Education-occupation mismatch of migrants in the Italian labour market: The effect of social networks

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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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1. Introduction: immigration, mismatch and informal networks

Why should we care ??

Immigration has become a structural phenomenon:

- Acceleration: nowadays 8.5% of the population
- Long-term (or irreversible) changes of ethnic composition
- Ageing population in the great North (west but also east)
- New push factors

Mismatch is essentially a misallocation of human resources

Migrants' over-education

Large literature on migrants' insertion in labour markets

wrt/ mismatch, different explanations:

- Information adjustment & difficult transfer of human capital
- Quality of the capital being transferred
- Mismatch in the country of origin
- Cultural proximity and language
- Attitutes toward foreigners (discrimination)
- 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

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
    - Those who migrated
    - Those who were born foreigners in Italy or grew up in IT (second generation)

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Defining education-occupation mismatch

Three main 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 modal educational level applied to ISCO one digit

2. Mismatch, network and other definitions

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)

2. Mismatch, network and other definitions

PUBLIC POLICY INNOVATION

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

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

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

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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	-0.0121				-0.0166							
	(0.011)				(0.014)							
Migrated			-0.0005				-0.0038					
			(0.014)				(0.017)					
Grew up in IT			-0.0381	**			-0.0503	*				
			(0.016)				(0.028)					
Network-looking	-0.0041	***	-0.0041	***					-0.0037			
	(0.000)		(0.000)						(0.003)			
Age	0.0003		0.0003		0.0005	**	0.0005	**	0.0052	***	0.0043	**
	(0.000)		(0.000)		(0.000)		(0.000)		(0.002)		(0.002)	
Gender	-0.0556	***	-0.0553	***	-0.0543	***	-0.0541	***	-0.0664	**	-0.0909	**
	(0.004)		(0.004)		(0.004)		(0.004)		(0.028)		(0.040)	
Child(ren)	-0.025	***	-0.0251	***	-0.0233	***	-0.0234	***	-0.0423		-0.0653	*
	(0.004)		(0.004)		(0.005)		(0.005)		(0.035)		(0.039)	
Area Centre	0.018	***	0.018	***	0.0163	***	0.0162	***	0.051		0.0782	**
	(0.005)		(0.005)		(0.005)		(0.005)		(0.041)		(0.038)	
Area South	0.0098	**	0.0099	**	0.0085	*	0.0086	*	-0.0525	*	-0.0418	
	(0.004)		(0.004)		(0.005)		(0.005)		(0.031)		(0.049)	
Major cities	0.0272	***	0.0273	***	0.0302	***	0.0303	***	0.068	**	0.0887	***
	(0.004)		(0.004)		(0.004)		(0.004)		(0.029)		(0.033)	
Father's education	0.1183	***	0.1183	***	0.1029	***	0.1029	***	0.1081	***	0.1023	***
	(0.005)		(0.005)		(0.004)		(0.004)		(0.032)		(0.033)	
Work status	-0.0602	***	-0.0602	***					0.0196			
	(0.004)		(0.004)						(0.043)			
Tenure	-0.0034	***	-0.0034	***	-0.0034	***	-0.0033	***	-0.0008		-0.0034	
	(0.000)		(0.000)		(0.000)		(0.000)		(0.003)		(0.003)	
Public	-0.0445	***	-0.0446	***	-0.0429	***	-0.0429	***	-0.1047	**	-0.0589	
	(0.004)		(0.004)		(0.005)		(0.005)		(0.047)		(0.054)	
Network-finding					-0.0651	***	-0.0654	***			-0.0784	**
					(0.005)		(0.005)				(0.036)	

