

# Immigration in Spain: Facts, Economic Outcomes and Lessons

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# SUMMARY

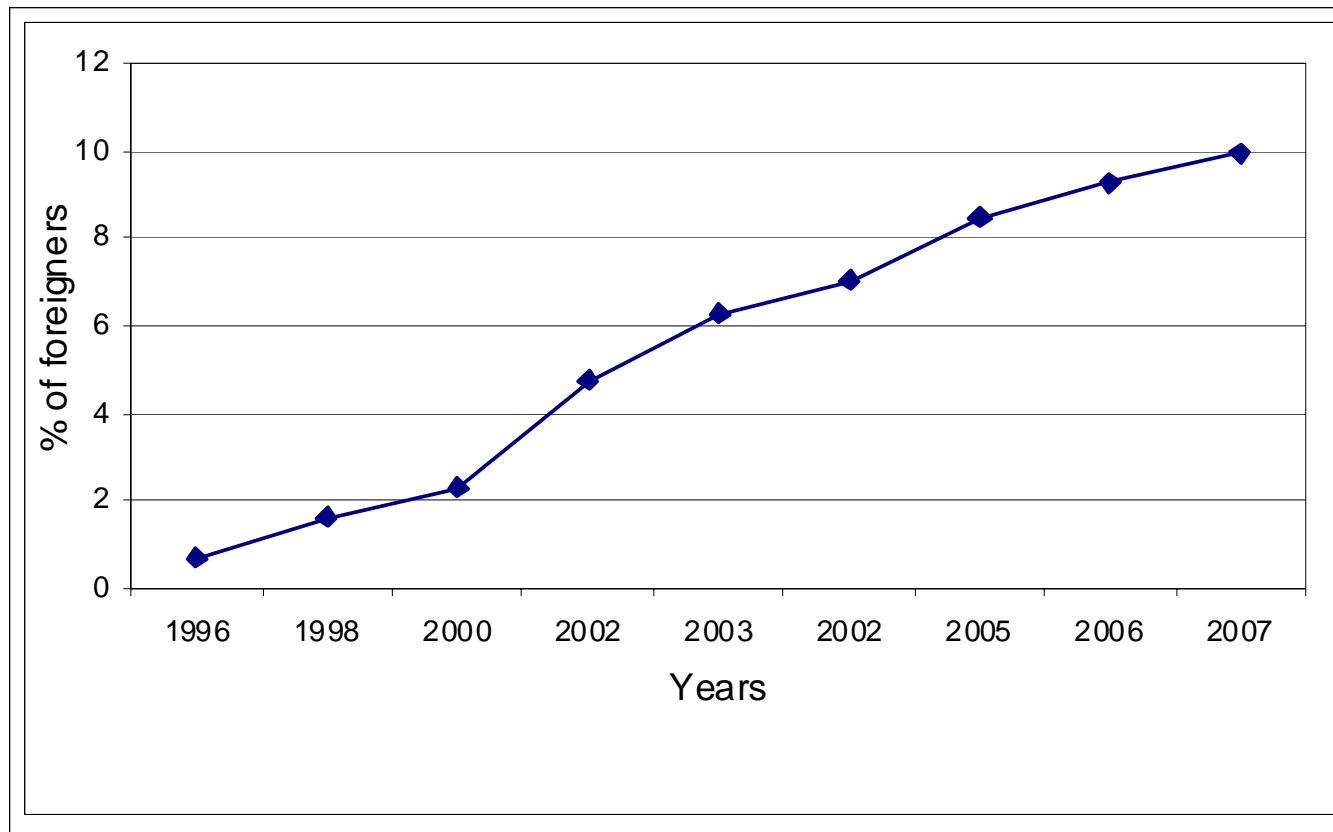
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- Facts:
  - The immigrant boom in Spain: Stylized facts
  - Immigrant characteristics
- Economic Outcomes of Immigrants:
  - Do immigrants assimilate to the Spanish labour market?
  - Are immigrants complements or substitutes of similarly skilled natives?
- Economic Impact of Immigration on Natives:
  - On occupational distribution
  - On Natives' Income
  - On Natives' Wages

Some Lessons to conclude

# Facts: Immigration Boom in Spain

Evolution of Foreigners as a Percentage of the Spanish Population (1996-2007)



Source: Spanish Institute of Statistics – Padrón Municipal



# Facts: Immigrants Drive Population Growth

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## Spanish Population Growth

%	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>	<u>2005</u>	<u>2006</u>	<u>2007</u>
<b>Total</b>	0.7	1.5	1.7	2.2	1.2	2.1	1.4	1.1
( Immigrants)	61.4	74.7	87.0	75.0	72.5	76.6	66.3	61.2
Immig.Ratio	<u>2.3</u>	<u>3.3</u>	<u>4.7</u>	<u>6.2</u>	<u>7.0</u>	<u>7.8</u>	<u>9.3</u>	<u>9.9</u>

- Overall Population : **4.45 m**/45 m
- Overall Population Growth (98-07): **3.9 m.** / 5.4 m (72.2%)



# Facts: What About the Rest of the World?

## Immigration Rates in the World (by nationality)

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	1870	1890	1910	2005
<b>Europe</b>				
Germany	0.5	0.9	1.9	8.8
France	2.0	3.0	3.0	8.9
United Kingdom	0.5	0.7	0.9	5.3
Denmark	3.0	3.3	3.1	5.0
Norway	1.6	2.4	2.3	4.8
Sweden	0.3	0.5	0.9	5.3
<b>New world</b>				
Australia	46.5	31.8	17.1	23.6
New Zealand	63.5	41.5	30.3	19.5
Canada	16.5	13.3	22.0	17.4
United States	14.4	14.7	14.7	11.1
Argentina	12.1	25.5	29.9	5.0
Brazil	3.9	2.5	7.3 <sup>1</sup>	4.3

Source: Williamson and Hatton, 2005.

<sup>1</sup>Number of foreign nationals in 1900.

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## Facts: Where Do Immigrants Come From (2007)?

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**Latinamerica** : 36% of all immigrants

- In Particular: From Ecuador, Colombia, Argentina & Bolivia.

