INAPP
ISTITUTO NAZIONALE PER L'ANALISI DELLE POLITICHE PUBBLICHE

The role of informal networks in finding occupation among natives, migrants and second generations. A Generalized Propensity Score approach

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PRESENTATION OUTLINE

1. **Introduction, literature review and research questions**
2. **Data and methodology**
3. **Empirical results**
4. **Conclusion, public policy considerations and next steps**

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Why should we care?

Immigration has become a structural phenomenon

Acceleration: nowadays migrants represent **8.7% of the Italian population** (Istat, 2024)

second generation represent about 15% of school-age children in Italy (ISTAT, 2023)

	2011	2023	Variation
Tot. Population	59.433.744	58.989.749	-0.7% (-2% variation without migrants)
Foreigners	4.570.317	5.307.598	16.3%

Ageing population in the great North (west but also east):

	0-14	15-64	65 e oltre
Tot. Population	12.5%	63.5%	24%
Foreigners	19.5%	70. 5%	10%

However….

	Employment rate	Unemployment rate
Tot. Population 20-64 - ISTAT	66.4%	7.2%
Foreigners 20-64 - ISTAT	65.1%	11.3%
Tot. Population 15-29 - ILO ’22		18%
I generation 15-29 - ILO ’22		17.8%
II generation 15-29 - ILO ’22		24.2%

First-Generation Migrants:

Face language barriers,

skill mismatches,

and institutional discrimination.

Second-Generation Migrants:

Face challenges in transitioning to the labor market despite familiarity with the local context.

Job Market Overview:

High unemployment among migrants and overrepresentation in low-skilled sectors (Van Wolleghem et al 2019)

Unemployment is essentially an inefficient allocation of human resources

Scholars find evidence of a positive role of informal networks for migrants to overcome barriers →

AIM: We empirically investigate, and compare to other job-search methods, the effect of informal networks on occupational status in Italy among natives and migrants.

MAIN RESEARCH QUESTIONS:

- **What is the role of informal networks in determining employment outcomes**?
- **How do job-search methods** (informal networks, public employment services, self-employment, schooling/training) **compare in terms of effectiveness**?
- Second generations, more familiar with the local context, may benefit differently from such networks**. Do the effects differ across natives, migrants, and second generations?**

OUR CONTRIBUTION is three-fold

- 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)

Literature review

Differences Between Migrants and Natives

- **Networks offer a means to bypass discrimination, reduce job-search costs, and enhance integration** (Drever and Hoffmeister, 2008).
- Migrants generally exhibit lower employment rates, higher unemployment, and greater education-to-occupation mismatch compared to natives (OECD, 2018; Van Wollegehm et al. 2022).

Role of Informal Networks

- The literature highlights that **informal networks influence labour market outcomes, but their impact varies depending on the resources and social capital the network holds** (Fontaine, 2007; Bourdieu, 1986).
- Empirical studies on this topic are limited, particularly in migration contexts, despite migration being a structural feature of OECD countries. **Ethnic networks can offer support but may also limit broader labor market access, while more diverse networks can provide wider opportunities** (Lancee & Hartung, 2012).
- A study by **Battisti, Giesing, and Laurentsyeva (2019) analyzed the impact of social networks on labor market integration of migrants in Germany, finding that networks significantly affect employment probabilities**. While this study focuses on Germany, its findings are relevant for understanding similar dynamics in Italy, highlighting the importance of network composition and the quality of information transmitted.

Literature review

Italian Context

- In Italy, migrants experience worse occupational outcomes than natives (Venturini and Villosio, 2008).
- Studies on the role of networks are scarce and often focus on specific communities. (Toma, 2016) found positive effect of networks on Senegalese comunity in France but negative in Italy.
- According to scholars, formal channel, as well as job centres, do not alleviate situations of unemployment, a phenomenon already established in research on Italian public employment services (Pastore, 2015) but not in the context of migration

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Data: Participation Labour Unemployment Survey 2018 (45.000)

26,005 individuals (employed or job-seeking)

17.2% unemployed

68% are foreigners prevalently grew up abroad, 32% are second-generation migrants - prevalently grew up in Italy (0-18 yo)

Dependent Variable:

1 = Employed 0 = Unemployed

Job-Search Channels (independent variable):12 channels (rated on a 0-10 scale):

Informal Networks (friends, relatives and acquaintances)

Public job centers

Training institutes (schools, universities)

Self-employment (*common among migrants to overcome exclusion from the labour market, Apitzsch and Kontos, 2002*)

Calculation:

Rank channels by intensity of use

Multiply inverse rank by intensity (and divided by 10) to obtain a composite score (scale from 0, little use compared to other job-hunt means, low intensity, to 12, most used channel and one, used intensely)

- Counterfactual methodology using **Generalized Propensity Score (GPS)** and **Inverse Probability Weighting (IPW)** to correct for selection bias (Imbens, 2000).

