Local effects of immigration: labour markets and internal migration

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Introduction: scope

- Local effects of immigration: huge topic!
- Today, we are at best just scratching the surface of some aspects of this issue...
- In particular:
  - We will be talking mainly about effects at destinations
  - We will focus on labour markets related issues, disregarding other issues such as fiscal effects
  - We are not distinguishing short vs. long term effects

Introduction: why do we care?

- European countries (and not only) are a major destination of international migrants (Münz, 2007) and simulations indicate that this will continue in the decades to come (Hanson and McIntosh, 2016; Docquier and Machado, 2017)

- The main worry about international migrants is always: how will they affect the native population? And, in particular, their **effects on the domestic labour market**
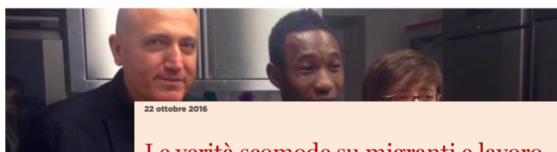

The debate often revolves around this question:

Are immigrants "stealing" the jobs of natives, reducing their wages and "displacing" them?

Introduction: labour market effects

- The answer to whether or not immigrants negatively affect the labour market outcomes of natives depends crucially on two aspects:

  1. The degree of "openness" of the host economy (Friedberg and Hunt, 1995). Here the role of **international trade** is fundamental (see **Bratti**)

  2. The **"degree of substitutability"** between migrants and natives in the labour market

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If natives and immigrants are **perfect substitutes** in the labour market, then the increase in labour supply leads to lower wages, which lead to native out-migration (**displacement of natives**)

Labor supply increases from S0 to S1 due to immigration. To the extent that S2 shifts in from domestic out-migration, there are small *ex post* wage and employment effects. (S3 could occur if there are added *cultural avoidance effects (Faggian et al. 2013)*, causing higher wages and less employment).
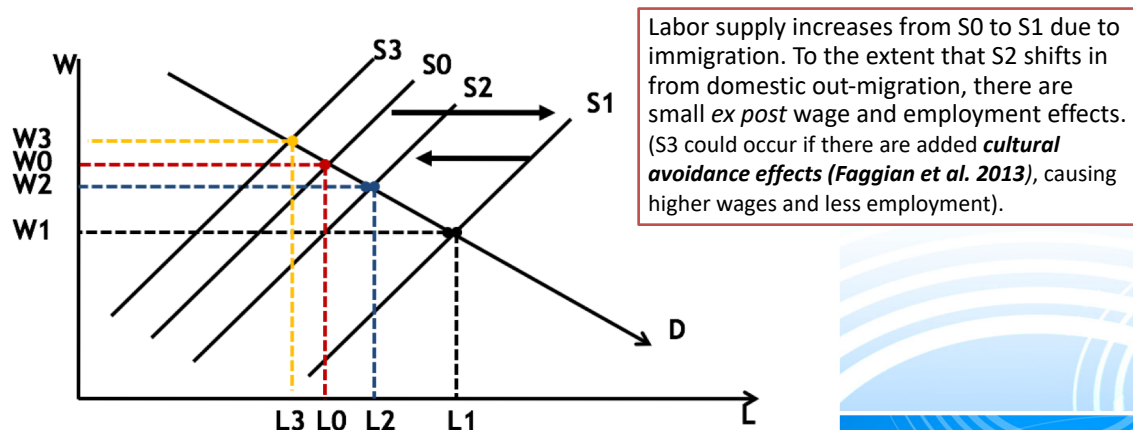
If natives and immigrants are **complements** in the labour market, then the effect could actually be positive on wages and employment leading to internal in-migration rather than out-migration

Labor supply increases from S0 to S1 due to immigration. If strong complements, then D0 shifts to D1. The offsetting wage increase could in fact spur in-migration of native workers causing an additional increase in supply beyond S1. This causes a highly elastic population response.

