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# A COMPARATIVE PERSPECTIVE ON INTERMARRIAGE: EXPLAINING DIFFERENCES AMONG NATIONAL-ORIGIN GROUPS IN THE UNITED STATES\*

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*Little is known about the validity of group-level theories of ethnic intermarriage despite the fact that such theories are often invoked in explaining why certain ethnic groups are “closed,” whereas others are relatively “open.” We develop a comparative perspective by analyzing the marriage choices of 94 national-origin groups in the United States, using pooled data from the Current Population Surveys, 1994–2006, and multilevel models in which individual and contextual determinants of intermarriage are included simultaneously. Our analyses show large differences in endogamy across groups. After taking compositional effects into account, we find that both structural and cultural group-level factors have significant effects on endogamy. Cultural explanations (which focus on the role of norms and preferences) play a more important role than structural explanations (which focus on meeting and mating opportunities). Our results reinforce the common but untested interpretation of endogamy in terms of group boundaries.*

Intermarriage has long been a central issue in the literature on ethnic relations (Alba and Nee 2003; Hwang, Saenz, and Aguirre 1997; Kalmijn 1998; Pagnini and Morgan 1990; Qian and Lichter 2007). First, it has been argued that intermarriage is an attractive behavioral indicator of the degree to which different groups in society accept each other as equals. Second, intermarriage is a form of interaction between groups because it connects not only the two spouses but also the social networks to which they belong. Third, intermarriage may reduce ethnic identities and prejudice in the long term because the children of mixed marriages are less likely to identify themselves with a single group (Waters 1990; Xie and Goyette 1997). Fourth, high rates of intermarriage make it more difficult to delineate the boundaries of ethnic groups, thereby weakening the salience of ethnic definitions in society (Davis 1991).

Much has been written about the trends in intermarriage and the individual determinants of intermarriage (Kalmijn 1998). In addition, a rich literature exists that describes the marriage choices of large ethnic and national-origin groups, both in the United States and elsewhere. For example, many studies on ethnic intermarriage in the United States have been done regarding Hispanics (Anderson and Saenz 1994; Gilbertson, Fitzpatrick, and Lijun 1996; Qian and Cobas 2004), Asians (Hwang et al. 1997; Lee and Fernandez 1998; Lee and Yamanaka 1990; Qian, Blair, and Ruf 2001; Sung 1990), and blacks (Batson, Qian, and Lichter 2006).

Although the literature is rich in describing the characteristics and conditions of specific groups, few comparative studies have been done, and these have focused on a relatively small number of groups. Some authors compare subgroups within larger racial/ethnic groups, such as Asian American groups (Hwang et al. 1997; Qian et al. 2001), Hispanic American groups (Qian and Cobas 2004), black American groups (Batson et al. 2006), or European groups in the more distant past (Kalmijn 1993; Pagnini and Morgan 1990). There

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is also research comparing the five main racial/ethnic groups in the United States: namely, blacks, Asians, Hispanics, American Indians, and whites (Qian and Lichter 2007). Because of the small number of cases at the contextual level and the homogeneity of the sample of groups considered, these comparative studies have so far not been able to provide strong statistical tests of contextual explanations of group differences in intermarriage.

In this article, we use pooled data from the Current Population Survey to compare the marriage choices of almost 100 national-origin groups in the United States. Our analysis combines individual and contextual determinants of intermarriage in a multivariate multilevel analysis. We test cultural and structural explanations of group differences in intermarriage. Structural forces are defined as factors that shape the opportunities that people have on the marriage market to marry inside or outside the group (Blau and Schwartz 1984). Cultural forces are defined as the norms, values, and preferences that people have regarding interaction and marriage with members of their own group (Kalmijn 1998). In testing contextual explanations, we control for important individual determinants of intermarriage, thereby taking into account that observed differences between groups can be partly compositional in nature.

The focus is on the children of immigrants (the second generation) and immigrants who entered the country before age 16. The age criterion is applied because immigrants who arrived at a later age may have married abroad (Hwang and Saenz 1990). We use the term “children of immigrants” to refer to these two generations. We examine which type of partner people choose, distinguishing among (a) marrying into the native stock: that is, with American-born persons of (two) American-born parents; (b) marrying a first- or second-generation person of the same national origin (i.e., endogamy); and (c) marrying a first- or second-generation person of another national origin (i.e., mixing).

The United States provides a unique setting to examine group differences in intermarriage. The many national-origin groups in the United States differ in several important ways. Some groups are numerically large (e.g., Mexicans), but others are small (Costa Ricans). Some groups are predominantly white (Canadians), whereas other groups are predominantly black (Haitians). All religions are represented, including Muslim (Iranians), Catholic (Italians), Orthodox (Greeks), Jewish (Israelis), and Protestant groups (Swedes). All continents are represented as well, although immigrants from Africa constitute a relatively small number. Furthermore, we analyze old immigrant groups (such as English), new immigrant groups (such as Italians), and recent groups (such as Mexicans and Asians). Recent cohorts of the older groups, however, may not behave in the same way as these groups did when they experienced their immigration peak (Alba and Nee 2003).

Our conceptualization of intermarriage follows a tradition of earlier work on the marriage patterns of national-origin groups in the United States (Landale and Tolnay 1993; Pagnini and Morgan 1990; Sassler 1997). A disadvantage of this approach is that all marriages of the children of immigrants into the native stock are regarded as exogamous. Some of these marriages may be with third-generation persons who have the same national origin. Because the Current Population Surveys, like virtually all other large-scale representative data, contain no information on the country of birth of grandparents, it is not possible to classify these marriages as endogamous. This limitation may not be problematic because of the strong effect of generational status on ethnic identity (Alba 1990). In other words, children of immigrants who marry third-generation persons (of the same origin) marry further away from the origin group than if they marry first- or second-generation persons (of the same origin). To check the sensitivity of the regression results for this definition, we estimate an additional model in which we refine our measure of intermarriage using questions on race and Hispanic origin.

Like earlier research, we define groups on the basis of countries (Pagnini and Morgan 1990). In many cases, national-origin groups can be equated with ethnic groups, but national-origin groups may also encompass diverse ethnic groups. For example,

Yugoslavians are treated as a single group, but this group includes several underlying ethnic groups based on combinations of religious affiliation and regional heritage. With large-scale, nationally representative data, it is generally impossible to make such detailed distinctions. Throughout this article, we refer to *national-origin* groups and not to *ethnic* groups. Moreover, we approach the nonequivalence of ethnicity and national origin empirically by including a measure of ethnic heterogeneity in our models (Alesina et al. 2003).

## THEORETICAL BACKGROUND

Inter-marriage is often explained in terms of three general notions: individual preferences to marry within or outside the group, structural opportunities to meet members of the own group, and the influence of third parties on marriage behavior (Kalmijn 1998). These explanations apply to all dimensions of inter-marriage and are also relevant for inter-marriage with respect to national origins. For example, members of different national-origin groups may have different norms and values that form a barrier to inter-marriage (individual preferences), they may live in homogeneous neighborhoods (structural opportunities), and the church to which the members of a group belong may oppose out-marriage (third-party influence).