**Africa**: 19% of all immigrants.

- In Particular: Marruecos.

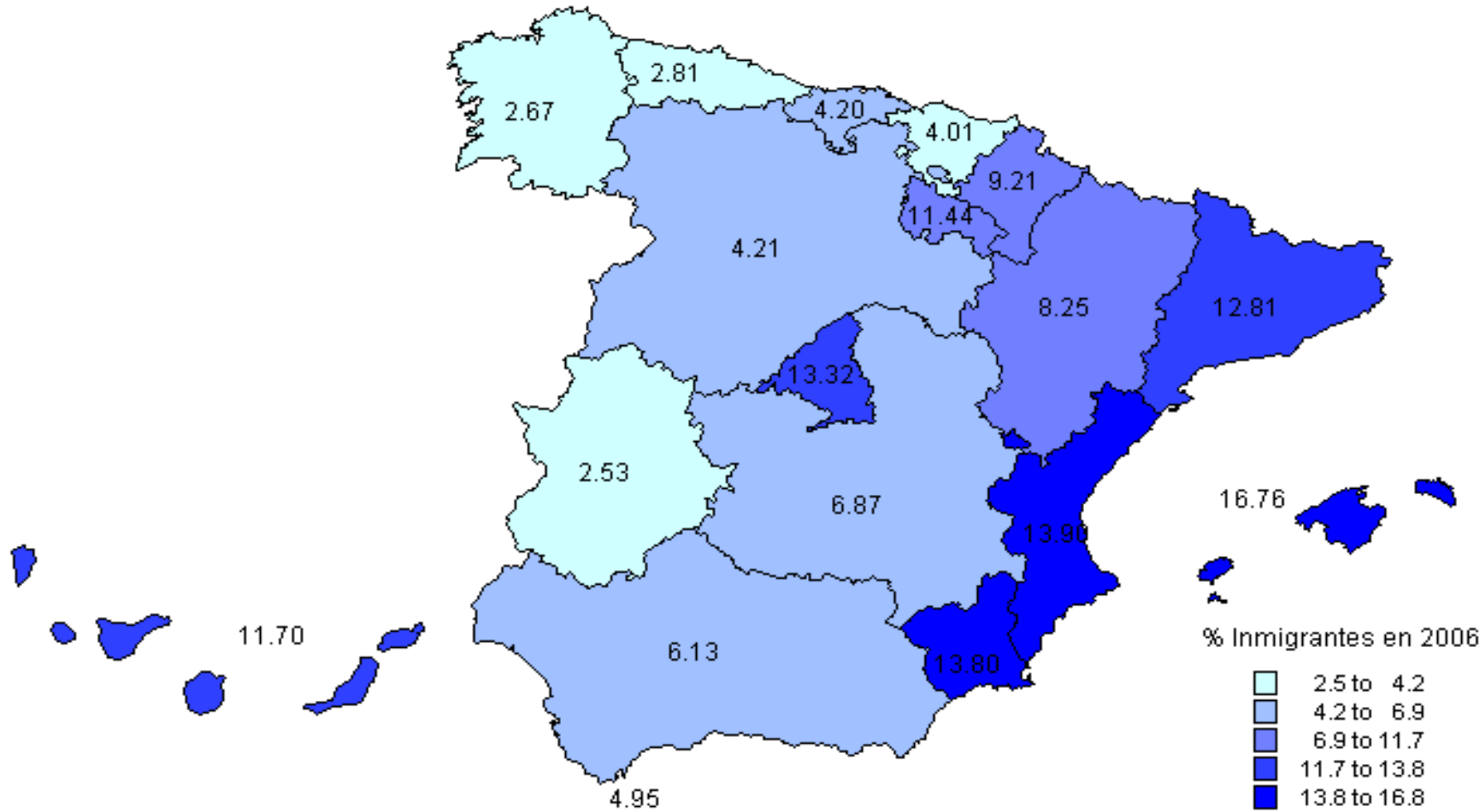
**Eastern Europe**: 18% of all immigrants.

- In Particular: From Rumania, Bulgaria, Polonia & Ucraina.

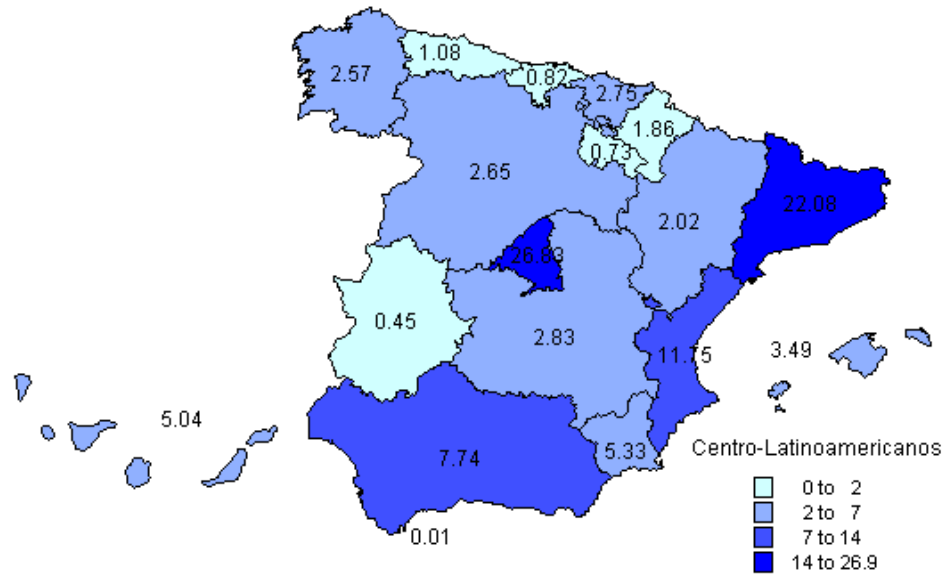
**Asia** : 5% of all immigrants.