We adopt a Generalized Propensity Score (GPS) approach (Imbens 2000). We put foreigners, second-generation migrants and natives on a par through the calculation of an Inverse Probability Weighting (IPW) model to correct for selection bias (Cattaneo, 2010, Feng et al., 2011).

- Probit regression models to estimate the impact of job-search channels.

In order to estimate the effect of informal networks and other job-search channels, we run probit regressions with employment status as the dependent variable and migration status and job-search channel as independent variables. Observation are weighted by their inverse probability of selection. We test for the existence of a differentiated effect between categories through interacting our two independent variables.

The calculation of propensity scores is based on the following covariates:

Area of residence: North, Centre, South -> important in Italy characterised by different territorial patterns of labour market dynamics and, consequently, different patterns of migrant integration (Ambrosini, 2013)

Type of agglomeration: Rural or urban

Occupation (ISCO 1-digit classification) -> aimed at capturing task heterogeneity, which we group in 4 categories, following Picchio and Mussida (white-collar high-skilled (1 to 3), white-collar low-skilled (4 and 5), blue-collar high-skilled (6 and 7) and blue-collar low-skilled (8 and 9))

Demographics: Gender, age, children, education level

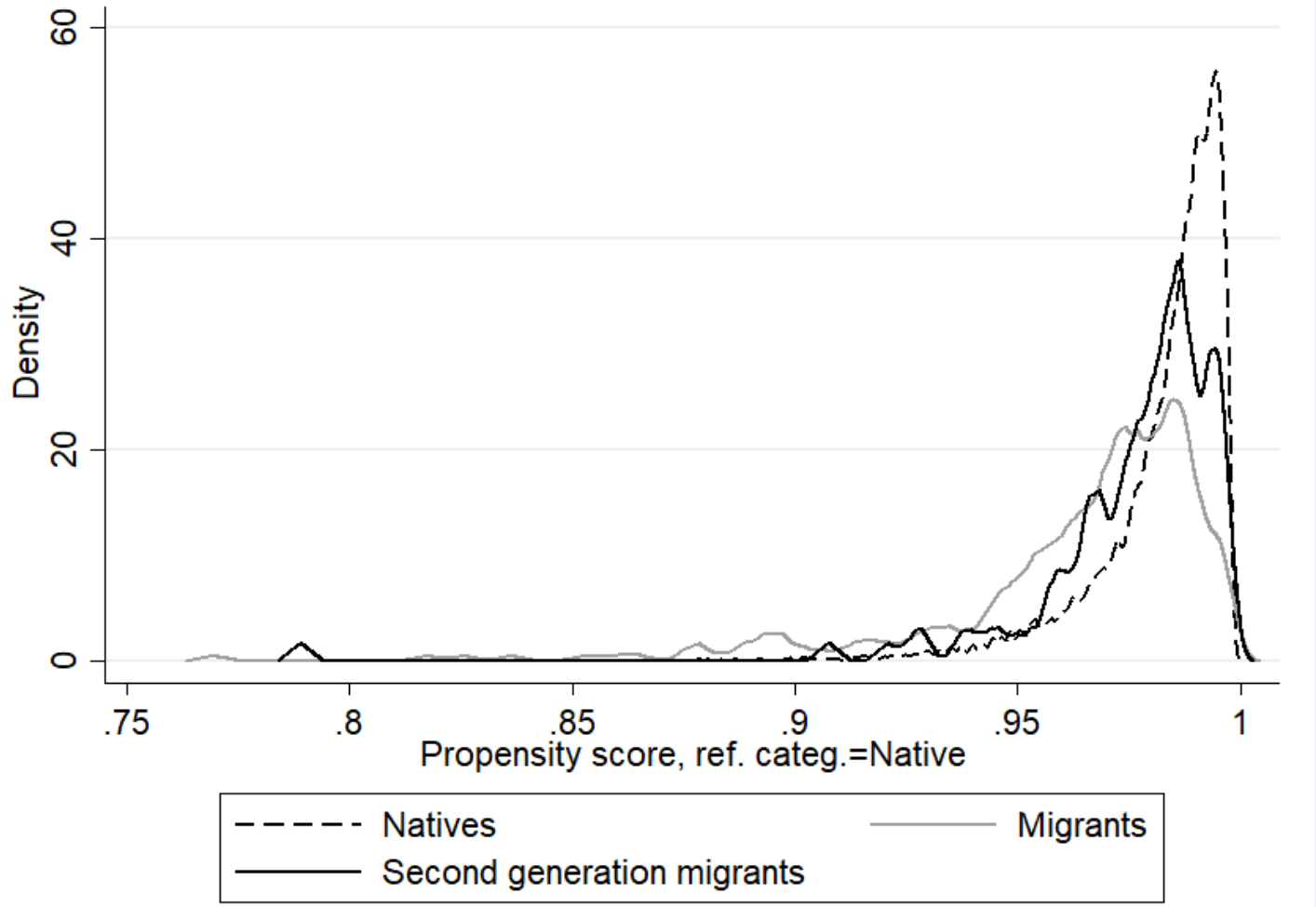
Control for Education Bias:

