Do informal networks increase migrants' over-education?

A comparison between natives, migrants and second generations in Italy

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RESEARCH QUESTIONS

- Evidence throughout Europe suggests the existence of a difference between natives and foreigners when it comes to education-occupation mismatch

  Are first- and second-generation migrants more over-educated than nationals,* ceteris paribus*?

- Numerous are the factors leading to mismatch

  What is the role of informal networks in generating mismatch? Is this different for natives and migrants?

PRESENTATION OUTLINE

1. **Introduction: immigration, mismatch and informal networks**

2. **Mismatch, network and other definitions**

3. **Data and method: PLUS & Probit/PSM/IPW**

4. **Empirical results**

5. **Conclusion and public policy considerations**

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Migrants' over-education

Large literature on migrants' insertion in labour markets (Park et al. 1921; Chiswick 1978)

wrt/ mismatch, different explanations:

- Information adjustment & difficult transfer of human capital (Chiswick and Miller 2009)
- Quality of the capital being transferred (Mattoo et al. 2008)
- Mismatch in the country of origin (Piracha et al. 2012)
- Cultural proximity and language (Dustmann and Van Soest 2002)
- Attitutes toward foreigners (discrimination) (Neumark 2013)
- Use of informal networks: referral hiring

The effect of networks

Literature (not as large though) has produced conclusions in shades

- Kalfa & Piracha (2017) for Australia: network increases mismatch
- Alaverdyan & Zaharieva (2019) for Germany: idem
- Chort (2016) for Senegalese community is several ctries: contrary

We propose to look at the Italian case

1. Introduction: immigration, mismatch and informal networks

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Three-fold contribution

- We look into the Italian case

- We rely on respondents' declared use of networks (rather than proxies)

- We break down the foreign population into
  - Migrants
  - Second generation

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Defining education-occupation mismatch

Different definitions

- **Normative approach**: measured using a classification elaborated ex-ante, which specifies the level of educational attainment required for each occupation. PB: need extensive data

- **Workers' self-assessment:** PB: horizontal vs. Vertical mismatch + underlying mechanisms defining perception when comparing foreigners and nationals

- **Statistical approach:** distribution of workers' education levels within occupational groups. Suitable to compare the distribution of different groups (even though there are limitations to it)

  => Here, we'll consider the <u>modal educational level applied to ISCO one digit</u>

2. Mismatch, network and other definitions

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International Standard Classification of Occupations (ISCO-88 (COM))

1	Legislators, senior officials and managers	(1 digit)
2	Professionals	(1 digit)
3	Technicians and associate professionals	(1 digit)
4	Clerks	(1 digit)
5	Service workers and shop and market sales workers	(1 digit)
6	Skilled agricultural and fishery workers	(1 digit)
7	Craft and related trades workers	(1 digit)
8	Plant and machine operators and assemblers	(1 digit)
9	Elementary occupations	(1 digit)
10	Armed forces	(1 digit)

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Informal networks

Resorting to social capital to look for and find a job:
"Friends, relatives and acquaintances"

- Intensity of use of networks (0-12)
- Current job found through informal network (0-1)

First and second generation migrants

Born with foreign citizenship who

- Prevalently grew up abroad
- Prevalently grew up in Italy (0-18 yo)

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3. Data and method: PLUS & PSM/IPW

Data: Participation Labour Unemployment Survey

45,000 obs; 18-75 yo; collected in October 2018

BUT

Focus on population available for work: 31,600 obs; 2.4% foreigners

Focus on non-EU15 foreigners

3. Data and method: PLUS & PSM/IPW

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Method: two-fold

1. Probit regressions

2. Use of counterfactual impact evaluation method

- Propensity Score Matching: logistic model and matching methods
  Treatment = being foreigner

- Inverse Probability Weighting: multinomial logistic model for treatment and logistic for impact
  Treatment = 1:migrated
  2:grew up in IT

3. Data and method: PLUS & PSM/IPW

Controls

For all:
Area of residence (x3), city size, gender, children, work status, father's education, sector of activity, period in which mismatch occurred

For migrants:
area of origin, years since arrival

For counterfactual:
education

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4. Empirical results: PROBIT REGS

Tab. 4. Probit regressions, average marginal effects, Models 5 to 10.

