

# The Economic Incorporation of Immigrants in 18 Western Societies: Origin, Destination, and Community Effects

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*This article examines differences in labor market participation and unemployment between immigrant groups in different countries. The authors argue that two macro designs must be combined to provide a more comprehensive perspective on the economic integration of immigrant groups. Instead of reliance on observations of multiple-origin groups in a single destination or a single-origin group in multiple destinations, multiple origins in multiple destinations are compared, suggesting that the economic status of immigrants may be affected by the country from which they come ("origin effect"), the country to which they migrate ("destination effect"), and the specific relations between origins and destinations ("community effect"). From the human capital theory, compositional hypotheses are derived, which predict that these macro effects can be attributed to the selection of human capital. From discrimination theories, contextual hypotheses are deduced, which maintain that macro effects can be ascribed to in-group preferences and out-group prejudices. Data on immigrants' labor force activity and employment in 18 Western countries during the period 1980 to 2001 are reported. Using multilevel techniques, the analysis shows that compositional differences associated with political suppression in the countries of origin, relative income inequality, and geographic distance affect the labor force status of immigrants. Contextual effects play a role as well in terms of religious origin, the presence of left wing parties in the government, and the size of the immigrant community.*

Since the 1960s, migration to Western countries has increased substantially, affecting more countries than ever before (Castles and Miller 2003; Organisation for Economic Cooperation and Development (OECD) 2001). Classic immigration countries such as Australia,

Canada, and the United States are again experiencing large-scale immigration, while new immigrant countries are emerging in Europe. The consequences from the growing share of immigrants in Western societies have been the focus of much public discussion. A major con-

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cern among policymakers is the economic position of immigrants in terms of labor force activity, unemployment, and earnings. The disadvantaged status of immigrants frequently has been observed, and national policymakers have tried to reduce such inequalities.

To identify the causes of immigrants' economic incorporation, researchers have relied on both micro and macro perspectives. At the individual level, it has been found that the human capital immigrants bring along or acquire in their new home country plays a role in their economic position. The importance of certain factors such as education, work experience, language skills, age at the time of migration, and length of stay in the host society has been well documented in the literature (e.g., Chiswick and Miller 2002). Immigrants who move at a young age, those who have been resident in the destination country for a long time, and those with a higher education, more work experience, and a better command of the destination language perform better economically.

Students observing the economic position of immigrants also increasingly recognize the importance of macro differences (Borjas 1999; Model and Lapido 1996; Portes and Rumbaut 1996; Reitz 1998, 2003). Two research designs have been used to examine these differences. The first compares multiple-origin groups in a single destination. This perspective has made it clear that immigrants' economic position differs among origin groups in the host country, even after individual characteristics are taken into account. For example, studies investigating the early waves of migration to the United States at the turn of the 20th century showed that some groups, such as the Russian Jews, performed especially well economically, whereas other groups, such as the Poles, were less successful in the labor market (Perlman 1988; Thomas and Znaniecki 1958). Studies of more recent immigrants to the United States have again stressed the importance of origin in economic integration (Borjas 1999; Jasso and Rosenzweig 1990). Research conducted in Australia found that immigrants of Mediterranean origin perform less well in the labor market than other groups (Kelley and McAllister 1984). Similar country studies, reporting differences among origin groups, have appeared in Belgium (Lesthaeghe 2000), Canada (Basavarajappa and Jones 1999), France (Tribalat 1995), Germany (Kalter and

Granato 2002), Israel (Raijman and Semyonov 1995), and the United Kingdom (Bell 1997).

The second macro design, although used less frequently, observes a single-origin group in multiple destinations. Using this "single-origin-multiple-destination" design, the impact of receiving societies on the economic performance of immigrants from a single origin is investigated. In the words of Model, Fisher, and Silberman (1999:187), the question is: "How does the choice of destination affect the socioeconomic outcomes of culturally similar migrants?" These researchers compared the economic positions of black Caribbean migrants in France, Canada, the United Kingdom, and the United States, but found no substantial differences. Cheng (1994) used a similar design to compare the occupational status of Chinese immigrants in the United Kingdom and the United States. She also failed to find significant cross-national differences. Kogan (2003) examined the integration of Yugoslav migrants into the labor markets in two destinations: Austria and Sweden. Her findings showed that Yugoslavs fared better in Austria than in Sweden in terms of labor force participation and employment.

In this study, we combined both macro designs to investigate multiple-origin groups at multiple destinations. We simultaneously examined the role of the country of origin ("origin effect") and the impact of the receiving society ("destination effect") on the economic incorporation of immigrants. The first and foremost advantage of this "double comparative design" is that it provides a more representative view of macro-level effects. After all, single comparative designs rely on either a single destination country or a single origin country. The resulting conclusions about origin effects are therefore not generalizable to other destination countries, and the conclusions about destination effects are not generalizable to other origin groups.

A second advantage of the double comparative design is the possibility of examining a third macro-level effect associated with the specific origin-by-destination combination in which immigrants find themselves (what we called a "community effect"). Thus, using this design, we could see whether some groups perform especially well in certain destinations and worse

in others, irrespective of the general impact of the countries of origin and destination.

Several previous studies had moved toward adopting the double comparative design. Model (1997) and Model and Lapido (1996) examined the occupational status of six nonwhite immigrant groups in London and New York. Their findings showed that New York provided a more favorable context than London, and their analysis also revealed differences among origin groups. Borjas (1988) and Reitz (1998) analyzed the economic position of multiple immigrant groups in Australia, Canada, and the United States. Both studies found that immigrant earnings relative to those of natives were lower in the United States than in Australia and Canada. Furthermore, these studies found that groups of European origin were more successful than African and Asian groups in all three destinations.

We extended these earlier double comparative studies to the economic incorporation of immigrants in several ways. First, and most important, we broadened the range of comparison with regard to destinations. Instead of examining a few receiving countries, we studied the labor market position of immigrants in 18 Western countries: 3 classic immigrant countries (Australia, Canada, and the United States) and 15 new immigrant countries in Europe (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom). This enabled us to provide a cross-national descriptive overview of labor market integration, and to test theories on immigrant integration more thoroughly. Theory testing in cross-national research is, in general, hampered by the low number of macro cases (Goldthorpe 1997). This also applied to our study, but to a lesser extent than in previous research.

Second, we examined the importance of origins, destinations, and communities more systematically. Instead of only comparing countries of origin, countries of destination, and combinations thereof, we also assessed the variance at the level of the origin and the destination countries, subsequently replacing the proper names of countries and communities with the values of theoretically informed macro-level variables (Przeworski and Teune 1970). These macro-level variables relate to origin countries

(e.g., political situation), destination countries (e.g., immigrant policy), and communities (e.g., relative group size).

Third, we used multilevel methods to estimate and explain the impact of origins, destinations, and communities. Earlier comparative research on immigrants' economic position used simple regression techniques, ignoring the multilevel structure of the data. We used multilevel techniques instead, which enabled us to disentangle different levels and to test hypotheses in a more appropriate way.

We examined two important aspects of economic integration: labor force participation and employment. Both aspects are generally assumed to be the first two steps toward full incorporation in the labor market. To test our hypotheses, we collected and standardized more than 100 existing surveys and created a cross-national data set for a total of 18 Western countries in the period 1980 to 2001. Some origin groups in our data set, such as the Chinese, Germans, Italians, and Turks, can be traced in many destination countries, whereas other origin groups are observed at a single destination. Although we did not observe all the origin groups in each destination country, we had information on 18 destinations, 187 origin groups, more than 900 combinations of origin and destination (i.e., communities), and more than 300,000 immigrants. This enabled us to assess and explain the impact of destinations, origins, communities, and individual characteristics simultaneously.

## THEORIES ON THE ECONOMIC INCORPORATION OF IMMIGRANTS

### *ORIGINS, DESTINATIONS, AND COMMUNITIES: COMPOSITION OR CONTEXT?*

The theoretical perspective pursued in this investigation is that the macro study of immigrants' economic incorporation should take into account the impact of origins and destinations simultaneously. One implication of this perspective is that the country of origin makes a difference in immigrants' economic outcomes, irrespective of the country to which they move. The political situation in the sending nation, for example, may be a cause of such differences that "travel" across receiving nations. Likewise, host societies affect the economic situation of immigrants, their origins notwith-

standing, through such factors as immigration policies. In addition to these effects, the simultaneous study of origins and destinations implies the possibility of a third independent macro effect related to immigrant communities (e.g., Mexicans in the United States). The relative size of an immigrant group and the geographic distance between its origin and destination countries are examples of community characteristics.

