



**[www.ipums.org/international](http://www.ipums.org/international)**

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## **IPUMS-International:**

**A global collaboratory to archive, integrate, and disseminate census microdata to researchers world-wide free of cost**

**See handouts:**

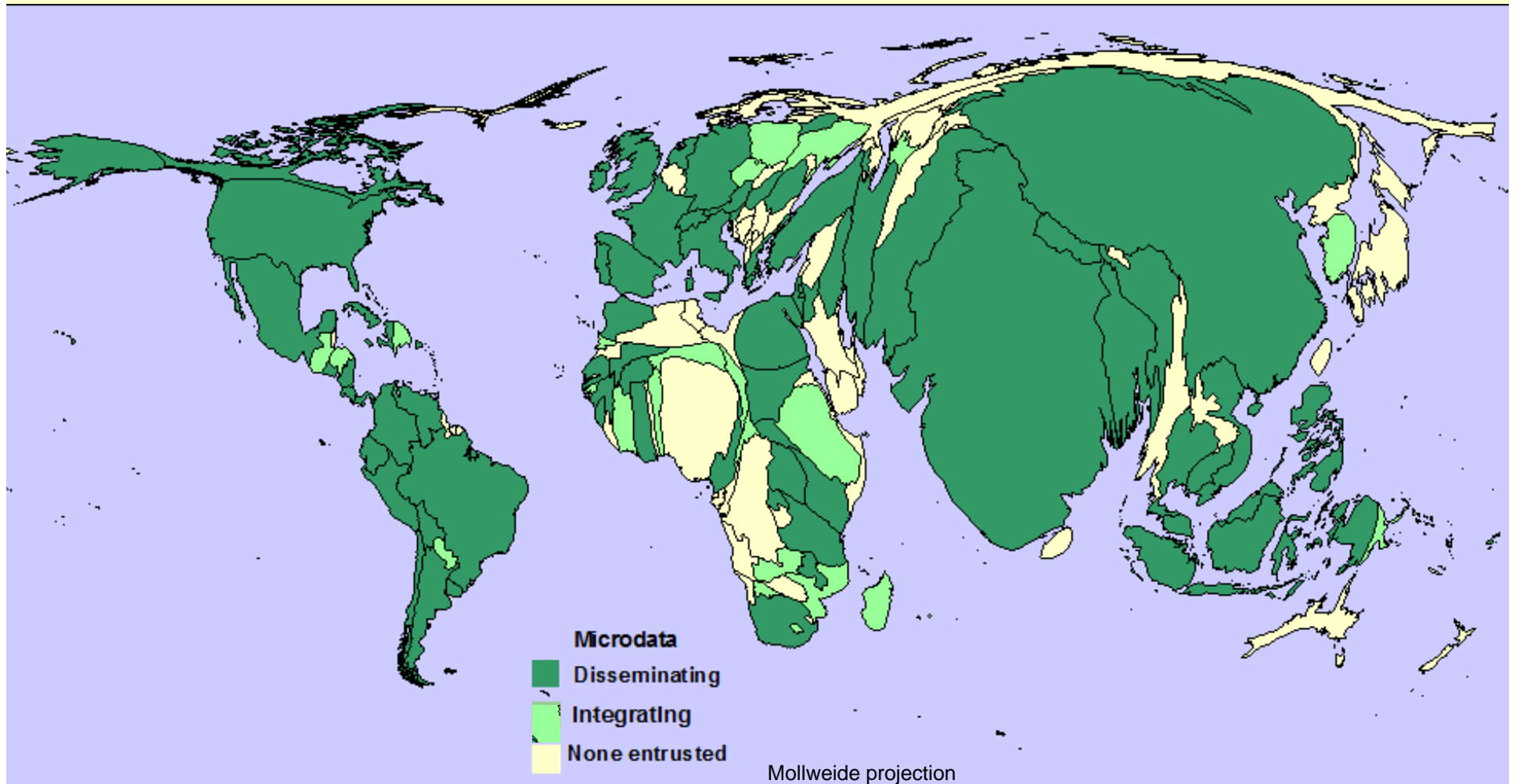
- 1. Card for list of samples and usage statistics**
- 2. Pamphlet for list of participating statistical offices and tips for using integrated microdata and metadata**

# IPUMS-International: 2013 cartogram (weighted by population)

*dark green = anonymized, harmonized and disseminating*

*74 countries, 238 samples, 540 million person records*

*bright green = integrating (25 countries, 75 censuses, 100 mill.)*





## IPUMS-International adds value to census microdata

- 1. Conditions of access to census microdata are the same for all countries and users (registration required, free of cost).**
- 2. Statistical confidentiality and security – disclosure controls, access restricted to researchers**
- 3. Integration/harmonization – census microdata and metadata**
  - E.g.: migration since birth, last 1/5/10 years, previous residence
- 4. Dissemination – custom tailored extracts: country(ies), census(es), sub-populations, variables, sample density, metadata**
- 5. Share -**
  - Microdata with national statistical office partners
  - Research results with other researchers, NSOs, etc.



**PROJECT**

About IPUMS-I  
How to Cite IPUMS-I  
User Registration and Login

**DATA**

Browse and Select Data  
Download Your Data Extract  
GIS and Other Data Files

**SAMPLES**

Sample Descriptions  
Variance Estimation  
Source Documents

**RESOURCES**

International Partners  
World Data Inventory  
Microdata Handbook  
Bibliography

## Integrated Public Use Microdata Series, International

**IPUMSI News**

June 2011 data release

**Browse and Select Data: countries, years, variables and subpopulations (e.g., migrants)**

census data from around the world. Its goals are to:

- Collect and preserve data and documentation
- Harmonize data
- Disseminate the data absolutely free!

62 countries - 185 censuses - 397 million person records

Mortality and fertility data  
NIH extends IPUMS-I  
... All news items

**MPC Data Projects**

IPUMS-USA and others



**Bibliography: view citations, links to publications**

Funding provided by: [National Science Foundation](#), [National Institutes of Health](#), and [Sun Microsystems](#).

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# IPUMS-International shares results posted at <http://bibliography.ipums.org>

## MPC Bibliography

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### Advanced Search

Enter search terms in at least one of the fields below

Keyword:

Title:

Author:

### Limit results by (optional)

Journal:

Type:

Publication Year:  to

Restrict to topics:

- |  |  |   |
|--|--|---|
| <input type="checkbox"/> Aging and Retirement            | <input type="checkbox"/> Crime and Deviance        | <input type="checkbox"/> Education                              |
| <input type="checkbox"/> Family and Marriage             | <input type="checkbox"/> Fertility and Mortality   | <input type="checkbox"/> Gender                                 |
| <input type="checkbox"/> Health                          | <input type="checkbox"/> Housing and Segregation   | <input type="checkbox"/> Labor Force and Occupational Structure |
| <input type="checkbox"/> Methodology and Data Collection | <input type="checkbox"/> Migration and Immigration | <input type="checkbox"/> Poverty and Welfare                    |
| <input type="checkbox"/> Race and Ethnicity              | <input type="checkbox"/> Other                     |   |

Restrict to projects:

- |                                    |                               |                                    |   |
|------------------------------------|-------------------------------|------------------------------------|---|
| <input type="checkbox"/> ATUS      | <input type="checkbox"/> IHIS | <input type="checkbox"/> IPUMS-CPS | <input checked="" type="checkbox"/> IPUMS-International |
| <input type="checkbox"/> IPUMS-USA | <input type="checkbox"/> NAPP | <input type="checkbox"/> NHGIS     |   |



## **IPUMS-International registered citations , Total = >600. “Migration” = 97**

- **Internal migration 41      International migration 56**
- **Single country 44      Global/Developing/OECD 38**
- **Topics:**
  - **Brain drain 5**
  - **Human capital 22**
  - **Stocks and flows 21**
- **Example citations:**
  - **Docquier, Frédéric, Çağlar Özden, Christopher Parsons, Erhan Artuc. 2012. “A Global Assessment of Human Capital Mobility: the Role of non-OECD Destinations.”**
  - **Sander, Nikola, Jana Vobecka. 2012. “A Cross-National Comparison of the Spatial Structure of Internal Migration by Level of Educational Attainment.”**