	Model 5		Model 6		Model 7		Model 8		Model 9		Model 10	
Foreign citizen	-0.0162				-0.0204							
	(0.012)				(0.016)							
Migrated			-0.0041				-0.0068					
			(0.014)				(0.018)					
Grew up in IT			-0.0476	***			-0.0670	*				
			(0.016)				(0.032)					
Network-looking	-0.0041	***	-0.0041	***					-0.0021			
	(0.000)		(0.000)						(0.003)			
Age	0.0003	*	0.0003	*	0.0005	**	0.0005	**	0.0058	***	0.0053	***
	(0.000)		(0.000)		(0.000)		(0.000)		(0.002)		(0.002)	
Gender (male)	-0.0554	***	-0.0552	***	-0.0541	***	-0.0540	***	-0.0639	**	-0.0885	**
	(0.004)		(0.004)		(0.004)		(0.004)		(0.027)		(0.041)	
Child(ren)	-0.0253	***	-0.0254	***	-0.0237	***	-0.0239	***	-0.0647	*	-0.0946	**
	(0.004)		(0.004)		(0.005)		(0.005)		(0.037)		(0.041)	
Area Centre[x]	0.0178	***	0.0178	***	0.0160	***	0.0159	***	0.0499		0.0782	*
	(0.005)		(0.005)		(0.005)		(0.005)		(0.045)		(0.045)	
Area South[x]	0.0099	**	0.0099	**	0.0087	*	0.0088	*	-0.0575	*	-0.0386	
	(0.004)		(0.004)		(0.005)		(0.005)		(0.030)		(0.052)	
Major cities[xx]	0.0267	***	0.0267	***	0.0296	***	0.0296	***	0.0389		0.0317	
	(0.004)		(0.004)		(0.004)		(0.004)		(0.029)		(0.039)	
Father's education	0.1184	***	0.1185	***	0.1031	***	0.1031	***	0.0997	***	0.0968	***
	(0.005)		(0.005)		(0.004)		(0.004)		(0.033)		(0.035)	
Work status	-0.0601	***	-0.0601	***					0.0196			
	(0.004)		(0.004)						(0.039)			
Tenure	-0.0034	***	-0.0034	***	-0.0034	***	-0.0033	***	-0.0000		-0.0022	
	(0.000)		(0.000)		(0.000)		(0.000)		(0.003)		(0.003)	
Public	-0.0445	***	-0.0447	***	-0.0430	***	-0.0430	***	-0.1156	**	-0.0915	
	(0.004)		(0.004)		(0.005)		(0.005)		(0.052)		(0.058)	
Network-finding					-0.0649	***	-0.0652	***			-0.0739	**
					(0.005)		(0.005)				(0.037)	