Origin, destination, and community effects can be explained in terms of composition and context. Composition effects arise when individual characteristics are not distributed equally across macro units, and when these characteristics also affect the dependent variable (in this case, economic integration). Contextual effects occur when the characteristics of macro units have a direct effect on individuals' outcomes, over and above the effects of individual characteristics.

In this article, we describe two theoretical approaches that propose composition and context effects. The first perspective is that of human capital, developed mainly in the economics literature (Becker 1964; Borjas 1987; Chiswick 1978). According to this theory, immigrants' economic position is determined by their human capital, such as education level, work experience, language fluency, and individual talents. Within a human capital framework, differences between macro units are therefore explained in terms of compositional differences. Hypotheses on contextual effects are more often proposed in the sociology literature. Within a sociologic framework, researchers have argued that macro factors provide opportunities and create restrictions for immigrants (Model and Lapido 1996; Portes and Rumbaut 1996, 2001). Societal conditions are linked to processes of discrimination, which foster or hinder migrants in becoming fully integrated into the labor market. Later, we derive hypotheses on compositional effects within the economic human capital framework, while contextual effects are taken from sociologic theories of discrimination.

It is important to emphasize that the hypotheses developed in the literature refer to immigrants' economic incorporation in general. Whereas economists have primarily used earnings as a measure of economic integration, sociologists also have studied occupational status and labor force status as economic outcomes.

We have applied the human capital theory and theories of discrimination to both labor force participation and employment. Assuming that people participate in the labor market to find jobs, there is a certain association between the decision to participate in the labor market and one's chances of finding employment. From a human capital perspective, it is assumed that people with more human capital have more opportunities and incentives to become employed, and therefore participate more often in the labor market (Duleep and Sanders 1993). Within a sociologic perspective, it is assumed that those who experience discrimination are more often unemployed, and are likewise less willing to participate in the labor market.

### COMPOSITION EFFECTS

According to the human capital theory (Becker 1964), the success or failure of immigrants in the labor market depends on individual skills. In general, two types of skills have been identified: observable and unobservable skills (Borjas 1987; Chiswick 1978, 1979). Observable skills include such things as education level, command of the destination language, and labor market experience. Ability, motivation, and talent are generally assumed to be unobservable skills. Within a human capital framework, macro effects are assumed to result from the skill composition of immigrant groups.

What makes the human capital framework interesting for the study of origin, destination, and community effects is the argument of researchers that macro factors play a role in the selection of immigrants' skills. It is argued in the literature that the selection of immigrants can be either positive (or favorable), with immigrants selected for their high observed and unobserved skills, or negative (unfavorable), with immigrants selected for their lower productivity and skills (Borjas 1987, 1988). The properties of origins, destinations, and communities determine the selective pattern of migration in terms of observable and unobservable human capital. In the following discussion, we take a look at immigration policy (a characteristic of destination countries), political suppression (a characteristic of origin countries), relative income inequality, relative economic development, geographic distance,

and language exposure (characteristics of communities).

We start with immigration policy. Borjas (1988) hypothesized that in countries with a strict immigration policy, such as Australia and Canada, immigrants are more favorably selected. In these countries, migrants who apply for an entry visa must meet specific requirements. This so-called "point system" rates migrants according to their language fluency, job experience, education, and several other characteristics (Borjas 1988; Reitz 1998). Immigrants who pass are therefore assumed to be more skilled and more talented than those who fail. Like the United States, European countries did not have a point system during the period we studied, and we assumed that immigrants in these countries are less favorably selected than immigrants in Australia and Canada. We predicted that immigrants perform better in the labor market of countries that use a point system than they do in other countries.

Characteristics of the country of origin may affect skill selection as well. Within a human capital framework, it is suggested that political conditions in the country of origin influence the economic success of immigrants. According to Chiswick (1978, 1979, 1999), political suppression and instability in the origin country may induce people to migrate for other than pure economic reasons. As a result, Chiswick predicted that refugees may be less favorably selected than economic migrants, and that they would perform less well in the labor market. We therefore expected that the more politically suppressive the country of origin is, the more likely immigrants are to be outside the labor market and unemployed.

Several community characteristics also could affect the skill selection of immigrants. Borjas (1987, 1988) has suggested that the composition of immigrant groups in terms of unobservable skills is determined by the extent of income inequality in the countries of origin and destination. In societies that have a very skewed income distribution, emigration tends to become concentrated among the less talented, who have much to gain by migrating. However, emigration from societies with more equally distributed incomes tends to be largely concentrated at the upper end of the home country's income distribution. According to Borjas (1988:25), this is because "the home country is taxing high-abil-

ity workers and insuring low-ability workers against poor labor market outcomes." Similarly, host countries with high income inequality should therefore attract migrants with high unobserved abilities. We therefore predicted that the less dispersed the income inequality is in the home country relative to that in the destination country, the better will be the labor market performance of immigrants.

Several researchers have suggested that the skill selection of immigrants is associated with the level of economic development in both the origin and destination countries (Borjas 1987, 1988; Chiswick 1978, 1979; Jasso and Rosenzweig 1990). They have argued that, other things being equal, migrants from developing countries should have lower human capital skills than those originating from more advanced economies. In addition, it has been maintained that migrants from rich countries may have an edge over migrants from poorer countries regarding the transferability of their skills and subsequent rewards. For example, education diplomas obtained in developing nations are more difficult to transfer to economically advanced nations than diplomas obtained in other advanced nations. In summary, the human capital theory predicts that the more economically advanced the origin country is relative to the destination country, the better immigrants will perform in the labor market of the destination country.

Geographic distance between origin and destination countries also could affect skill selection. It is assumed in the literature that greater distance increases migration costs (Borjas 1987; Jasso and Rosenzweig 1990). As a consequence, individuals with more unobserved human capital are overrepresented among migrants who have moved over long distances. Geographic distance also diminishes the likelihood of return migration (Borjas 1987), which, in turn, increases the incentives to invest in human capital, such as acquisition of the destination language (Chiswick and Miller 2001). We therefore expected that greater geographic distance between origin and destination countries has a positive impact on immigrants' economic performance.

A final property of communities that may affect the skill selection of immigrants is the exposure in the country of origin to the official language of the destination country. It is well

documented that proficiency in the destination language has an important impact on immigrants' economic position (Chiswick and Miller 2002; Kossoudji 1988). Immigrants who have already been exposed to the destination language in their country of origin would naturally be expected to have more skill in the destination language than immigrants who have not been exposed to the host language before migration. We therefore hypothesized that immigrants exposed to the official language of the host country before migration will be more incorporated in the labor market.

### CONTEXT EFFECTS

Within a more sociologic framework, researchers have argued that the position immigrants obtain in the labor market is affected by the level of discrimination they experience (Model and Lapido 1996; Portes and Rumbaut 1996, 2001). Although there is no overarching discrimination theory, the broad range of hypotheses within this framework share their emphasis on societal conditions that produce in-group preferences and out-group prejudices. It is argued, in a broad sense, that such preferences and prejudices cause positive and negative discrimination, such as (better) jobs offered to members of the in group, refusal of employment to a member of the out group, or lower wages paid to out-group members. What makes discrimination theories distinct from each other are the assumptions about the actors and the mechanisms that produce discrimination. Whereas some theories focus on the state or the government as the central actor, other theories stress the role of the native population or the immigrants themselves. And whereas some discrimination theories assume a (perceived) threat as a mediating factor, other theories focus on (egalitarian) belief systems.

Our first hypothesis relates to the role of host societies. Within the discrimination framework, it could be argued that the government affects the advantages and disadvantages that immigrants face. Lenski (1966), who originally proposed this idea in a more general way, argued that political democracy (in contrast to aristocracy) and the election of left wing parties in the government (in contrast to liberal, conservative, and Christian democratic parties) lead to greater economic equality in general. Lenski's

ideas have been much discussed in the literature on social mobility with respect to income inequality (e.g., Hewitt 1977), father-to-son mobility (e.g., Ultee and Luijkx 1990), and societal openness in terms of educational endogamy (e.g., Smits, Ultee, and Lammers 1998). Along these same lines, we suggested that left wing parties have a more positive attitude toward immigrants and tend to reduce economic inequalities more than liberal, conservative, or Christian democratic parties. We therefore expected that immigrants in countries with a longer presence of left wing parties in the government are more incorporated in the labor market.

