

Comparative Perspectives on Marriage and International Migration, 1970-2000: Findings from IPUMS-International Census Microdata Samples

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Introduction

Marriage has not been, historically, a major reason for people to migrate across borders. Instead, most people migrate for economic reasons in search of land, a better job, or more opportunity. In recent decades, there has been increased international migration for family reasons to reunite with emigrant kin, to seek refuge from violence, to escape famine and natural disaster or simply to retire to a sunny paradise.

Historically, if marriage was the reason to migrate, most unions would have occurred between migrants of the same nativity, strengthening family ties and reinforcing trans-national networks between countries of origin and destination. As we have seen in some migrant communities in Europe and America, often international migrants favor

marriage with individuals from their country of origin. This is a common pattern of first and second generation Moroccans and Turks in Western Europe (Cottrell 1973; Cretser 1999; Lievens 1999; Glowsky 2007; Niedomysl et al. 2010), as it was a century ago with Italians, Greeks and many other ethnicities in the United States (McCaa 1993; McCaa et al. 2005).

In principle, marriage markets for native populations are bounded by national borders, leaving aside highly mobile groups such as the military, diplomats, sailors and the like. Nevertheless, the globalization of inexpensive communications such as the telephone, the Internet, and social media is breaching the spatial barriers of marriage markets.

In recent decades, we have witnessed a surge in marriage migration in particular areas of the world. Much research focuses on Asia, specifically women from poor Asian countries marrying Asian men from wealthy countries (Piper 1999; Wang and Chang 2002; Chen 2008; Bélanger et al. 2010). Research suggests that marriage migration is fuelled both by internal demographic disequilibria in the age-sex composition of the marriageable population and a cultural preference for a more submissive woman available in developing countries because women in developed countries have raised their expectations regarding independence, self-expression, travel and material well-being (Piper 1999). The case of Japan with high rates of single women exemplifies this. Japanese women are getting more education than men and many prefer to remain single than to marry a Japanese man who will curtail their independence and perhaps lower her social standing and income.

Most research on cross-border marriage focuses on one or a few countries and is often based on specialized surveys and qualitative,

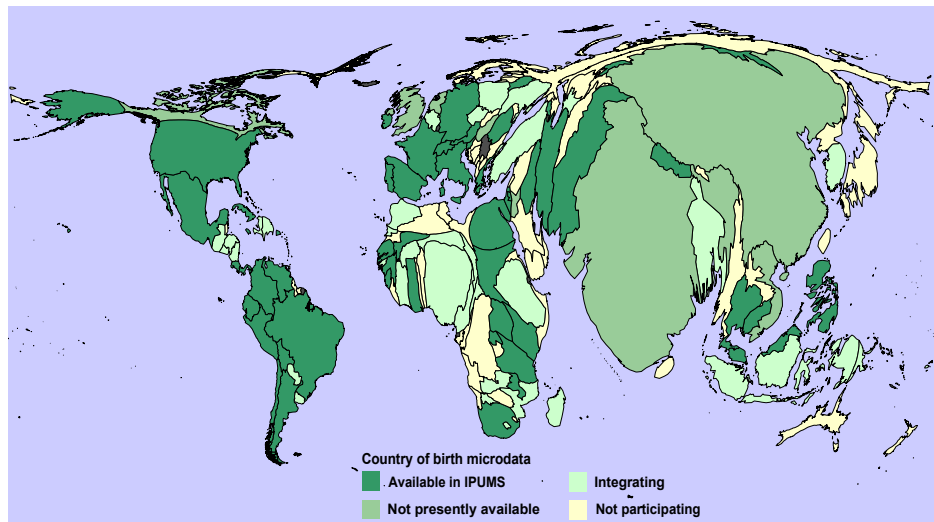
ethnographic research. We offer a global, demographic and quantitative analysis of 47 countries—all the extant census samples with information on country of birth disseminated by IPUMS-International at the beginning of 2011.

The countries which constitute the principal immigration magnets are well known, and many are included in this study. What is less well known is the marital dynamics of immigrants. Census microdata are essential to study this phenomenon because no other source has universal coverage over a series of decades, with widely accepted definitions and concepts regarding immigration, marriage, and the like. Therefore, we propose a methodology for measuring cross-border migration using census microdata.

In this paper, we focus on cross-border marriage, first, broadly conceived as an immigrant in union with native-born stock. For a series of five countries with a question on year of immigration, we define cross-border marriage narrowly, between a person immigrating within one year of the census and married to a native-born person. While this categorization is not perfect, we think it closely approximates the dynamics of cross-border marriage.

First, we describe the census microdata samples (Figure 1), concepts and definitions available for analysis. Then we develop the backdrop for cross-border marriages by examining the proportion of foreign-born aged 25-39 by sex, country and census decade for 107 samples (Table 1). Table 2 drills down one level to report the frequency of native-born in unions with immigrants, also by sex, country and census decade. Figures 2 (foreign-born females) and 3 (foreign-born males) depict the relationship between the share of

**Figure 1. Cartogram of Country of Birth/Nativity Data Availability:
A Global View (Country Area Proportional to Population Size)**



foreign-born to the proportion of native-born of the opposite sex married to a foreign-born spouse. Figure 4 analyzes the gendered inelasticities of cross-border marriage for a series of five countries with the requisite microdata: USA, Spain, Italy, Colombia, and Chile. We limit our analysis to five countries because of data availability. Although IPUMS currently disseminates data for more than 150 censuses (over 50 countries), few inquire as to country of residence one year ago. In Asia, forms rarely include a question on country of previous residence at any time—or even country of birth. The censuses of the Republic of Korea are notable exceptions, reporting country of birth and of residence both one and five years ago, but the microdata are not widely available to researchers at this writing. Two of the five countries that we were able to analyze account for a large fraction of international migrants, although they shed no light on Asia. Fortunately, other papers in this volume offer profound insights into the

phenomena of cross-border marriages in Asia. Finally, we conclude with a discussion of findings and directions for further research.

Data

We rely exclusively on population samples from the IPUMS-International database (www.ipums.org/international). At the beginning of 2011, IPUMS-International disseminated 158 microdata samples, encompassing 67% of the world's population, representing 55 countries. Of these, forty-seven offer data for triangulating country of residence with country-of-birth and marital status of co-resident spouses (see Table 1 and Figure 1), spanning from the 1970 to 2000 census round (see Appendix 1 for a justification of the countries and samples excluded).