4. Empirical results: PSM APPROACH

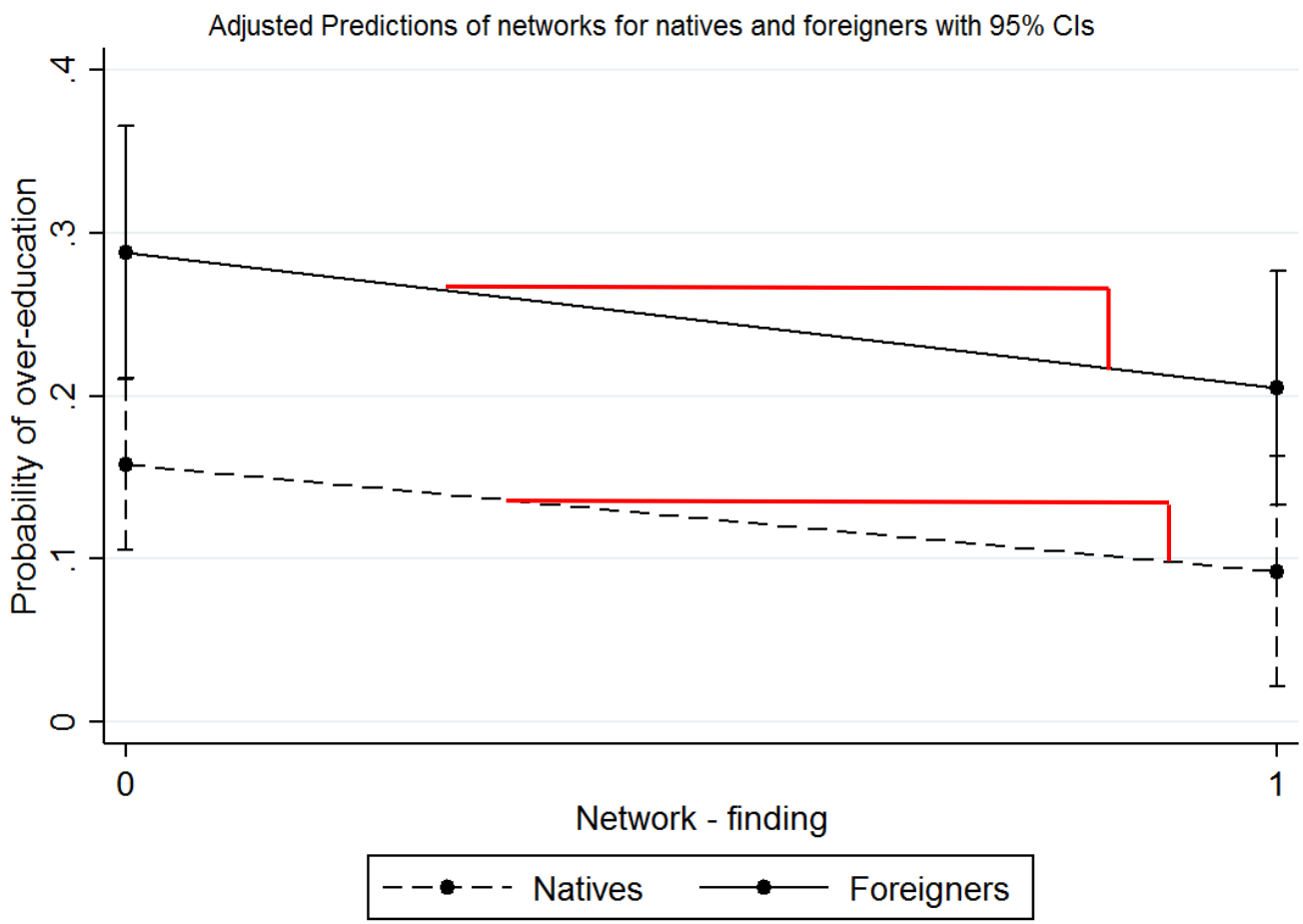
Tab. 5. Estimation of the average effect on the treated (ATT) of being a foreigner: logistic, nearest neighbour, Kernel and radius matching estimations.

ATT	Probit model	Nearest neighbour	Kernel matching[x]	Radius matching (0.1)	Probit model	Probit model
Foreign citizen	0.120 ***	0.096 ***	0.061 **	0.117 ***	0.114 ***	0.124 ***
	(0.024)	(0.026)	(0.023)	(0.024)	(0.029)	(0.035)
Network-looking					-0.000	
					(0.003)	
Network-finding						-0.073 **
						(0.035)

x : bootstrap std.err.

4. Empirical results: PSM APPROACH & interaction term

Fig. 1. Predicted effect of networks on mismatch between natives and foreigners (proportions).



Effect not different across categories

4. Empirical results: IPW APPROACH

Tab. 6. Estimation of the average effect of migration and migration background: multinomial logistic estimation.

Average treatment effect on the treated	Coefficients
Migrated vs. natives	0.0827 ***
	(0.014)
Migration background vs. natives	0.0334
	(0.055)
Migrated vs. migration background	0.1965 ***
	(0.061)