A second branch of discrimination theory has focused on the social distance natives feel in relation to immigrants (Lieberson 1980; Portes and Rumbaut 1996, 2001). The social distance idea, originally advanced by Bogardus (1959), suggests that people may feel more distant toward some groups than toward others. Social distance refers to the degree of sympathetic understanding between people or groups. In studies of natives in Canada and the United States, it was found that social distance toward immigrants varied considerably by ethnic origin (Owen, Eisner, and McFaul 1981; Pineo 1977). Northern Europeans ranked at the top of the "social hierarchy," followed by eastern and southern Europeans and, at the lowest level of prestige, nonwhite immigrants. According to Portes and Rumbaut (2001), the ranking of social distance concurs by and large with a distinction in culture, physical appearance, and socioeconomic background.

Several researchers have pursued this line of research, arguing that social distance between natives and immigrant groups results in discrimination in the labor market (Evans and Kelley 1991; Model and Lin 2002; Portes and Rumbaut 1996, 2001; Wanner 1998). We examined this idea by looking at one major aspect of the immigrant group's culture—religion—and a more remote indicator of both the culture and socioeconomic background of the immigrant group—average level of education. We assumed greater social distance between natives and immigrant groups with a low average education and a different religion. Because the Western countries we examined in this study were predominantly Christian, we predicted that migrants from non-Christian origins would do

worse in the labor market than those of Christian descent. Likewise, we predicted, after taking the individual effect of education into account, that a lower average education of an immigrant group in a certain destination country would be associated with lower levels of labor force participation and employment among these immigrants. It should be noted that both the effects of religion and average education level refer to the community level. However, we treated religion as an origin effect because it did not differ among the destinations in our study.

Other context effects can play a role at the community level. The relative size of an immigrant group can be an important factor, although this factor has been associated with discrimination against immigrants in two different ways (Frisbie and Neidert 1977; Tienda and Lii 1987; Tolnay 2001). One suggestion is that prejudice and discrimination increase with the relative size of the immigrant group (Blalock 1967; Quillian 1995). It is argued that sizable groups are more visible and thus perceived as a potential threat to the native population in terms of political and economic power. This "ethnic threat" hypothesis predicts a negative relation between the relative size of an immigrant group in a host society and the economic performance of its members in that society.

Alternatively, researchers have suggested that sizable immigrant groups perform better economically than smaller immigrant groups (Evans 1989; Portes and Bach 1985; Portes and Rumbaut 1996; Zhou and Logan 1989). In the same way that natives prefer in-group members, it is assumed that immigrants are more willing to help co-ethnics. Members of the same immigrant group help each other by offering jobs, buying goods, and lending money. This "ethnic capital" idea predicts that the relative size of an immigrant group in a certain country has a positive effect on the position the members of that group occupy in the labor market. It should be noted that this ethnic capital hypothesis predicts the opposite of the ethnic threat hypothesis.

A final, more specific idea pertains to discrimination within an immigrant group against women. Antecol (2000) examined the gender difference in labor force participation among immigrant groups in the United States. Her analysis showed that the gender gap in labor force activity among immigrant groups could,

to a substantial degree, be attributed to gender differences in labor force activity in the country of origin. She suggested that the cultural patterns of female labor force participation in the country of origin are carried over to the destination country. Hence, we predicted that the higher the labor force activity rate is for women in the country of origin, the greater their chances of participating in the labor market in the destination country.

## DATA, MEASUREMENT, AND MODELS

### DATA

We collected and standardized existing surveys containing individual-level information on the economic position of immigrants. The surveys were pooled in a single cross-national data set: the International File of Immigration Surveys (Van Tubergen 2004). The core of the meta-file consists of 115 labor force surveys conducted in 15 countries of the European Union during the period 1992 to 2001: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden, and the United Kingdom. These surveys were collected and standardized by Eurostat, the statistical office of the European Union, and pooled into the so-called European Union Labour Force Survey (EULFS). Because Eurostat takes great care in standardizing the labor force surveys, the designs of these surveys became much alike in the 1990s, reducing problems of comparability (Eurostat 1998).

To obtain data besides the EULFS data that was both high quality and comparable across countries, surveys had to fulfill three criteria: (1) the survey had to contain a sufficiently large number of immigrants in a sample that was (approximately) nationally representative; (2) the survey had to contain standard questionnaires with fixed response categories; and (3) the survey had to contain independent and dependent variables comparable with the measures in EULFS. In addition to the EULFS data set, we collected five censuses for the classic immigrant nations (Australia, Canada, and the United States) and 11 so-called "specific immigrant" surveys for Australia and several Western European countries (Belgium, Germany, Italy, the Netherlands, and the United Kingdom). These surveys typically oversampled immigrant

populations and therefore provided a valuable supplement to the labor force surveys, in which samples of immigrants can sometimes be small. All in all, the International File of Immigration Surveys includes 131 surveys conducted in 18 Western countries between 1980 and 2001. Detailed references to the surveys are included in the Supplement.

The analysis was restricted to first-generation immigrants, defined as those born outside the country of residence. For the traditional immigrant countries (Australia, Canada, and the United States), the census samples were much larger than those for the new immigrant countries, so we restricted the number of respondents in large immigrant groups to a maximum of 2,000 per survey to avoid computational problems. To exclude the influence of differential school participation and retirement, we selected the population between the ages of 25 and 54 years. Our analysis included both females and males, which is a significant contribution to the literature because earlier research on economic incorporation of immigrants was restricted largely to males (Schoeni 1998). The meta-file consists of 18 destination countries, 187 origin groups, 984 combinations of origins and destinations (i.e., communities), and 347,991 immigrants. The Supplement contains information on the number of respondents by origin and destination.

### DEPENDENT VARIABLES

We analyzed the labor force status of immigrants. To enhance cross-national comparability, we selected only those surveys for which labor force status could be classified using international standard classifications, and we used the standard definitions of labor force status adopted by the 13th International Conference of Labour Statisticians in 1982. The following three categories were distinguished:

1. *Employed*: Those who had paid employment (who were either at work during the reference week or had a job but were temporarily not at work) or were self-employed (were at work during the reference week or had a business but were temporarily not at work).
2. *Unemployed*: Those without work or currently available and seeking work.
3. *Inactive*: All others, such as homemakers, students, and retired persons.

Using this scheme, we constructed two dichotomous dependent variables of labor force status. First, we examined *labor force participation*, considering the odds of an immigrant being either employed (category 1) or unemployed (category 2), vis-à-vis being inactive (category 3). Subsequently, we selected the active population and used that subsample to examine *employment* and the odds of an immigrant being employed (category 1) versus being unemployed (category 2).

### INDEPENDENT VARIABLES

The independent variables were related to destinations, origins, communities, and controls at the micro and macro levels. We treat each variable briefly in the following discussion.

*Point system*: We set up a dummy to indicate whether destinations had a point system or not. Australia and Canada have such immigration policies (Borjas 1988). Because they have had a point system since the 1960s, we did not vary this dummy over time.

*Presence of left wing parties in the government*: We counted the number of years that left wing parties had been present in the government during the 10 years before the survey year. The annual presence of left wing parties in the government was rated as 1 when they formed a one-party government, 0.5 when they joined a coalition, and 0 when they were absent from the government. Information on the presence of left wing parties in the government was obtained from various Internet sources.

*Political suppression*: We used information collected by Freedom House (Karatnycky and Piano 2002) on political rights and civil liberties in the countries of origin. Political rights varied from 1 (free and fair elections, power for opposition parties, and so forth) to 7 (oppressive regime, civil war). Civil liberties varied from 1 (freedom of expression and religion, free economic activity) to 7 (no religious freedom, political terror, no free association). We used the total score for each country (2 to 14) and computed averages for the 1972–1980 period.



*Religious origin:* We included a dummy variable for origin countries that had a predominant Christian population, using predominantly non-Christian countries as a reference. Those countries with more than 50 percent Christian adherents in the 1960–1980 period were assumed to be predominantly Christian. This information was obtained from Brierley (1997).

*Female labor force participation:* We collected information on the average labor force activity among females between the ages of 25 and 54 years in the countries of origin. Data refer to the period 1980–1986 and were obtained from the International Labor Organization (1981–1990) Yearbook of Labour Statistics for various years.