Our focus is the married foreign-born aged 25-39. In raw numbers our sample exceeds 130,000 cases and represents over two million persons. Slightly less than one-half of our study draws on cases from the censuses of the USA. Indeed, in recent decades, as cross-border migrations and marriages have accelerated, the proportion accounted for by the USA has actually increased from one-quarter of the cases in 1970 to almost one-half in 2000. To a considerable extent this is due to the influx over the last two decades of the twentieth century of millions of Mexican immigrants into the USA. While we analyze the Mexican born resident in the USA as a special case, note, however, that our data show rising numbers for most countries of origin and in many countries of destination.

The lack of a chronologically complete census record for

Table 1. Proportion of Foreign-Born Aged 25-39 by Sex, Country and Census Round

Country	Men				Women			
	1970	1980	1990	2000	1970	1980	1990	2000
America								
Argentina	8.8	7.1	5.5	4.3	7.5	6.8	6.3	5.1
Bolivia	1.7			1.5	1.4			1.4
Brazil	1.6	1.1	0.4	0.2	1.1	0.8	0.3	0.2
Chile	1.2	0.6	0.7	1.7	1.0	0.6	0.7	1.7
Colombia	0.5	0.3	0.2	0.2	0.4	0.2	0.2	0.2
Costa Rica	3.9	4.6		11.4	3.5	4.7		11.0
Cuba				0.1				0.1
Ecuador	1.0	1.5	1.1	1.1	1.0	1.5	1.2	1.1
Mexico	0.4		0.3	0.3	0.4		0.3	0.3
Panama	4.4		3.4	3.9	3.8		3.3	4.1
Peru			0.2	0.3			0.2	0.3
Puerto Rico	10.2	6.1	13.1	14.4	10.0	6.6	13.4	15.7
Saint Lucia		4.1	7.2			4.9	6.0	
United States	5.9	8.2	12.2	19.0	6.9	8.5	11.3	17.7
Venezuela	12.1	13.7	8.5	5.1	10.4	12.8	8.7	4.9
Europe								
Armenia				6.6				8.8
Austria				15.6				16.3
Belarus			12.8				13.7	
France	18.5	16.3	26.3		13.3	14.0	27.0	
Greece				17.0				16.3
Italy				6.8				7.3
Portugal		3.2	5.8	12.2		3.6	6.1	11.5
Romania	0.9		0.1	0.5	0.9		0.1	0.3
Slovenia				7.7				8.8
Spain			2.8	9.0			3.1	8.7
Switzerland	35.0	24.9	29.3	28.0	31.9	24.0	26.2	29.7
Asia								
Cambodia			1.3				1.1	
Iraq			1.0				0.5	
Israel	60.3	46.4	24.0		61.7	47.6	26.7	
Kyrgyz Republic			6.2				8.1	
Malaysia	5.8	2.7	9.5	14.0	5.5	2.7	6.7	10.8
Mongolia				0.3				0.3
Nepal				2.7				6.2
Pakistan	18.5				18.6			
Palestine			33.3				36.2	
Philippines			0.1	1.8			0.1	1.8
Thailand	1.1	0.4	0.2	0.4	0.6	0.3	0.2	0.3
Africa								
Egypt			0.2				0.2	
Ghana				0.8				0.8
Guinea		1.2	5.2			1.0	5.4	
Kenya		1.0	2.1			1.0	2.1	
Mali		2.4	2.2			2.0	1.8	
Rwanda			1.4	7.8			1.1	5.5
Senegal		6.3		3.6		4.3		2.7
South Africa				10.3				5.2
Tanzania		2.4		1.0		2.2		1.1
Uganda			2.6	1.8			2.8	2.0

Source: Minnesota Population Center, IPUMS-International

two-thirds of the countries studied is, at first glance, troubling. However, if we assess the magnitude of this loss, by interpolating figures between censuses where possible and extrapolating where necessary, we find that the omissions due to the lack of a sample for a decade or two are not so great.

Most of the countries lacking data are characterized by small numbers of immigrants. For example, for the 1970s a census sample is not available for 3/5ths of the countries but, if we had samples for the missing, they would probably account for scarcely 2/5ths of the cases.

Only for the 2000 decade is the fraction of interpolated cases greater than the fraction of missing countries. This is due to the absence of a sample for France, an omission that may now be corrected thanks to the recent integration into IPUMS of a high-precision sample for France's first rolling census, 2004-2008.

However, marriage must first be defined if we are to study cross-border unions from a global perspective using census microdata. Because each national statistical agency is responsible for defining its own census concepts, we must accept *ex post facto* whatever definition is offered. Formal marriage is recorded in 89 samples (IPUMS- International code "21x"), and of these 55 further report cohabitating, informal or consensual unions (code "220"). Twenty eight samples simply report "married" or "in-union" (code "200") and do not otherwise differentiate between *de facto* (200), civil (211), religious (212), civil and/or religious (213, 214), traditional/customary (215), monogamous (216) or polygamous unions (217). We count as married those who are reported as such, whether formal (21x), informal (22x), or not specified (200).

We study the married foreign-born aged 25-39 co-resident with

their partners. In most instances co-residence is inferred by means of the IPUMS constructed variable “SPLOC” (Spouse’s location in the household).¹

Cross-border marriages are rarely identified in population censuses, and the samples in the IPUMS-International database are no exception. A proxy may be constructed by comparing year of immigration (country of residence one year ago), marital status, and spouse’s country of birth. Our reasoning is that if one of the spouses emigrated from the country of birth in the past year and is reported as married to a person born in the country of immigration then this constitutes a cross-border union.

Microdata for thirteen countries in the IPUMS-International database contain the necessary details, but seven must be excluded because the number of cases is too small: Argentina, Bolivia, Costa Rica, Jamaica, Greece, Malaysia and Venezuela. The phenomenon of cross-border marriages is not demographically significant in these countries with one exception. In the case of Malaysia cross-border marriages appear to be sizeable in number, but the samples are not large enough—two percent instead of ten—to analyze the phenomenon.

¹ SPLOC, a “value-added” by IPUMS to every household sample in the database, serves to link each person in a household to his/her spouse. SPLOC is constructed from marital status, relationship pairing, adjacency of listing in the household, and the occasional sample specific rule (such as child-to-child links). A non-zero code indicates the person number of the inferred co-resident spouse.