# Applied research example: Brain drain may lead to brain gain

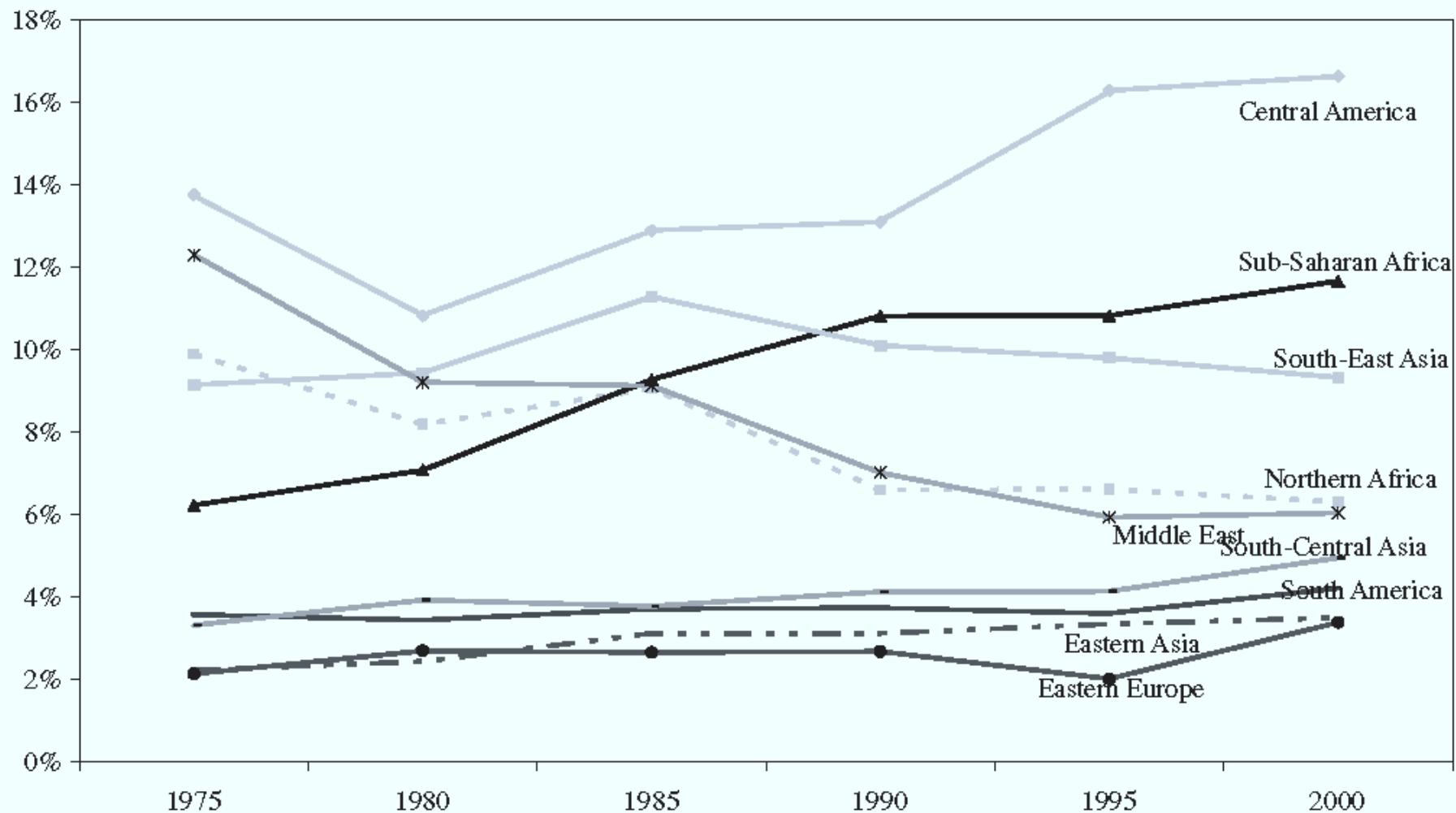



Figure 1. *Long-run trends in skilled emigration rates.*

Docquier, Defoort and Beine. *World Development*, April 2011:523–532


# IPUMS Website Live Demonstration

[www.ipums.org/international](http://www.ipums.org/international)

MINNESOTA POPULATION CENTER, UNIVERSITY OF MINNESOTA



[Home](#) | [Select Data](#) | [FAQ](#) | [Contact](#) | [Login](#)

<b>PROJECT</b> About IPUMS-I How to Cite IPUMS-I User Registration and Login	<h2>Integrated Public Use Microdata Series, International</h2> <p>census microdata for social and economic research</p> <hr/> <p>IPUMS-International is a project dedicated to collecting and distributing census data from around the world. Its goals are to:</p> <ul style="list-style-type: none"><li>• Collect and preserve data and documentation</li><li>• Harmonize data</li><li>• Disseminate the data absolutely free!</li></ul> <hr/> <p><b>68 countries - 211 censuses - 480 million person records</b></p>	<b>IPUMSI News</b> <a href="#">June 2012 data release</a> <a href="#">2011 award winners</a> <a href="#">Terra Populus funded</a> <a href="#">IPUMS Dublin workshop</a> <a href="#">June 2011 data release</a> <a href="#">Improved web interface</a> <a href="#">IPUMS Havana workshop</a> <a href="#">Mortality and fertility data</a> <a href="#">... All news items</a>
<b>DATA</b> Browse and Select Data Download Your Data Extract GIS and Other Data Files		
<b>SAMPLES</b> Sample Descriptions Variance Estimation Source Documents		
<b>RESOURCES</b> International Partners World Data Inventory Microdata Handbook Bibliography		
		<b>MPC Data Projects</b> <a href="#">IPUMS-USA and others</a>
		 <b>Sign up</b> to receive News of interest to IPUMS-International data users and producers.



# IPUMS Samples

Africa		Asia		Latin America		Europe/N. America	
Egypt	2	Armenia	1	Argentina	4	Austria	4
Ghana	1	Cambodia	2	Bolivia	3	Belarus	1
Guinea	2	China	2	Brazil	5	Canada	4
Kenya	2	India	5	Chile	5	France	7
Malawi	3	Indonesia	9	Colombia	4	Germany	4
Mali	2	Iran	1	Costa Rica	4	Greece	4
Morocco	3	Iraq	1	Cuba	1	Hungary	4
Rwanda	2	Israel	3	Ecuador	5	Ireland	8
Senegal	2	Jordan	1	El Salvador	2	Italy	1
Sierra Leone	1	Kyrgyzstan	1	Jamaica	3	Netherlands	3
South Africa	3	Malaysia	4	Mexico	7	Romania	3
Sudan	1	Mongolia	2	Nicaragua	3	Slovenia	1
Tanzania	2	Nepal	1	Panama	5	Spain	3
Uganda	2	Pakistan	3	Peru	2	Switzerland	4
		Palestine	2	Puerto Rico	5	UK	2
		Philippines	3	Saint Lucia	2	USA	6
		Thailand	4	Uruguay	5		
		Turkey	3	Venezuela	4		
		Vietnam	3				