*Income inequality (ratio):* This variable measures the income inequality of the origin country relative to that of the destination country. To measure the income inequality in a country, we used the Gini formula. Information was obtained from a publication of the Worldbank (2001), which gives Gini scores per country in 1980.

*Economic development (ratio):* We used gross domestic product (GDP) per capita as a measure of economic development and calculated GDP ratios for the origin country relative to the destination country. The GDP, measured in constant dollars per capita for 1980, was obtained from OECD (2000).

*Geographic distance:* Geographic distance between origin and destination was measured as the distance in kilometers between the capital cities of the origin and destination countries. Calculations were based on the so-called “great circle distance method” (Byers 2002).

*Official language:* We included a dummy to indicate whether the official language of the origin country was the same as the official language of the destination country, on the basis of the language situation at the end of the 20th century (Grimes 2000). An official language is the language used in schools and formal settings.

*Relative group size:* We constructed a variable for the size of an immigrant group relative to the total population of the host country. Information on group size for earlier times

and smaller groups is limited. However, using several sources (e.g., censuses of Australia, Canada, and the United States; the European Union Labour Force Surveys; OECD 1994, 1996, 1998, 1999a, 2001), we managed to estimate averages for all groups in the 1980–1990 period.

*Mean level of education:* We aggregated individual-level information on the education of immigrants included in the surveys of our data set using a three-category classification ranging from low to high (see later).<sup>1</sup>

We also included individual-level control variables. Some surveys contain precise information on all relevant individual-level variables, whereas others have cruder measures or do not contain certain variables. The EULFS, for example, does not provide precise information on duration of residence and schooling and has no information on language skills. Therefore, we had to make some concessions to render the variables cross-nationally comparable (see below).

*Age:* Age was measured in years or by estimations of midpoints for surveys using age categories.

*Duration of residence:* We constructed three categories: 0–5 years, 6–10 years, and 11 years or more.

*Education:* In accordance with the classification of education level in the EULFS, we used three categories for education: low (primary education and first stage of secondary education), middle (second stage of secondary education), and high (higher education). Surveys using measures of

<sup>1</sup> Because the macro characteristics could be highly correlated, leading to unstable estimates, we inspected bivariate correlations at the macro level. We found that correlations between macro-level indicators were hardly ever above 0.40. However, the GDP ratio showed a relatively strong inverse relation with political suppression in the origin country (–0.60). Another moderately high correlation was found to exist between political suppression and Christian origin (–0.46). In general, however, we did not find high collinearity between the macro predictors.

schooling (years of full-time education) were recoded using information on the years needed to obtain certain education levels. Information for various countries was obtained from ISCED-97 (OECD 1999b).

*Language proficiency:* Another variable we for which we controlled was immigrants' language proficiency, which is an important determinant of immigrants' economic position (Kossoudji 1988). For surveys in seven countries (Australia, Belgium, Germany, Italy, the Netherlands, the United Kingdom, and the United States) we had information on immigrants' proficiency in the destination language. We constructed a variable with three categories: 1 (immigrants who spoke the language very well), 2 (immigrants who did not speak the language very well), and 3 (immigrants whose language skills were unknown).

We also included two control variables at the macro level.

*Economic opportunities:* We included aggregate variables that controlled for differences in labor market opportunities between countries and between periods. We collected annual information on labor market participation and unemployment of natives 25 to 54 years of age, both males and females. The labor market participation rate was defined as the fraction of the total population in the labor market (employed or unemployed). The unemployment rate is the fraction of the population in the labor market that is unemployed. We used information from the surveys included in the meta-file to obtain these figures.

*Migration survey:* One survey characteristic that could affect the selection of immigrants participating in a survey, and thereby the comparability of the surveys in the meta-file, is the difference between general population surveys and specific immigrant surveys. We therefore included a dummy in our analysis to represent this difference.

Descriptive statistics for the independent variables are presented in the Supplement.

## ANALYSIS AND MODELS

Because the dependent variables in the analysis were dichotomous, we used logit regression techniques. This involved first estimating models predicting the odds of an immigrant being active in the labor market, and then selecting the immigrants who were active to examine the odds of an immigrant being employed. Both labor market outcomes were estimated separately for males and females because patterns in labor market position generally differ by sex.

We made use of multilevel techniques suited to dealing with the multilevel structure of the data. Most previous research on the economic incorporation of immigrants has estimated the impact of micro-level and macro-level factors using ordinary logit regression. With this method, the error terms at the macro level are neglected, and the standard errors of the parameters are underestimated (Snijders and Bosker 1999). As a result, support for macro-level hypotheses can be unjustified.

The use of multilevel techniques allowed us to assess and explain the variance at both the micro and macro levels in a more convincing way. We made use of random intercept models with two levels. At the "lowest," or micro, level, economic integration is affected by individual characteristics such as education and duration of residence in the host society. At the macro level, immigrants' economic status is an outcome of their origin, destination, and community. These macro-level components affect economic integration at the same level, so the multilevel structure is nonhierarchical. We therefore relied on cross-classified models (Bryk and Raudenbush 2001; Snijders and Bosker 1999), in which origins and destinations constitute "parallel" levels. Because the variance of communities is tapped by the variance of origins and the variance of destinations, it cannot be independently assessed. However, community effects were estimated at the appropriate origin-destination level.

The two outcome variables we analyzed fluctuate with the business cycle, especially unemployment. Instead of treating the role of destinations in a static way, we therefore made destination countries time dependent in our analysis. This resulted in more than 100 "destination-year" cases as the destination component instead of only 18 destination countries. With this dynamic design, we were able to

include precise macro-level control variables that measured the average labor force participation and unemployment rates among native males and females for each destination country in each survey year. In addition, we arrived at a better estimate of the time-dependent predictor in our analysis (i.e., the presence of left wing parties 10 years before the survey year). In summary, this resulted in a two-level model, with a random intercept for individuals at the lower level and random intercepts for countries of origin and countries of destinations per year at the higher level.<sup>2</sup> We made use of Markov Chain Monte Carlo estimation procedures provided in the MLwiN software program (Browne 2002).

To examine our hypotheses, we started with a model that had only macro-level variables. This model was used to examine the hypotheses related to the selection of immigrants' skills. Individual-level variables were added in a second model. In general, macro-level effects that indicate skill selection should decrease after human capital variables were included. However, with our models, it was unlikely that the effects of these macro-level variables would disappear or even be diminished. This was, first of all, because several "observable" skills were not measured (e.g., labor force experience) or were only partly measured (e.g., language proficiency), and because "unobserved" skills (e.g., talents) were, of course, completely omitted. Second, with multilevel models that have dichotomous outcomes, the coefficients of the macro-level variables as well as the variance at the macro level tend to increase after micro-level variables with strong effects have been included (Snijders and Bosker 1999). The reason for this is that the residual level-one variance is fixed. We therefore refrained from inspecting changes in the effects of macro-level variables and changes in variance components after adding micro- and macro-level variables, nor did we inspect deviance statistics. The multilevel models were appropriate, however, for exam-

ining the variance of random intercept models without explanatory factors and for testing macro-level hypotheses. It should be noted further that models including individual variables were used to test the contextual effects, for which it is relevant to take composition effects into account.

## RESULTS

The analytical part of our report consists of four sections. First, we described immigrants' economic position by country of origin, country of destination, and immigrant community. Second, we analyzed the extent to which the labor market outcomes of immigrants vary between origins and between destinations. Third, we tested our hypotheses by including theoretically informed variables in the analysis. Fourth, we translated our results back with a few concrete examples.

### DESCRIPTIVE ANALYSIS

For an initial assessment of macro effects on immigrants' labor force status, we present descriptive figures for one of our four outcomes: male employment. Figures for the other three outcomes are included in the Supplement. Table 1 presents the percentage of employed male immigrants by country of origin, country of destination, and immigrant community. Because such information could, of course, not be presented here for the more than 900 communities included in our data set, we present the figures for groups from five countries of origin: Germany, Italy, Morocco, Turkey, and the United Kingdom. To ensure reliable descriptive figures, we present only the percentage of employed individuals for communities with more than 500 respondents. It is important to emphasize that our subsequent multivariate analysis included communities with fewer respondents, as well as all the origin groups omitted in Table 1.