In this article, we use a twofold theoretical distinction: *cultural* arguments that relate to the norms, values, and preferences that people have regarding interaction and marriage with members of other groups; and *structural* arguments that address the opportunities that people have to marry inside or outside the group. Individual preferences and third-party influences are both considered cultural determinants, since both relate to preferences (of either the individual or third parties). Although the distinction between cultural and structural effects is theoretically meaningful, in practice, indicators for either of the two approaches will sometimes include elements of the other. For example, the size of a group in a neighborhood is a structural factor, but where people live is also a choice that people make, and in this sense, preferences will come into play.

We consider not only the odds of marrying within the origin group rather than into the native stock but also the odds of marrying with another national-origin group (*mixing*) rather than into the native stock. In some cases, effects of contextual factors are expected to be similar for mixing and endogamy. Contextual determinants that make marrying within the group less likely can also make marrying with other groups less likely: these are factors that primarily increase the chances of marrying into the native stock. In other cases, the effects can be different. For example, some forces primarily increase the chances of marrying with another national-origin group (e.g., the presence of other, linguistically similar groups in a state).

### Cultural Determinants

Third-party influences on marital choices are a key cultural influence (Kalmijn 1998). The degree to which parents and other family members are involved in the partner-selection process varies from country to country. In India, Pakistan, and Saudi Arabia, for example, people marry very young, and parents often have an important role in selecting marriage candidates for their children, particularly for their daughters (Esveldt and Schoorl 1998; Goode 1963). It is generally assumed that parents have an interest in endogamous marriages of their children. Exogamy may make relationships with parents-in-law more difficult and may increase the physical distance between adult children and parents. A contextual indicator of parental interference is a tradition of very early marriage in the country of origin. Early marriage customs are related to the practice of arranged marriages, and although traditional U.S. customs do not involve arranged marriages, the underlying tendency of migrant parents to interfere in the choice of a spouse for their children will probably be transferred to the United States. We therefore would expect that endogamy is more likely in groups that have a tradition of early marriage.

The religious orientation of national-origin groups can also provide a cultural barrier to intermarriage. Religion is a core element of culture because it is associated with values, beliefs, and practices. Research has shown that religion plays a major role in marital choices (Lehrer 1998; Sherkat 2004). As a mainly Protestant-Catholic country, the United States has groups of various religious origins, including Muslim, Hindu, Buddhist, and Eastern/Greek/Oriental Orthodox (hereafter, simply Orthodox). A different religion may make the native American stock less accepting of a group and may make it less attractive for that group to marry with the native stock.

Another cultural aspect of national-origin groups that could affect intermarriage is language origin (Hwang et al. 1997; Stevens and Swicegood 1987). Although young immigrants (i.e., those who arrived before age 16) and second-generation immigrants from non-English-speaking countries speak English very well (Stevens 1999), they also use their mother tongue (Portes and Rumbaut 1996). As a result, children of immigrants from these origins may prefer a spouse who speaks the same non-English mother tongue even though they themselves speak English. In addition, language similarity will make it easier for people within the networks of the two spouses to communicate with each other, especially for the older members of this network, many of whom may not speak English well.

Group differences in intermarriage can also be linked to the international orientation of the home country. Some countries are strongly focused on their own nation, exemplified by a nationally oriented economy, culture, technology, and governance. By contrast, other countries participate more strongly in the process of globalization, thereby downplaying the importance of national boundaries. Naturally, immigrants who move to the United States already express this international orientation. Nevertheless, national-origin groups differ in how they were socialized in an international worldview, and we assume that such an outlook is transmitted to their children. We expect that the more globalized the orientation of the sending country, the less endogamous the group will be. More globalized groups may also be less likely to mix with other groups because globalization in part also reflects an orientation toward Anglo culture. Hence, the native stock will probably be the most likely choice for such groups.

### **Structural Determinants**

The most-often noted structural determinants of intermarriage are the size and residential segregation of a national-origin group (Harris and Ono 2005; Lichter et al. 2007; Okamoto 2007). The size of an immigrant community influences people's daily opportunities of meeting members of their own group (Blau and Schwartz 1984). Because members of larger groups more often meet group members, members of large groups are more likely to marry endogamously. Although groups vary in size, regional variation also exists (Lieberson and Waters 1988). In some U.S. states, a certain group is represented more strongly than in another state. Hence, what matters is the relative number of group members in the state of residence. We will use a measure that pertains to the state level and not to smaller geographical units, such as counties or census tracts. We recognize that there will be an association between residential segregation at the county or tract level and intermarriage, but this association may also be due to intermarried couples moving out of ethnic enclaves.

The sex ratio is another structural factor that may affect intermarriage (Anderson and Saenz 1994; Hwang et al. 1997; Pagnini and Morgan 1990). A shortage of marriageable group members of the opposing sex has been linked to low marriage rates among several immigrant groups (Angrist 2002; Landale and Tolnay 1993). Skewed sex ratios can also, however, constitute a structural force toward out-marriage. For example, for Italian men in the first half of the twentieth century, there were too few Italian women to marry in the United States. Comparatively, for Irish women in that period, there were too few Irish men to marry (Angrist 2002). If the preferences to marry are strong enough, this can provide a

stimulus for mixing—in this case, between Irish women and Italian men. Skewed sex ratios can also provide a stimulus to search for a spouse in the large native stock.

People take several different traits into account when searching for a partner, not just national origin. As a result, the composition of the origin group with respect to these other characteristics is also important (Anderson and Saenz 1994; Hwang et al. 1997). One of the more important other boundaries in the marriage market is education. Within lower-educated national-origin groups, persons with a higher education will have more difficulties to find an equally educated coethnic spouse, as compared with lower-educated persons (Lehrer 1998; van Tubergen and Maas 2007). This may encourage the higher-educated member in that group to search for potential partners outside the own group. In higher-educated national-origin groups, the situation is exactly opposite. In short, the more dissimilar a person is to his or her group in terms of education, the higher the chance that he or she will marry outside the group.

The generational composition of the native stock may also be important (Lieberson 1963). The higher the generation, the more distance a person experiences from his or her national origin (Alba 1990). Certain elements of one's national origin may remain salient in later generations, but people in later generations have been shown to use their origins in a more symbolic and ad hoc fashion (Waters 1990). Because of differences in the migration histories of national-origin groups, the percentage of third-generation members in the native stock will vary from group to group. For example, the native stock in the 1990s will contain few third-generation German persons but will contain many third-generation Polish persons. Hence, for Polish children of immigrants, there will be more culturally similar persons in the native stock than for German children of immigrants. In general, one could argue that groups are more likely to marry into the native stock when there are more third-generation persons of that origin.