# IPUMS Microdata

	Relation to head		Marital status		Migration status		Occupation	
0000980001001002	1000	0791	220	220802	11	203900	999	009900000000001
0000980001002001	2000	0642	220	220802	21	203100	999	009900000000002
0000980001003000	4100	0231	100	220802	21	201000	832	00269000001202
0000980001004000	4100	0132	100	220801	21	203300	999	009900000000002
0000988001001002	1000	0351	210	220802	23	112300	723	005270000000302
0000988001002001	2000	0412	210	220802	21	203100	999	009900000000002
0000988001003000	3000	0172	100	220802	22	122300	998	009900000000002
0000988001004000	3000	0162	100	220802	22	123100	999	009900000000002
0000988001005006	4910	0192	210	220802	22	123100	999	009900000000002
0000988001006005	4910	0271	210	220802	23	121000	122	00011000009602
0000988001007000	4100	0002	100	220800	00	000000	999	00990999999992
0000988001008000	4910	0221	100	220802	23	111000	611	00011000002801
0001005001001002	1000	0451	210	220801	22	121000	611	00011000002002
0001005001002001	2000	0342	210	220801	22	13100	999	009900000000002
0001005001003000	3000	0122	100	220801	22	123300	999	009900000000002
0001013001001002	1000	0651	220	220702	21	203430	999	009900000000002
0001013001002001	2000	0652	220	220802	21	203100	999	009900000000002
0001013001003000	3000	0332	350	220802	22	13100	999	009900000000002
0001013001004000	4100	0152	100	220801	22	13300	999	009900000000002
0001013001005000	4100	0132	100	220801	22	123300	999	009900000000002
0001013001006000	4100	0021	100	220800	00	000000	999	00990999999992

# Strengths of IPUMS Microdata

- **Microdata: individual-level analysis**
- **Persons are organized into households**  
“pointers” => age of spouse, education of mother
- **Large sample sizes (median 785,000 cases)**
- **Multiple samples for most countries**
- **Data are cleaned and documented**
- **Harmonized variables**
- **Unharmonized variables – no lost information**

# Limitations of IPUMS Samples

- **Confidentialized – limited low-level geography**
- **Samples**
  - sampling error**
  - insufficient cases for some subpopulations**
- **Comparability issues**
- **Cross-sectional – causality**

# Future Plans

- **2013: Bangladesh, Burkina Faso, Cameroon, Fiji, Haiti**
- **Improved geography**  
**Harmonization over time; boundary files**
- **Wealth index**
- **Remote access**
- **TerraPopulus – climate and environment**

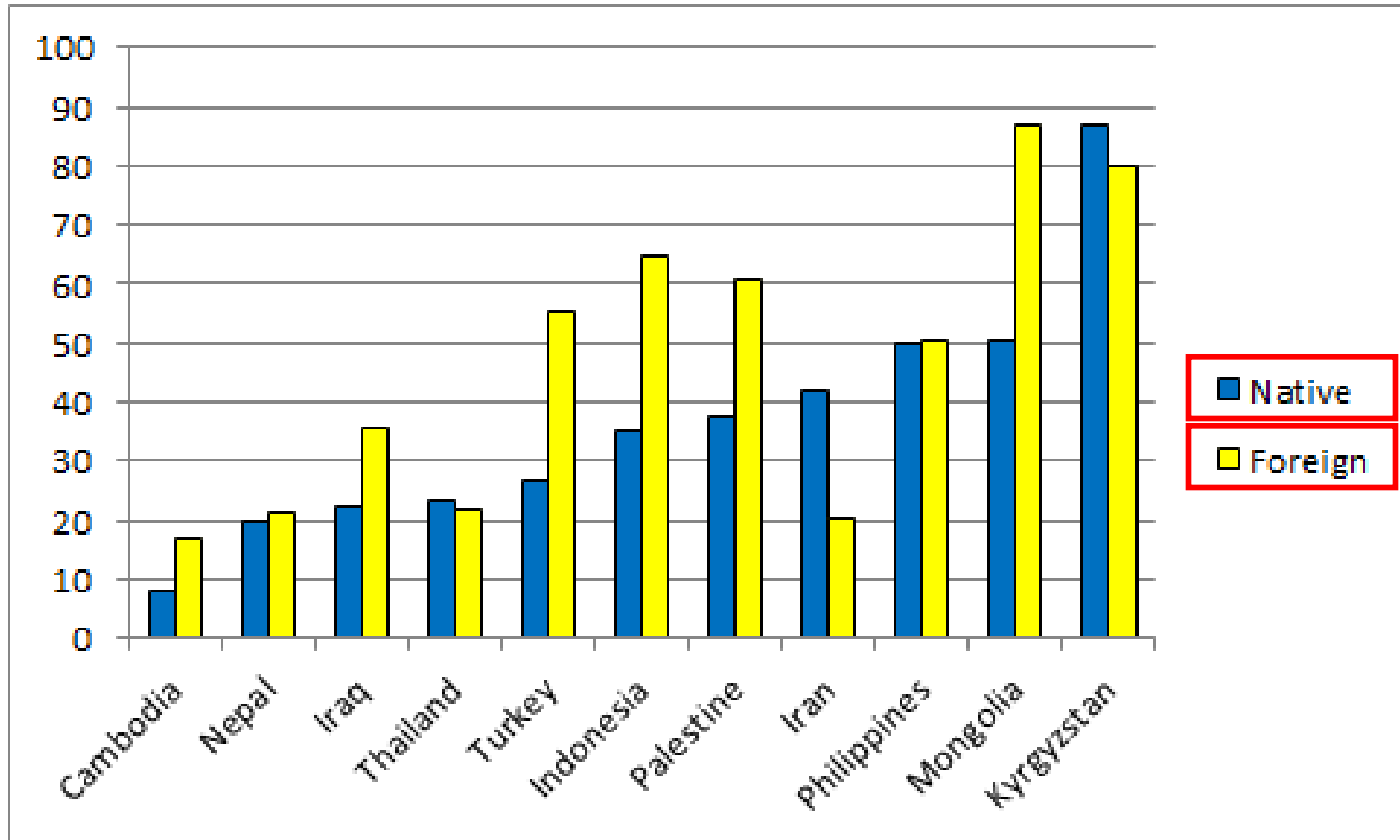
# Migration Variables in IPUMS

<u>Variable</u>	<u>N of Samples</u>
Place of residence 1/5/10 years ago	113
Place of previous residence	67
Country of residence 1/5 years ago	55
Country of previous residence	41
Nativity status	175
Country of birth	130
Major subnational division of birth	145
Urban status, previous or x years ago	22
Years residing in current locality	71
Year of immigration	46
Citizenship status/nationality	111
Reason for migration	22

# Research Examples Using IPUMS

- [Education](#)
- [Social impact](#)
- [Demography](#)
- [Return migration](#)
- [Measurement](#)
  
- [End show](#)