4. Empirical results

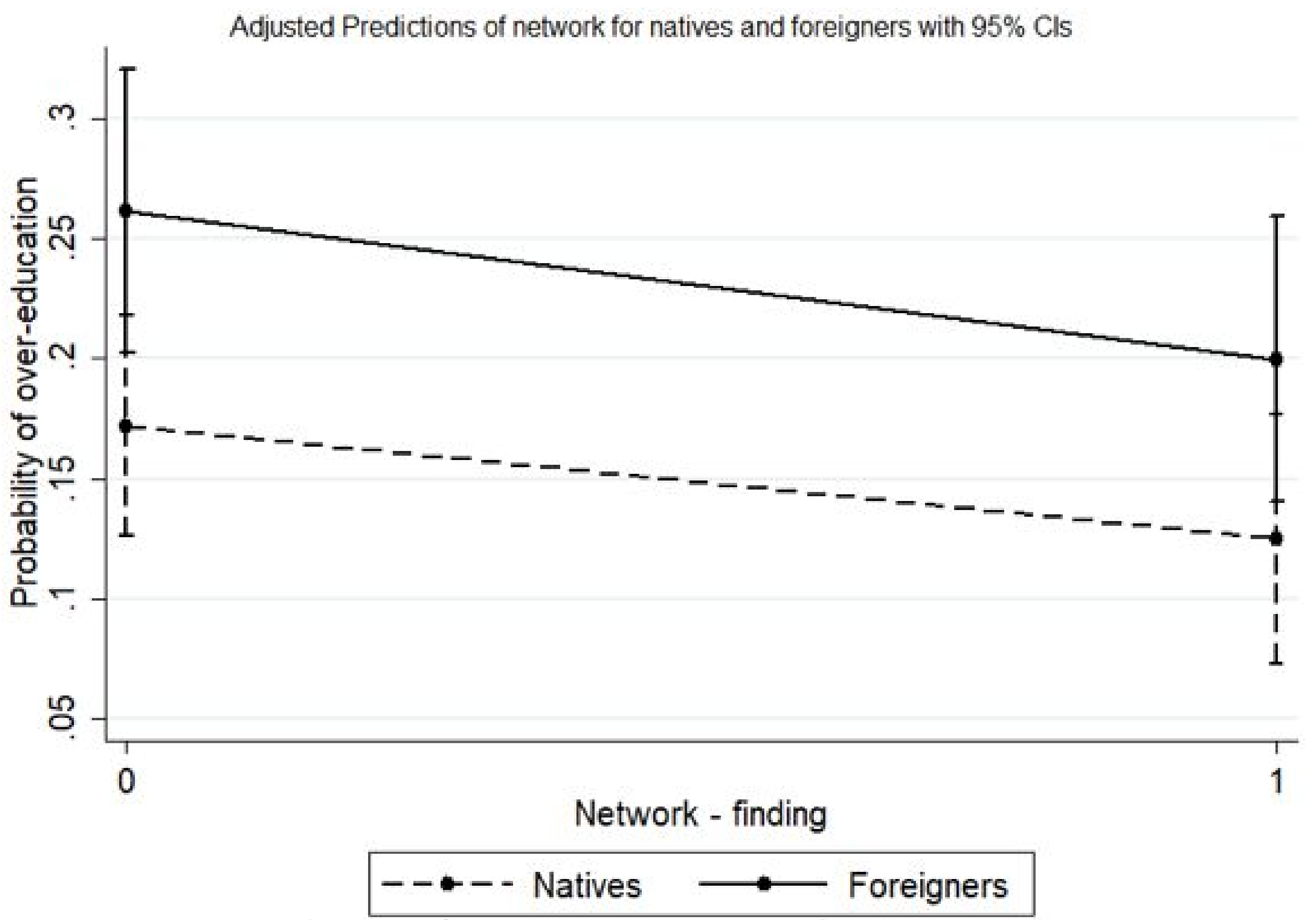
Tab. 5. Estimation of the average effect on the treated (ATT) of being a foreigner: logistic, nearest neighbour, Kernel and radius matching estimations.

ATT	Probit model	Nearest neighbour	Kernel matching[x]	Radius matching (0.1)	Probit model	Probit model
Foreign citizen	0.091 *** (0.024)	0.069 *** (0.023)	0.047 ** (0.022)	0.089 *** (0.021)	0.091 *** (0.026)	0.084 *** (0.032)
Network-looking					-0.002 (0.003)	
Network-finding						-0.054 * (0.032)

[x]: bootstrap std.err.