- In Particular: From China

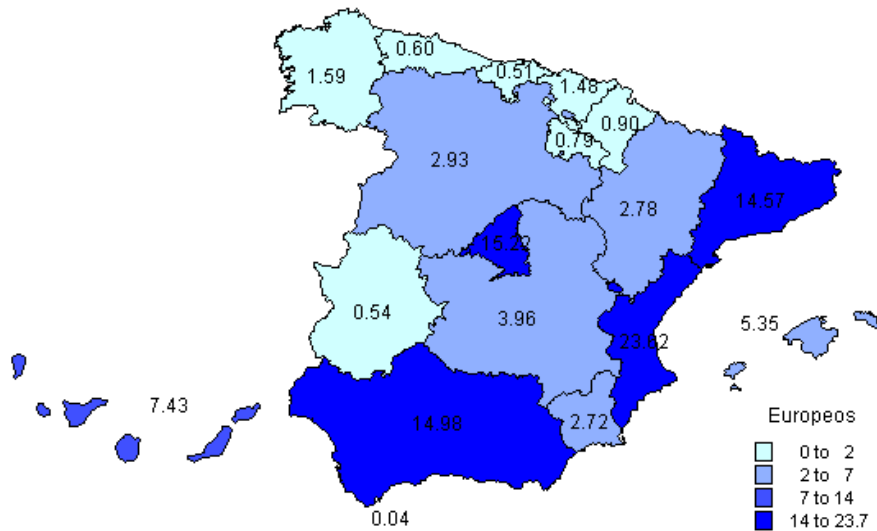
# Facts: Where Do Immigrants live (2006)