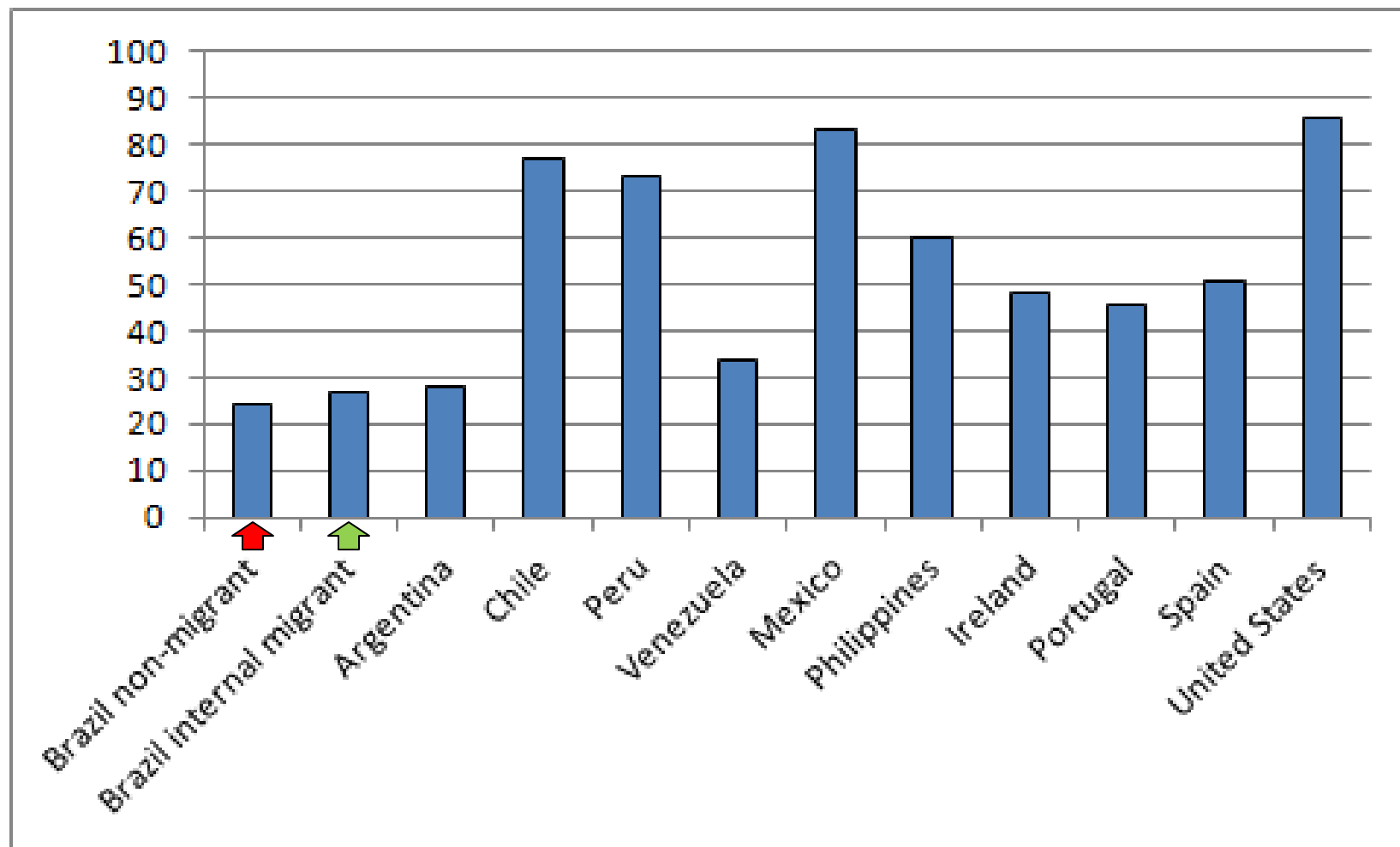
## Secondary Education by Nativity



Source: IPUMS. Persons age 20 to 59. Census closest to year 2000 in each country.

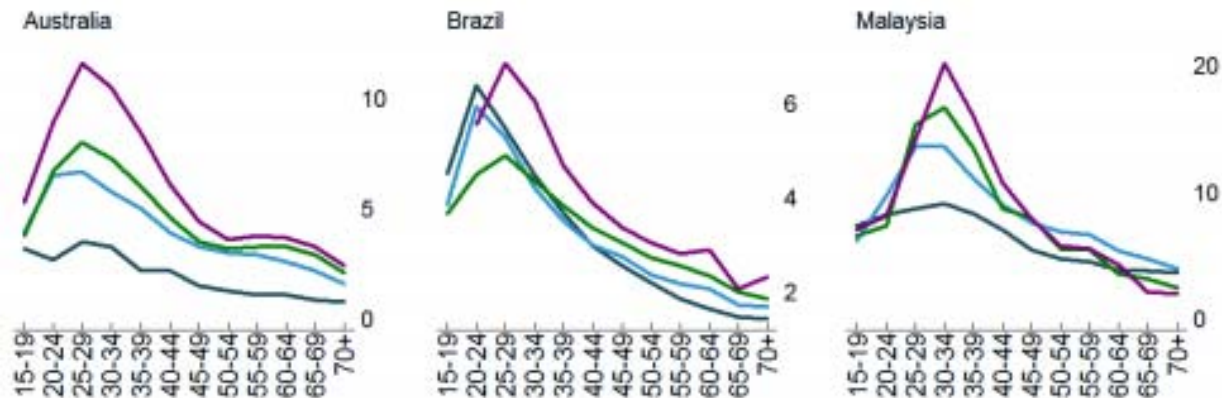


## Brazilians Living Abroad: Secondary Education by Country of Residence

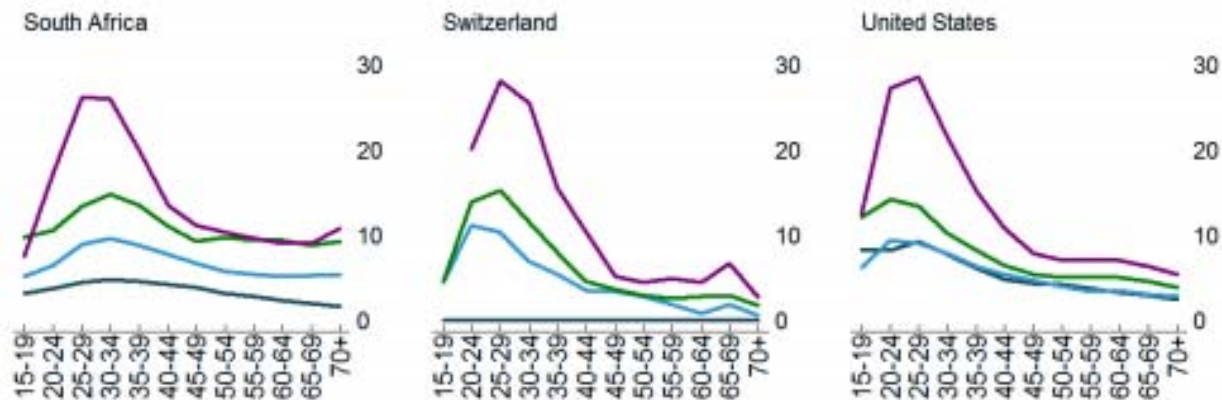


Source: IPUMS. Persons born in Brazil, age 18 and older with secondary education or more. Data are from census closest to year 2000 in each country.