SPRULE explains the criteria used to construct SPLOC for each individual with a non-zero code. Co-residence may be de facto (commonly, slept in this residence last night), de-jure (usually or legally resident in this household) or both. A few censuses directly list the person number of the co-resident spouse (e.g., South Africa 2001 question P-06a), but we use the constructed SPLOC to maintain comparability between samples and thus make possible the study of the characteristics of ego and ego’s spouse.

(Fortunately, Statistics Malaysia recently entertained our proposal to entrust new high-precision samples to the IPUMS-International project).

The 47 countries provide a natural experiment in the study of unions by country of birth of the spouses; however, for a refined analysis of cross-border unions, defined as international migration for the purpose of marriage, our analysis is limited to five countries: Chile, Colombia, Italy, Spain, and the USA.

Results

Patterns and Trends in Cross-Border Marriages

First, consider the patterns and trends of the proportions of international migrants by gender for the 47 countries in the IPUMS samples (Table 1). A medley of eleven countries stand out with high proportions (10% or greater) of foreign-born aged 25-39, according to the most recent census: Austria, Belarus, Costa Rica, France, Greece, Israel, Malaysia, Pakistan, Palestine, Portugal, Puerto Rico, South Africa, Switzerland, and the USA.

In Malaysia, for example, in 1970 5.8% of males aged 25-39 were foreign-born rising to 14.0% in 2000. The figures for female immigrants to Malaysia were similar. Although the increase from 5.5 to 10.8% is not as high, it is remarkable to consider that 10% of young adult Malaysians of both sexes were foreign-born.

The pattern for the USA is even more striking. In 1970 5.9% of males and 6.9% of females were foreign-born, surging in a mere three decades to 19.0 and 17.7%, respectively. What this means is that in the

USA, according to the 2000 census, almost one-fifth of males and females aged 25-39 were foreign-born. Of 31.3 million males, 6.0 were foreign-born compared to 5.5 million females. Among the foreign-born, 35% of males were born in Mexico versus 29% of females.

Only one country with high levels of foreign-born showed any tendency to decline: Israel. In 1970, over 69% of adults aged 25-39 in Israel were foreign-born, declining to 25% according to the 1995 census—still a remarkable fraction.

Other countries with high, but rising levels of foreign-born young adults were France (27%), Puerto Rico (15%), Costa Rica and Portugal (11%). In eleven countries, the proportions of foreign-born were modest at less than 5%, and the proportions were rising in only three: Guinea, Rwanda and Spain. Vanishingly small, demographically speaking, was the incidence of immigration in almost half the countries studied (22 of 47).

Table 2, the proportion of native-born aged 25-39 in unions with foreign-born, brings us closer to the matter of cross-border marriages. An incidence as high as ten percent was attained in only five countries—Belarus, France, Israel, Puerto Rico, and Switzerland—followed closely by three countries at slightly lower levels: Greece, Palestine, and Portugal. At around 4% in recent years, there is a small cluster of eight countries: Armenia, Austria, Costa Rica, Italy, Kyrgyz Republic, Slovenia, South Africa, and the USA.

A divide between developed and the developing countries seems to exist for the frequency of marriages between native-born and immigrants. The native-born of developed countries attain higher rates of out-marriage than those for developing ones. Spain at 3.7% establishes the floor for out-marriage among the developed countries,

Table 2. Proportion of Native-Born (25-39) in Union Married to Foreign-Born by Sex, Country and Census Round

Country	Men				Women			
	1970	1980	1990	2000	1970	1980	1990	2000
America								
Argentina	3.6	3.8	3.6	2.6	4.5	4.6	3.0	2.1
Bolivia	0.5			0.7	0.5			0.7
Brazil	0.3	0.4	0.1	0.1	1.0	0.8	0.3	0.2
Chile	0.5	0.4	0.4	0.8	0.8	0.4	0.4	0.7
Colombia	0.3	0.2	0.2	0.2	0.3	0.2	0.2	0.2
Costa Rica	1.8	2.2		4.0	2.3	2.5		4.1
Cuba				0.1				0.1
Ecuador	0.5	0.7	0.7	0.7	0.4	0.7	0.6	0.6
Mexico	0.2		0.2	0.2	0.3		0.2	0.2
Panama	1.7		2.1	2.1	2.3		1.5	1.7
Peru			0.1	0.2			0.1	0.2
Puerto Rico	5.3	4.3	11.3	13.1	4.5	3.5	10.6	12.2
Saint Lucia		2.6	3.2			2.0	3.0	
United States	2.9	3.2	3.7	5.0	1.8	2.7	3.9	5.0
Venezuela	2.7	3.8	4.0	2.7	5.2	4.5	4.2	3.3
Europe								
Armenia				4.6				3.8
Austria				6.1				4.4
Belarus			11.2				11.5	
France	5.5	6.0	12.2		6.4	7.3	14.8	
Greece				9.9				5.4
Italy				4.8				3.1
Portugal		1.9	3.4	8.0		1.0	3.1	7.1
Romania	0.6		0.0	0.2	0.9		0.1	0.3
Slovenia				4.0				4.4
Spain			2.1	3.9			1.7	3.5
Switzerland	13.8	10.4	11.2	14.3	9.6	9.9	11.0	12.6
Asia								
Cambodia			0.3				0.3	
Iraq			0.2				0.2	
Israel	23.4	24.7	9.8		25.1	35.9	10.6	
Kyrgyz Republic			5.4				3.6	
Malaysia	3.0	2.2	2.1	2.0	4.1	1.5	1.6	1.5
Mongolia				0.1				0.1
Nepal				5.5				1.1
Pakistan	1.1				6.9			
Palestine			10.5				4.9	
Philippines			0.0	0.2			0.1	0.2
Thailand	0.2	0.1	0.1	0.1	0.8	0.2	0.1	0.1
Africa								
Egypt			0.1				0.0	
Ghana				0.7				0.5
Guinea		0.7	2.2			0.5	0.8	
Kenya		0.6	1.3			0.4	1.1	
Mali		1.3	1.4			0.9	1.1	
Rwanda			0.5	0.9			0.8	1.4
Senegal		1.8		1.5		1.5		1.2
South Africa				3.3				5.9
Tanzania		0.7		0.4		0.7		0.4
Uganda			1.3	0.7			1.0	0.3

Source: Minnesota Population Center, IPUMS-International.

while for developing countries South Africa and the Kyrgyz Republic form the roof at 4.5% (averages for both sexes).