4. Empirical results

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



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

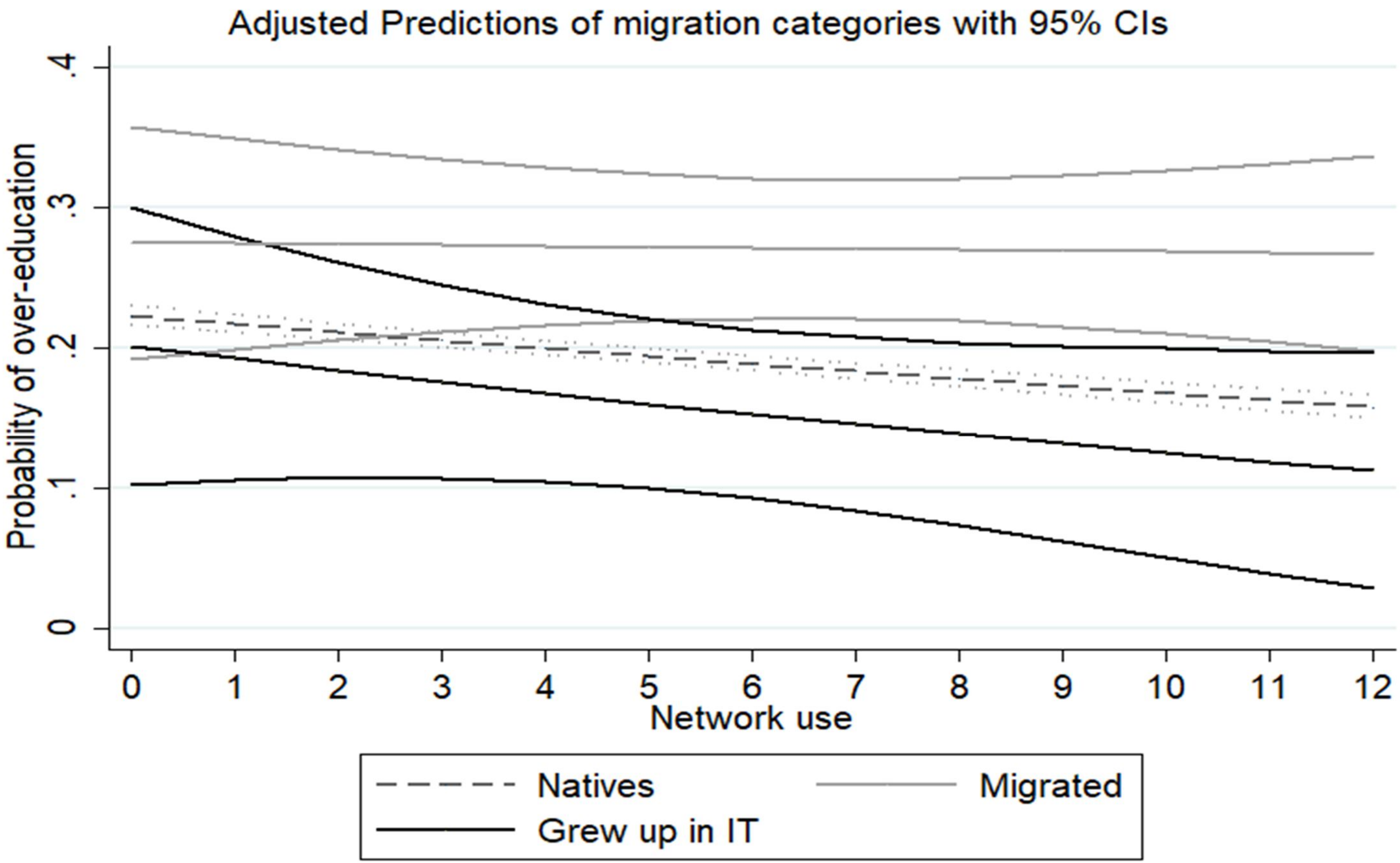
Average treatment effect on the treated	Coefficients
Migrated vs. natives	0.0655 ***
	(0.014)
Migration background vs. natives	0.0241
	(0.047)
Migrated vs. migration background	0.155 ***
	(0.053)