How much do employment rates differ from the perspective of the country of origin? Table 1 shows that 89.7 percent of all the male immigrants in our data set who were active in the labor market had a job (i.e., 10.3 percent unemployed). Of the five origin groups presented, immigrants born in Germany were clearly employed at above-average levels (94.3 percent), whereas those from Morocco had con-

<sup>2</sup> One drawback, however, is that the standard error of the time-constant destination variable (i.e., point system), in particular, is underestimated in this design. We therefore also analyzed models in which destinations are treated as time constant. These additional analyses are included in the Supplement.

**Table 1.** Male Immigrant Employment Rates in 18 Western Countries, 1980–2001

|                        | Country of Origin |       |         |        |      | All Groups<br>(mean) | Natives<br>(mean) |
|------------------------|-------------------|-------|---------|--------|------|----------------------|-------------------|
|                        | Germany           | Italy | Morocco | Turkey | UK   |                      |                   |
| Country of destination |                   |       |         |        |      |                      |                   |
| Australia              | .                 | 96.2  | .       | 87.2   | 95.4 | 93.8                 | 95.1              |
| Austria                | 97.0              | .     | .       | 87.2   | .    | 90.4                 | 95.9              |
| Belgium                | 94.5              | 85.9  | 67.4    | 66.7   | .    | 81.4                 | 94.7              |
| Canada                 | 93.2              | 93.2  | .       | .      | 95.1 | 91.4                 | 91.2              |
| Denmark                | .                 | .     | .       | .      | .    | 88.6                 | 94.6              |
| Finland                | .                 | .     | .       | .      | .    | 82.8                 | 89.1              |
| France                 | .                 | .     | 67.8    | .      | .    | 78.5                 | 91.8              |
| Germany                | n.a.              | 94.7  | .       | 89.4   | .    | 91.7                 | 94.8              |
| Greece                 | .                 | .     | .       | .      | .    | 92.8                 | 94.4              |
| Ireland                | .                 | 96.2  | .       | .      | 83.1 | 84.2                 | 89.2              |
| Italy                  | .                 | n.a.  | 71.8    | .      | .    | 71.3                 | 90.9              |
| Luxembourg             | 98.3              | 96.7  | .       | .      | .    | 97.5                 | 98.6              |
| Netherlands            | 94.3              | .     | 73.7    | 78.4   | 93.1 | 84.0                 | 96.8              |
| Portugal               | .                 | .     | .       | .      | .    | 94.6                 | 97.0              |
| Spain                  | .                 | .     | .       | .      | .    | 87.5                 | 88.6              |
| Sweden                 | .                 | .     | .       | .      | .    | 82.5                 | 93.2              |
| United Kingdom         | 91.1              | 92.1  | .       | .      | n.a. | 87.6                 | 92.0              |
| United States          | 97.1              | 95.5  | .       | .      | 96.8 | 94.7                 | 95.0              |
| Mean                   | 94.3              | 91.5  | 71.0    | 80.6   | 89.0 | 89.7                 | 94.4              |

*Note:* Figures on communities with fewer than 500 respondents not presented. Data show percent of active population in five selected origin groups. Men are 25–54 years of age.

siderably lower employment levels (71 percent). Moreover, in the two destination countries for which we had information on more than 500 respondents of both groups (Belgium and the Netherlands), the percentage of Germans employed was much higher than the percentage of Moroccans employed. These differences, which “travel” across destinations, suggest that characteristics of the countries of origin influence the employment of male immigrants.

There also were pronounced differences in immigrants' employment levels between destination countries. Particularly low employment levels were found in Italy, where only 71.3 percent of the immigrants in the labor market were employed. Relatively low employment levels among male immigrants also were observed in Belgium (81.4 percent) and Sweden (82.5 percent). A much higher percentage of the immigrant population in Luxembourg (97.5 percent), the United States (94.7 percent), and Portugal (94.6 percent) had a job. Comparing the experiences of two origin groups (Germans and Italians) that could be traced in two destinations with diverging employment levels (Belgium and Luxembourg) replicated the pat-

tern found for the total immigrant population: both German and Italian immigrants were more often unemployed in Belgium than in Luxembourg. In summary, this suggests that the country of destination influences the employment of male immigrants, irrespective of the country of origin.

Table 1 also provides some clues concerning the impact of communities. For instance, the employment figures of male Turks in Belgium (N = 2,116) and Germany (N = 1,936) are compared. In Belgium, only 66.7 percent of the Turkish immigrants in the labor market were employed, which was below the mean employment rate for Turkish immigrants in all destinations (80.6 percent), and also below the mean for all immigrants in Belgium (81.4 percent). In contrast, in Germany, 89.4 percent of the Turkish community had a job. This was higher than the average Turkish employment rate in all the destinations observed, and more than 30 percentage points higher than in Belgium. This difference exceeds the 10 percent overall difference in immigrants' employment levels between Belgium and Germany. Apparently, then, the specific situation of the Turkish com-

munity in Germany and Belgium determined their deviance from the pattern expected from general origin and destination effects.

### VARIANCE COMPONENTS

How much does the labor force participation and employment of immigrants differ between origin countries and between destination countries? Table 2 provides an answer to that question. It should be noted that the logistic distribution for the level-one residual implies a variance of  $(\pi^2 / 3) = 3.29$  (Snijders and Bosker 1999). We present the findings of two different random intercept models, both without the inclusion of explanatory variables: one in which destinations were treated as time invariant (1a) and one in which destinations varied over time (1b).

Our analysis shows that considerable variation exists between origins and between destinations. Because about 180 different origin groups and only 18 (Western) countries exist in our data set, the strong variation of immigrants' labor force status across receiving countries is quite remarkable. It appeared that for males, labor force activity varied more among destinations than among origins (Model 1a: 0.463 vs 0.288), whereas for females, at least in our data, conditions in the country of destination were less important than the characteristics of the country of origin (Model 1a: 0.132 vs 0.305). With respect to employment, we found that for females, employment chances were more affected by the situation in the receiving society than by the characteristics of the sending nation. For males, this was less straightforward. When countries of destination were treated as time invariant, employment chances were more affected by the country of origin than by the

country of destination. When destinations were varied over time, however, the employment chances of males differed more among destinations than among origins. This is most likely because employment chances changed considerably over time. In general, the variance among destinations increased with time-variant rather than time-invariant measures, but the difference between the two was larger with respect to employment than with respect to labor force activity. All in all, we found that for both male and female immigrants, labor force participation and employment chances clearly depend on their origin and destination.

### HYPOTHESIS TESTING

The results for the cross-classified multilevel logistic regression models of immigrants' economic incorporation are presented in Table 3. Again, separate analyses were conducted for males and females. We estimated models without individual-level variables to examine the compositional hypotheses (Models 1 and 3) and models that included individual-level variables to test the contextual hypotheses (Models 2 and 4).<sup>3</sup> With regard to compositional hypotheses, we did not find a predicted positive impact of host

<sup>3</sup> It should be noted that we conducted additional analyses to examine the sensitivity of our findings. We obtained similar conclusions regarding our hypotheses when analyzing a subset (i.e., excluding Finland and all communities with fewer than 50 respondents), when omitting certain surveys (i.e., migration surveys), and when using a design in which destinations are treated as time constant. These additional analyses are presented in the Supplement.

**Table 2.** Variance Components of Immigrants' Economic Incorporation in 18 Western Countries, 1980–2001

|                            | Labor Force Participation |               | Employment    |               |
|----------------------------|---------------------------|---------------|---------------|---------------|
|                            | Origin                    | Destination   | Origin        | Destination   |
| <b>Males</b>               |                           |               |               |               |
| Destination time-invariant | 0.288 (0.045)             | 0.463 (0.184) | 0.427 (0.063) | 0.378 (0.147) |
| Destination per year       | 0.292 (0.045)             | 0.445 (0.071) | 0.359 (0.059) | 0.510 (0.072) |
| <b>Females</b>             |                           |               |               |               |
| Destination time-invariant | 0.305 (0.043)             | 0.132 (0.049) | 0.276 (0.044) | 0.305 (0.120) |
| Destination per year       | 0.295 (0.042)             | 0.158 (0.024) | 0.264 (0.042) | 0.389 (0.059) |

*Note:* N = 347,991. Standard errors appear in parentheses. Results obtained from cross-classified multilevel logistic regression models without explanatory variables.