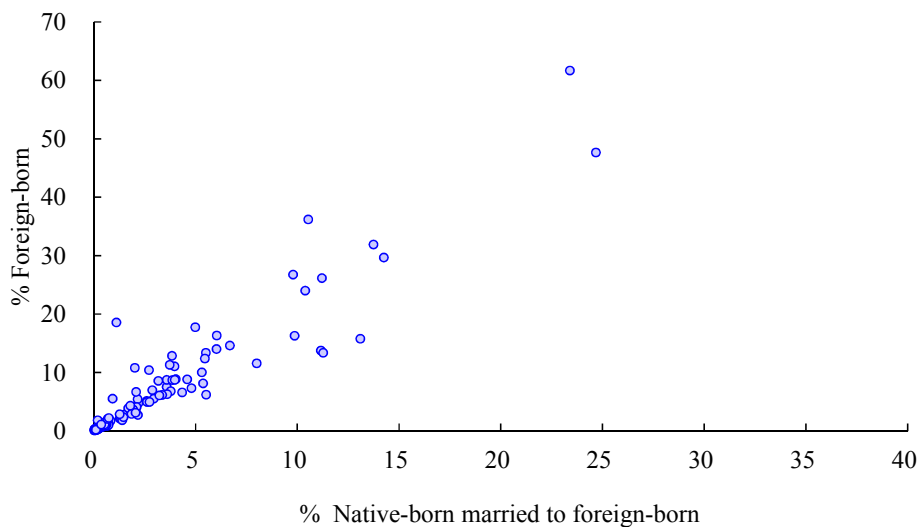
As a region, the Latin American countries, with the exceptions of Costa Rica and Puerto Rico, stand apart with low levels of out-marrying of 2% or less with little tendency to increase.

Likewise, in Africa, most out-marriage rates for natives are less than two percent with the exception of South Africa (3.3 and 5.9%, for males and females, respectively).

Among the Asian countries in our study, aside from the special cases of Israel and Palestine, rates are quite low. Malaysia might be considered an outlier with an out-marriage rate of 2%—that is, nonetheless, falling. For most Asian countries the rate is negligible at 0.5% (Cambodia, Iraq, Mongolia, Philippines, and Thailand). Two Asian states, with only one census to measure, show relatively high rates for one sex, but not for the other: Nepal (2001: 5.5 and 1.1) and Pakistan (1973: 1.1 and 6.9), for males and females, respectively.

From this plethora of cases, a simple, somewhat tautological rule emerges into focus in Figure 2: the greater the proportion of foreign-born females, the greater the proportion of native-born males married out ($R^2=.87$). Of course, the rule is tautological only at the extremes. If one percentage is low, the other must also be low and vice-versa. Although heteroscedasticity is readily observed in Figure 2, what is remarkable is that even at mid-levels the rule still roughly holds. For example in Belarus (1999), 11% of men marry-out in a population where non-native females amount to 14%. A similar pattern is observed in Puerto Rico.

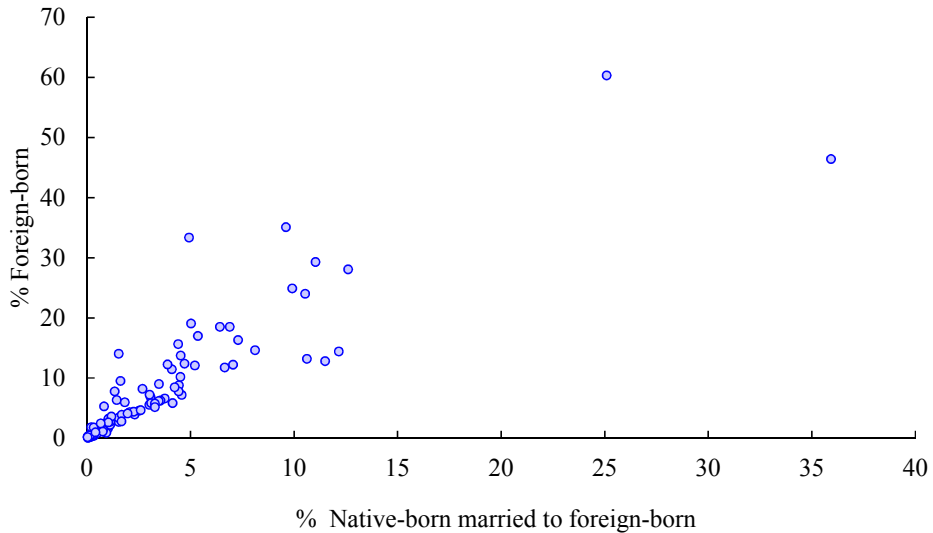
Figure 2. Scatterplot of the Share of Foreign-Born Women (25-39) and the Percentage of Native-Born Men (25-39) Married to Foreign-Born Women, Various Countries and Census Rounds



Despite the low levels of foreign-born in Colombia, Cuba, and Ghana, the fraction of natives married to non-natives is roughly the same as in Belarus, where there is a relatively large foreign-born population. At the other extreme is the USA, where in 2000, despite the foreign-born accounting for 17.7% of the female population aged 25-39, only 5% of native males were in unions with non-natives with the fraction declining from 1970 to 2000. In Malaysia, the decline is even more dramatic, despite the fact that, similar to the USA, the proportion of foreign-born women quadrupled to more than 10%.

Viewed from the perspective of male immigrants (Figure 3), a similar, slightly fuzzier picture emerges ($R^2=.78$), with one significant gendered difference: foreign-born males were less likely than females to marry natives. Even after taking into account size of group, foreign-born males were exceedingly unlikely to be married to native women in

Figure 3. Scatterplot of the Share of Foreign-Born Men (25-39) and the Percentage of Native-born Women (25-39) Married to Foreign-born Men, Various Countries and Census Rounds



a half dozen countries: Egypt (2006), Greece (2001), Guinea (1996), Malaysia (2000), Nepal (2001), and Palestine (1997).

Where a considerable proportion of men were likely to marry native women, the fraction was much smaller than what would be expected if unions were random. Roughly a two point increase in the percentage of foreign-born men yielded a single point increase in the proportion marrying native women.

The case of Israel breaks the rule. In 1972, 60% of males aged 25-39 were foreign-born, but only 25% were married to native-born women. Two decades later, the 25:60 ratio remained unchanged, despite the sharp fall in the proportion of young adult foreign-born males (to 10:24).

France stands out as the polar opposite exception. Here, the odds

of marrying a native-born female rose by one-half from 1962 to 1999, reaching 1:3, despite the fact that the proportion of foreign-born men remained fairly steady.