# Internal Migration by Age and Education



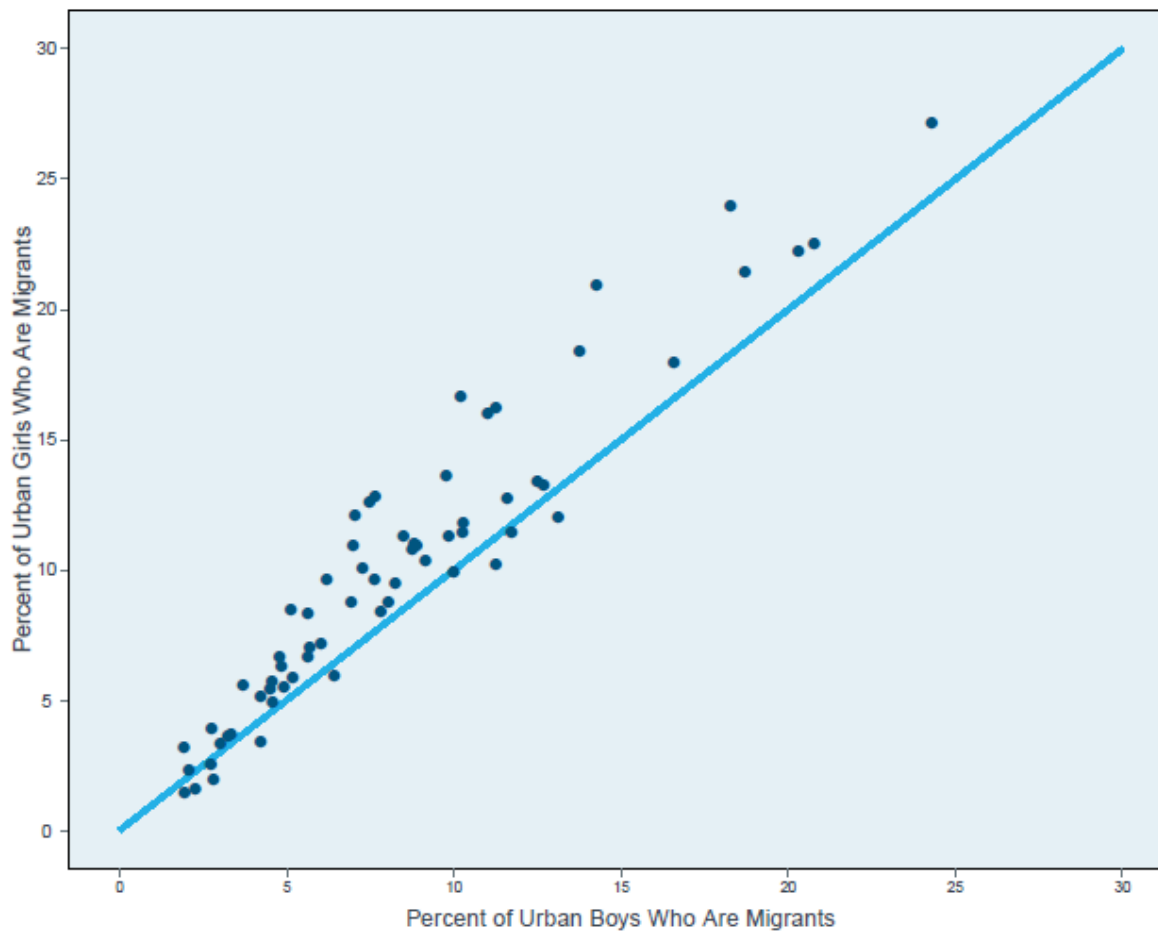
(a) Australia, Brazil and Malaysia



— less than primary    — primary    — secondary    — tertiary

Source: N. Sander and J. Vobecka, "A Cross-National Comparison of the Spatial Structure of Internal Migration by Level of Educational Attainment," PAA, 2012.

## Adolescent Urban Migrants by Sex



(c) Urban girls compared with urban boys

Figure 3: In-migration percentages for adolescent girls and boys aged 15–19. Migration defined as a cross-province move or the equivalent in the previous five years. Source: IPUMS.

Each data point is an IPUMS sample.

Source: Mark Montgomery et al., “Urban Migration of Adolescent Girls.” PAA 2012

# Migrant Adolescent Girls Living Without Parents or Spouse

Non-migrant

Migrant

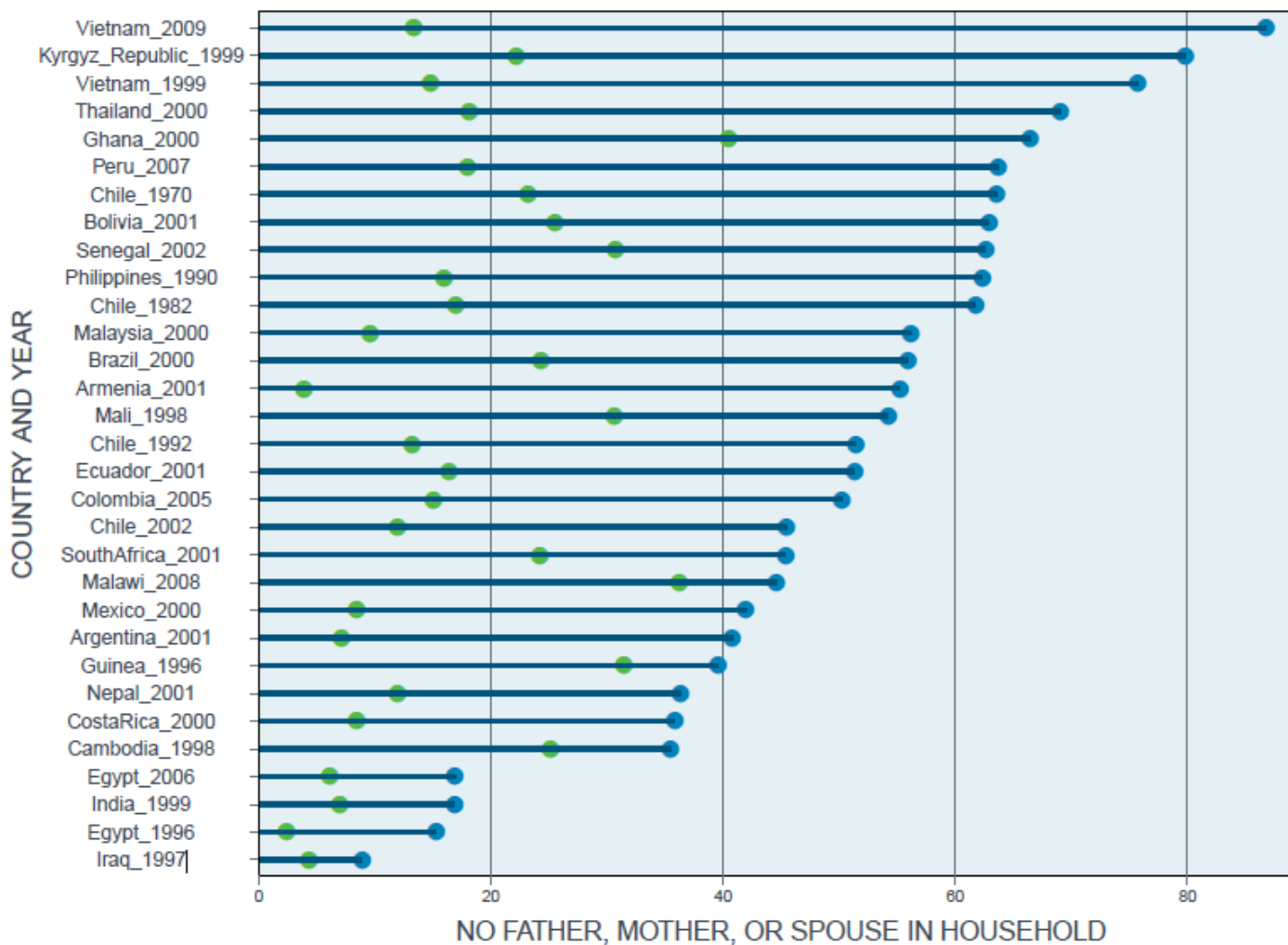
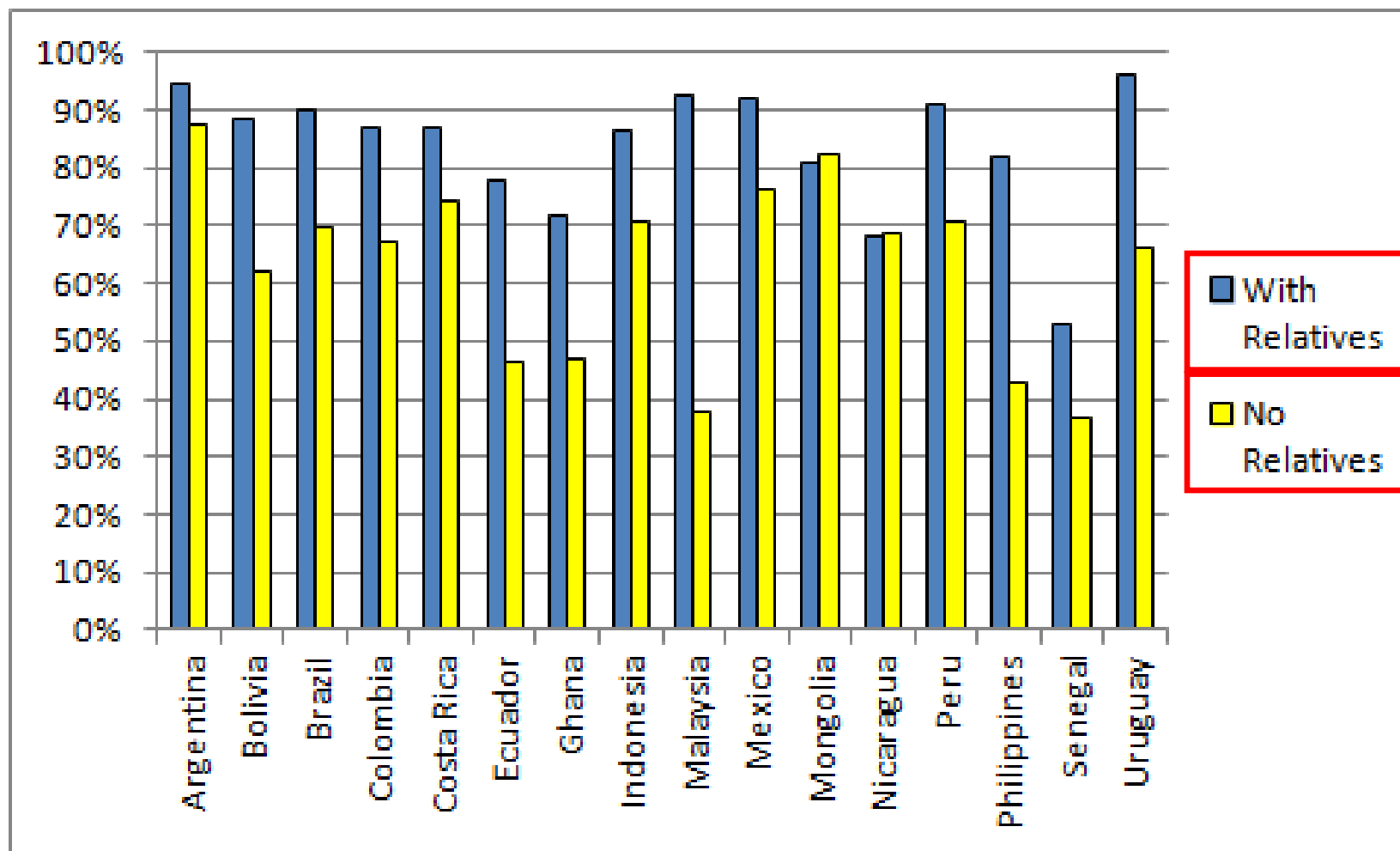