Some structural factors may specifically affect the chances of marrying a person of another national-origin group. The chance to marry with another national-origin group will first depend on the size of the foreign stock. States differ considerably in their foreign-born population, ranging from 3% in Mississippi to 54% in California (based on the pooled CPS data). This difference may have led the children of immigrants to marry with other national-origin groups more often in California than in Mississippi. The size of the foreign stock will matter, but the religious and linguistic composition of the foreign stock is also important. For example, a Mexican and an El Salvadorian who marry outside their own national-origin group may marry each other because they share a common language and religion. In a more general sense, one could argue that national-origin groups may mix less often when other cultural boundaries divide the groups. Individual-level research has indeed demonstrated the importance of linguistic and religious similarities for intermarriage (Alba and Golden 1986; Hout and Goldstein 1994).

## DATA AND MEASUREMENT

The data we use are from the Current Population Survey (CPS), an annual, nationally representative survey from the total population of the United States (King et al. 2004). We use the 13 surveys conducted in the period 1994–2006. We select married and cohabiting children of immigrants and immigrants who arrived in the United States before age 16. We exclude respondents from the outlying areas of the United States (about 5% of the children of immigrants), such as Guam and Puerto Rico, because not all contextual variables could be measured for these groups. We also exclude respondents whose origins were classified with unclear labels (e.g., “Europe not specified”) and respondents with unclear information on the spouse's origin. This leaves us with 93,777 respondents for the analysis.

To measure national origin, we rely on the respondent's country of birth (if born abroad), the mother's country of birth (if native born), or the father's country of birth (if native born with a native-born mother). Hence, we give priority to the mother's country of

birth, which is in line with research on ethnic identity (Rumbaut 1994). We include native-born persons who have one foreign-born and one native-born parent. These persons can be called the “2.5 generation” because they are somewhere between the second generation (two foreign-born parents) and the third generation (two native-born parents).

The dependent variable consists of three categories: (a) a native-stock partner (i.e., a native-born partner with two U.S.-born parents); (b) a first- or second-generation partner of the same national origin (i.e., endogamy); and (c) a first- or second-generation partner of another national origin (i.e., mixing). The national-origin definitions used for the partner are the same as those used for the respondent.

To analyze this dependent variable, we use multilevel logistic regression models in which individuals are nested within national-origin groups. There are 94 origin groups in our data, and the average size of groups is 684.<sup>1</sup> The multilevel design yields less-biased standard errors and *p* values for the contextual effects. In a normal regression model, the standard errors of contextual effects would be underestimated, and the effects would often be falsely accepted as significant. This is the main strength of the multilevel design in the present application. Moreover, the multilevel design allows us to examine to what extent group differences can be explained. To test our hypotheses, we focus on two contrasts: (b) endogamy versus (a) native-stock partner, and (c) mixing versus (a) native-stock partner. The model is estimated separately for men and women. We leave the interesting question of how gender differences in endogamy vary among groups (Jacobs and Labov 2002) to a separate article.

Because some of marriages within the native stock may be with third-generation members of the same origin, the level of out-group marriage is probably overestimated. We try to minimize the potential bias that this may cause in the effects of contextual variables by including a group-specific measure of the relative size of the third generation. The size of the third generation positively affects the opportunities to marry into the native stock. Including this variable thereby reduces the bias that may arise from not having information on the national origins of the third generation. Another and related problem is that immigrants who marry into the native stock may in fact be marrying within their own racial/ethnic group. If this is the case, the patterns we find may say less about the incorporation of racial and ethnic minorities in U.S. society. To address this, we replicate the model for nonwhite persons for whom we consider an additional distinction in the intermarriage variable: marrying a native-stock partner of a different race/ethnicity (a1) and marrying a native-stock partner of the same race/ethnicity (a2).<sup>2</sup> We estimate a multinomial logit model for the contrasts (b) endogamy versus (a1) and (b) endogamy versus (a2), and we test whether the effects are different for the two contrasts.<sup>3</sup>

Some of the contextual variables vary not only across groups but also across states (e.g., group size). Ignoring the state-level variation may affect the group-level variance (Snijders and Bosker 1999), but our analyses shows that this is not the case. The residual group-level variance in a cross-classified model in which groups and states are represented by parallel (i.e., nonnested) levels is the same as the residual group-level variance in a multilevel model that ignores the state level. To capture possible regional differences in intermarriage, we include dummy variables for each of the nine U.S. divisions.

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1. In calculating this average, we excluded Mexico and Canada, which, because of their disproportionately large size, would have affected the mean group size too much.

2. We distinguished (1) Mexican, (2) Cuban, (3) other Spanish and South or Central American, (4) Asian, and (5) non-Hispanic black. We thank one of the reviewers for the suggestion to incorporate the race/ethnicity and origin variables in the measure of intermarriage.

3. The standard errors of the effects in the multinomial logit model are adjusted for clustering of observations within national origin groups. This adjustment prevents *p* values of contextual effects from being underestimated. This adjustment is similar to what the multilevel logistic regression model does. We use a clustered multinomial model because no multilevel multinomial logistic regression model was available.

## Contextual Measures

Here, we present the contextual measures that aim to explain group differences in inter-marriage. Some of these are measured using information on the group as it appears in the United States; when this is not possible, we use information on the sending country. When a group-level measure is used, we sometimes also use a measure for the groups for each state separately. In the tables, we specify which type of measure is used.

*Early-marriage customs* is measured as the percentage of women who married between ages 10 and 14 in the country of origin between 1950 and 1990. Information is from census data.

*Christian background* is the percentage of the country of origin that was Christian during the 1960–1980 period (Brierley 1997). Using other sources (e.g., [www.adherents.com](http://www.adherents.com)), we explore possible differences in inter-marriage among the non-Christian population. Because of selective migration, the religious composition of groups in the United States is not always the same as the religious composition of the origin countries. For example, high proportions of Iranian immigrants in the United States are Christians (Jasso et al. 2003). This can lead to an underestimation of this contextual effect.

*Non-English* is whether English is an official language in the country of origin (Grimes 2000). There are seven English-speaking origin countries in our sample.

*Globalization* is a cultural measure of globalization that is a combination of (a) the sum of import and export of books, (b) the number of Ikea stores per capita, and (c) the number of McDonald's per capita (Dreher 2006). Among the most globalized countries are Singapore and the Netherlands; the least-globalized countries are Haiti and India.

*Group size* is the percentage of the population aged 15 years and older from a certain country of origin, measured for each combination of group and state.<sup>4</sup>

*Sex ratio* is the proportion of opposite-sex members in a group divided by the proportion of same-sex members in a group.

*Educational similarity to own group* is measured as the percentage within a national-origin group that has the same educational level as the respondent. We distinguish three levels of the highest educational level attained: (1) primary education, (2) secondary education, (3) tertiary education.

*Size of third generation* is a proxy measure of the size of the third generation. We calculate the percentage of each national-origin group that was of the second generation in 1960 (using the 1/100 sample of the 1960 census). The measure is weighted for the number of children present in the household because these children will presumably form the third generation that the respondents in the CPS were facing when they were on the marriage market.<sup>5</sup>

*Foreign stock* is the percentage in a state that is first or second generation. The size of the own group is subtracted.

*Linguistic similarity to other groups* is the percentage of respondents in a state who speak the same dominant language as the group to which the respondent belongs, excluding the members of the own group.