In the USA, a sharp rise over 3 decades in the proportion of foreign-born males from 6 to 19%, was accompanied by an increase in the percentage marrying native-born women (from 2 to 5%) but a decline in the ratio (1:3 to 1:4).

Gendered Inelasticities in Cross-Border Marriage Migration

To refine our analysis of cross-border marriage, we turn to the microdata for five countries—USA, Spain, Italy, Chile and Colombia—where a) the census included a question on year of immigration and b) the number of foreign-born seems to be sufficiently large to study the patterns by country of birth and sex.

Unfortunately among the Asian countries, we are unable to analyze the cross-boundary marriage phenomenon because for four important countries (Japan, Korea, Australia, and New Zealand) no microdata have been entrusted to IPUMS. In two instances, the samples that were entrusted are not yet integrated (Indonesia and Bangladesh). In one case, Malaysia, the samples were integrated but the densities were too small. In addition, most censuses lacked the essential question on year of immigration (Armenia, Cambodia, China, India, Iraq, Kyrgyz Republic, Mongolia, Nepal, Pakistan, Philippines, Thailand, and Vietnam).

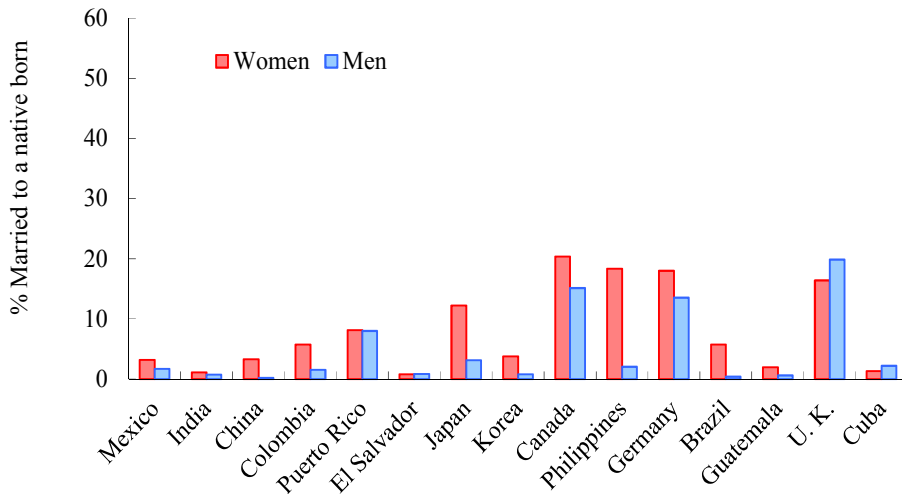
For Africa, there is widespread endorsement of the IPUMS project, but no Africa census taken before the 2010 round contains a question on year of immigration. Thus, our proxy for cross-border unions—

immigrated within one year and in union to a native-born resident—cannot be analyzed for any African census until the 2010 microdata become available. The 2009 census of Kenya is the first national enumeration in the history of census taking on the continent that inquires as to length of residence in country. The 2011 census of South Africa will be the second. The absence of the question is readily explained: in most countries immigrants are too few in number to justify the expense of burdening the census with an additional question when it is applicable to only a tiny fraction of respondents.

Figures 4a-4e display the results for five countries available from the 2000 round microdata: the USA, Spain, Italy, Chile and Colombia, respectively. As we saw in Table 1, the USA had the highest proportion of foreign-born young adult males in 2000 (19%), followed by Spain (9%), Italy (7%), Chile (1.7%) and Colombia (0.2%). The rates for females were almost identical at 18, 9, 7, 1.7, and 0.2%, respectively.

In the case of the USA (Figure 4a), of the 15 largest groups by national origin, cross-border marriages seem to be the most frequent with Asians. Also remarkable is the striking disproportion by gender. The well known preference of American men for Asian brides is confirmed by the 2000 census microdata of the USA. Among recent Filipino immigrants, 18% of females are in a union with a native-born American, but only 2% of male Filipinos, a ratio of 9:1. Among Japanese and Koreans the ratio is “only” 4:1 (12 and 3%, 4 and 1%, respectively). For Chinese, 3 percent of females are married to an American compared with less than 1% of males. Indians are the one large Asian group with an extremely low rate of cross-border marriage

Figure 4a. Percent of Recent Migrants Married to Native-Born by Sex and Country of Birth (Age 15 and over), USA, 2000

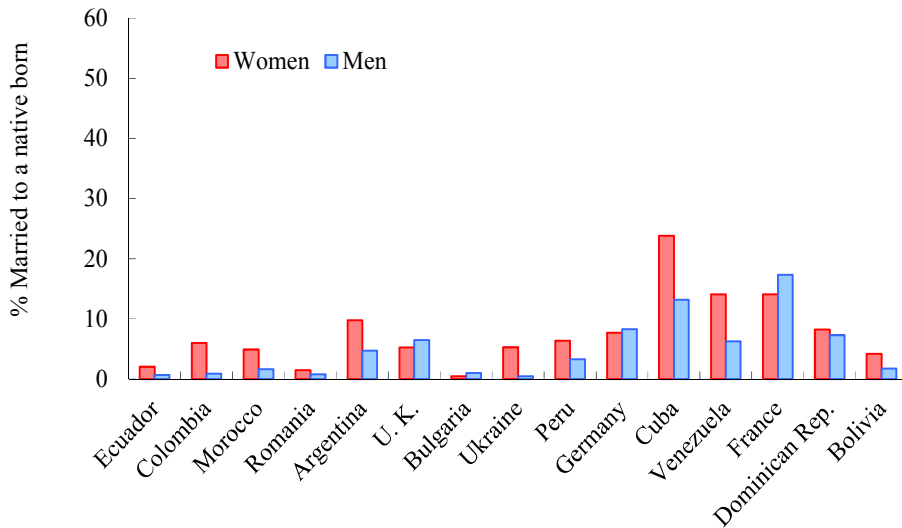


to American natives (1% for both sexes).

For immigrants from four Latin American countries there are also few cross-border unions with native-born Americans, whether male or female—Cuba (1% of females, 2% males), El Salvador (1% both), Guatemala (2%, 1%), and Mexico (3%, 2%—the only difference by sex that is statistically significant for this group of 4 countries). For two other Latin American origins cross-border marriages are slightly more common and differences by sex are statistically significant: Colombia (6% females, 2% males) and Brazil (6%, <1%). Puerto Ricans intermarry with native-born to a high degree (8% for both), but there is no difference between males and females.

