

Supplementary File

Tab. A1. Population living in marginal municipalities for each Italian province, by macro-region

Provinces	Macro-region	Population living in marginal municipalities (%)	Geographical marginality (tertiles)
MONZA E DELLA BRIANZA	North-west	0.0	First
MILANO	North-west	0.0	First
TRIESTE	North-east	0.0	First
RAVENNA	North-east	0.7	First
LODI	North-west	0.9	First
NAPOLI	South	3.5	First
PRATO	Centre	3.7	First
NOVARA	North-west	3.7	First
BARLETTA-ANDRIA-TRANI	South	4.1	First
FIRENZE	Centre	4.8	First
GENOVA	North-west	4.9	First
IMPERIA	North-west	5.0	First
PADOVA	North-east	5.1	First
TORINO	North-west	6.2	First
GORIZIA	North-east	6.3	First
BRINDISI	South	6.5	First
MACERATA	Centre	7.2	First
PISTOIA	Centre	7.6	First
MASSA-CARRARA	Centre	8.1	First
TARANTO	South	8.5	First
VARESE	North-west	9.1	First
BOLOGNA	North-east	9.1	First

PAVIA	North-west	9.2	First
PISA	Centre	9.3	First
LUCCA	Centre	9.5	First
BIELLA	North-west	10.0	First
ANCONA	Centre	11.0	First
ALESSANDRIA	North-west	11.0	First
PIACENZA	North-east	11.5	First
CREMONA	North-west	12.6	First
ASCOLI PICENO	Centre	12.6	First
COMO	North-west	12.8	First
VERBANO-CUSIO-OSSOLA	North-west	12.8	First
TERAMO	South	13.3	First
RIMINI	North-east	14.0	First
VERONA	North-east	14.1	First
LECCO	North-west	14.3	Second
LIVORNO	Centre	14.5	Second
BARI	South	14.5	Second
MODENA	North-east	14.8	Second
BERGAMO	North-west	15.8	Second
FORLI'-CESENA	North-east	16.1	Second
SAVONA	North-west	16.1	Second
FERRARA	North-east	16.9	Second
PARMA	North-east	17.4	Second
VICENZA	North-east	17.7	Second
PORDENONE	North-east	18.4	Second
LA SPEZIA	North-west	18.9	Second
UDINE	North-east	19.0	Second
REGGIO NELL'EMILIA	North-east	19.6	Second
FERMO	Centre	21.5	Second

PERUGIA	Centre	21.7	Second
CASERTA	South	21.7	Second
PESCARA	South	22.2	Second
TRAPANI	South	22.2	Second
ROMA	Centre	22.4	Second
SALERNO	South	23.1	Second
AREZZO	Centre	23.2	Second
BRESCIA	North-west	23.4	Second
VENEZIA	North-east	24.3	Second
PALERMO	South	24.4	Second
PESARO E URBINO	Centre	24.4	Second
ASTI	North-west	24.5	Second
ROVIGO	North-east	25.7	Second
VERCELLI	North-west	26.9	Second
BELLUNO	North-east	26.9	Second
CUNEO	North-west	29.1	Second
CAGLIARI	South	29.2	Second
TREVISO	North-east	29.5	Second
VALLE D'AOSTA	North-west	30.5	Second
CATANIA	South	31.7	Second
CARBONIA-IGLESIAS	South	32.2	Second
LATINA	Centre	33.7	Second
SIENA	Centre	33.9	Third
MANTOVA	North-west	35.1	Third
TERNI	Centre	35.7	Third
AVELLINO	South	36.4	Third
BOLZANO/BOZEN	North-east	37.6	Third
VIBO VALENTIA	South	37.7	Third
FROSINONE	Centre	38.0	Third

GROSSETO	Centre	42.4	Third
ISERNIA	South	42.5	Third
L'AQUILA	South	42.9	Third
SASSARI	South	43.7	Third
FOGGIA	South	45.2	Third
CALTANISSETTA	South	45.2	Third
BENEVENTO	South	47.9	Third
CATANZARO	South	49.8	Third
REGGIO DI CALABRIA	South	49.8	Third
TRENTO	North-east	52.0	Third
MESSINA	South	52.6	Third
ORISTANO	South	53.0	Third
AGRIGENTO	South	55.9	Third
VITERBO	Centre	58.9	Third
SIRACUSA	South	59.7	Third
RIETI	Centre	60.0	Third
CROTONE	South	62.3	Third
LECCE	South	62.3	Third
CHIETI	South	63.3	Third
COSENZA	South	64.4	Third
CAMPOBASSO	South	68.3	Third
MATERA	South	70.1	Third
NUORO	South	72.3	Third
SONDRIO	North-west	74.5	Third
POTENZA	South	77.1	Third
RAGUSA	South	77.3	Third
ENNA	South	78.3	Third
OLBIA-TEMPIO	South	100.0	Third
OGLIASTRA	South	100.0	Third