Figure 16: Urban girls aged 15–19 not living with a mother, father, or spouse, by migrant status (cross-province movers). Source: IPUMS.

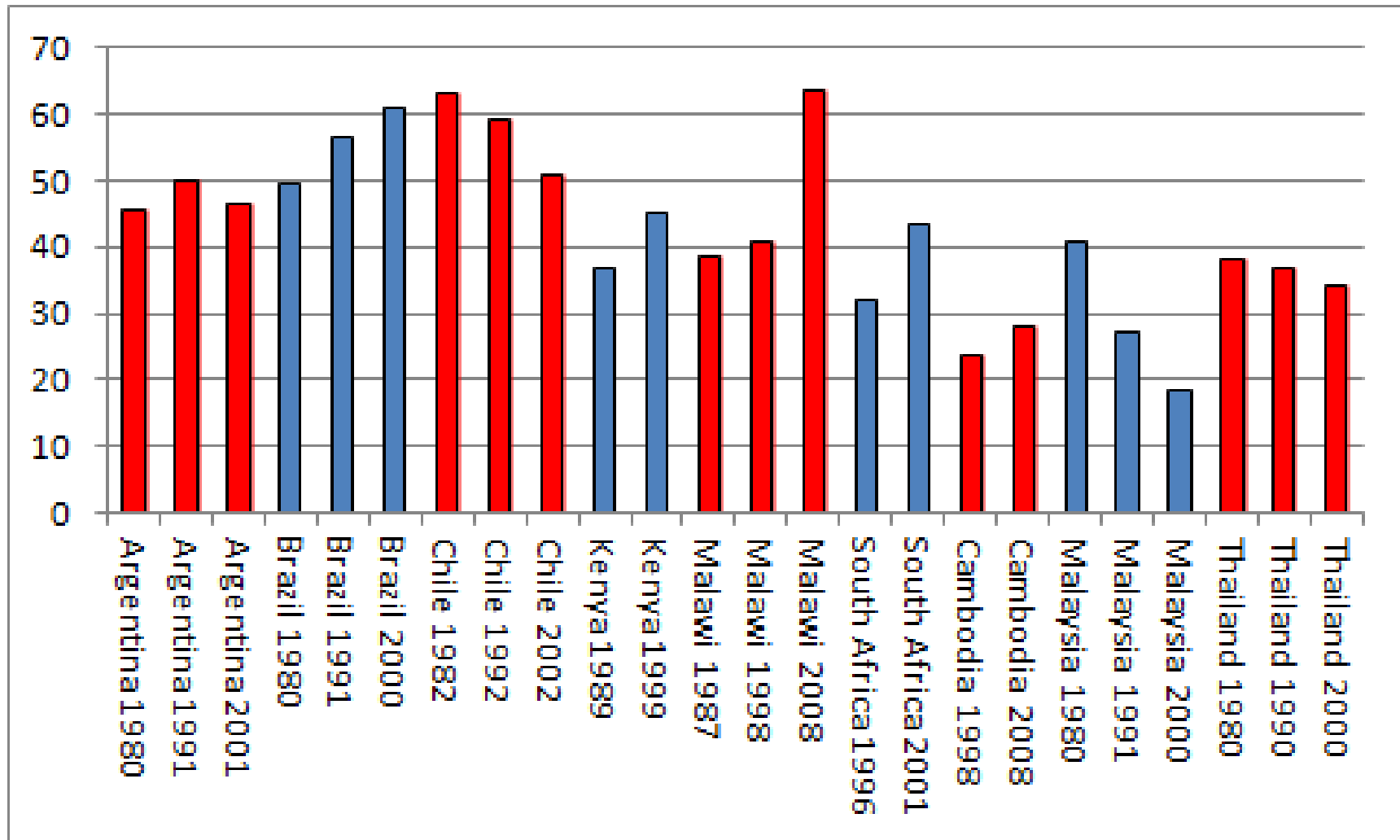
Source: Mark Montgomery et al., “Urban Migration of Adolescent Girls.” PAA 2012

## School Attendance of Migrant Children, by Presence of Relatives



Source: IPUMS. Samples circa 2000. Children age 6 to 15 who migrated internally within the past 5 years.