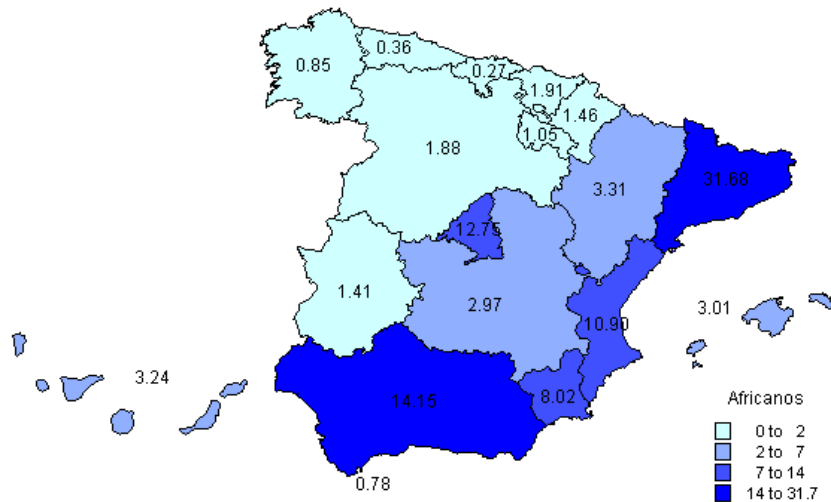
# Latinoamericanos



# Europeans

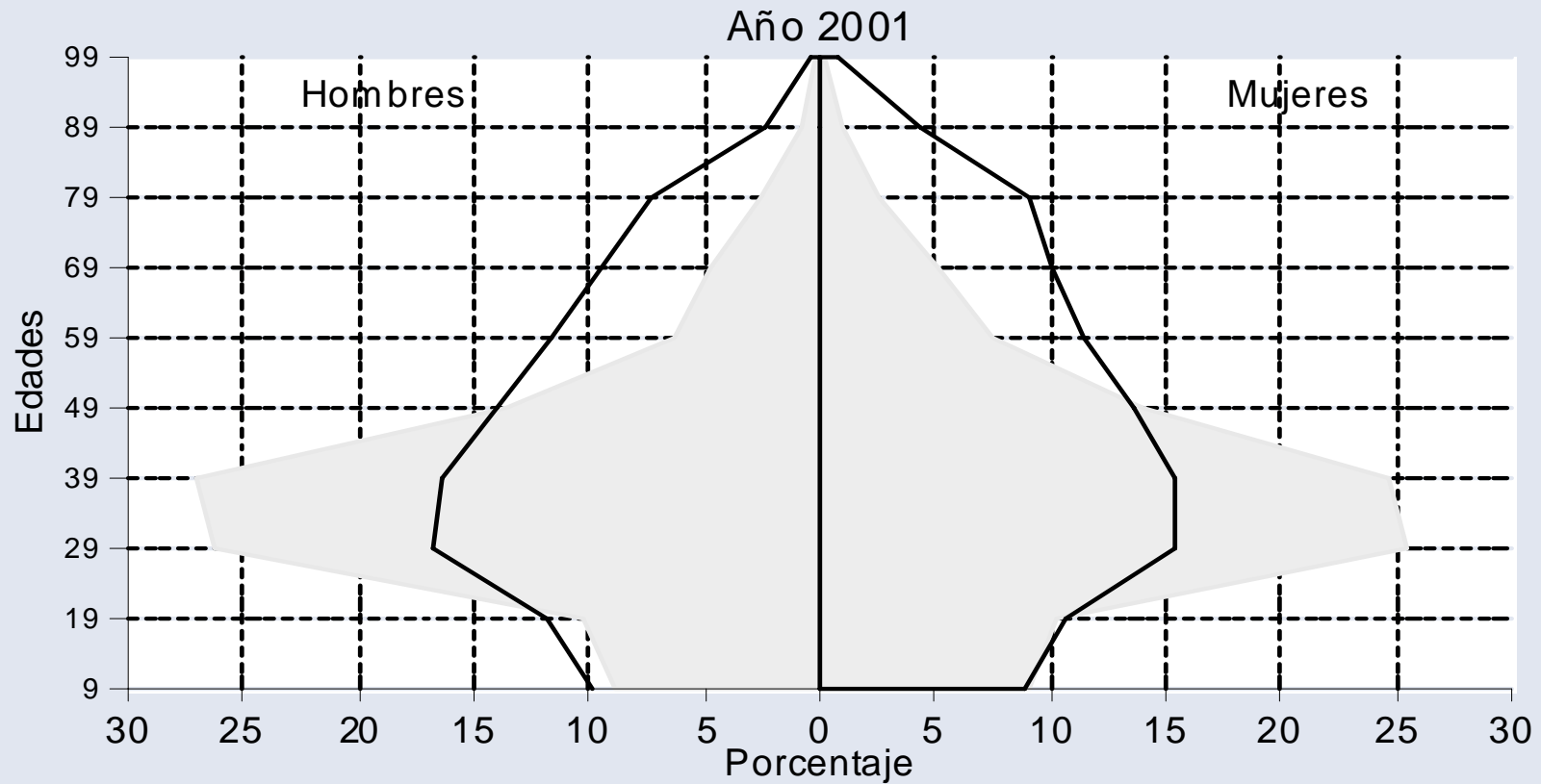


# Africanos



# Facts: Immigrant Characteristics

## Age: Significantly Younger

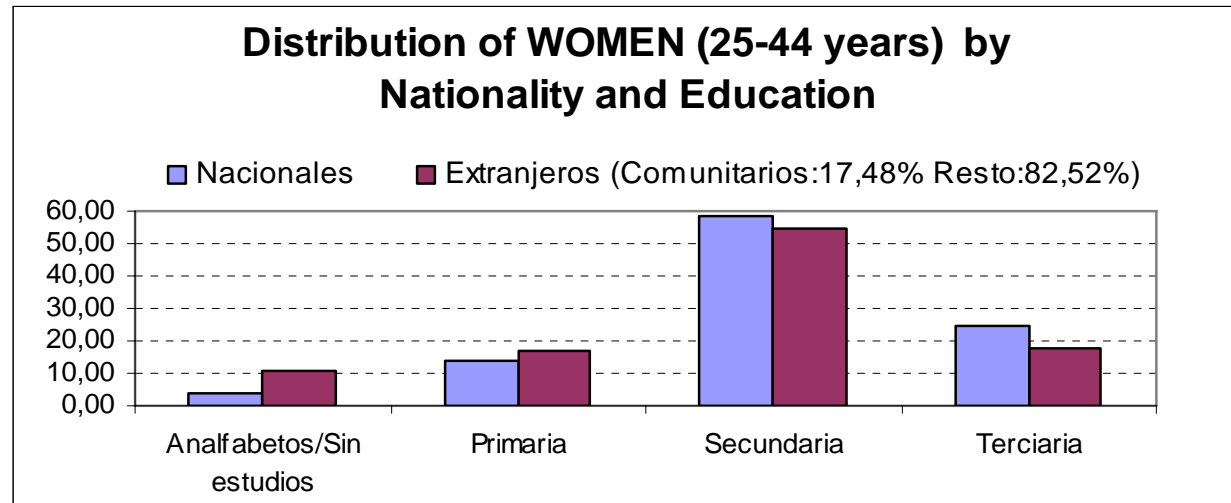
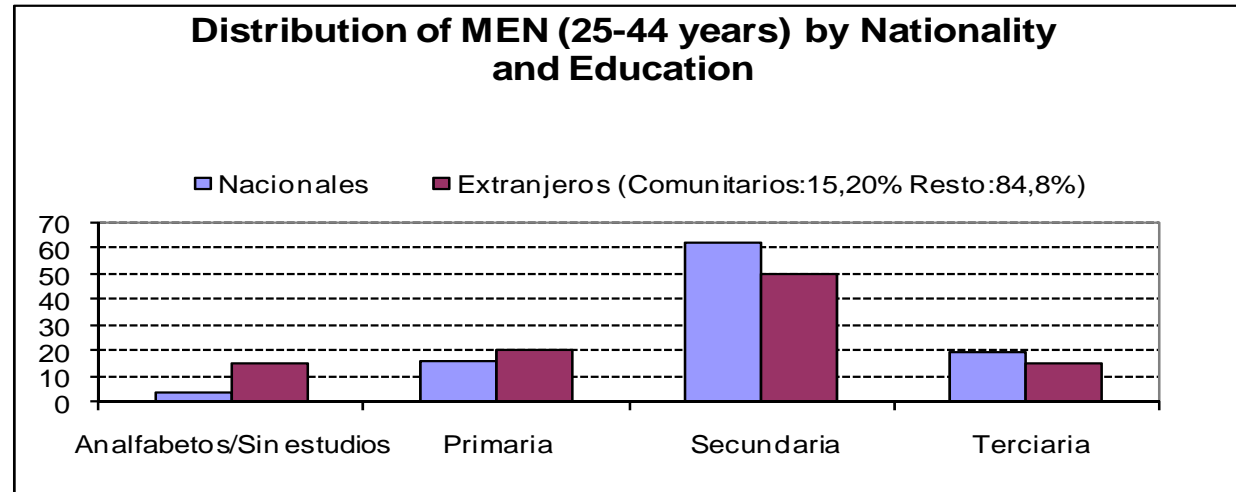


Pirámide de la población inmigrante  
Perfil de la población española

Fuente: Censo de Población y Viviendas 2001

# Facts: Immigrant Characteristics

## Educational Attainment: Slightly lower





# Facts: Immigrants Characteristics

## Gender Distribution

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- **Overall: 56% Males.**
- **By place of origin:**
  - Latinamerica: 45% Males
  - Africa: 68% Males.
  - Europe: 49% Males.



# Outcome 1: Do Immigrants Assimilate to the Spanish Labour Market?

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**“Labor Market Assimilation of Recent Immigrants in Spain”  
Amuedo-Dorantes & De la Rica (BJIR, 2007)**

We use Census 2001 data to examine:

- Immigrants’ employment likelihood at entrance and how it changes as time in the country lengthens (from 0 to 5 years).
- Immigrants’ occupational mobility towards highly paid occupations as time in Spain lengthens (from 0 to 5 years)



# Outcome 1: Do Immigrants Assimilate to the Spanish Labour Market? (cont.)

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## *Are Immigrants More Likely to be Employed?*

- At entrance: Immigrants are less likely to be employed than similarly skilled natives.