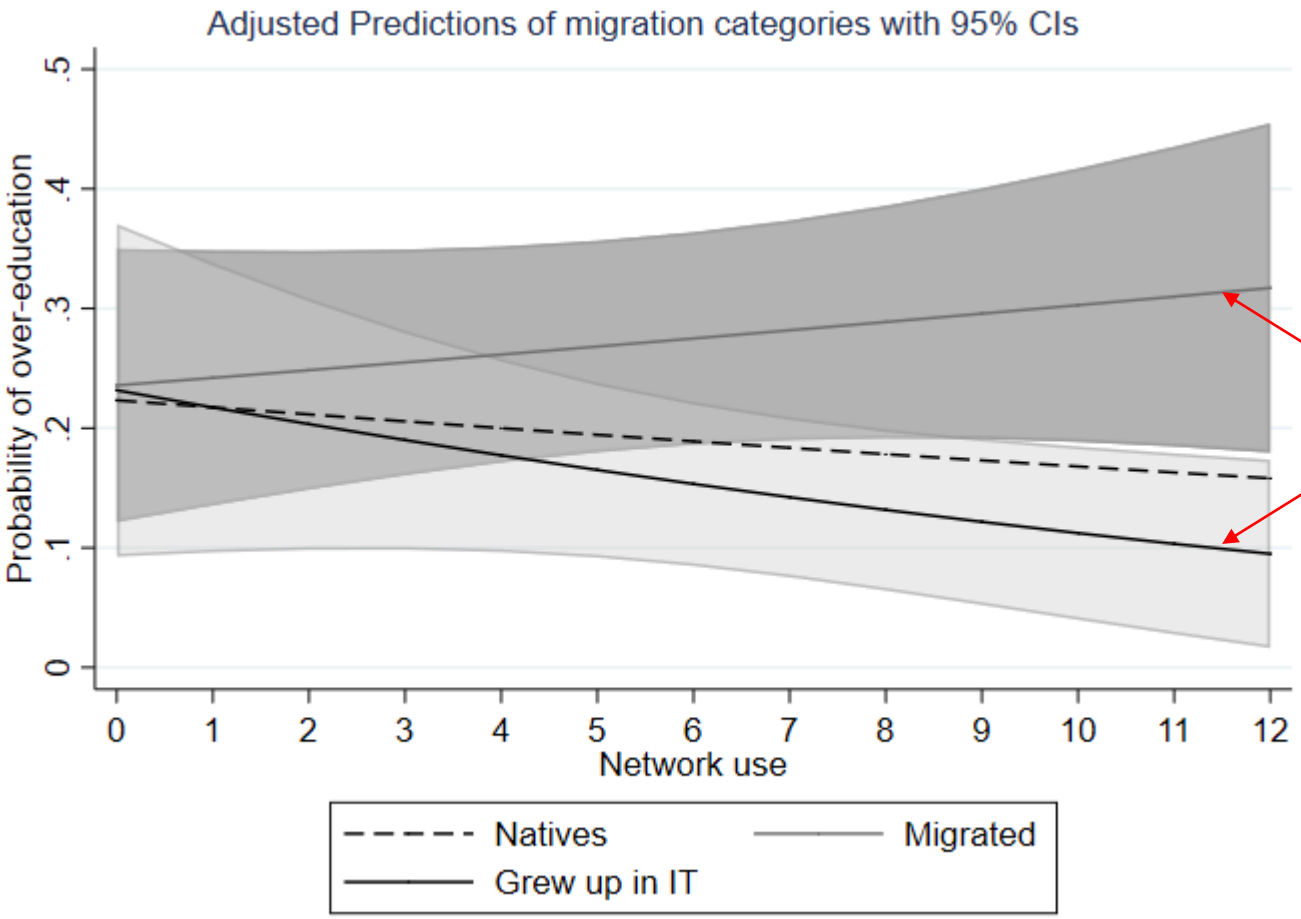
4. Empirical results: IPW APPROACH

Tab. 7. Estimation of the effect of informal networks. Logistic regression with inverse probability weighting, average marginal effects.

Average treatment effect on the treated	Probit model 1		Probit model 2
Migrated	0.0804	*	0.0775
	(0.047)		(0.032)
Grew up in IT	-0.0261		-0.0283
	(0.041)		(0.049)
Network-looking	-0.0036		
	(0.004)		
Network-finding			-0.0781
			(0.053)