A remarkably different pattern is observed for immigrants of European origin: the level is not only high but nearly the same for both sexes. The fraction reaches one-in-five for Canadian females (1:7 for males), one-in-six for Germans (1:7 for males) and one-in seven for

Figure 4b. Percent of Recent Migrants Married to Native-Born by Sex and Country of Birth (Age 15 and over), Spain, 2001



females born in the UK (1:5 for males). While the difference by sex for Canadians and Germans is statistically significant, its substantive importance is slight.

In Spain (Figure 4b), cross-border unions were frequent according to the 2001 census, but the distribution by countries differed markedly from the USA. In the first place, no Asian countries ranked in the top 20. Instead, we find 11 Latin American countries, and almost invariably there are twice as many female cross-border marriages as male, despite considerable variations in levels. For Ecuadorian females aged 25-39, a mere 2% were in cross-border unions to Spaniards versus one percent for Ecuadorian males—a statistically significant difference, despite the small percentages. For Argentines the proportions were 10 and 5%, respectively—the only statistically significant difference by sex in this list of 6 countries: Peruvians 6%:3%; Cubans 24%:13%; Venezuelans 14%:6%; Bolivians 4%:2%; and Chileans 8%:4%. Exceptions to the 2:1

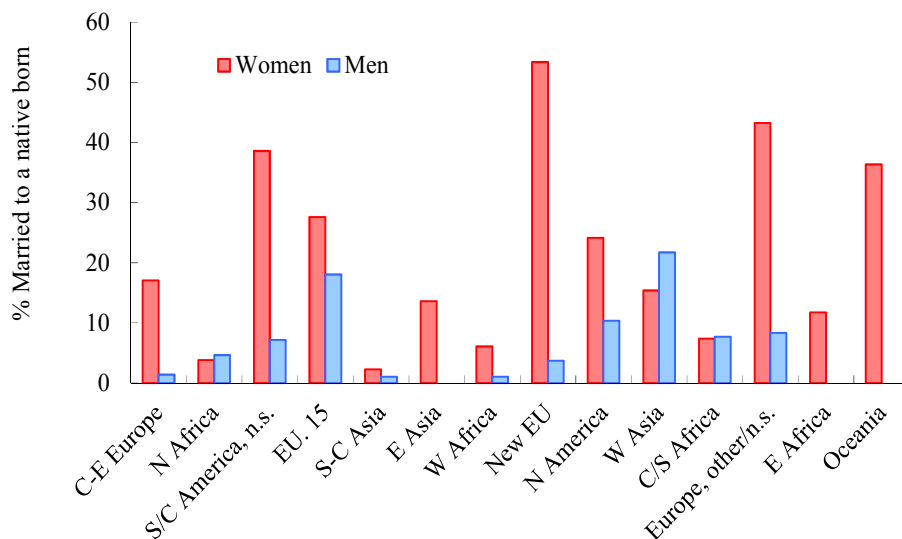
rule were the Colombians 6%:1% and Brazilians 19%:6%—both statistically significant. Slight differences by sex are recorded for Dominican Republicans 8%:7% and Uruguayans 2%:3%, but these are not statistically significant.

Among those of European origins enumerated in the 2001 census of Spain, there was rough parity with two extraordinary, statistically significant exceptions: Ukrainians: 5%:0%, and Russians 19%:0%. Romanians were 1:1, UK 5:6, Bulgarians 0:1, Germans 8:8, and French 14:17. Only two African countries made the list of the top 15—Moroccans (5%:2%) and Algerians (4%:3%)—and they both approach the 2:1 rule characteristic of Latin America, but only the Moroccan differences are statistically significant.

The Italian census sample for 2001 reports origins by world region, not country of birth. Thus, the statistics are not truly comparable with the detailed data for other countries. Nonetheless, nine of the 14 regions yield statistically significant differences by sex. In five regions there was a major imbalance in percent of cross-border brides to grooms (Figure 4c). With the figures for males equal to or approaching zero, for brides from Central Eastern Europe the figure was 17%:1%, compared with 14%:0% for Eastern Asia, 12%:0% for Eastern Africa and 36%:0% for Oceania—all differences by sex that are statistically significant.

For a second set of regions the differential by gender was substantial, but less extreme: South or Central America 39%:7%, “European Union 15” 28%:18%, North America 25%:10% (not statistically significant), “Europe, other and not specified” 43%:8%. Finally for a third group, no sex differences are significant despite the

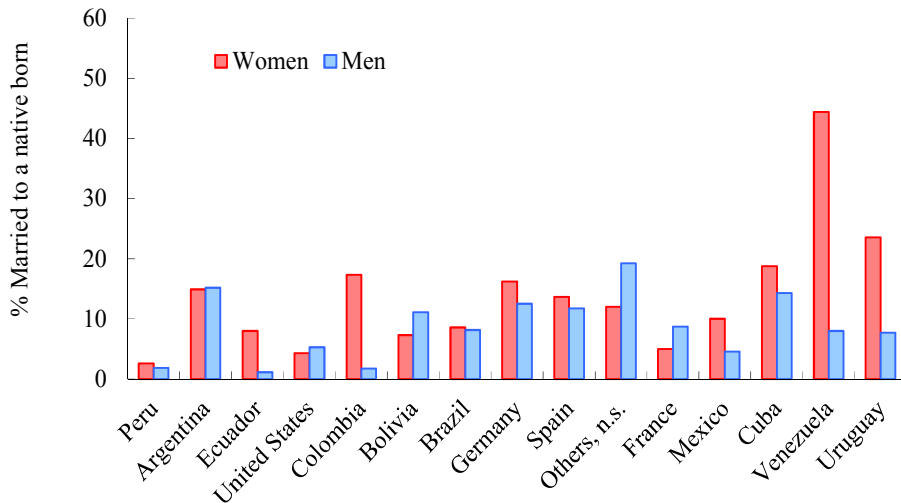
Figure 4c. Percent of Recent Migrants Married to Native-Born by Sex and Country of Birth (Age 15 and over), Italy, 2001



fact that there was a preponderance of cross-border marriages by female natives to male immigrants: Northern Africa 4%:5%, Western Asia 15%:22%, and Central and South Africa 7%:8%.

