Cavanagh (2007) shows that among Mexican youth, recent immigrants are less likely to drink and binge than those whose families arrived earlier.
- ²For example, only about 2% of all Italian citizens in Germany reside in the former GDR outside of East Berlin, and the percentages for citizens from the other five countries included in this study are even smaller. Thus, less than 1% of Turkish or SFRY immigrants live in the former GDR.
- ³This 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 they will enjoy full mobility only after a transition period of between 2 to 7 years (European Commission, 2011).
- ⁴In 1970 the highest number of years reported for planned additional length of stay was five years.
- ⁵The reported marginal effects for the 1980, 1991 and 2000 models are for $y = 4$: plan to stay in Germany for as long as possible.