4. Empirical results

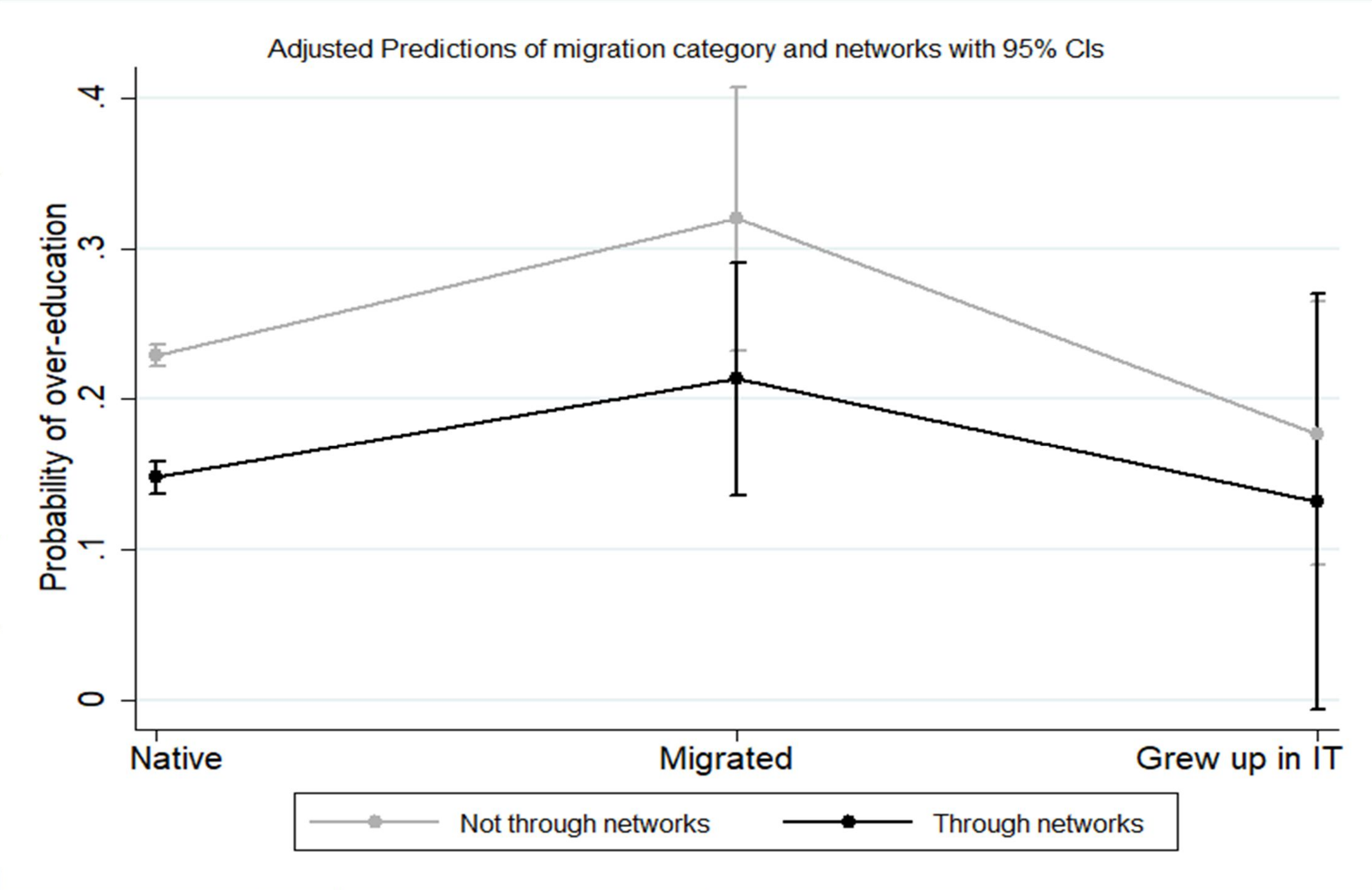
Tab. 7. Estimation of the effect of informal networks. Logistic regression with inverse probability weighting, average marginal effects.

Average treatment effect on the treated	Probit model 1		Probit model 2	
Migrated	0.0881	***	0.0827	***
	(0.026)		(0.032)	
Grew up in IT	-0.0339		-0.0433	
	(0.031)		(0.038)	
Network-looking	-0.0055	***		
	(0.001)			
Network-finding			-0.0811	***
			(0.006)	

4. Empirical results



4. Empirical results



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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…
- Recognition of qualifications as the way to go? → very little research on that !!

Thank you !

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Working paper available at: https://ideas.repec.org/p/zbw/glodps/398.html

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