The overall incidence of immigration in Chile is small, and none of the gender patterns discussed above for other countries are statistically significant for foreign-born residents (see Figure 4d). Despite the absence of statistical significance, the observed frequencies with respect to cross-border marriages are replicated here: a) extremely gendered with high proportions of recent female immigrants married to native-born males, with almost no native-born females married to recent male immigrants (Ecuador, Colombia, Mexico, Venezuela and Uruguay); b) little gender selectivity (Peru, Argentina, USA, Brazil, Germany, Spain, and Cuba); c) female preference for cross-border unions, that is somewhat higher proportions of recent male immigrants in unions with

Figure 4d. Percent of Recent Migrants Married to Native-Born by Sex and Country of Birth (Age 15 and over), Chile, 2002

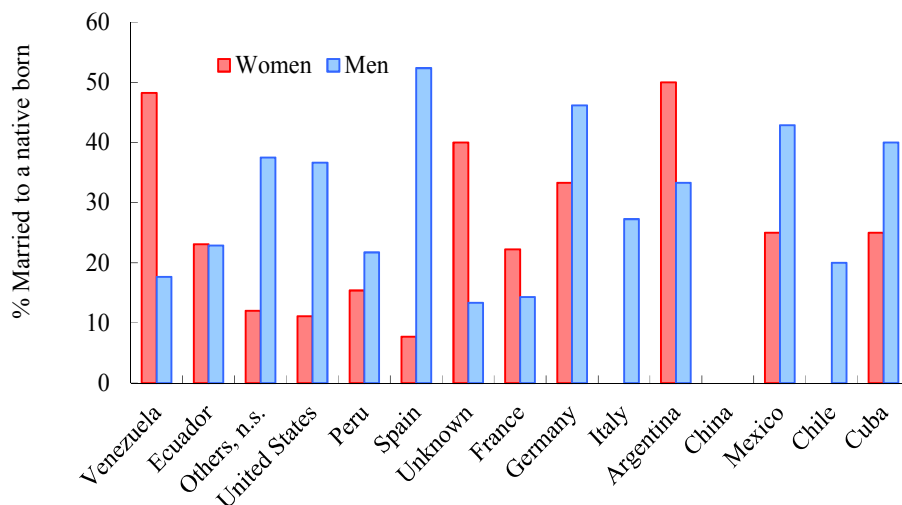


Chileans (Bolivia, France, and other countries not specified).

Colombia is characterized by an exceedingly low level of immigration, and an extraordinary pattern where more male immigrants engage in cross-border marriages than female (Figure 4e). For example, among young adult male immigrants from the USA who immigrated in the past year, 37% are married to Colombian women versus only 11% of USA females to Colombia men. A similar pattern is observed for Peruvian, Spanish, German, Italian, Mexican, Chilean and Cuban immigrants. The classic pattern of predominantly females as cross-border brides is common only for Venezuelans and Argentines. Finally, only two gendered differences in the frequency of cross-border marriages are statistically significant: Venezuelans and Spaniards. With Colombia, we see the flip-side of cross-border immigration to the USA and Spain.

Colombia is the only country in our analysis where emigration is higher than immigration. Many Colombian women emigrate to marry or

Figure 4e. Percent of Recent Migrants Married to Native-Born by Sex and Country of Birth (Age 15 and over), Colombia, 2005



marry to emigrate. There is a considerable number of cross-border marriages registered with the Colombian authorities by Spanish grooms and Colombian brides. Our data show that in some cases the couple resides in Colombia rather than residing in Spain. A sizeable fraction of Colombian women who marry foreigners already have children from previous relationships and prefer to settle in Colombia, as material conditions permit. The Colombian microdata on cross-border unions fit the Spanish microdata like pieces of a jigsaw puzzle.

Discussion

We find strikingly high proportions of immigrants in eleven countries, and little immigration in twenty-two. Nonetheless, there are sixteen countries with at least 4% of young adult native-born married to immigrant spouses. In five countries, the percentage is greater than

ten. Among developed countries, the ceiling of intermarriage seems to approach 30%, while the floor is slightly less than 4%. For developing countries, the floor is zero and the ceiling is slightly more than the 4% floor of developed countries.

The rule regarding intermarriage between immigrants and native-born—that the greater the proportion of foreign-born, the greater the proportion of native-born married out—is something of a tautology. What is surprising is that the relationship is tight at mid-levels, where one might expect more variation. We also find that foreign-born males are less likely than females to intermarry with native-born, regardless of the magnitude of immigration rates. While the microdata are silent as to motivation, the fact that much migration from low to high income countries is motivated by the quest for work means that immigrants are not seen as particularly attractive marriage partners, at least to the well-educated.

With the surge in immigration in recent decades, we do not observe a surge to the same degree in intermarriage. Indeed a 2% increase in the proportion of immigrants, leads to only a one point increase in the intermarriage rate. In the case of the USA, a sharp, fourteen point rise in the proportion of foreign-born males, from 6% in 1970 to 19% in 2000, was accompanied by an increase in of only three points in the percentage marrying native-born women, from 2 to only 5%. In other words, the intermarriage ratio actually declined from 1:3 to 1:4.

We analyze five countries in detail where there is information on year of immigration. We define cross-border marriage or union as that between an immigrant aged 25-39 resident in country for less than one

year married with a native-born spouse. We discern three gendered patterns: a) a much higher proportion of immigrant females marrying natives; b) gender parity; and c) a higher proportion of immigrant males marrying natives.

Type “a” characterizes Asian immigrants in the USA, such as the 18% of Filipino recent immigrant females married to native-born spouses vs. only 2% for Filipino males. For Spain, cross-border brides came primarily from the Ukraine and Russia and a half dozen Latin American countries.

The microdata for Italy aggregates country of birth to sub-continental regions. Here we find the largest gender differentials in cross-border marriage. In Chile and Colombia, cross-border grooms are preferred to brides—the flip side of patterns observed in the USA, Spain, and Italy.

Conclusion

Cross-border marriage is often driven by male demand in developed countries for a type of wife in short supply in their home country but in abundance in developing countries. In contrast, some women in the developing world are looking for men in developed countries. In an era enthralled by global social media (e.g., <http://www.thailovelines.com>) with fast, inexpensive air transportation (see: www.kayak.com), cross-border marriage offers a happy solution to satisfying these mutually compatible desires.

A Colombian bride with a Spanish groom is likely marrying a

man with attributes in short supply in Colombia. A Spanish groom with a Colombia bride is likely marrying a woman with attributes in short supply in Spain. However, exactly what these attributes are cannot be easily divined from census microdata alone. The pop phenomenon, Shakira (b. 1977, Barranquilla, Colombia) is engaged to Gerard Piqué (b. 1987, Barcelona, Spain), the 1.92 m center-back soccer star of Barça. Although neither Shakira nor Piqué socially represent intermarrying Colombian women and Spanish men (indeed, they broke off their engagement within a couple of months of our writing these lines), they epitomize the workings of a global, cross-border marriage market captured by census microdata.