Yet, there are significant differences by:

- Gender
- Time of residence in Spain (i.e. diminishing over a 5 year period)



# Outcome 1: Do Immigrants Assimilate to the Spanish Labour Market? (cont.)

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## **GENDER AND TIME IN SPAIN MATTER...**

### **Among men:**

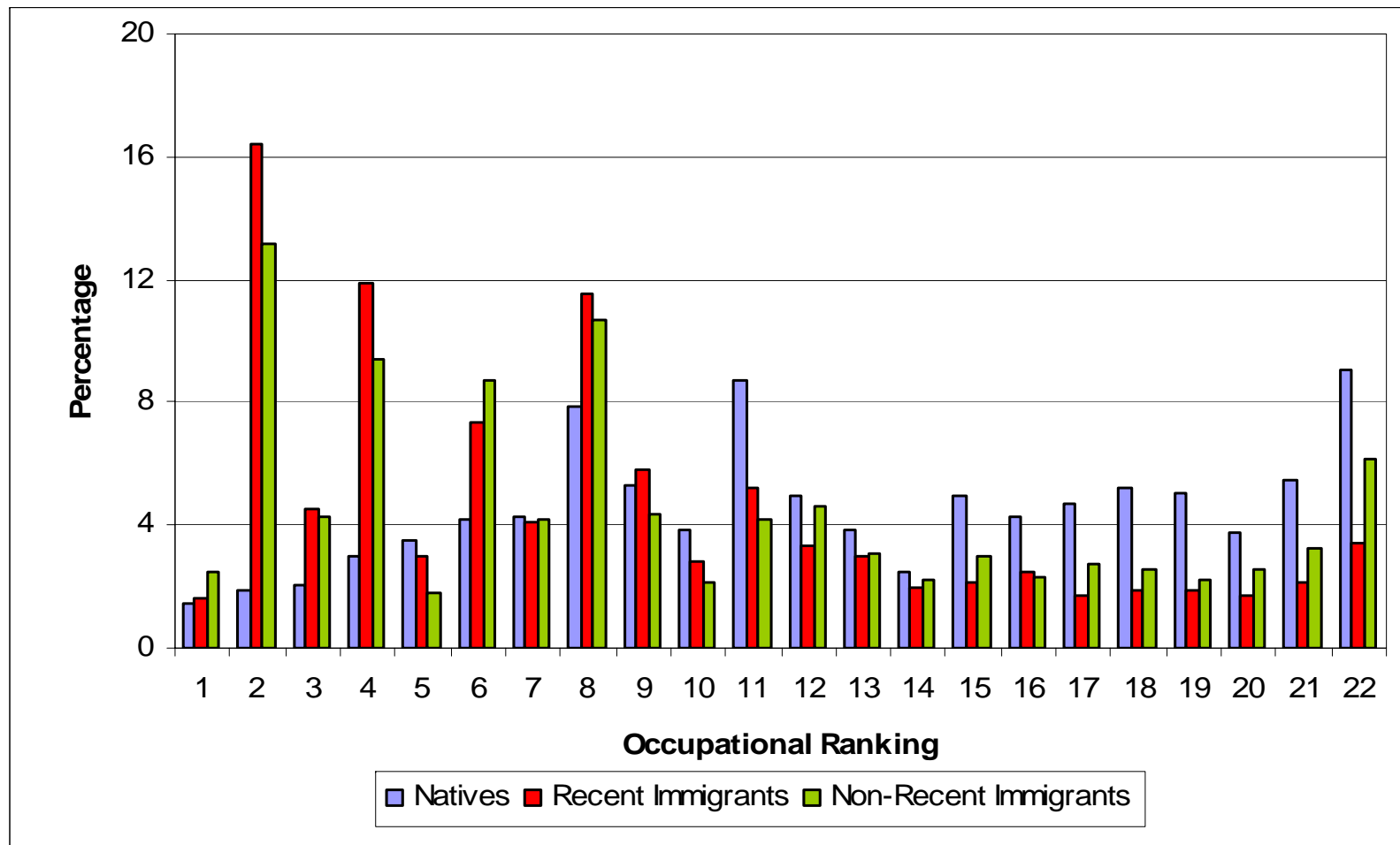
- *At entrance:*
  - 12% less likely to be employed than similar natives.
- *After five years:*
  - 3% MORE likely to be employed than similar natives.

### **Among women:**

- *At entrance:*
  - Latinos and Non-EU Immigrants are 3% MORE likely to be employed; Africans are 15% less likely to be employed.
- *After five years:*
  - Differences increase for Latino and Non-EU Immigrants, and only decrease to 13% points for Africans.