We test for potential biases related to education by comparing the use of job-search channels across different education levels and running weighted probit regressions with and without education control

With regard to the first one, the distribution of education and use of the channel across our three groups is comparable, thus producing unbiased coefficients. As for subsample regressions, our variable turns non-significant only when we look at respondents with lower middle school level or under. We therefore consider the results presented below as valid.

Overlap of propensity scores

Satisfying overlap, suggesting that, irrespective of their values, there is a good chance of having observations in the control and treatment groups.



Variables	Obs.	Mean	Std. Dev.	Min.	Max.
In work (dependent variable)	26,005	0.767	0.423	0	1
Migration status	26,005	0.022	0.173	0	2
Gender	26,005	0.475	0.499	0	1
Child(ren)	26,005	0.568	0.495	0	1
Area of residence	26,005	1.854	0.875	0	3
Age	26,005	44.802	12.165	18	74
City size	26,005	2.795	1.351	1	5
Education	26,005	4.259	0.769	2	6
ISCO group	26,005	1.771	0.893	1	4
Use of networks	26,005	4.009	4.378	0	12
Use of PES	26,005	1.769	3.103	0	12
Use of schooling institutions	26,005	1.453	3.002	0	12
Use of self-employed activities	26,005	1.395	3.260	0	12

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Effect of treatment on the treated and effect of job-search methods, average marginal effects

- Migrants are 7 percentage points less likely to be employed than natives.