From our previous research we expected to discover that gender squeeze—that is, skewed sex ratios of unmarried immigrants—would be a major dynamic in the marriage market by promoting intermarriage with spouses of native stock. From our analysis of the historical experience of the United States (McCaa 1993; McCaa et al. 2005; see also Goodkind 1997) we expected the sex-ratio imbalance to stimulate intermarriage. Moreover, at a global level from our analysis of 47 countries, one-sixth of immigrant males aged 25-39 lacked unmarried women from their own country with whom they might marry. Cross-border marriages were essential if they were to marry such women.

Future research should investigate further the relationship between cross-border marriage and the internal dynamics of marriage markets to explore the socio-demographic characteristics of natives that marry across-borders. Most research on intermarriage investigates the individual, societal and structural factors that encourage ethnic groups, racial minorities, international migrants, and other groups to marry out.

Therefore, more research is needed to discern the individual, societal and structural features that encourage natives and majority groups to marry across borders.

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Appendix 1. IPUMS Samples Excluded from the Analysis

Eight countries were excluded because their samples in the IPUMS database do not meet two basic requirements for this study: a question on country of birth or country-specific nativity (excludes China, Hungary, India, Jordan, Netherlands, and Vietnam) and a household sample design permitting analysis of co-resident spouses (excludes Canada and the United Kingdom—this problem is to be remedied shortly by the incorporation of new household samples for both countries).

Also excluded are the 13 most populous countries yet to entrust census microdata samples to the IPUMS-International project: the Russian Federation, Japan, Congo (DR), Myanmar, Korea (RO), Algeria, Afghanistan, Uzbekistan, Saudi Arabia, Korea (PDR), Yemen, Australia, and Syria. Three countries on this list leap to mind as being strangely out of place here: Japan, the Republic of Korea and Australia. Social scientists and policy makers may hope that the statistical agencies of these countries would open their doors to researchers world-wide in the not too distant future to access census microdata samples. Even better would be to make them available without cost, delay, or restriction other than to use the data for statistical purposes and to protect the anonymity of the respondents—as is the case for the samples disseminated by IPUMS.

We must also exclude 27 samples (7 countries) integrated into the IPUMS-International database in recent months. With all these exclusions, our coverage cannot be universal. Nonetheless, it is global. Each continent is represented with samples for at least 10 countries, and the Americas by 15.

Chronologically, of the 107 samples, 19 are from the decade of the 1970s, 21 from the 80s, 33 from the 90s and 34 from the first years of the 21st century. The temporal record is complete for 11 countries—all represented by one sample for each decade from 1970 through 2000: 8 for the Americas—Argentina, Brazil, Chile, Colombia, Ecuador, Puerto Rico, USA, and Venezuela—2 for Asia—Malaysia and Thailand—1 for Europe—Switzerland—and none for Africa. Data for three decades are available for seven countries—Costa Rica, Mexico, Panama, France, Portugal, Romania, and Israel—2 for 13—Bolivia, Peru, Saint Lucia, Spain, Philippines, Guinea, Kenya, Mali, Rwanda, Senegal, South Africa, Tanzania, and Uganda—and 1 for 16: Cuba, Armenia, Austria, Belarus, Greece, Italy, Slovenia, Cambodia, Iraq, Kyrgyz Republic, Mongolia, Nepal, Pakistan, Palestine, Egypt, and Ghana.

No data for the 2010 decade are available from IPUMS, although in 2012 high precision samples for the 2010 censuses of Indonesia and Mexico are planned for release. By 2014, a substantial number of 2010 round samples will be integrated into the IPUMS and made available to researchers worldwide at no cost.

Appendix 2. Number of Recent Migrants by Origin, Sex, and Country of Residence

Rank	United States 2000			Spain 2001			Italy 2001		
	Origin	Men	Women	Origin	Men	Women	Origin	Men	Women
1	Mexico	20,023	17,036	Ecuador	2,197	2,144	Central-Eastern Europe	1,246	1,739
2	India	2,244	1,488	Colombia	1,369	1,839	Northern Africa	601	629
3	China	1,212	678	Morocco	1,357	632	Central/South /n.s.. America	293	588
4	Colombia	1,183	816	Romania	643	478	European Union 15	277	420
5	Puerto Rico	1,138	734	Argentina	487	492	South-Central Asia	290	307
6	El Salvador	1,193	1,072	United Kingdom	340	287	Eastern Asia	175	294
7	Japan	871	502	Bulgaria	302	213	Western Africa	193	214
8	Korea	876	466	Ukraine	220	208	Newly added to EU	54	221
9	Canada	979	512	Peru	183	235	North America	58	58
10	Philippines	693	454	Germany	205	208	Western Asia	46	39
11	Germany	872	559	Cuba	144	214	Central & South Africa	26	27
12	Brazil	806	520	Venezuela	144	185	Europe, other and n.s.	12	37
13	Guatemala	996	903	France	150	135	Eastern Africa	14	34
14	United Kingdom	785	354	Dominican Republic	96	182	Oceania	3	11
15	Cuba	683	344	Bolivia	117	144			
	Total	34,554	26,438	Total	7,954	7,596	Total	3,288	4,618
Rank	Colombia 2005 (*10)			Chile 2002 (*10)					
	Origin	Men	Women	Origin	Men	Women			
1	Venezuela	85	85	Peru	218	392			
2	Ecuador	35	26	Argentina	297	181			
3	Other countries, n.s.	32	25	Ecuador	87	125			
4	United States	30	18	United States	114	70			
5	Peru	23	13	Colombia	58	52			
6	Spain	21	13	Bolivia	45	41			
7	Unknown	15	10	Brazil	49	35			
8	France	7	9	Germany	32	37			
9	Germany	13	3	Spain	34	22			
10	Italy	11	5	Other countries, n.s.	26	25			
11	Argentina	12	4	France	23	20			
12	China	10	5	Mexico	22	20			
13	Mexico	7	4	Cuba	21	16			
14	Chile	10	0	Venezuela	25	9			
15	Cuba	5	4	Uruguay	13	17			
	Total	316	224	Total	1,064	1,062			

Source: Minnesota Population Center, IPUMS-International.