Here there is also all the literature on the effects of immigrants on innovation and productivity (see **Lissoni**)

The beliefs on the degree of substitutability between natives and immigrants vary:

a) High - Borjas (1995): gains from immigration for the USA are low, immigrants are not sufficiently 'different' from the stock of natives – suggests immigration policy to attract more *skilled migrants*

b) Low – Greenwood (1996): the adverse effect on wages is only on other recent immigrants not on natives
Card (2005): no significant effect on wages of native (either low or high skilled)
Ottaviano and Peri (2005, 2008): overall immigration is beneficial for natives (even increasing their salaries…)

c) Effect dependent on skill-level of natives– Orrenius and Zavodny (2003) & Cortes (2008): immigrants are more substitutable with low-skilled native – they affect only their wages

Introduction: secondary migration

Moreover, even when immigration is concentrated in few gateway areas, **internal migration flows** allows the effects to spread across the country (**'bathtub model'**, Borjas, 2003 & 2005; Partridge and Rickman 2008, 2009)

INTERNATIONAL IMMIGRATION → INTERNAL MIGRATION FLOWS
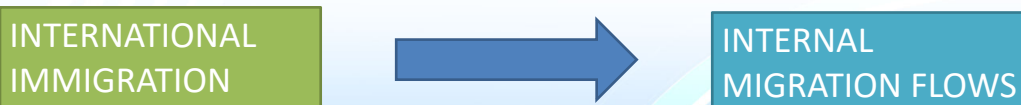
In the USA:

- Borjas (2003) and Partridge et al. (2008, 2009) find **strong domestic resident response** to international immigration.
- However, Card and DiNardo (2000) Card (2001) and Kritz and Gurak (2001) find that there is **little connection between foreign immigration and native out-migration**.
- Card and DiNardo (2000): they even say that an increase in immigrants in **certain skill groups** lead to a *small increase* in the native population of the similar skill groups (**complementarity**)
- Peri (2007), in the case of California, 1960-2004 immigration did not produce a negative migratory response from natives.

The case of Italy

- For the case of Italy – similarly to Card and DiNardo - Mocetti and Porello (2010) find that immigration is positively associated with infows of **highly-educated natives** (**complementarity** effect), and negatively associated with inflows of **low-educated natives** (**displacement** effect)

- However, this study:
  - Uses quite aggregate data (regions, *NUTS2 level*)
  - Does not consider the *effect of foreign immigrants on internal movements of previous immigrant cohorts*, a phenomenon gaining momentum in recent years

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Annual flows of foreign immigrants and of interprovincial movements of natives and foreign-born residents
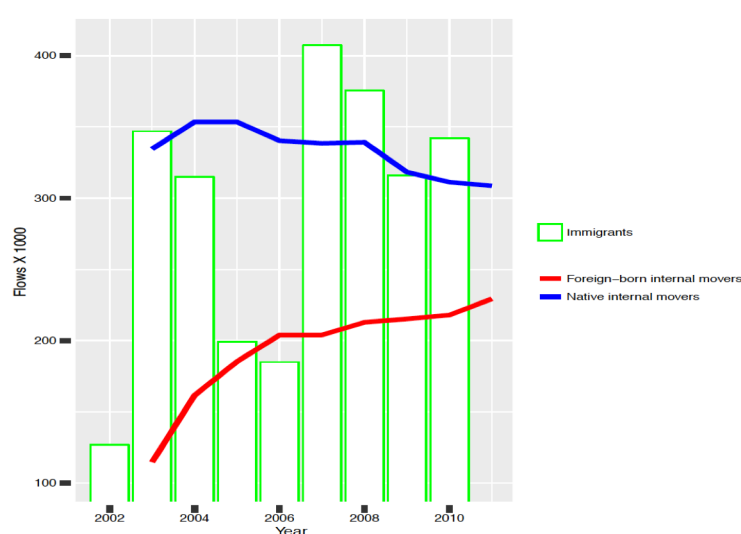
Basile et al. (2018): in brief...