**Table 3.** Determinants of Immigrants' Economic Incorporation in 18 Western Countries, 1980–2001

|  | Labor Force Activity |         |         |         | Employment |         |         |         |
|--|----------------------|---------|---------|---------|------------|---------|---------|---------|
|  | Males                |         | Females |         | Males      |         | Females |         |
|  | Model 1              | Model 2 | Model 3 | Model 4 | Model 1    | Model 2 | Model 3 | Model 4 |
| Constant   | -3.265               | -2.516  | -1.659  | -.491   | 3.319      | 2.567   | 3.225   | 1.554   |
| Destination                                      |                      |         |         |         |            |         |         |         |
| Point system                                     | -.340                | -.436*  | -.030   | .150    | .185       | -.105   | .112    | .074    |
| Government left-wing parties                     | .080**               | .089**  | .033**  | .024    | .068**     | .067**  | .097**  | .096**  |
| Origin   |                      |         |         |         |            |         |         |         |
| Political suppression                            | -.054**              | -.030** | -.013*  | .000    | -.044**    | -.044** | -.072** | -.050** |
| Predominantly Christian origin                   | .384**               | .453**  | .240**  | .259**  | .168*      | .129    | .255**  | .240**  |
| Labor-force activity, females                    |                      |         | .010**  | .008**  |            |         |         |         |
| Community  |                      |         |         |         |            |         |         |         |
| Gini ratio (origin/destination)                  | -.361**              | -.454** | .031    | .057    | -.586**    | -.359** | -.828** | -.601** |
| GDP/capita ratio (origin/destination)            | -.440**              | -.432** | -.129** | -.171** | -.304**    | -.269** | -.449** | -.411** |
| Geographic distance/1000 km                      | -.006                | -.011** | -.008** | -.010** | .030**     | .024**  | .025**  | .022**  |
| Official language                                | -.089                | -.076   | .015    | .052*   | .167**     | .144**  | .018    | .031    |
| Relative group size, %                           | .032**               | .022*   | .065**  | .054**  | .018       | .008    | .039**  | .023    |
| Mean educational level, group                    | -.023                | -.163** | .351**  | -.070*  | .455**     | .204**  | .392**  | .188*   |
| Micro-level control variables                    |                      |         |         |         |            |         |         |         |
| Age  |                      | -.021** |         | -.016** |            | .007**  |         | .013**  |
| Duration of stay                                 |                      |         |         |         |            |         |         |         |
| 0–5 years  |                      |         | ref.    | ref.    |            | ref.    |         | ref.    |
| 6–10 years                                       |                      |         | .735**  | .384**  |            | .360**  |         | .437**  |
| 10+ years  |                      |         | .712**  | .591**  |            | .453**  |         | .630**  |
| Education  |                      |         |         |         |            |         |         |         |
| Low  |                      |         | ref.    | ref.    |            | ref.    |         | ref.    |
| Middle   |                      |         | .484**  | .481**  |            | .333**  |         | .307**  |
| High   |                      |         | .645**  | .622**  |            | .819**  |         | .710**  |
| Language proficiency                             |                      |         |         |         |            |         |         |         |
| Not fluent                                       |                      |         | ref.    | ref.    |            | ref.    |         | ref.    |
| Fluent   |                      |         | .250**  | .105**  |            | .301**  |         | .323**  |
| Unknown  |                      |         | -.335** | .009    |            | -.042   |         | .409**  |
| Macro-level control variables                    |                      |         |         |         |            |         |         |         |
| Migration survey                                 | .316**               | -.264   | -.367** | -.654** | -.349**    | -.619** | .273**  | .417**  |
| (vs. general population survey)                  |                      |         |         |         |            |         |         |         |
| Labor-force activity (%), native reference group | .070**               | .067**  | .018**  | .011**  |            |         |         |         |
| Unemployment (%), native reference group         |                      |         |         |         | -.138**    | -.121** | -.078** | -.074** |
| Observations, <i>n</i>                           |                      |         |         |         |            |         |         |         |
| Destination year                                 | 129                  | 129     | 128     | 128     | 129        | 129     | 128     | 128     |
| Origin   | 187                  | 187     | 184     | 184     | 183        | 183     | 178     | 178     |
| Community  | 938                  | 938     | 919     | 919     | 922        | 922     | 873     | 873     |
| Individual                                       | 175,403              | 175,403 | 172,588 | 172,588 | 159,368    | 159,368 | 109,438 | 109,438 |

Note: GDP = gross domestic product.

\*  $p < .05$ , \*\*  $p < .01$  (two-tailed tests).

countries that have a point system. Measured in terms of labor force activity and employment, these countries (Australia and Canada) do not seem to select more employable immigrants to their economy. Earlier studies showed that, as compared with immigrants in the United States,

immigrants in Australia and Canada had higher earnings than the native population (Borjas 1988; Reitz 1998).

Higher levels of political suppression in the sending country were associated with lower levels of immigrants' labor force activity and

employment. The relation was significant for both males (Model 1) and females (Model 3). This finding confirmed the idea that people who move for noneconomic reasons are less favorably selected for the labor market than those who move for economic reasons.

As predicted, we found that the higher the income inequality in the country of origin relative to that in the country of destination, the less often immigrants participated in the labor market and the less often they were employed. The exception to this pattern was the labor force activity of females. In general, however, this confirmed the idea that in countries with a more dispersed income distribution, the less talented are the most likely to emigrate, and they are most likely to migrate to countries with less income inequality. Studies of multiple immigrant groups in the United States have found no significant effect of the inequality ratio on the earnings of males (Borjas 1987), whereas the predicted negative relation was supported for females (Cobb-Clark 1993). A negative relation also was observed in Borjas' (1988) cross-national analysis of immigrant earnings in Australia, Canada, and the United States.

Surprisingly, we did not find that people who moved from more economically developed countries to less wealthy nations were more likely to be included in the labor market. On the contrary, the higher the GDP per capita in the sending nation relative to that in the host society, the more often immigrants were outside the labor market, and if they were in the labor market, they were more often unemployed.<sup>4</sup> This clearly contradicts the idea that people from relatively advanced economies are more favorably selected in terms of observable skills and the transferability of their skills. Earlier studies found that the per capita income in the origin country had a positive effect on the occupational earnings and wages of male and female immigrants in the United States (Borjas 1987; Cobb-Clark 1993; Jasso and Rosenzweig 1990), and on the earnings of male immigrants in three destinations: Australia, Canada, and the United States (Borjas 1988).

The geographic distance between origin and destination had a differential effect on immigrants' labor market position. In accordance with our hypothesis, a greater distance was associated with higher odds of an immigrant being employed. This confirmed the notion that migrants who have moved a long distance are more favorably selected and, because of the likelihood of permanent residence, have more incentives to invest in human capital skills. However, we found the opposite pattern with respect to labor force activity. Migrants, especially females, who had moved a longer distance were more likely to remain outside the labor market. Borjas (1987) and Cobb-Clark (1993) found no effect or even a negative effect of geographic distance on the earnings of immigrants in the United States. Jasso and Rosenzweig (1990) found a positive effect of distance on the occupational earnings and wages of immigrants in the United States.

We have found little support for the idea that exposure to the destination language before migration enhances labor market opportunities. One exception was the position of male migrants who had moved from a country in which the destination language was official. They had a greater chance of being employed than males who were not exposed to the host language. Language exposure did not affect the employment chances of females, however, nor did it have any effect at all on labor market participation. Earlier research in the United States has shown that immigrants from countries in which English is an official language performed better in the labor market (Borjas 1987; Jasso and Rosenzweig 1990).

To examine contextual effects, we turn to Models 2 and 4. The presence of left wing parties in the government during the 10 years before the survey year had a positive effect on the economic position of immigrants, except for labor force participation of females. In general, then, the longer left wing parties have been in the government of a specific country, the more immigrants in that country are active in the labor market, and the more often they are employed. This confirmed the suggestion that left wing parties take more measures to include immigrants in the labor market than other parties.

Our analysis further showed that immigrants from predominantly Christian countries participated more often in the labor market and were

<sup>4</sup> Note that a negative effect of the GDP ratio remains after exclusion of a possibly associated factor: the average education level of the immigrant community (analysis not presented here).

more often employed than immigrants from non-Christian countries, with the exception of the employment of males. This general pattern confirmed the idea of social distance, which was presumed to be lower toward Christian groups than toward non-Christian groups. Correspondingly, members of a predominantly Christian group experienced less discrimination in the labor market.