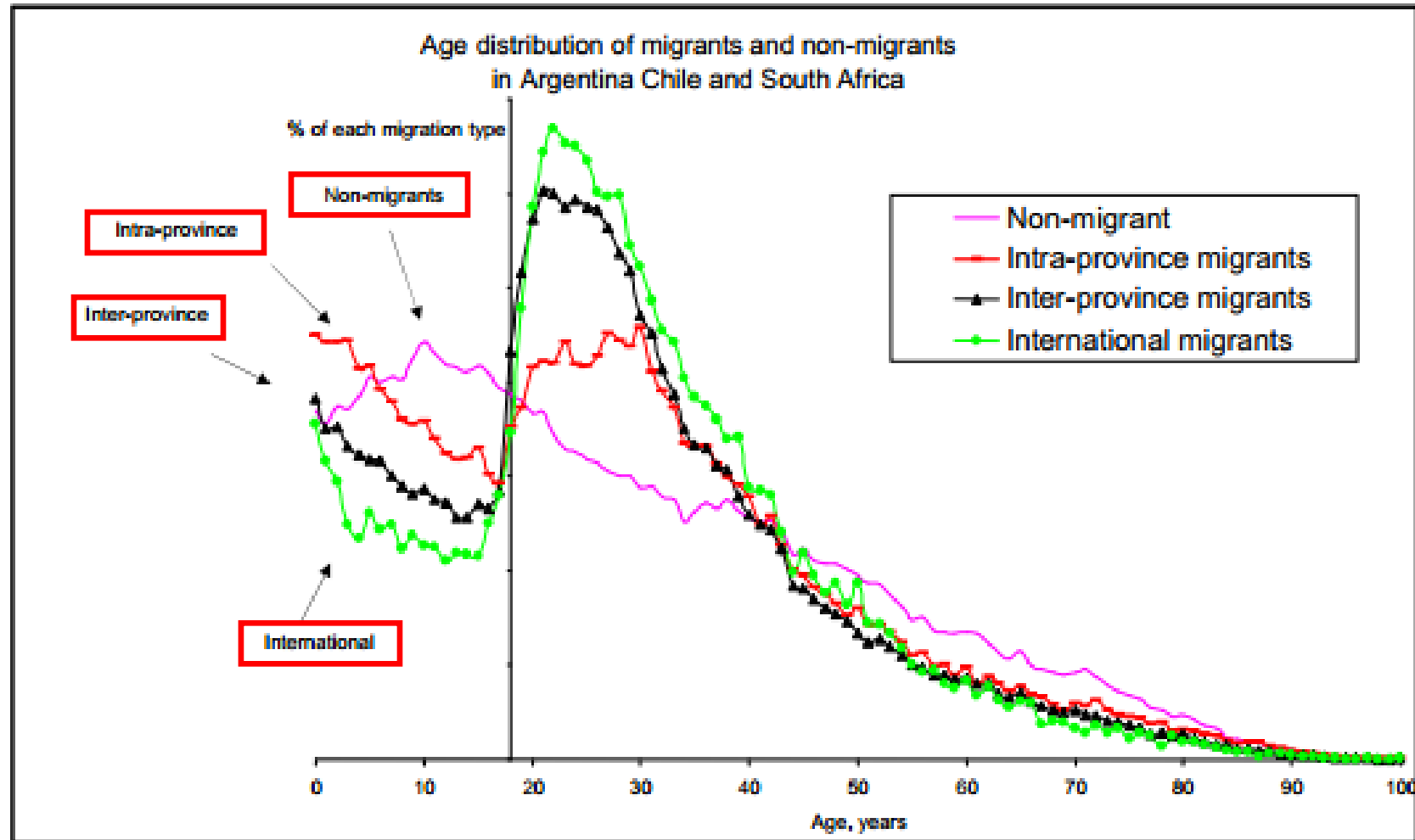
## Immigrant Intermarriage Over Time



Source: IPUMS. Foreign-born persons in a marriage or union to a person from a different country of origin.

# Age by Migrant Type: 3 Countries

Figure 1: Age profiles by migration types, Argentina, Chile and South Africa

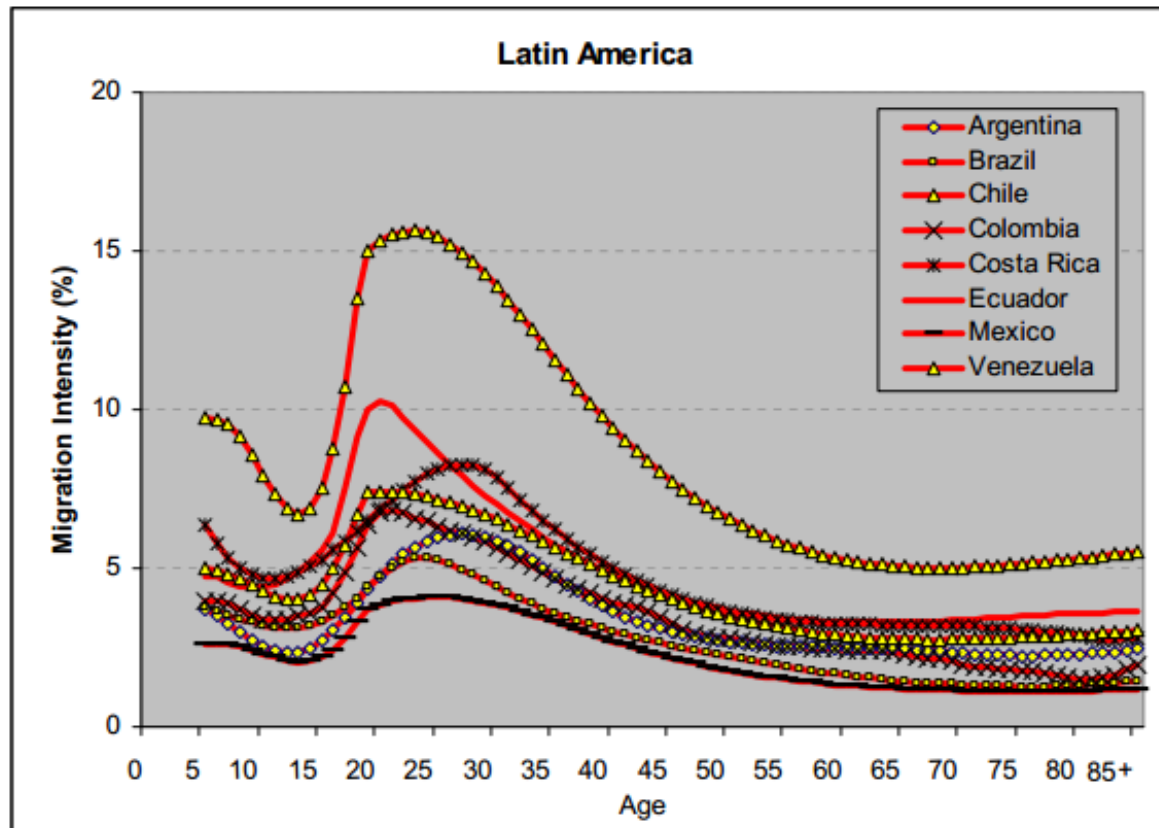


Migration in previous 5 years in Argentina, Chile and South Africa.

Source: Shahin Yaqub, "Child Migrants with and without Parents: Census-Based Estimates of Scale and Characteristics in Argentina, Chile and South Africa", UNICEF Discussion Paper 2009-02, February 2009

# Internal Migration Intensity by Age: Latin America

Figure 4b: Age Profiles of Five Year Migration Intensity for 'Major Regions', Selected Countries in Latin America



Source: M. Bell and S. Muhidin, "Cross-National Comparisons of Internal Migration", UNDP, Human Development Research Paper, 2009/30, 2009.