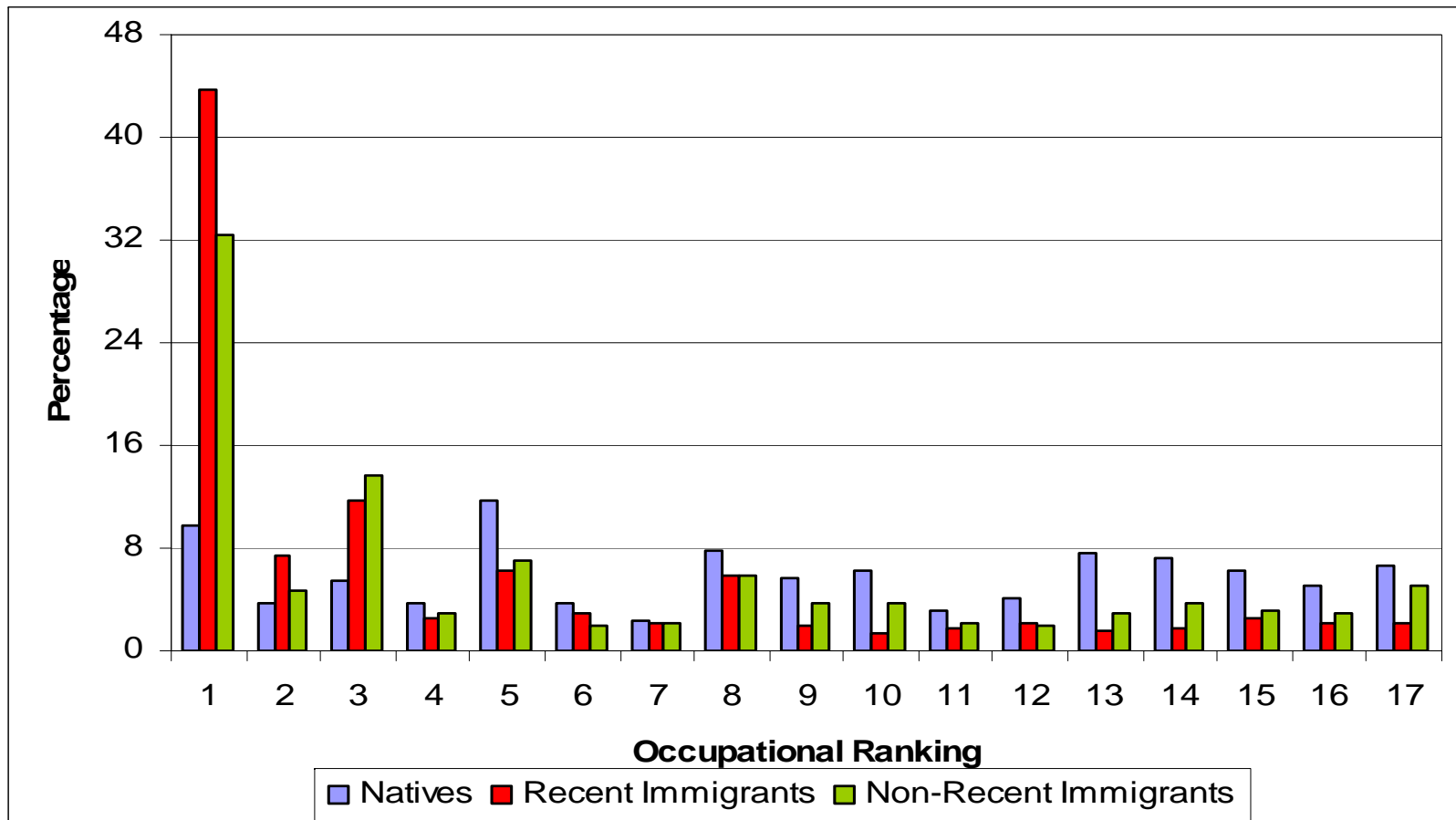
# Outcome 1: Do Immigrants Assimilate to the Spanish Labour Market? (cont.)

## Occupational Upgrading: Descriptives for Men



# Outcome 1: Do Immigrants Assimilate to the Spanish Labour Market? (cont.)

## *Occupational Upgrading: Descriptives for Women*





# Outcome 1: Do Immigrants Assimilate to the Spanish Labour Market? (cont.)

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## *Occupational Upgrading:*

### **Approach:**

Ordered logit model:

- Dependent variable: occupational rank.
- Independent variables: age, education, marital status, 52 region dummies and dummies for length of residence in Spain.

### **Results:**

Latino and non-EU15 immigrants (men and women) enjoy an upward occupational attainment as their residency in Spain lengthens. However, no occupational upgrading among African Immigrants.



## Outcome 2: Are Natives and Immigrants Complements or Substitutes?

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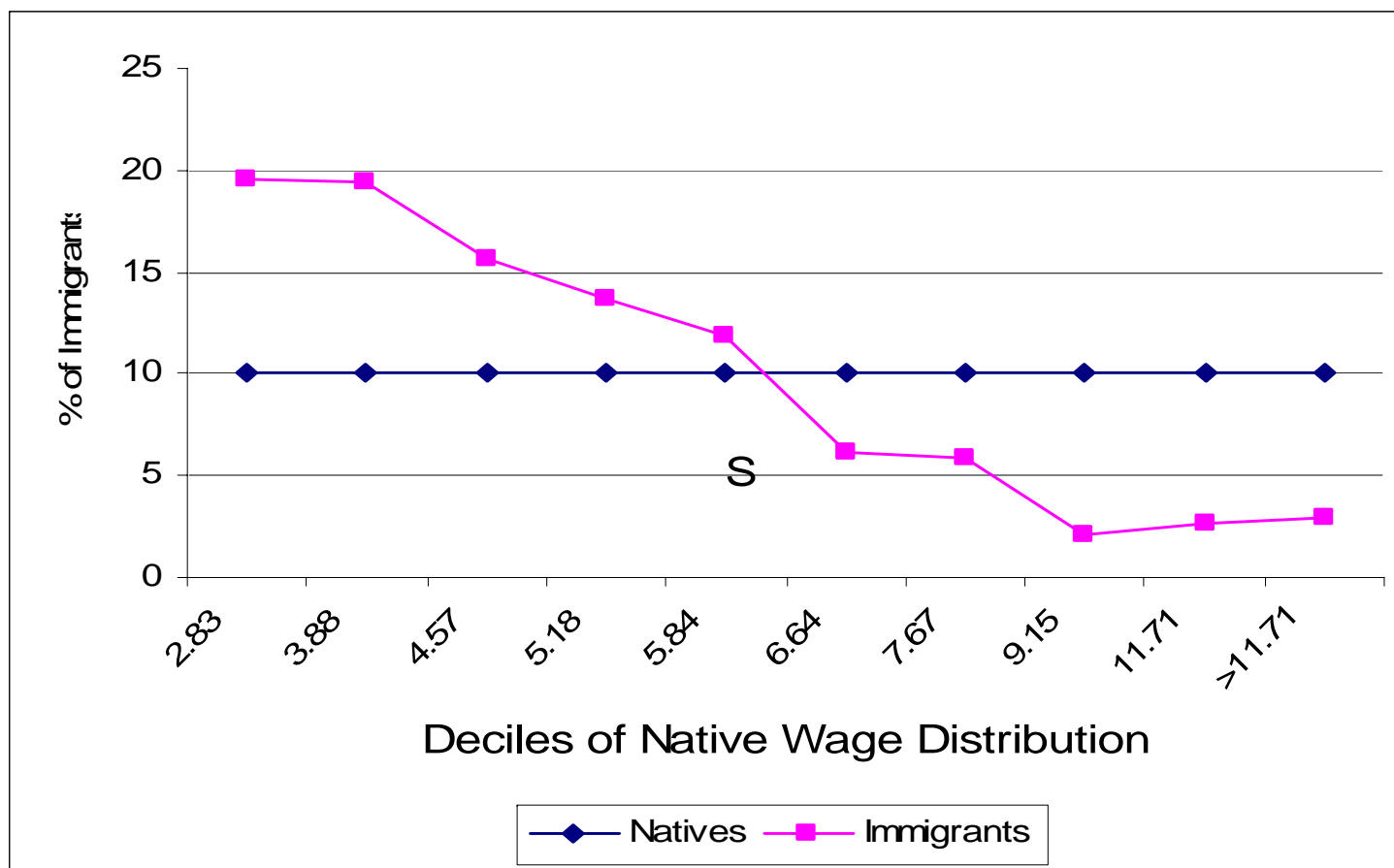
**“Complementarities between Immigrants and Natives:  
Task Specialization by Nativity in Spain”**

**Work in Progress - Amuedo-Dorantes & De la Rica**

- Do natives and immigrants work in similar jobs?
- Do immigrants take jobs with more manual (vs. interactive) tasks?