Another context effect relates to the labor force activity among females. The labor force activity of females in the country of origin had a positive effect on their labor force activity in the destination country, whatever that destination might be. This finding confirmed the suggestion that the cultural patterns of female labor force participation in the origin country are carried over to the destination country.

With respect to the relative size of immigrant groups, we formulated two opposing hypotheses. According to the ethnic threat hypothesis, larger groups experience more discrimination and, in turn, perform less well in the labor market. Alternatively, it was suggested that larger groups increase economic opportunities for their members, predicting a positive relation instead. Our analysis did not support the former suggestion: members of larger groups did not perform less well economically. We did find some support for the latter suggestion: members of larger immigrant groups had a higher probability of being active in the labor market. Group size had no effect on employment chances, however.

A final contextual notion pertains to the education level of the immigrant community. It has been suggested that members of groups with less education experience more discrimination and, consequently, are more often excluded from the labor market. With respect to labor force activity, we found the opposite pattern: lower education of an immigrant community was associated with higher levels of labor market activity among the members of that group. However, in accordance with our hypothesis, we found that the higher the education level of an immigrant group, the more likely the members of that group were to have a job.

### ***SIMULATING AND ILLUSTRATING THE RESULTS***

We have shown that composition and context can explain, to a certain extent, the impact of the

country of origin, the country of destination, and the immigrant community on the labor force status of immigrants. To illustrate how these processes work, we have simulated our findings and give concrete examples, focusing on the risk of unemployment for male immigrants.

To begin with, the importance of composition effects, as presented in Table 3, Model 1 (employment) should be considered. Besides the unexpected finding of the point system and the GDP ratio, four selection factors play a role: political suppression, Gini ratio, geographic distance, and official language. Groups can be distinguished that are favorably selected in all these dimensions from groups that are unfavorably selected. According to our estimates of Model 1 (Table 3), and using the range of the variables among the male sample (presented in the Supplement), the difference in the predicted chances for employment between these groups could be as high as 55 percent.<sup>5</sup> In a similar vein, the maximum difference between groups could be computed on the grounds of the two significant context variables found in Model 2: left wing parties in the government and mean education level. The difference in the likelihood of employment could amount to 23 percent.<sup>6</sup> However, in reality, groups with such extreme properties in all dimensions are very rare.

To illustrate more realistically the magnitude of selection and context effects, we used averages to distinguish between groups with favorable or unfavorable selection and social context. The results presented in Table 4 again refer to the unemployment chances of male immigrants. An example is the role of selection mechanisms. Of the 922 immigrant communities in our male sample, 27 were favorably selected. That is, the immigrants who moved from coun-

<sup>5</sup> The percentage is computed as follows:  $e^{-0.044 \times 2 + -.586 \times .057 + .030 \times 19.84 + 1 \times .167} / (e^{-0.044 \times 2 + -.586 \times .057 + .030 \times 19.84 + 1 \times .167} + 1) - e^{-0.044 \times 14 + -.586 \times 2.57 + .030 \times 0.17 + 0 \times .167} / (e^{-0.044 \times 14 + -.586 \times 2.57 + .030 \times 0.17 + 0 \times .167} + 1)$ .

<sup>6</sup> From this example, it should not be concluded that selection effects in general are more important than context effects for the economic status of immigrants. With regard to female labor force participation, for instance, we found three significant context effects, which were more important than the one selection effect.



**Table 4.** Composition and Context Effects on Unemployment among Male Immigrants

| Composition           | Favorable               | Unfavorable                | Context                 | Favorable                | Unfavorable                |
|-----------------------|-------------------------|----------------------------|-------------------------|--------------------------|----------------------------|
| Political suppression | Low                     | High                       | Left-wing parties       | High                     | Low                        |
| Gini ratio            | Low                     | High                       | Mean                    | High                     | Low                        |
| Geographic distance   | High                    | Low                        | educational level group |                          |                            |
| Official language     | Yes                     | No                         |                         |                          |                            |
| Groups (N)            | 27                      | 97                         |                         | 171                      | 232                        |
| Mean % employed       | 93%                     | 74%                        |                         | 90%                      | 86%                        |
| Examples (% employed) | US in the UK (97%)      | Albanians in Austria (81%) |                         | Germans in Sweden (96%)  | Mexicans in the US (92%)   |
|                       | UK in Australia (95%)   | Poles in Belgium (75%)     |                         | Germans in France (91%)  | Vietnamese in Canada (86%) |
|                       | Indians in the UK (89%) | Iraqi in Sweden (56%)      |                         | Italians in Greece (85%) | Pakistani in the UK (78%)  |

Note: Average scores used to distinguish between "low" (i.e., below average) and "high" (i.e., above average).

tries with little political suppression (i.e., below the mean of 8.33), had a low Gini ratio (below 1.16), had a greater distance between origin and destination (more than 5.57 thousand kilometers), and had an official language in the destination country resembling that in their country of origin. There were 97 communities unfavorably selected in all four dimensions, and 798 groups that scored favorably in some dimensions and unfavorably in others. Table 4 shows that among the 27 favorably selected communities, the mean percentage employed was 93 percent (i.e., 7 percent unemployed) and in the 97 unfavorably selected communities the mean percentage employed was 74 percent (i.e., 26 percent unemployed).<sup>7</sup>

Table 4 also presents concrete examples of communities with a favorable or unfavorable selection or social context. We illustrate our findings for selection effects with an example of a favorably selected group: the British immigrant community in Australia. It is interesting to contrast this group with Iraqi immigrants who have settled in Sweden. The British immigrants already had a head start in leaving a

country with the least political suppression (Score 2), which indicates no political reasons for migrating, whereas the Iraqi immigrants came from a very suppressive society (Score 14), and presumably many were political refugees. In addition, the Gini ratio for the British immigrants in Australia was 1.03, but for immigrants from the unequally distributed Iraq who moved to the more equally distributed Sweden, it was 1.52. Furthermore, the British immigrants in Australia had traveled over a far greater distance (16,970 meters) than the Iraqis in Sweden (3,480 meters). Finally, the British community in Australia was exposed to the official language before migration, whereas the Iraqi immigrants in Sweden were not. All in all, this resulted in employment rates of 95 percent among the favorably selected group of British immigrants in Australia and 56 percent among the unfavorably selected group of Iraqi immigrants in Sweden. This difference of 39 percentage points comes very close to what would be expected from imputing the values for both groups in Model 1 (i.e., 30 percent).

## CONCLUSIONS AND DISCUSSION

The purpose of this article was to examine macro-level effects on immigrants' labor force participation and employment. It is suggested in the literature that the labor market performance of immigrants depends not only on their individual characteristics, but also on their country of origin and their country of destination. Such macro differences are a core topic of econom-

<sup>7</sup> The differences are replicated when contrasted with the unemployment level of natives. The unemployment level of favorably selected communities was 6 percent above that of the native population in the destination country. The unemployment level of unfavorably selected communities was 25 percent above that of the native population.

ics and sociology, but they also are relevant from a policy perspective.

We argued that two research designs need combining to provide a more comprehensive macro-level perspective on the economic incorporation of immigrants. Instead of relying on observations of groups from multiple origins in a single destination, or of a single-origin group in multiple destinations, we applied a double comparative design in which multiple origins were simultaneously observed in multiple destinations. This double comparative design provides a more representative view of origin and destination effects, and also the possibility of examining origin-by-destination combinations ("communities"). We have tried to improve on earlier studies that moved toward adopting the double comparative design by studying 18 Western countries (instead of a few), using cross-classified multilevel regression techniques (instead of ordinary regression models), and systematically testing theoretically informed macro-level variables (instead of comparing names of countries).

From the human capital theory, we derived compositional hypotheses predicting that macro differences can be attributed to the selection of both observed and unobserved human capital skills. From discrimination theories, we deduced

contextual hypotheses stating that macro differences in labor market performance can be ascribed to in-group preferences and out-group prejudices.

Table 5 provides a summary of our findings. These findings can be discussed from several perspectives.

ONE. We may ask: Is it fruitful to distinguish among, and study simultaneously, the effects of origins, destinations, and communities? This question can unequivocally be answered positively. Labor market performance and employment vary considerably between countries of origin and countries of destination. In addition, both before and after taking individual characteristics into account, we saw that characteristics of origins, destinations, and communities influence immigrants' labor market performance. Furthermore, whereas some of the findings obtained from single comparative designs were replicated in our study, our double comparative study also questioned the generalizability of other well-known relations.