*Religious similarity to other groups* is the percentage of respondents in a state who have the same (dominant) religion as the group to which the respondent belongs, excluding the members of their own group.

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4. We use the CPS to measure this variable. Because the numbers in some groups in some states are small, we also calculated the measure using the 5% Public Use Microsamples of the 1990 and 2000 censuses (taking the average of the two years). The census measure is limited to the first generation, but it appears to correlate closely to the CPS measure ( $r = .92$ ).

5. We experimented with applying different age selections, not weighting for the number of children, excluding unmarried respondents, and so forth, but these alternatives correlate very highly to our initial measure ( $r > .90$ ).

*Ethnic diversity* is measured by the index of fractionalization, which is equal to 1 minus the sum of squares of the relative sizes (proportions) of the ethnic-religious groups in a country (Alesina et al. 2003).

We checked the correlations among the macro-variables and observed that all correlations were well below .50, showing that there are probably no problems with multicollinearity.

### Individual Measures

To take possible compositional differences into account, we include several individual measures as control variables in all models: generational status, a dummy variable for black (versus all other), education, year of birth, and cohabitation. All these variables are known to have an effect on endogamy (Blackwell and Lichter 2004; Feliciano 2001; Gshur and Okun 2003; Hwang, Saenz, and Aguirre 1995; Monden and Smits 2005; Qian et al. 2001), and they also differ considerably among groups (Borjas 1992; Lieberman and Waters 1988). To save space, we will not discuss the effects of these variables, but we do present them in the tables. For generational status, we include a separate dummy variable for native-born persons who have one foreign-born and one native-born parent (the “2.5 generation,” as described earlier). Table 1 presents the descriptive statistics of the independent and dependent variables.

### RESULTS

We begin by presenting descriptive statistics on rates of intermarriage. Table 2 presents the percentages of the children of immigrants who married within the group for each group separately. Because descriptive statistics are less meaningful for small numbers, we limit

**Table 1. Means, Standard Deviations, and Definitions of Independent Variables (N = 93,777)**

Variable	Mean	SD	Minimum	Maximum
Individual Variables				
Black (dichotomous) (i)	0.02			
Second generation (dichotomous) (i)	0.31			
2.5 generation (dichotomous) (i)	0.37			
Years of schooling (dichotomous) (i)	12.70	2.58	0.00	16.00
Birth year (dichotomous) (i)	1952.29	18.28	1904.00	1992.00
Cohabitation (dichotomous) (i)	0.03			
Contextual Variables				
Early-marriage customs (c)	0.11	0.78	0.00	9.26
Christian background (c)	76.57	27.61	0.00	98.67
Non-English group (c)	0.82			
Globalization (c)	43.61	22.59	1.00	87.14
Group size (sg)	0.06	0.09	0.00	0.29
Sex ratio (g)	1.00	0.09	0.57	1.77
Educational similarity to own group (ig)	35.90	11.80	1.70	73.60
Size of third generation (g)	0.44	0.20	0.04	0.80
Size of other foreign stock (sg)	24.00	13.90	2.80	53.90
Linguistic similarity to other groups (sg)	0.08	0.14	0.00	0.82
Religious similarity to other groups (sg)	0.25	0.23	0.00	0.85
Ethnic diversity (c)	0.34	0.23	0.00	0.86

*Notes:* No standard deviations are presented for dichotomous variables. i = individual level, g = group level, c = country level, s = state level, sg = state × group level, ig individual × group level. See the text for an explanation.



the table to the larger groups ( $n > 80$ ). We also present the percentages for the full sample (bottom row). Table 2 shows that, on average, 33% of the children of immigrants married within the group. Considering the average size of national-origin groups on a state level (5.8%, Table 1), endogamy clearly exceeds what one would expect on the basis of chance. There is a large difference with respect to generation. For immigrants, endogamy is 51%, whereas for the second generation, it is 24% (not in Table 2). We also see that a substantial number of children of immigrants married outside their national-origin group (16%). Because the foreign stock is quite large in most states, this is not entirely surprising.<sup>6</sup> Separate analyses for men and women reveal a slightly higher level of endogamy for women (35%) than for men (31%) (data not shown).

The most endogamous groups (in terms of percentages) are from Mexico, India, Vietnam, Laos, and Pakistan (all greater than 60%). Clearly, it seems that the most endogamous groups are also groups of color. The least endogamous groups are children of immigrants from Belgium, Switzerland, France, Switzerland, and Australia (all less than 5%). Table 2 further reveals that western European groups are the least endogamous, followed by eastern European groups. Asian and Caribbean groups are the most closed. Central and South American groups are less endogamous than Asians. Although there are differences between world regions, there is also substantial diversity within world regions. Note that we use the term “endogamous” here in a purely descriptive manner.

In Table 3, we present the results of the multilevel logistic regression models. All contextual variables except binary variables are standardized ( $m = 0$ ,  $SD = 1$ ); thus, effects can be compared with each other and the magnitude of the effects can be evaluated in a meaningful way.

### Cultural Determinants

We first discuss the effects of the cultural determinants. Table 3 shows that people are more likely to marry within their group when they come from countries with an early-marriage tradition. This confirms the idea that in countries with teenage marriages, parents have more influence on partner choice. Regardless of whether marriages in the United States are arranged, in these groups, parents traditionally have more to say in the marriage choices of their children. When parents have a strong influence, they will tend to favor endogamy (Kalmijn 1998). An increase of 1 standard deviation in early marriage customs is associated with a 14% increase in the odds that women marry endogamously (i.e.,  $e^{0.13} - 1$ ). The effect is stronger for women (for men, the effect is only marginally significant), which is plausible given that it has often been argued that parents play a stronger role in controlling the marriage choices of their daughters than of their sons (Goode 1963).

The second variable is Christian background. As expected, Table 3 shows that Christian groups are less likely to marry within their group and more likely to marry into the native stock than non-Christian groups. An increase of 1 standard deviation in Christian background is associated with a 24% decrease in endogamy for men and an 18% decrease for women. Hence, religion plays an important role. One would also expect a negative effect on marriages with other groups because other groups will less often be Christian than the native stock, but this is not borne out by the results in Table 3.

Does the type of religion matter as well? For both men and women, we find that Hindu/Buddhist groups are significantly more endogamous than Protestant groups ( $b = 1.73$ ,  $p < .01$  for men, and  $b = 1.13$ ,  $p < .01$  for women; data not shown in tables). Orthodox groups are also more closed than Protestant groups, but the differences are smaller

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6. Hong Kong has a very high percentage of marrying to other groups, but these are mostly marriages to Chinese persons. We experimented with combining data for people from China and Hong Kong, but this did not change the parameter estimates in Table 3. The globalization measures are very different for the two groups, which suggests that we should consider them separately.