We use **data on internal mobility at provincial (NUTS-3) level** by ISTAT ("Indagine sui trasferimenti di residenza") for the period **2002-2011** to estimate a modified **gravity model** (we correct for endogeneity using a control function approach and information on the origin countries of immigrants *à la* Beine and Coulombe, 2018)

Spatio-temporal trends (smoothing functions)

$$\log(\mu_{jkt}) = \beta_1 \log\left(\frac{Imm_{kt}}{Imm_{it}}\right) + \beta_2 \log(\phi_{jk}) + \beta_3 \log\left(\frac{y_{kt}}{y_{it}}\right)$$

$$f^j(x_{s1}, x_{s2}, x_\tau) + f^k(x_{s1}, x_{s2}, x_\tau)$$

$$\mu_{jkt} = E\left(m_{jkt}^n\right) \qquad m_{jkt}^n \sim \ bin(\mu, \theta)$$

Number of migrants (with educational level h in the case of Italian residents) moving at time **t** from province of origin **j** to province of destination **k**

Variable of intere immigra

Distanc an
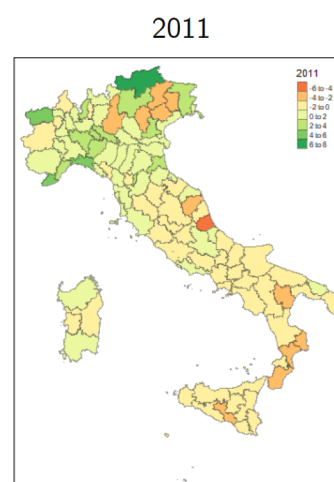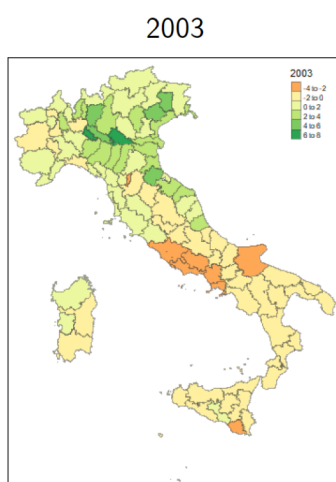
Other control variables:
- Disposable income per head
  - Unemployment rates
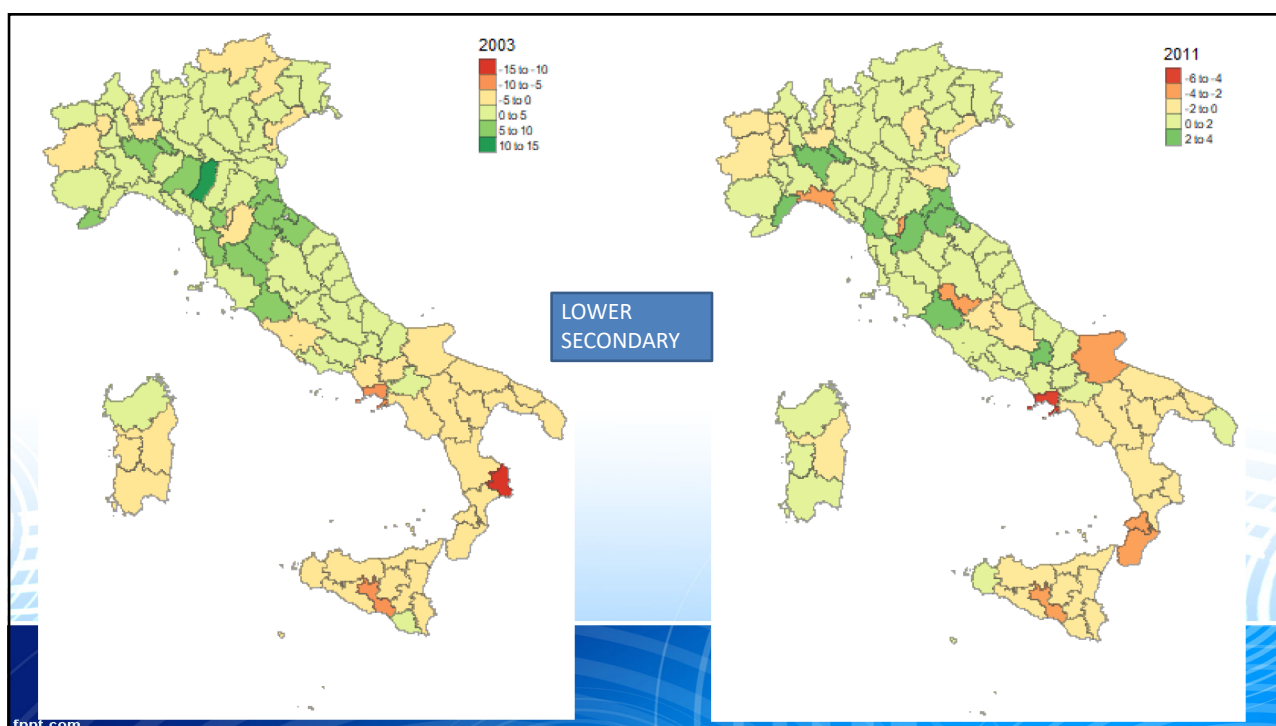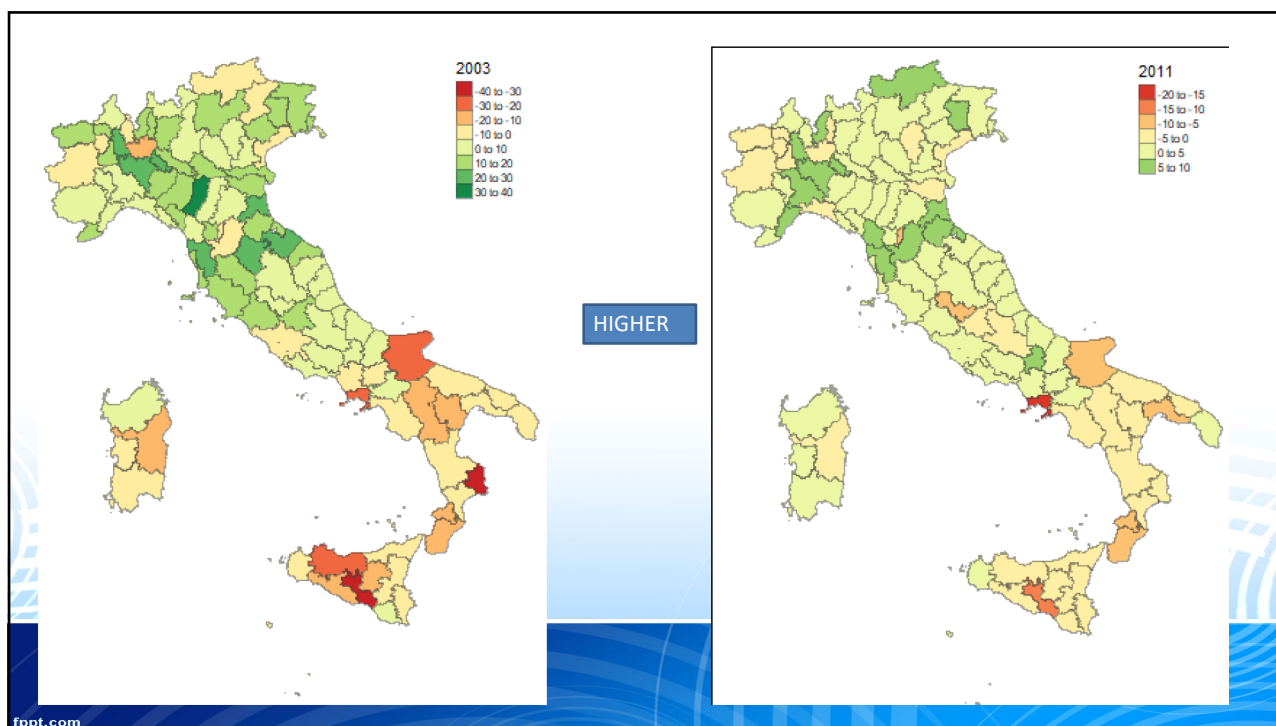   - Hosuing prices
- Industrial composition