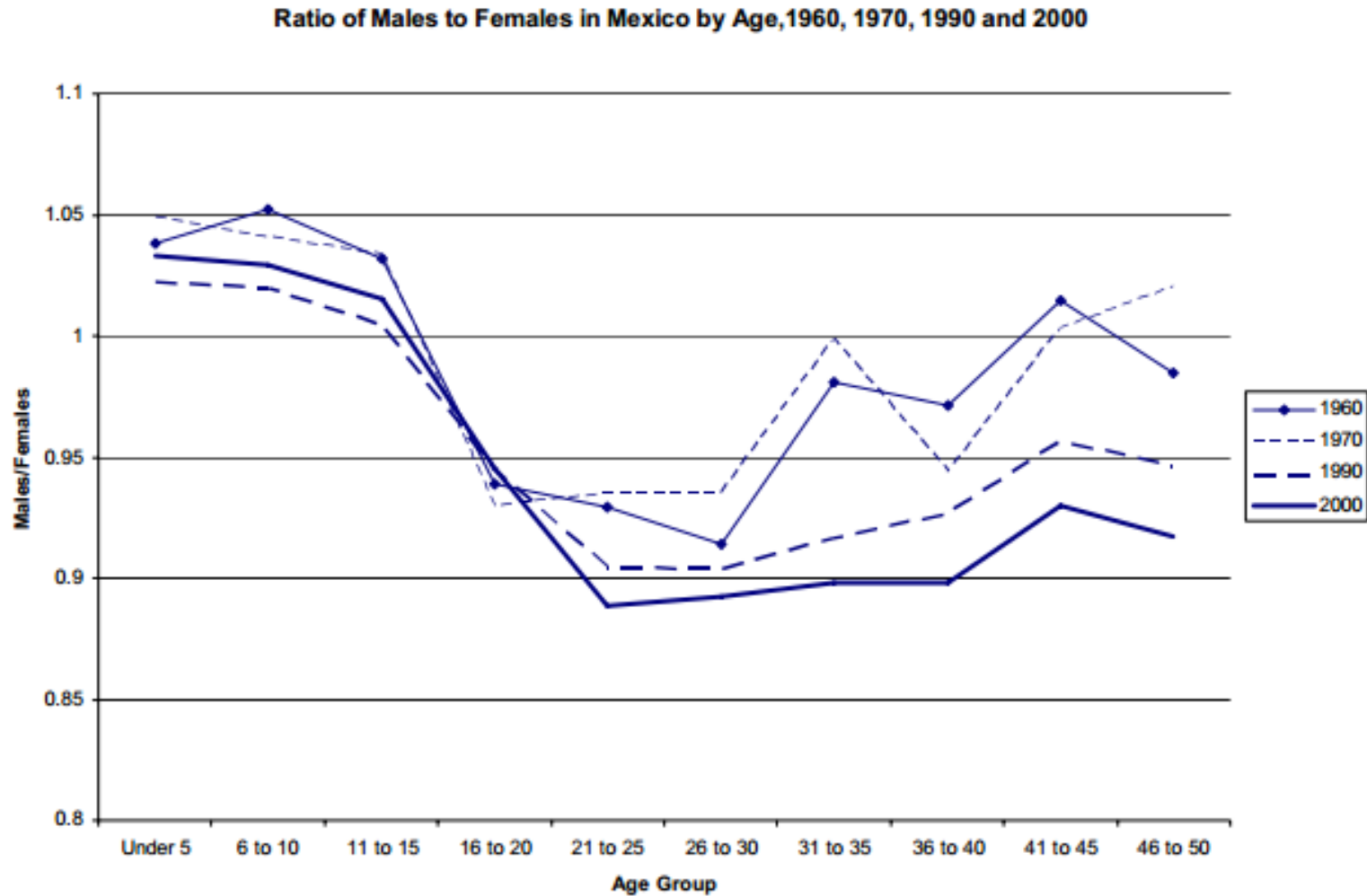
## Age 60+ Internal Migration Rates, Previous 5 Years

	Year 2000, GDP per capita in current US dollars <sup>a</sup>	Percentage reported	
		25-59	60+
Brazil 2000	\$4,135	3.87	1.67
Chile 2002	\$5,110	10.02	5.15
Costa Rica 2000	\$2,877 <sup>b</sup>	5.57	3.14
Greece 2001	\$12,278	6.44	3.04
Mexico 2000	\$5,492	4.55	2.06
Philippines 2000	\$1,073	3.58	1.39
Vietnam 1999	\$383	2.76	1.06

Migration across major administrative boundaries in previous five years.

Source: D. Bradley and C. Longino, "Geographic Mobility and Aging in Place", in P. Uhlenberg (ed.), *International Handbook of Population Aging*, 2009.

# Sex Ratios by Age, Mexico 1960-2000



Source: Steven Raphael, "International Migration, Sex Ratios, and the Socioeconomic Outcomes of Non-migrant Mexican Women", Institute for Research on Labor and Employment, Working paper, 2009.

# Return Migration: Education and Employment

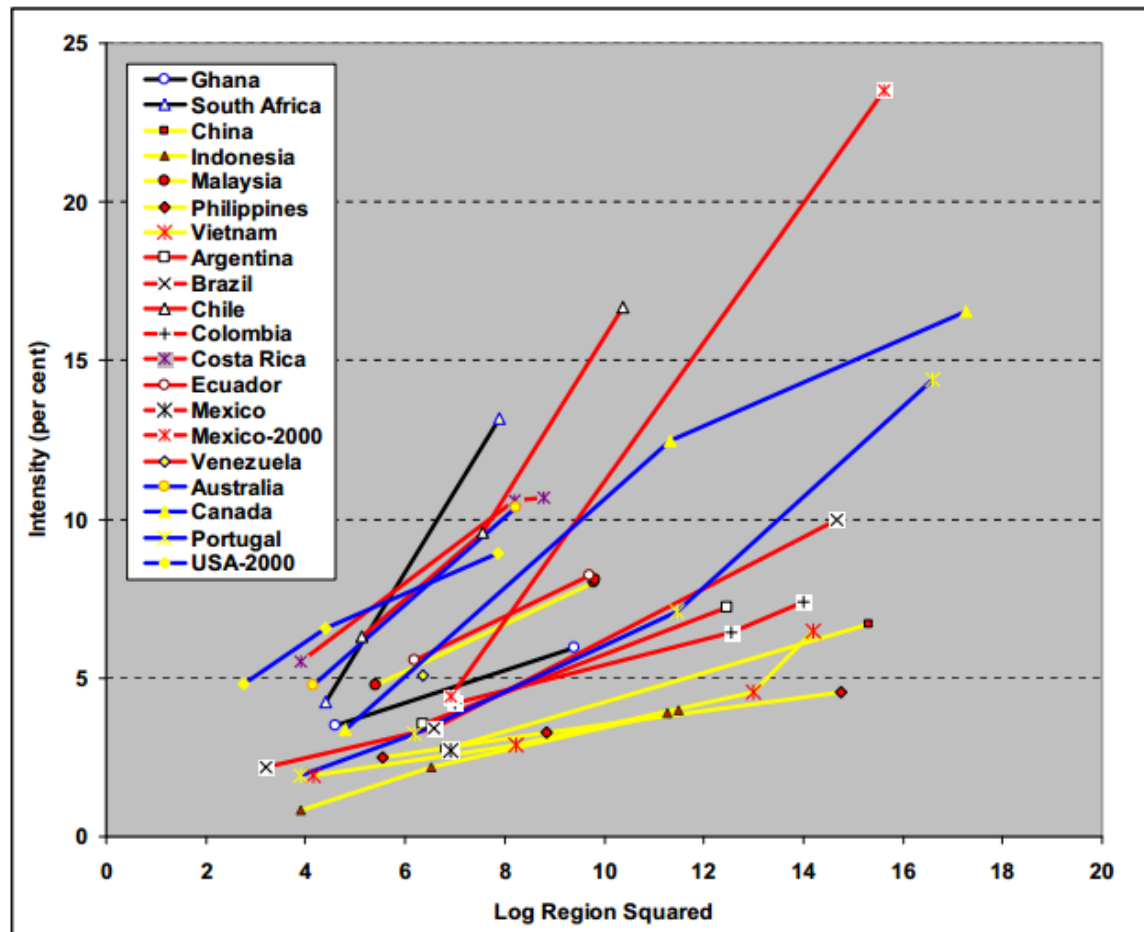
**TABLE 4**  
RESULTS SHOWING THE ASSOCIATION BETWEEN THE ODDS OF EMPLOYMENT AND MIGRATION STATUS

	Model 1	Model 2
<b>Migration Status</b>		
<b>Nonmigrants</b>		
No schooling (ref)	(1.00)	(1.00)
Primary schooling	1.249***	1.008
Secondary schooling	1.632***	1.188***
Vocational graduate	3.972***	3.024***
University graduate	4.539***	3.183***
<b>Returning Migrants</b>		
No schooling	1.23	1.331
Primary schooling	0.806	1.078
Secondary schooling	0.961	1.262
Vocational graduate	2.456***	3.610***
University graduate	7.718***	6.162***
<b>Foreign Born</b>		
No schooling	0.786	0.743***
Primary schooling	0.925	0.836***
Secondary schooling	0.977	0.886
Vocational graduate	1.611**	1.335*
University graduate	2.367***	1.706***

Source: Kevin Thomas, "Return Migration in Africa and the Relationship between Educational Attainment and Labor Market Success: Evidence from Uganda", *International Migration Research*, 2008.

# Measurement: Internal Migration by Size of Geographic Unit

Figure 1: Five Year Migration Intensity by Zonal System, Selected Countries



Source: M. Bell and S. Muhidin, "Cross-National Comparisons of Internal Migration", UNDP, Human Development Research Paper, 2009/30, 2009.

# Thank You!

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