**Table 2. Intermarriage Percentages by Country and Region of Origin: First- and Second-Generation U.S. Immigrants, 1994–2006**

Region and Country of Origin	% With Native Stock	% With Other Group	% Within Group	<i>N</i>
Central America				
Nicaragua	35.1	36.1	28.8	316
Honduras	29.1	43.0	27.9	244
Guatemala	19.2	43.2	37.6	396
Costa Rica	53.2	28.8	18.0	139
El Salvador	50.0	24.8	25.1	1,719
Panama	68.4	26.1	5.5	253
Mexico	25.5	6.2	68.3	22,056
Caribbean				
Dominican Republic	16.5	33.8	49.8	814
Jamaica	43.5	19.2	37.3	464
Haiti	25.5	18.9	55.6	275
Trinidad and Tobago	35.2	37.1	27.7	159
South America				
Chile	52.5	37.5	10.0	160
Peru	47.3	39.6	13.1	260
Cuba	33.1	23.1	43.8	2,302
Venezuela	46.9	33.6	19.6	143
Brazil	55.6	32.5	11.8	169
Guyana/British Columbia	30.5	25.5	44.0	141
Colombia	39.8	34.2	26.0	623
Ecuador	30.3	33.6	36.1	396
Argentina	54.5	37.8	7.7	233
Europe				
Portugal	44.1	14.2	41.6	1,194
Austria	56.6	35.0	8.5	898
Belgium	73.8	23.4	2.8	282
Spain	67.0	24.5	8.5	542
Germany	78.5	15.9	5.6	7,644
Finland	69.2	20.9	10.0	201
Italy	55.4	15.7	28.9	8,013
Sweden	71.4	23.4	5.2	843
Denmark	77.1	17.8	5.0	398
Switzerland	75.3	20.6	4.1	291
United Kingdom	77.4	17.4	5.2	5,075
Ireland	68.1	18.4	13.5	2,422
Norway	73.3	17.6	9.1	921
Netherlands	74.1	12.6	13.3	872
France	76.0	22.3	1.7	821
Greece	49.4	16.4	34.3	867

*(continued)*

(Table 2, continued)

Region and Country of Origin	% With Native Stock	% With Other Group	% Within Group	N
Eastern Europe				
Lithuania	51.6	35.5	13.0	386
Yugoslavia	57.2	22.1	20.8	530
Poland	49.4	25.2	25.4	3,857
Ukraine	53.7	21.4	24.8	294
Latvia	67.5	24.7	7.8	166
USSR/Russia	46.0	26.7	27.4	2,744
Czechoslovakia	60.4	27.4	12.3	1,027
Hungary	58.5	32.2	9.3	1,074
Romania	41.0	44.4	14.6	261
Asia				
Thailand	49.4	28.1	22.5	231
India	24.6	14.3	61.0	621
Philippines	46.9	12.1	41.1	2,256
Vietnam	16.5	13.7	69.7	568
Japan	51.1	9.1	39.8	2,178
Hong Kong	22.0	48.7	29.2	236
Taiwan	40.2	24.6	35.2	199
Laos	11.0	13.1	75.9	237
Indonesia	67.0	23.9	9.1	88
Cambodia	26.6	26.0	47.5	177
South Korea	45.6	11.3	43.1	680
Pakistan	11.2	23.5	65.3	98
China	32.0	23.8	44.2	1,178
Middle East				
Iran	41.5	19.1	39.4	246
Turkey	52.4	28.9	18.7	187
Israel	45.5	0.0	54.5	1,041
Syria	39.8	37.2	23.0	113
Lebanon	44.9	26.7	28.4	292
Egypt	39.3	34.8	25.9	112
Other				
Canada	77.2	12.8	9.9	8,769
Australia	78.1	21.9	0.0	183
Pacific Islands	41.6	18.5	39.9	173
All	50.7	16.3	32.9	93,777

Notes: Groups with  $n > 80$ . Averages are taken across groups (unweighted). The population consists of members of the second generation and the first generation who migrated before age 16.

**Table 3. Multilevel Logistic Regression of Marriage Choices of First- and Second-Generation Immigrants in the United States, 1994–2006**

Variable	Men				Women			
	Partner Same Origin Versus Native Stock		Partner Other Origin Versus Native Stock		Partner Same Origin Versus Native Stock		Partner Other Origin Versus Native Stock	
	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>
<b>Individual Variables</b>								
Black (i)	0.044	.71	0.075	.51	-0.175	.12	-0.298*	.01
Second generation (i)	-0.575*	.00	-0.236*	.00	-0.435*	.00	-0.145*	.00
2.5 generation (i)	-1.717*	.00	-0.724*	.00	-1.620*	.00	-0.652*	.00
Years of schooling (i)	-0.163*	.00	-0.003	.69	-0.245*	.00	-0.052*	.00
Birth year (i)	-0.013*	.00	-0.014*	.00	-0.009*	.00	-0.014*	.00
Cohabitation (i)	-0.673*	.00	0.277*	.00	-0.583*	.00	0.084	.30
<b>Contextual Variables</b>								
Early-marriage customs (c)	0.087	.07	0.020	.35	0.130*	.02	0.052	.13
Christian background (c)	-0.270*	.00	-0.013	.42	-0.198*	.01	-0.006	.46
Non-English group (vs. English) (c)	0.623*	.05	0.399	.09	0.699*	.04	0.261	.16
Globalization (c)	-0.399*	.00	-0.194*	.03	-0.495*	.00	-0.153*	.04
Group size (sg)	0.526*	.00	0.178*	.00	0.507*	.00	0.122*	.00
Sex ratio (g)	0.010	.42	0.015	.37	0.051	.22	-0.036	.22
Educational similarity to own group (ig)	0.058*	.00	0.002	.46	0.086*	.00	-0.025	.12
Size of third generation (g)	-0.229*	.01	-0.048	.28	-0.073	.23	-0.052	.22
Size of other foreign stock (sg)	0.329*	.00	0.435*	.00	0.316*	.00	0.401*	.00
Linguistic similarity to other groups (sg)			0.077*	.00			0.118*	.00
Religious similarity to other groups (sg)			0.069*	.02			0.035	.15
Ethnic diversity (c)	-0.155*	.05	0.039	.31	-0.090	.19	0.008	.45
<b>Regional Variables</b>								
Middle Atlantic	-0.090*	.10	0.099	.06	-0.089	.12	0.144*	.01
East North Central	-0.112	.07	0.146*	.01	-0.151*	.02	0.091	.14
West North Central	-0.386*	.00	-0.283*	.00	-0.435*	.00	-0.255*	.00
South Atlantic	-0.242*	.00	0.010	.86	-0.221*	.00	0.098	.09
East South Central	-0.356*	.02	-0.359*	.04	-0.801*	.00	-0.550*	.00
West South Central	-0.815*	.00	-0.445*	.00	-0.860*	.00	-0.490*	.00
Mountain	-0.723*	.00	-0.207*	.00	-0.777*	.00	-0.381*	.00
Pacific	-0.786*	.00	-0.224*	.00	-0.839*	.00	-0.347*	.00
Constant	26.936*	.00	27.205*	.00	20.475*	.00	28.055	.00

*(continued)*

(Table 3, continued)

Variable	Men				Women			
	Partner Same Origin Versus Native Stock		Partner Other Origin Versus Native Stock		Partner Same Origin Versus Native Stock		Partner Other Origin Versus Native Stock	
	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>
Chi-square for Model Fit	4,386		1,778		4,545		1,674	
Number of Respondents	40,253		33,013		38,186		29,857	
Number of Groups	94		94		94		94	
Residual Group-Level Variance	.573		.411		.668		.299	

Notes: All group variables except dominant English language are standardized. New England is the reference category for division dummy variables. i = individual level, g = group level, c = country level, s = state level, sg = state × group level, ig = individual × group level. See the text for an explanation.