4. Empirical results: IPW APPROACH & interaction term

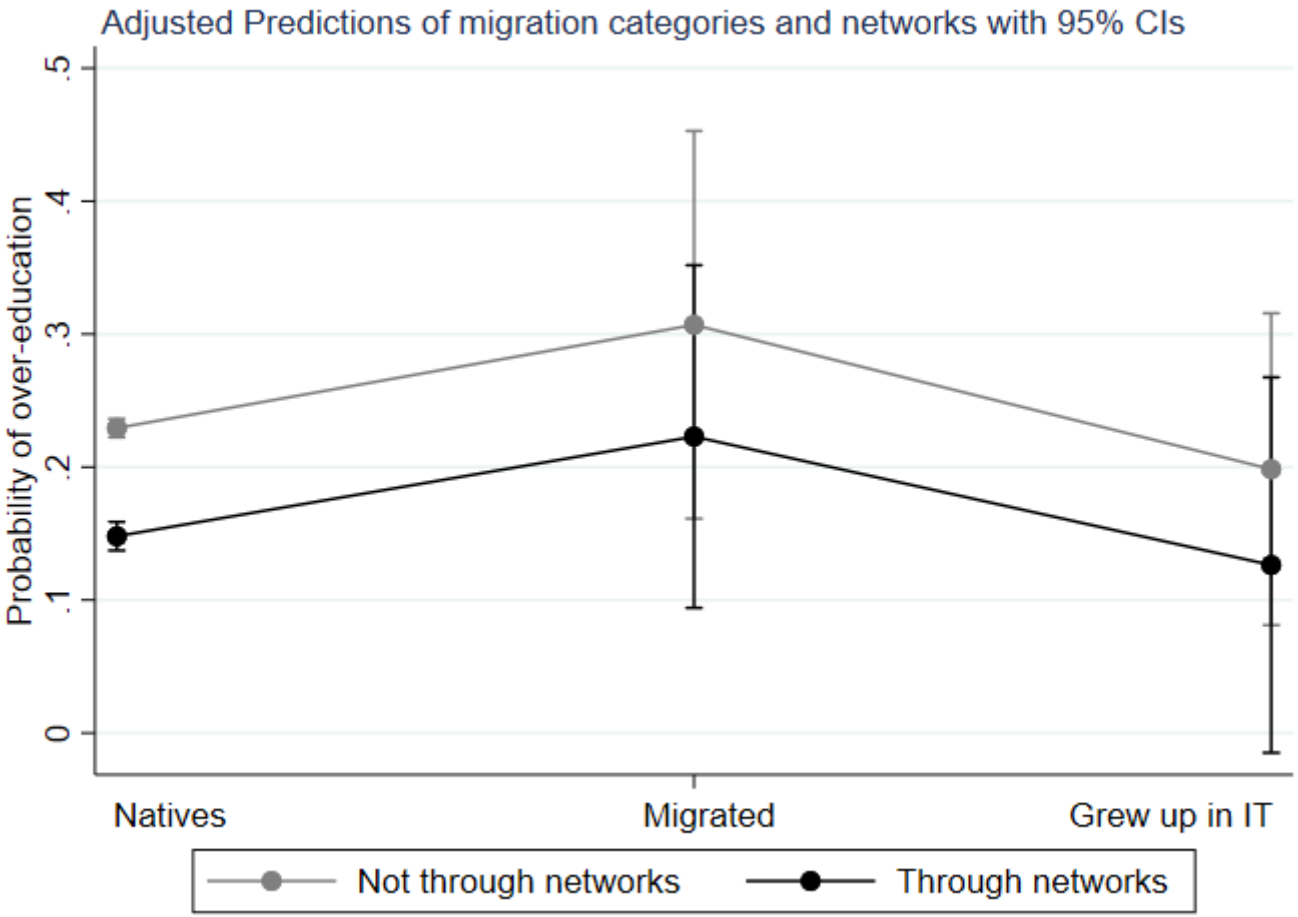
Fig. 2. Effect of migration categories at different levels of networks' use. Predicted probabilities.



Effect different across categories but weak evidence

4. Empirical results: IPW APPROACH & interaction term

Fig. 3. Effect of migration categories and network leading to employment. Predicted probabilities.



Effect not different across categories

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Conclusions

- More research is needed!

- Migrants **vs.** natives & second generations

- There is an effect of networks but that does not vary much across categories

Policy hints

- What can you do about networks… especially if they decrease mismatch

- Recognition of qualifications as the way to go? → very little research on that and evidence of its effect in Germany

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