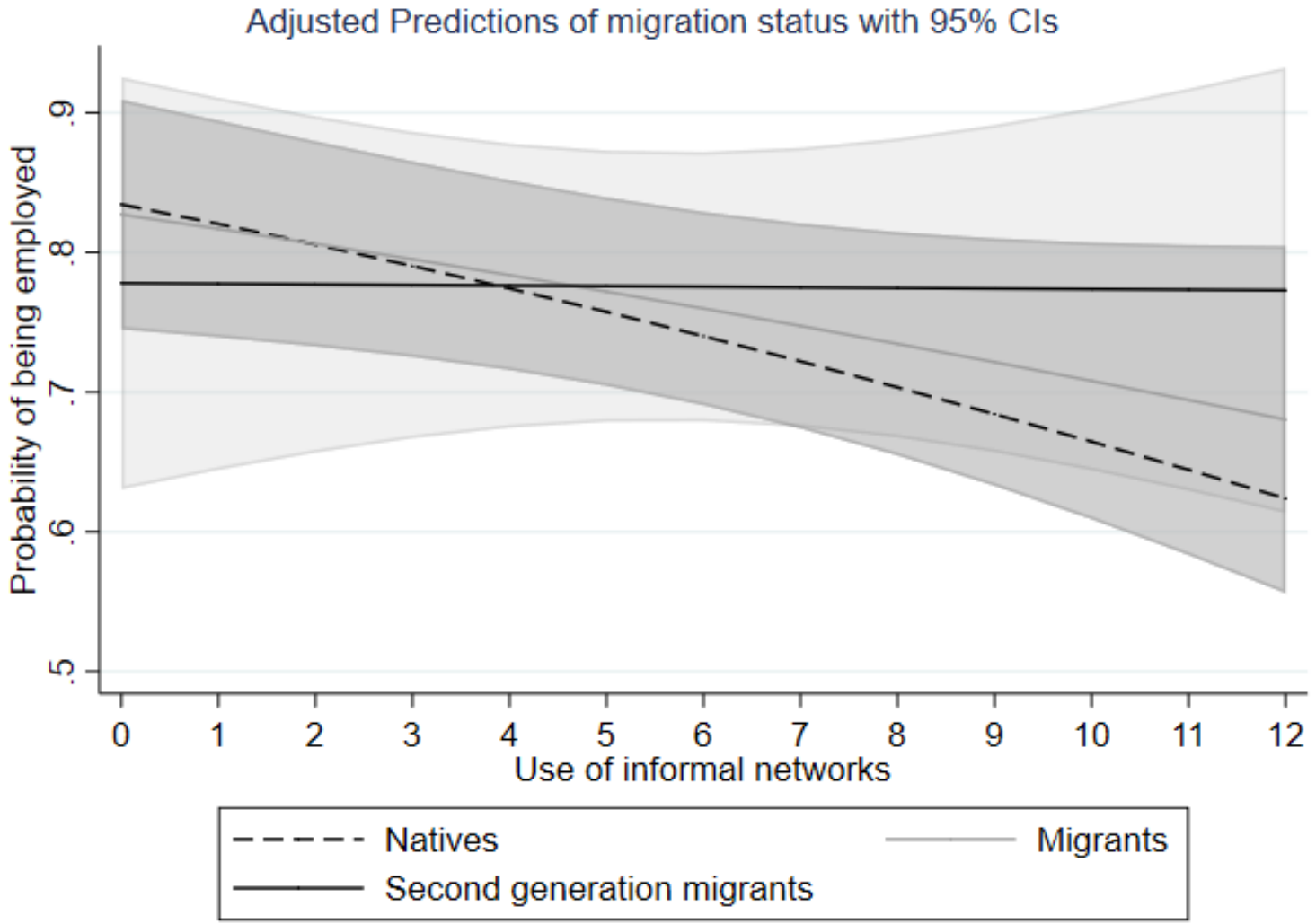
- Informal networks decrease employment probability slightly (-1 p.p.), while public employment services (PES) have a stronger negative effect (-2.5 p.p.).

- Self-employment and reliance on schooling/training significantly increase employment probabilities

Avg. treat. effect on the treated	Coef.	Avg. treat. effect	M1	M2	M3	M4
Migrants vs. natives	-0.0704 ***	**Migrants vs. natives**	0.0082	-0.0084	-0.0065	-0.0163
	(0.026)		(0.035)	(0.035)	(0.034)	(0.035)
Scd. gen. vs. natives	0.0538	**Scd. gen. vs. natives**	0.0088	0.0079	0.0040	-0.0034
	(0.047)		(0.053)	(0.053)	(0.050)	(0.051)
Migrants vs. scd. gen.	-0.0172	**Network**	-0.0099**			
	(0.059)		(0.004)			
		PES		-0.0250***		
				(0.005)		
		Training inst. & university			0.0209***	
					(0.007)	
		Self-empl. activity				0.0188***
						(0.006)