\* $p < .05$  (one-sided tests for group-level effects)

and, for men, only marginally significant ( $b = .63$ ,  $p = 0.09$  for men;  $b = 0.94$ ,  $p = .03$  for women). There is a gender-specific effect for the difference between Islamic and Protestant groups. For women, this difference is not significant ( $b = 0.38$ ,  $p = .19$ ), but for men, the difference is substantial and significant ( $b = 0.70$ ,  $p = .04$ ). Hence, men from Islamic groups are more endogamous, but women from these groups are not. We find no significant difference between Catholic and Protestant groups.

Language also affects the intermarriage rate of national-origin groups. People from countries in which English is the dominant language are less likely to marry within their group but more likely to marry into the native stock. This is one of the strongest effects in the model and could already be observed in the descriptive tables. In non-English-speaking groups, the odds of endogamy are 1.9 times higher for men and 2.0 times higher for women ( $e^{+0.623}$  and  $e^{+0.699}$ ). We emphasize that virtually all respondents from non-English-speaking groups also speak English; hence, the effect is not attributable to linguistic endogamy. Instead, the effect probably reflects the importance of language similarity in the respective networks of the two spouses. We also see that the effect is negative for marrying with other groups (although it fails to reach significance).

We further see that cultural globalization plays a role. In line with expectations, it appears that more-globalized origin groups are less likely to marry within their group and more likely to marry into the native stock than are less-globalized origin groups. The effect is substantial: an increase of 1 standard deviation in globalization is associated with a 33% to 39% decline in the odds of endogamy (for men and women, respectively). Moreover, we see a significant negative effect on marrying with other groups (rather than into the native stock). Hence, the more-globalized groups are primarily more likely to marry into the native stock than are less-globalized origin groups.

### Structural Determinants

The first structural variable is relative group size, which is measured at the state level. Table 3 shows that the greater the relative size of a group in a state, the more likely that the children of immigrants marry endogamously. The effect is substantial: a 69% and a 66% increase in the odds of endogamy per standard deviation increase in group size for men and women, respectively. Note that variation in group size comes from both differences among groups and differences in the size of each group among states. Group size also has a (small) positive effect on marrying with other groups.

The second structural factor is the sex ratio. We expected that women from immigrant groups with more male than female members would be more likely to marry within the group, and similarly, that men from groups with more female than male members would be more endogamous. The results reveal no significant effects of the sex ratio on endogamy for either men or women. There is also no effect of the sex ratio on marrying with others, but here we did not expect an effect.

We also measured opportunity as the percentage of group members who have the same education as the individual respondent. Here we see a positive effect. The more a person's educational level resembles that of his or her group, the more likely it is that the person marries within the group rather than into the native stock. The effect is significant for both men and women. We see no effect on marrying with other groups, but one did not expect an effect in this case.

The approximate size of the third generation also has the expected effect. The larger the size of the third generation (of a specific group), the more likely it is that the members of that group marry into the native stock (i.e., a negative effect on the first contrast in Table 3). Hence, a national-origin group is closer to the native stock when the native stock contains more (third-generation) persons of that origin. The effect is significant only for men.

We also examine factors that are specifically concerned with the second choice (marrying with other groups rather than into the native stock). The size of the foreign stock in a state appears to have a strong effect. When the foreign stock in a state increases by 1 standard deviation, the odds of marrying with another national-origin group (rather than with the native stock) increase by 54% for men and 49% for women. Marrying with other groups is thus more common in the typical immigrant states, in line with expectations. We further see that a large foreign stock is associated with an increase in the odds of marrying endogamously. Hence, the tendency in immigrant states to marry other groups more often does not mean that people in these states marry within the own group less often.

The presence of persons in the foreign stock who speak the same language also has a positive effect on mixing with other groups. When there are more people who speak the same language as the respondent, he or she is more likely to marry someone from another national-origin group rather than someone from the native stock. This confirms the often-noted observation that a common language increases mixing. The effect is significant for both men and women. The religious composition of the foreign stock has a significant effect as well. When there are more persons in religiously similar groups in a state, persons are more likely to marry with other national-origin groups. This effect is significant only for men. Note that these effects are found after we control for the relative size of the own group.

We included a measure of ethnic diversity to take into account that countries of origin may not coincide with ethnic groups. We see modest evidence for the role of ethnic heterogeneity. There is a negative significant effect on marrying someone from the same origin for men. Men are less likely to marry within the group and more likely to marry into the native stock when they come from a national-origin group with more ethnic diversity. This is as expected, but the effect is not significant for women.

### **Alternative Specification of Inter-marriage**

In Table 4, we replicate the model for nonwhites, and we examine whether the effects of contextual variables are similar or different when we make a distinction between native-stock partners of the same race/ethnicity and native-stock partners of a different race/ethnicity. The reason for examining this lies in the heterogeneity of the native stock. Immigrants could be marrying into the native stock, but this may not necessarily say much about racial and ethnic relations in American society if they are marrying with racial minorities rather than with whites. Hence, the question is whether the effects of contextual variables are also present when we focus on marriages into the native stock that are of mixed race/ethnicity.

**Table 4.** Regression of Marriage Choices Among Nonwhite First- and Second-Generation Immigrants in the United States, 1994–2006

Variable	Clustered Multinomial Logit							
	Multilevel Logit, Partner Same Origin Versus Native Stock		Partner Same Origin Versus Native Stock of Different Race		Partner Same Origin Versus Native Stock of Same Race		Test for Difference	
	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	<i>b</i>	<i>p</i>	Chi-square	<i>p</i>
Individual Variables								
Woman (i)	0.065*	.02	-0.017*	.74	0.171*	.00	16.4*	.00
Black (i)	-0.578*	.00	0.394*	.06	-2.248*	.00	37.2*	.00
Second generation (i)	-0.668*	.00	-0.535*	.00	-0.790*	.00	15.6*	.00
2.5 generation (i)	-1.722*	.00	-1.626*	.00	-1.792*	.00	1.3	.25
Years of schooling (i)	-0.207*	.00	-0.307*	.00	-0.143*	.00	39.9*	.00
Birth year (i)	0.010*	.00	0.008*	.42	0.012*	.05	1.0	.33
Cohabitation (i)	-0.683*	.00	-0.789*	.00	-0.491*	.00	12.2*	.00
Contextual Variables								
Early-marriage customs (c)	0.113*	.02	0.058*	.03	0.219*	.00	4.3*	.04
Christian background (c)	-0.302*	.00	-0.257*	.00	-0.096 <sup>†</sup>	.07	4.6*	.03
Non-English group (vs. English) (c)	-0.277	.27	0.079	.41	0.188	.26	0.1	.72
Globalization (c)	-0.522*	.00	-0.588*	.01	-0.552*	.00	0.1	.76
Group Size (sg)	0.495*	.00	0.840*	.00	0.234*	.00	30.0*	.00
Sex ratio (g)	0.126*	.00	0.125*	.00	0.112*	.00	0.3	.60
Educational similarity to own group (ig)	0.061*	.00	-0.013	.41	-0.030	.33	0.1	.70
Size of third generation (g)	-0.203*	.05	0.120	.22	-0.105	.19	3.3 <sup>†</sup>	.07
Size of other foreign stock (sg)	0.368*	.00	0.281*	.00	0.305*	.00	0.1	.72
Ethnic diversity (c)	-0.158 <sup>†</sup>	.07	-0.230*	.04	-0.006	.47	2.4	.12
Constant	-16.930*	.00	-10.684	.57	-19.274	.11		
Chi-square for Model Fit	4,675							
Pseudo-Log-Likelihood	-21,844							
Number of Respondents	32,274		32,274					
Number of Groups	88		88					
Residual Group-Level Variance	.498							