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Our dependent variables are the **internal flows of natives, divide by educational level** (4 categories:) and the **internal flows of foreign-born**

Internal mobility rates of foreign-born residents

2003

2011

G S
S I

HIGHER

LOWER SECONDARY

Immigration rates from abroad of foreign workers

2003

2011

Share of foreign immigrants over total population of the province
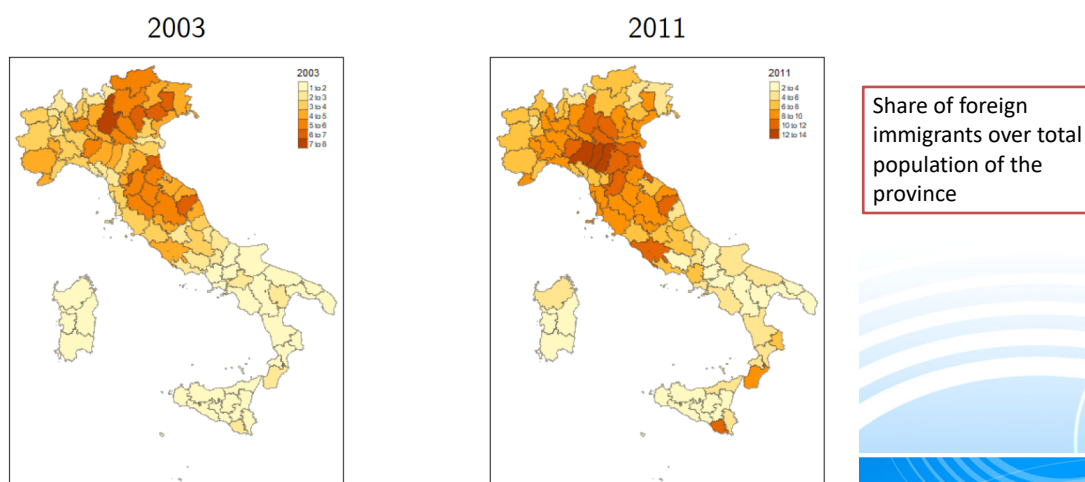

TABLE 4

Gravity models of internal mobility in Italy. Testing the relative incidence of foreign immigrants. Negative Binomial Estimates. Model specification (2) with spatio-temporal trends, accounting for endogeneity (second step CF approach)