## Outcome 2: Are Natives and Immigrants Complements or Substitutes?

Wages of Natives and Immigrants (2004-2005)





## Outcome 2: Are Natives and Immigrants Complements or Substitutes?

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### Occupational Distribution (%) Natives and Immigrants (2004-2005)

Occupations	Natives	Immigrants	Average Hourly Wage
Professionals	14.04	3.37	10.76
Employers and Managers	3.4	1.12	10.11
Technicians	11.22	3.43	7.84
Clerks	12.56	3.75	6.61
Semi-Skilled Manual Workers	9.53	5.52	6.24
Skilled Manual Workers	17.47	<b>22.94</b>	<b>5.65</b>
Trade, Hotels, Restaurants	14.94	<b>18.54</b>	<b>5.13</b>
Unskilled Manual Workers	15.3	<b>37.73</b>	<b>4.67</b>
Agriculture, Forestry and Fishing	1.49	3.56	4.39

80% of Immigrants are concentrated on THREE (Aggregate) Occupations and they are some of the lowest paid occupations.

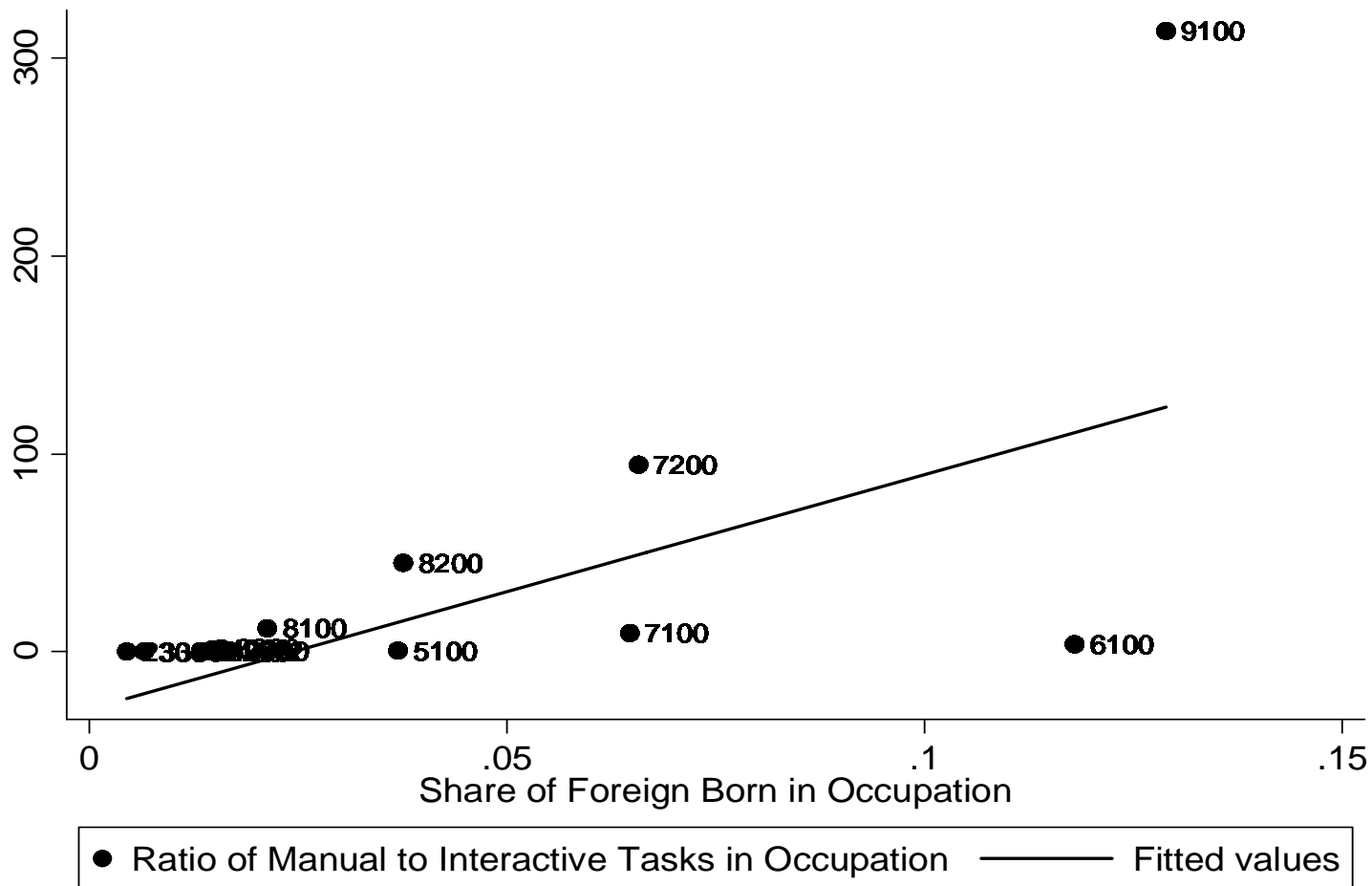
## Outcome 2: Are Natives and Immigrants Complements or Substitutes?