Notes: All group variables except dominant English language are standardized. i = individual level, g = group level, c = country level, s = state level, sg = state × group level, ig = individual × group level. See the text for an explanation. Models control for division dummy variables.

<sup>†</sup>*p* < .10; \**p* < .05 (one-sided tests for group-level effects)

The first column in Table 4 replicates the multilevel logistic regression model from Table 3 for nonwhites (for the contrast endogamy versus native stock).<sup>7</sup> The effects for nonwhites are quite similar to what we found for the full sample. One effect is no longer significant in Table 4: the non-English-language group effect. Because there are probably

7. To simplify the presentation, we combine men and women and include a dummy variable for sex.

**Table 5. Residual Group Variance in Different Models**

Model	Partner Same Origin Versus Native Stock				Partner Different Origin Versus Native Stock			
	Residual Group- Level Variance		Explained (%)		Residual Group- Level Variance		Explained (%)	
	Men	Women	Men	Women	Men	Women	Men	Women
Empty Model	1.727 <sup>a</sup>	1.877 <sup>a</sup>	0	0	0.664 <sup>a</sup>	0.507 <sup>a</sup>	0	0
+ Individual Variables	1.649 <sup>a</sup>	1.769 <sup>a</sup>	5	6	0.684 <sup>a</sup>	0.545 <sup>a</sup>	-3	-7
+ Division Dummy Variables	1.641 <sup>a</sup>	1.698 <sup>a</sup>	5	10	0.646 <sup>a</sup>	0.508 <sup>a</sup>	3	0
+ Individual and Cultural Group-Level Variables	0.787 <sup>a</sup>	0.780 <sup>a</sup>	54	58	0.497 <sup>a</sup>	0.394 <sup>a</sup>	25	22
+ Individual and Structural Group-Level Variables	0.978 <sup>a</sup>	1.143 <sup>a</sup>	43	39	0.489 <sup>a</sup>	0.365 <sup>a</sup>	26	28
+ All Characteristics	0.551 <sup>a</sup>	0.643 <sup>a</sup>	68	66	0.428 <sup>a</sup>	0.321 <sup>a</sup>	36	37

<sup>a</sup>Value is more than twice its standard error.

few nonwhite persons from English-speaking national-origin groups, this is understandable. We also see a new effect that was not present in Table 3. When there are more opposite-sex relative to same-sex group members, the chance to marry within the group is higher. Hence, for nonwhites, we find a positive effect of the sex ratio. More detailed analyses show that this effect is limited to (nonwhite) women.

More important is the question of whether the effects differ depending on whether the native-stock partner is of the same race/ethnicity or of a different race/ethnicity. The second (multinomial) logit model in Table 4 presents these effects. When we focus on the test of whether the effects are similar (last column in Table 4), in the first model of Table 4, three of the nine significant contextual effects were significantly different for the two contrasts. The pattern is not systematic, however. For example, group size and Christian background had a stronger effect for the first contrast (native stock of different race/ethnicity) than for the second contrast (native stock of same race/ethnicity), whereas globalization had a stronger effect on the second contrast. We further see that seven of the ten contextual variables had significant effects on the first contrast (same origin versus native stock of different race). In other words, the contextual factors that affect the chances to marry into the native stock also affect the chances to marry across racial boundaries. This gives us confidence that our results are also informative with respect to the incorporation of ethnic minorities in American society.

### Decomposition of Group-Level Variance

To what degree is our approach successful in explaining the differences among groups? The residual variances at the group level are presented for several models in Table 5. A model containing only individual factors shows a significant residual group-level variance in endogamy for both men and for women. Hence, significant differences exist among groups after compositional factors are taken into account.

To what extent can individual and contextual variables explain the differences in endogamy among groups? Table 5 shows that individual variables explain 5%–6% of the initial group-level variance (the variance of an empty model).<sup>8</sup> Hence, only a small part

8. Because of the large sample size, the program was unable to estimate the empty model. To reduce the sample size, we took a sample of the two largest groups (10% of Mexicans and 20% of Canadians). The estimates



of the differences is due to compositional effects. When cultural and structural contextual variables are added, the percentage of the group-level variance that can be explained increases to 68% for men and to 66% for women. Hence, almost two-thirds of the group-level variance in the choice between endogamous and native-stock partners can be attributed to the cultural and structural factors that were incorporated in our comparative approach. This is clear evidence for the importance of contextual influences. For the second contrast—that between the native stock and another national-origin group—our model is somewhat less successful. We are able to explain about one-third of the group differences in this case.

Are cultural or structural factors more important for explaining group differences in intermarriage? One way to answer this question is by looking at a model containing only cultural variables and a model containing only structural variables. We recognize that the distinction is not always very sharp, and we also note that we do not have the same number of cultural and structural variables. Nonetheless, our model can give us some indication about the relative importance of these two mechanisms. The results in Table 5 show that the residual variance declines more when cultural variables are added than when structural variables are added. This difference is considerable, suggesting that cultural factors are more successful in explaining group differences in endogamy than structural factors. For mixing, it appears that the two mechanisms are more or less equally important.

Finally, we return to the group differences observed in Table 2. Is the theoretical model tested in this study successful in understanding these differences? To answer this question, we compare the observed percentages married within the group (rather than into the native stock) with those predicted by our model. We plot observed and predicted percentages for each group (for men) in Figure 1 (limited to groups with 40 or more male respondents). The scatterplot shows a good degree of correspondence between observed and predicted percentages. For example, India and Pakistan are relatively closed, and this is also what our model predicts. European groups are relatively open, and this is also what the model predicts.