TWO. To what extent can macro-level differences be interpreted in terms of skill selection and discrimination? We found support for sev-

**Table 5.** Summary of Findings

|                                 | Labor Force Activity |         | Employment |         |
|---------------------------------|----------------------|---------|------------|---------|
|                                 | Males                | Females | Males      | Females |
| Destination effects             |                      |         |            |         |
| Point system                    | 0                    | 0       | 0          | 0       |
| Left-wing parties in government | +                    | 0       | +          | +       |
| Origin effects                  |                      |         |            |         |
| Political suppression           | +                    | +       | +          | +       |
| Christian origin                | +                    | +       | 0          | +       |
| Labor-force activity females    | n.a.                 | +       | n.a.       | n.a.    |
| Community effects               |                      |         |            |         |
| Income inequality ratio         | +                    | 0       | +          | +       |
| Economic development ratio      | 0                    | 0       | 0          | 0       |
| Geographic distance             | 0                    | 0       | +          | +       |
| Language exposure               | 0                    | 0       | +          | 0       |
| Relative group size             |                      |         |            |         |
| Ethnic threat                   | 0                    | 0       | 0          | 0       |
| Ethnic capital                  | +                    | +       | 0          | 0       |
| Socioeconomic background        | 0                    | 0       | +          | +       |

*Note:* Results refer to models (a) without individual-level variables with respect to hypotheses on composition effects and (b) with individual-level variables with regard to context effects. + = hypothesis confirmed; 0 = hypothesis not supported.

eral skill selection hypotheses. Politically motivated immigrants were expected to be less favorably selected than economically motivated immigrants. Indeed, immigrants from countries with politically suppressive regimes participate less often in the labor market, and when they do, they are less often employed. In addition, migrants who have moved from societies with a dispersed income distribution to more egalitarian nations are more often inactive and more often unemployed. This confirms the idea that the less talented have more incentives to move from unequal societies to more equal societies, whereas more productive persons follow the opposite route. It was further hypothesized that those moving over greater distances are more favorably selected and have more incentives to invest in specific human capital skills. In fact, longer distances appear to increase the chances that both male and female immigrants will be employed.

We also found support for contextual hypotheses about discrimination. With regard to countries of destination, we examined the idea that left wing governments have a more positive attitude toward immigrants, resulting in measures that facilitate incorporation of immigrants into the labor market. Indeed, in societies with a strong presence of left wing parties in the government, immigrants are more active in the labor market, and when they are active, they are more likely to be employed. We also found that those from predominantly Christian nations have a clear advantage over those from non-Christian societies. This underscores the idea that in the host societies of our study, which all were predominantly Christian, native discrimination tended to be stronger against non-Christian groups, clearly affecting the labor market positions of the members of those groups.

In addition, our research showed that the cultural patterns for the labor force activity of females in the origin country are carried over to the destination country. Exclusion of women from the labor market in the country of origin therefore plays an important role in the labor force participation of female immigrants in their country of destination. Furthermore, we found that the relative size of the immigrant group is positively related to immigrants' labor force participation. This supports the assumption that immigrants profit from the ethnic capital avail-

able in their community, which increases with group size.

Finally, immigrants from communities with higher aggregate levels of education have better chances for employment. This confirms the idea that these groups are less often discriminated against than groups of lower status. In summary, it seems fruitful to assume that the impact of origins, destinations, and communities can be interpreted in terms of both skill selection and discrimination.

THREE. Which hypotheses received no empirical support? Because we tested hypotheses for both labor force participation and employment and for both males and females, there are four empirical tests for each hypothesis, except for the specific hypothesis on female labor force participation. We found two clear rejections of hypotheses on skill selection. Contrary to what we expected, immigrants in countries with a point system did not perform better in the labor market. A possible explanation for the absence of any effect from point systems is suggested in the literature. According to Borjas (1999:59), "the point system works not by attracting more skilled immigrants from each source country, but by changing the national origin mix of the immigrant population." If this is the case, we would not expect to find an effect from immigration policy because, in our study, the impact of destinations was examined independently of the influence from the country of origin.

Another possibility is that countries other than Australia and Canada have adopted similar selective policies. For example, in the 1940s, the United States signed labor contracts with the Mexican government to import agricultural workers (Galarza 1964). Similar labor contracts were signed by western European countries with Mediterranean countries in the 1960s and 1970s (Fassman and Münz 1994). As a consequence, many migrants from these countries were employed immediately after their migration. However, these policies were applied only to specific origin groups (e.g., Mexicans), a specific sex (males), and for specific periods (e.g., the 1960s), and were therefore unlikely to be as selective as those of countries with a point system.

A third explanation for the absence of an effect from the point system is that illegal migration may be less widespread in Australia and

Canada, assuming that illegal immigrants are in the data set, and that illegal immigrants have higher participation rates and lower unemployment figures than documented immigrants. Unfortunately, information on legal status was not available in our data set, and aggregate estimates were available for only a few countries. Nevertheless, illegal entry in any country probably is more likely to happen via land than via sea or air. The results concerning the point system may therefore reflect differential populations of undocumented migrants.<sup>8</sup>

We also found no empirical support for the idea that immigrants from advanced economies have higher education qualifications and an edge over migrants from poorer countries with regard to the transferability of their qualifications. On the contrary, our analysis showed that immigrants from poorer nations participated more often in the labor market and were more often employed than those who migrated to the same destination from more advanced economies. However, the negative impact of the GDP ratio still could be interpreted in a human capital framework because migrants from poorer nations have more to gain from permanent settlement and may, in turn, invest more in human capital.

Only one hypothesis within the discrimination framework was clearly rejected. According to the ethnic threat hypothesis, sizable immigrant groups are perceived as a threat to the native population, experience more discrimination, and as a result, do less well in the labor market. However, our analysis did not find a negative relation between group size and economic integration. Instead, the relative size of an immigrant group had a positive effect on

labor force participation. This finding concurs with the alternative ethnic capital idea, according to which, the presence of co-ethnics can be beneficial to immigrants' economic opportunities.

FOUR. Were the results different for our two dependent variables and for men and women? Hypotheses proposed in the literature failed to explain one particular outcome: the labor force participation of immigrant women. Remarkably, only one hypothesis on skill selection was supported for this group (political suppression), whereas we found evidence for three discrimination hypotheses (Christian origin, labor force activity in the country of origin, group size). This suggests that contextual effects and selection effects in particular (at least those examined in our study), are not as important for female labor force participation as they are for male labor force participation and male and female unemployment. However, it should be emphasized that the labor force participation of women is a particularly complex phenomenon, which also depends on a number of factors not considered here, such as the presence of young children, marital status, and the husband's economic success (Leibowitz and Klerman 1995). Because our findings on women's labor force participation were probably sensitive to the many variables not included in our analysis, the failure to find support for a number of hypotheses concerning this particular outcome does not call into question the more general hypotheses on skill selection and social context.

FIVE. Are our results different from previous findings? Our study found little support for a number of hypotheses on skill selection (e.g., point system, economic development, language exposure) that were confirmed in earlier studies (Borjas 1987, 1988; Cobb-Clark 1993; Jasso and Rosenzweig 1990). One explanation for this is that these earlier studies examined earnings as a measure of economic incorporation, whereas we relied on labor force status. Another reason could be that these studies did not use a double comparative design or that they omitted relevant contextual factors. For instance, they found higher earnings among immigrants from relatively advanced nations, which may, according to our study, be attributable to their Christian

<sup>8</sup> However, this explanation is less plausible because undocumented immigrants probably are restricted to specific groups (i.e., communities). For instance, the Immigration and Naturalization Service of the United States (1996) reported that of the estimated 5 million illegal immigrants in 1996, 2.7 million (54 percent) were from Mexico. This would imply that the estimated economic integration of the members of this community may be biased (but in an unknown direction and to an unknown extent), but this need not affect the estimate of the destination effect, which is computed for all groups in a country.

origin, which has a consistently positive impact on labor market performance. These suggestions call for a double comparative study of immigrants' earnings that includes both compositional and contextual factors. More generally, further research is encouraged to introduce this methodologic and substantive approach in other fields of ethnic and migration studies. For reasons of both theory and policy, it would be interesting to know the extent to which ethnic intermarriage, political participation, and residential segregation depend on the country of origin, the country of destination, and the immigrant community.

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