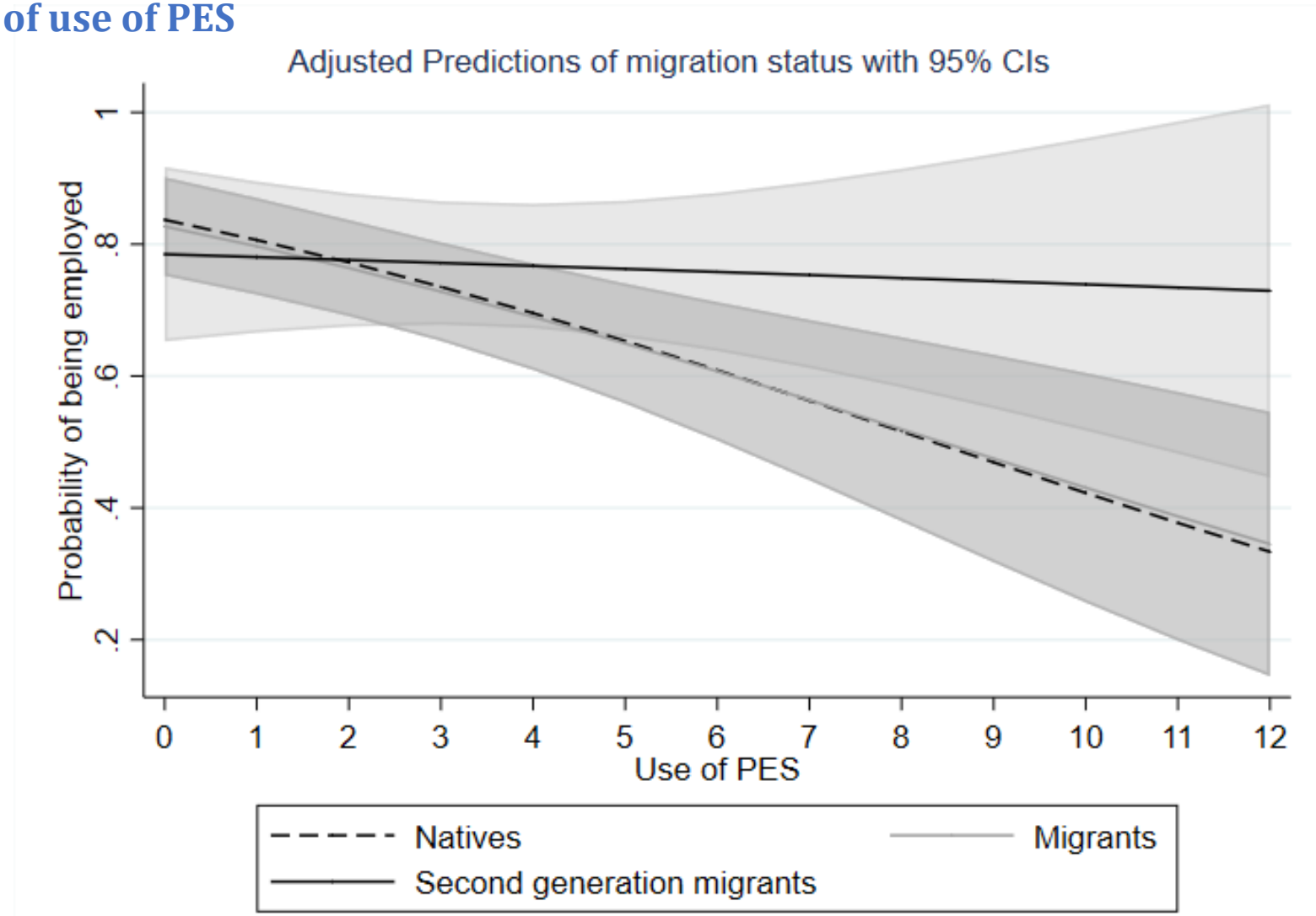
Predicted probability of occupation by migration status at different levels of use of informal networks

The effect for informal networks appears to be very similar from one category to another . There is weak evidence, however, of an ascending slope for second-generation migrants whilst it is descending for both natives and migrants