### Occupational Distribution (%) - Natives and Immigrants (2004-2005) WITHIN Educational Levels

Occupations	University		Secondary		Primary or Less	
	Native	Immigrant	Native	Immigrant	Native	Immigrant
Professionals	40.3	12.2	0.65	0.51	0.06	0
Employers and Managers	5.27	2.58	3.10	0.84	0.76	0
Technicians	17.66	8.12	9.74	2.36	2.59	0.62
Clerks	16.01	7.01	13.49	3.38	2.97	0.62
Semi-Skilled Manual Workers	3.64	5.17	12.35	5.24	13.62	7.45
Skilled Manual Workers	6.71	16.61	20.66	24.83	30.47	27.33
Trade, Hotels, Restaurants	7.57	18.45	20.54	20.61	13.62	13.66
Unskilled Manual Workers	2.63	27.68	17.79	39.19	32.54	44.10
Agriculture, Forestry and Fishing	0.26	2.21	1.67	3.04	3.38	6.21

# Outcome 2: Are Natives and Immigrants Complements or Substitutes?

## Do Immigrants Specialize in More Manual Tasks?





## Outcome 3 – The Impact of Immigration on: (i) Occupational Distribution

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*Still estimating ...  
Perhaps ready for Friday, 23rd.*



## Outcome 3 – The Impact of Immigration on: (ii) Natives' Income

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### **“Does Immigration Raise Natives' Income? National and Regional Evidence in Spain”**

**Amuedo-Dorantes, C. and S. De la Rica – IZA DP N°**

- We assess the impact of immigration on Spanish natives' income:
  - What is the net immigration surplus accruing at the national level and at high immigrant-receiving regions?
  
- We allow for the imperfect substitutability of immigrants and natives within similar skill groups.



## Outcome 3 – The Impact of Immigration on: (ii) Natives' Income

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### Methodology:

- We extend *Borjas' (1995) framework* to compute the IS under the assumption of homogeneous labor to a case of heterogeneous labor where workers can present up to  $n$  different skills. Same assumptions about the production function.
- *Imperfect substitutability within skill groups*: Using information on the occupational densities of immigrants and natives of different skill levels, we develop a mapping of immigrant-to-native self-reported skills that reveals the combination of natives across skills that would be equivalent to an immigrant of a given self-reported skill level.

## Outcome 3 – The Impact of Immigration on: (ii) Natives' Income

Table 4: Estimates of the 2001 Immigration Surpluses at the National and Regional Levels

National and Regional Level	Using the Estimated or Actual $\beta$ 's (%)			Using the Self-reported $\beta$ 's (%)		
	IS (1)	IS (2)	IS (3)	IS (4)	IS (5)	IS (6)
National	0.02	-	0.04	0.017	-	0.002
Andalucía	0.02	0.015	0.04	0.006	0.005	0.01
Cataluña	0.05	0.046	0.1	0.013	0.013	0.028
Valencia	0.04	0.033	0.09	0.005	0.004	0.011
Madrid	0.03	0.034	0.04	0.019	0.019	0.027
Murcia	0.09	0.056	0.25	0.033	0.033	0.044

Notes: Columns 1 and 4: indicate the value of the immigration surplus at the national and regional levels that results from estimating equation (4) at the national level and equation (5) at the regional level.

Columns 2 and 5: indicate the value of the immigration surplus when the regional  $\beta$ 's are instrumented with  $\beta$ 's computed at the national level.

Columns 3 and 6: indicate the value of the immigration surplus when using the immigration figures (parameter  $m$ ) for 2007 instead of those of 2001.



## Outcome 3 – The Impact of Immigration on: (ii) Natives' Income

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### Conclusions:

- **Immigration raises natives' income:** The IS is about 0.02% GDP at the national level when we use 2001 figures on immigrant penetration – roughly 12 million euros per year. It doubles when we use 2007 figures on immigrant penetration.
- **IS is higher in some high immigrant-receiving regions, e.g. Cataluña, Valencia and Murcia.**

*Some caveats about IS...*



## Outcome 3 – The Impact of Immigration on: (ii) Natives' Income

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- The IS does not account for **immigrant consumption externalities**, e.g. a growing demand for various goods and services.
- Other benefits of immigration:
  - **Immigrants shape the population pyramid** –a crucial contribution in financing the retirement of an older population.
- Hence: the IS is an underestimate of the bearing of immigrants to the Spanish economy.



## Outcome 3 – The Impact of Immigration on: (iii) Natives' Wages

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**“The Impact of Immigration on the Wage Structure:  
Spain 1995-2002”**

**R. Carrasco, J.F. Jimeno y A. C. Ortega**

- **Objective:** To estimate the impact of immigration flows on the Spanish Wage Structure 1995-2002.
- **Sample:** European Earnings Structure Survey for Spain.



## Outcome 3 – The Impact of Immigration on: (iii) Natives' Wages

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### *Methodology:*

- Construct counterfactual wage distributions, i.e. wages that would have been observed in 2002 had the composition of employment remained as in 1995 (without immigrants).
- Compute the impact of immigration on the wage distribution on:
  - The estimated wage gaps between similar immigrants and natives (quantile regressions).
  - The changes in the employment composition associated to immigrants' arrival.



## Outcome 3 – The Impact of Immigration on: (iii) Natives' Wages

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### *Main Results:*

- 1. Very small impact of immigration on changes in natives' wages.
- 2. The evidence does not support the view that immigration negatively affects natives' wages.

### *But....*

The EESS excludes: (i) small firms and (ii) firms in agriculture or domestic service where many immigrants are concentrated on.



# To Conclude...Any Lessons?

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1. For the last decade, immigration is driving population growth.
2. Immigrants are widening the base of the population age pyramid.
3. Immigrants have lower reservation wages than natives – high likelihood of being at work.
4. They work in occupations that require more manual tasks, whereas natives concentrate in occupations that require other types of skills (interactive skills).
5. Immigrants raise natives' income by 0.02% GDP/year.
6. But, their impact on natives' wages is negligible.



# To Conclude...Any Lessons?

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**Yet, for the long run, the government, entrepreneurs and unions must agree on:**

1. The number of contingencies Spain needs for the labour market every year.
2. An active integration policy for immigrants – Continuous on-the-job training to help them assimilate better to our country.
3. Ensure that the Spanish welfare state does not deteriorate in quality due to immigration pressures, e.g. impact on quality of schooling, health care, etceteras.