The scatterplot looks convincing across the full range, but some origin groups are not so well in line with theoretical expectations. For some origin groups, we predicted lower degrees of endogamy than observed (e.g., Mexico, Guatemala, Laos), and there are some countries where our predictions of endogamy were too high (e.g., Morocco, Turkey, Indonesia). These exceptions may point to imperfections in some of our measures, or they may point to other determinants not included in the model. For example, residential segregation at the tract level may be a reason why our estimate for Mexicans is too low. Similarly, the percentage of Christians among Turks and Moroccans in the United States may be higher than what their country measures of religion suggest, which may explain why the observed level of endogamy is too low. Future research is needed to examine such issues.

## CONCLUSION AND DISCUSSION

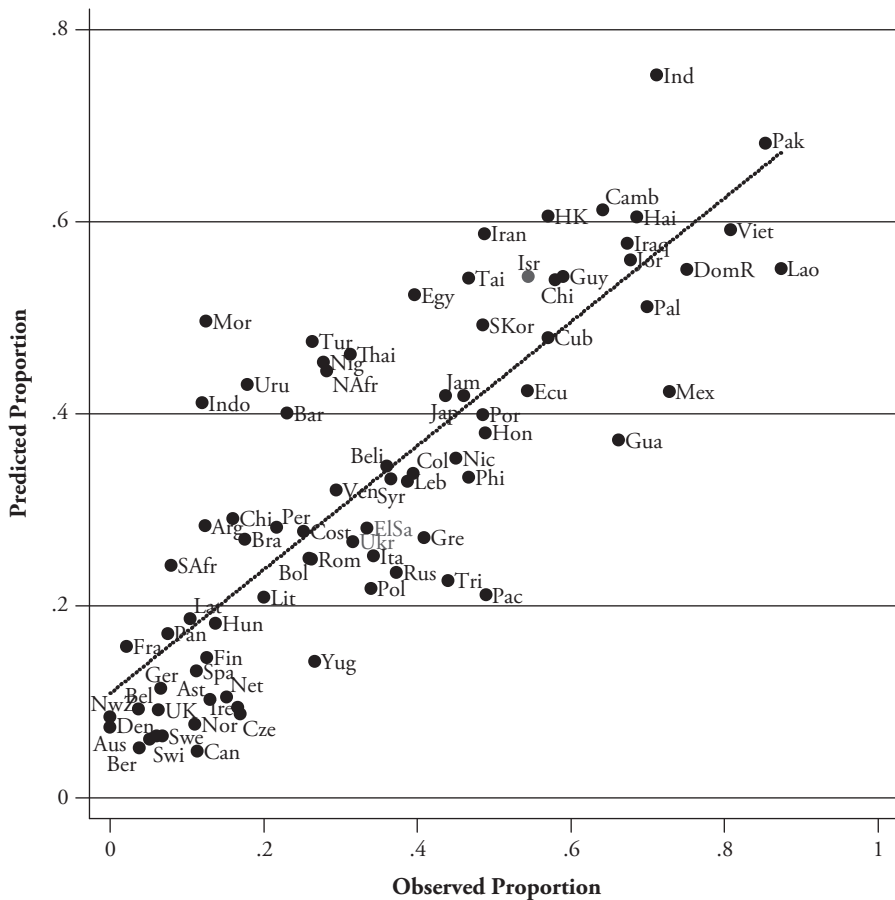
Much research on intermarriage has been descriptive in nature, with a particular emphasis on highly discussed national-origin, racial, and ethnic groups. An understanding of why a certain group has a low rate of intermarriage requires theories that apply to any national-origin group. Subsequently, tests of such theories require comparisons of groups with different levels of intermarriage. Because there is always more than one possible theory of any group difference in intermarriage, this comparison requires a multivariate approach that is based on a large number of groups.

In this article, we presented a comparative analysis of 94 national-origin groups in the United States, using a multilevel multivariate design in which we separate compositional from contextual influences and in which we separated contextual influences into cultural and structural factors. Our analysis suggests that compositional factors are of minor importance.

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in Table 5 are based on this smaller sample. The variance of the full model in Table 5 is nearly the same as that in Table 3, where the full sample is analyzed.

**Figure 1. Observed and Predicted Proportions Marrying Within the Group for National-Origin Groups**



Over and above compositional differences, contextual influences appear to be very important. The cultural and structural characteristics of national-origin groups examined in our comparative analysis explain about two-thirds of the group differences in intermarriage. Furthermore, evidence suggests that cultural forces are more important than structural forces. We also showed that cultural and structural characteristics play a role in marrying with other national-origin groups, not only for marrying within the own group.

Evidence for the importance of the cultural perspective was found for a number of indicators. We found that people are more likely to marry within the group when they come from countries with an early marriage tradition. This points to the role that parents and other family members traditionally had in the marriage choices of their offspring in their native countries. We also found evidence for the hypothesis that people from Christian countries are more likely to marry into the native stock. This suggests that cultural differences with the native stock are smaller for people from Christian origin countries than for people from non-Christian countries. Third, we found evidence that

people from non-English-speaking countries are less likely to marry into the native stock. Because presumably all the respondents in our study speak English, this points to the role of either cultural differences related to language or to the role of third parties in determining marriage partners. Not all the family members of the respondents in these groups will speak English, and non-English-speaking family members may encourage the younger generation not to cross group boundaries. Finally, we found that people from more-globalized countries are less likely to marry within the group.

On the structural side, several factors appeared to play a role as well. Group size measured at the state level had the strongest effect: the larger the group in a state, the more likely it is that the person marries within the group. It is easier to meet partners of the own group in large groups than in small groups. It is not only the sheer size of the group but also the composition of the group that matters. The more similar a person's educational level to that of his or her group, the more likely it is that he or she will marry within the group. We also found that marrying into the native stock is more likely when there are more third-generation group members in the native stock. We expected that a shortage of opposite-sex members would encourage people to find partners outside the group, but this was found for only nonwhite women. Hence, for nonwhite men and for white men and women, unbalanced sex ratios primarily affect nonmarriage and not out-marriage. Some structural forces specifically affected the chances to marry with another national-origin group. Group size appears to be important here as well: the larger the foreign stock in a state, the higher the chances of mixing. The composition of the foreign stock appears to be relevant as well. The larger number of people in the foreign stock with a similar language or a similar religion, the more likely it is that a person marries with another group, after we control for the relative size of the own group.

Our comparative approach has resulted in a more systematic and more powerful test of contextual explanations and has thereby added to our insights into the question of why some national-origin groups are more closed than other national-origin groups. Although structural factors play a role, there is clear evidence that group differences are also governed by cultural factors that have to do with norms of endogamy, openness toward out-groups, and value and language similarities with the destination society. More generally, these findings support the often invoked, but not often explicitly tested, interpretation of endogamy in terms of group boundaries.

We regard our article as a first step in the comparative approach to intermarriage. As always, there is room for improving the design and the measures. First, some measures are based on the origin countries rather than on the groups as they appear in the United States. This may be improved by using other large-scale survey data. Second, the measures of opportunities can be refined by looking at group size in geographical units that are smaller than states. This will also present new problems, however, because of selective out-migration of intermarried couples from segregated areas. Third, we used a static perspective. A dynamic design would be an improvement because the characteristics of groups and the destination's reception of groups can both change over time. This is a complex task for further research.

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