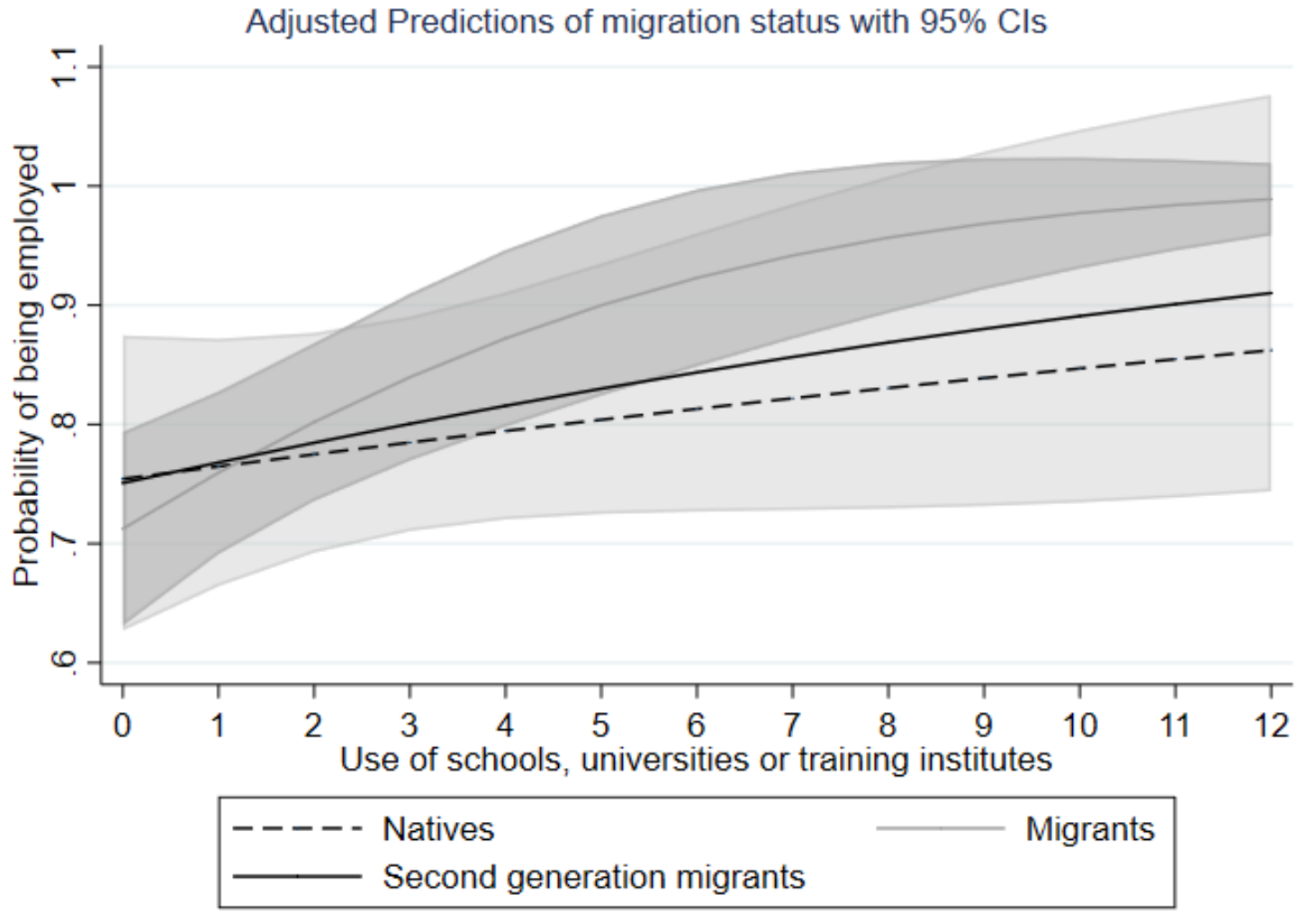
Predicted probability of occupation by migration status at different levels of use of PES

Formal channels have an effect that is consistent amongst natives and migrants whilst it is significantly less negative for second-generations