	Italian citizens				Foreign-born residents
	Primary	Lower sec.	Upper sec.	Higher	
Parametric terms	*Coefficients (standard errors)*				
Intercept	-2.486***	-0.861**	-1.328***	-0.954***	-2.557***
	(0.484)	(0.398)	(0.322)	(0.304)	(0.221)
$\log(Imm_{kt}/Imm_{jt})$	-0.402***	-0.141***	0.096**	0.548***	-0.298***
	(0.073)	(0.053)	(0.049)	(0.059)	(0.051)
$\log(Inc_{kt}/Inc_{jt})$	0.165**	0.044	0.079*	0.057	0.099**
	(0.068)	(0.049)	(0.046)	(0.055)	(0.047)
$u_{kt} - u_{jt}$	-0.027***	-0.016***	-0.006**	0.011***	-0.030***
	(0.004)	(0.003)	(0.003)	(0.003)	(0.003)
$\log(House_{kt}/House_{jt})$	0.007	0.002	-0.007	0.010	0.051***
	(0.019)	(0.014)	(0.013)	(0.015)	(0.013)
$\log(Agr_{kt}/Agr_{jt})$	0.045***	0.029***	0.001	-0.044***	0.004
	(0.009)	(0.007)	(0.006)	(0.007)	(0.006)
$\log(Cons_{kt}/Cons_{jt})$	0.151***	0.017	-0.031	-0.097***	-0.047*
	(0.038)	(0.028)	(0.026)	(0.030)	(0.026)
$\log(Man_{kt}/Man_{jt})$	0.017	0.003	0.025*	-0.036**	0.062***
	(0.022)	(0.017)	(0.015)	(0.017)	(0.015)
$\log(\phi_{jk})$	-0.723***	-0.789***	-0.814***	-0.814***	-0.978***
	(0.005)	(0.004)	(0.004)	(0.004)	(0.003)
Nonparametric terms	χ^2-test [EDF]				
$f(res)$	28.10***	12.28**	14.03***	104.39***	135.27***
	[2.163]	[3.096]	[3.040]	[3.215]	[3.956]
Spatio-temporal trends (ANOVA specification)	Yes	Yes	Yes	Yes	Yes

Main results...

Displacement effect on other foreign-born and low-skilled natives.

Complementarity effects on high-skilled natives

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TABLE 6

Gravity models of internal mobility in Italy. Testing the impact of foreign immigrants at origin and at destination. Negative Binomial Estimates accounting for endogeneity (second step CF approach)

	Italian citizens				Foreign-born residents
	Primary	Lower sec.	Upper sec.	Higher	
Parametric terms	*Coefficients (standard errors)*				
Intercept	-0.640	-1.119**	-1.532***	-4.457***	-0.367
	(0.687)	(0.529)	(0.470)	(0.513)	(0.467)
$\log(Imm_{kt})$	-0.125**	0.014	0.139***	0.414***	-0.291***
	(0.051)	(0.036)	(0.034)	(0.040)	(0.035)
$\log(Imm_{jt})$	0.415***	0.205***	0.016	-0.154***	0.238***
	(0.050)	(0.037)	(0.035)	(0.040)	(0.036)

Same effect on native low skille...

However, where we had before insignificant parameters, now - breaking origin and destination up - we have some positive effects also on middle-skilled...

...sult for high ...larity at

...placement effect ...born are ...evious findings.

...y are displaced at destination ...opposite for the origin j

Discussion and preliminary conclusions

- Our results indicate, in the case of Italy, a displacement effect of the immigrants on the internal mobility of foreign-born residents and of Italian citizens with a low education level, but also a positive impact on the internal mobility of natives with a high education level

- These findings suggest that **interregional migration is an important mechanism** through which the Italian labor market **adjusts to immigration**

- They also open up an interesting question: why is the displacement only happening for low educated natives? Is it a **"pure" human capital story** (immigrants simply are all low educated) or is it also a **signaling problem** (immigrants cannot "signal" their skills even when they have them)?

Policy Implications

- On the one hand, **incentivizing human capital accumulation** is a viable option to reduce the displacement effect of immigration and, at the same time, to benefit low-skill workers (and the country overall) through increase in their productivity
- On the other hand, the most 'tricky' part is the integration of **foreign immigrants** and the **identification of their skill level**
- The missing ingredient in the integration process is a systematic assessment of the human capital of foreign immigrants. It is wrong to assume all of them have no or low skills.

- Where most (if not all) European countries are lagging behind is in **mapping the skills, education and competences of foreign migrants**
- The mapping and validation of these skills by the government should:
  - be included explicitly in the national dispersal policies to ensure a better matching between demand and supply of labor
  - help with the discrimination faced by humanitarian migrants with local employers often dismissing almost completely their qualications and/or work experience (Damos de Matos and Liebig, 2014)

Thank you!

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