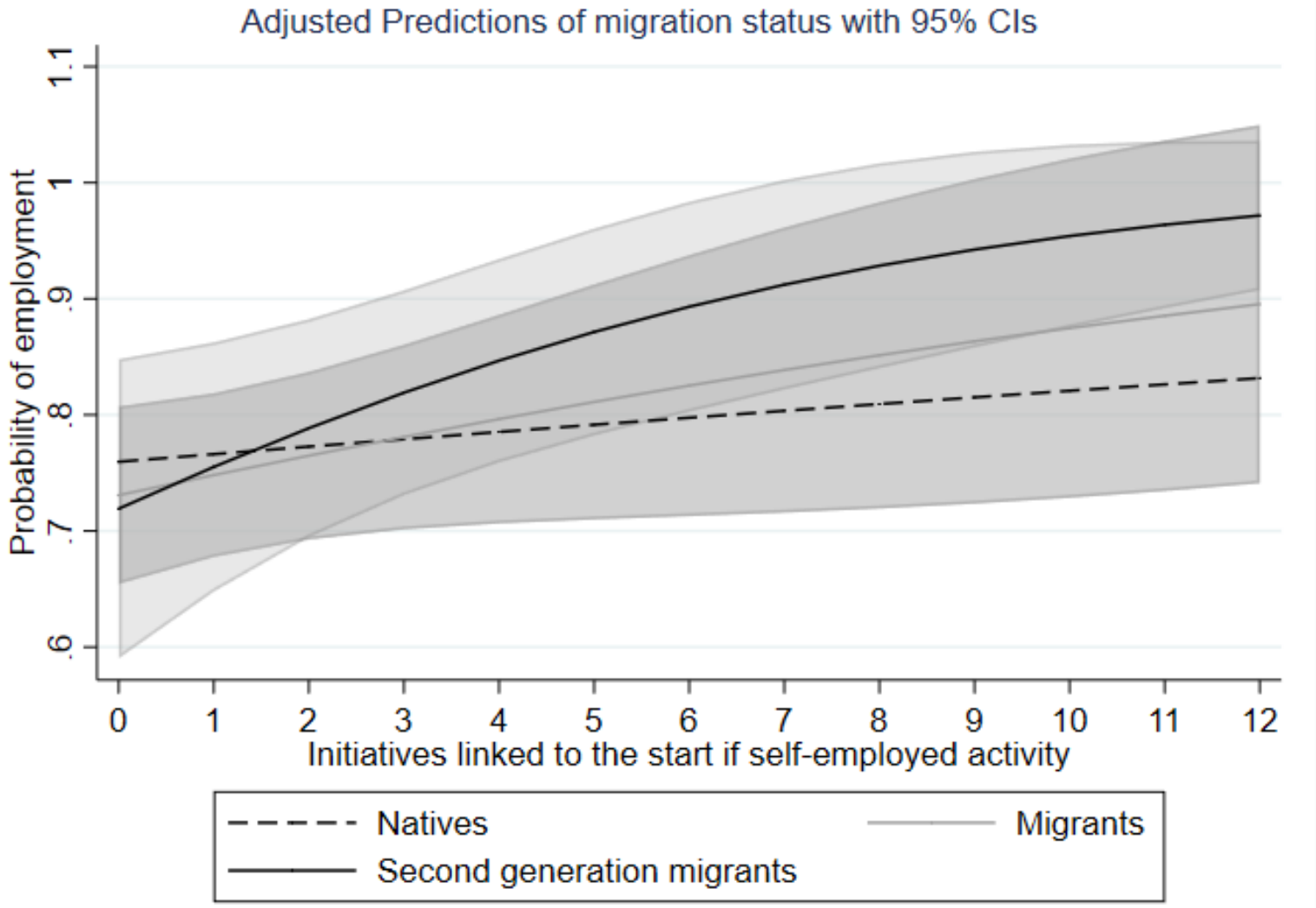
Predicted probability of occupation by migration status at different levels of use of schooling institutions

Relying on schooling and training institutions produces effects that are always positive but significantly more so for migrants. Conversely, second generations' probability of employment is similar to that of natives



Predicted probability of occupation by migration status at different levels of use of initiatives linked to the start of self-employed activity

Starting self-employed activity appears to affect the probability of working for all but significantly more so for second-generations, as they intensely resort to this means to curb the risk of unemployment



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Our results show that, **if migrants in Italy are significantly more likely to be unemployed than natives (by 7 p.p.), it is not so much due to their using informal networks** to look for jobs.

Our findings show that **resorting to Italian PES decreases the probability of being in work by 2.5 p.p**.; more than twice as much as networks (job centres, do not alleviate situations of unemployment, a phenomenon already established in research on Italian public employment services (Pastore, 2015) but not in the context of migration.)

We provide evidence on the Italian case that contrasts the findings relating to the German case where networks are shown to provide occupation (Drever and Hoffmeister, 2008; Lancee and Hartung, 2012).

We confirm the importance of the receiving context. Toma (2016), for instance, shows that the members of the Senegalese community using networks observe positive outcomes in France and negative outcomes in Italy

Our results confirms the concerns expressed elsewhere and uphold the calls for **investment in Italian job centres and active labour market policies (OECD, 2019).** As a matter of fact, "Italy's spending in active labour market policy amounts only to 0.37% of GDP, a much lower share than Germany and France (1%), not to say of Denmark (1.48%), the homeland of flexicurity" (Pastore, 2017: 8-9).

Resorting to schooling institutions to look for a job (for first generation) and the start of self-employed activity (for second generation) appear to significantly increase workers' likelihood to be in occupation

Accordingly, **education and training, comprising of training targeted to would-be entrepreneurs, may translate into lower unemployment rates across the board.**

- Informal Networks: limited impact on improving employment outcomes (often tied to low-quality jobs…)
- PES: decreases the probability of being in work
- Schooling and training institutions and self employment: impact employment outcomes especially for first generation in the first and second generation in the second case

Policy recommendation:

- ✓ Strengthen public employment services and active labor market policies (OECD, 2019)
- ✓ Enhance education and training tailored to migrants' needs.
- ✓ Support entrepreneurship to mitigate unemployment, particularly for second generations.

Next step:
More research is need!
We will update our analysis with the new data and LFS data.

Thank you !

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