MEDIO CAMPIDANO

South

100.0

Third

Tab. A2. Sample descriptives for IT-LFS data. Column percentages and means

	North			Centre			South		
	1st tertile	2nd tertile	3rd tertile	1st tertile	2nd tertile	3rd tertile	1st tertile	2nd tertile	3rd tertile
Enrolled in 4-5yrs schools	85.7	85.0	79.0	90.6	90.7	90.4	82.8	84.9	89.3
Enrolled in 2-3yrs schools	7.3	7.1	12.3	2.1	3.1	2.4	2.0	2.4	1.6
Not enrolled	7.0	7.9	8.7	7.3	6.2	7.2	15.2	12.7	9.1
Enrolled in academic track	35.2	28.8	25.1	32.9	38.8	33.5	34.9	36.4	36.9
Female	48.4	48.5	48.3	48.5	46.4	48.1	49.5	47.6	48.1
Born abroad	10.8	11.0	10.0	10.6	10.2	8.2	2.2	2.9	3.9
Parental social class									
Service class	20.6	17.0	17.5	19.6	20.4	15.7	10.6	14.9	13.0
White collars	27.4	25.0	27.4	23.0	27.4	24.6	20.7	22.5	23.0
Self-employed	18.0	21.8	21.5	22.5	18.0	20.2	18.4	15.6	20.1
Working class	27.6	30.2	28.0	29.0	27.4	31.9	30.5	28.7	29.4
Not employed	6.4	6.1	5.6	5.9	6.7	7.5	19.8	18.3	14.5
Parental education									
No formal qualification	0.5	0.7	0.4	1.4	1.1	0.9	1.0	1.3	0.6

Primary	2.4	3.2	2.5	3.2	1.9	3.1	9.7	7.2	5.5
Lower secondary	26.8	30.7	27.4	29.6	24.4	29.3	42.8	42.2	38.9
Upper secondary 2-3yrs	12.2	13.0	22.1	6.7	7.6	8.3	5.1	3.9	5.2
Upper secondary 4-5yrs	39.2	37.5	33.6	40.0	44.6	42.0	29.5	31.2	35.8
Post-secondary non-tertiary	2.3	2.0	2.0	2.3	2.9	2.5	1.5	1.5	1.9
Tertiary	16.6	12.9	12.1	16.7	17.7	13.9	10.3	12.8	12.1
Age	15.99	15.99	16.00	16.00	16.02	16.01	16.01	16.01	16.02
N	31,672	29,482	15,056	7,015	12,943	6,972	11,893	24,638	44,781

Source: own elaboration on IT-LFS data (2005-2014)

Tab. A3. Sample descriptives for INVALSI data. Column percentages and means

	North				
	City-hub	Inter-municipal hub	Belt	Intermediate	Peripheral and ultraperiph.
Enrolled in academic track	32.7	30.7	26.5	25.3	22.3
Female	55.1	54	52.6	53.4	53.2
Born abroad	3.2	3.3	2.9	3.4	2.5
Parental social class					
Service I	15.8	13.9	13.6	14.2	12.2
Service II	26.4	23	21.4	29.5	20
Routine non-manual	23.6	25.3	24.1	20.2	19.4
Petty bourgeoisie	14.5	15.1	16.7	18.7	20.9
Working class	18.6	21.5	23	26.1	25.9
Not employed	1.1	1.2	1.2	1.4	1.6
Parental education					
Lower secondary or less	7.2	9.2	10.5	11	10
Upper secondary	53.2	57.8	61	64.4	67.1
Tertiary	39.6	33	28.5	24.6	22.9
Age	15.9	15.9	15.9	15.9	15.9
N	153,379	13,547	44,315	15,154	3,444
	Centre				
	City-hub	Inter-municipal hub	Belt	Intermediate	Peripheral and ultraperiph.
Enrolled in academic track	40.8	35.5	35.8	37.9	34.2
Female	54.2	52.2	50.2	52.6	52.7
Born abroad	2.8	2.9	3.1	3	4.7
Parental social class					

Service I	16.1	13.2	14.5	14.7	16
Service II	30.1	25.5	24.2	24	22.8
Routine non-manual	20.1	19.4	19.2	18.8	16.4
Petty bourgeoisie	15	18.3	19.6	18.6	22.7
Working class	17.3	21.7	21.8	22.1	19.4
Not employed	1.4	1.9	1.7	1.9	2.7
Parental education					
Lower secondary or less	7.2	8.9	10.9	10.1	11.4
Upper secondary	49	57.3	57.3	58.1	62.3
Tertiary	43.7	33.7	31.8	31.8	26
Age	15.9	15.9	15.9	15.9	15.9
N	67,780	3,798	12,271	11,102	2,435

South

	City-hub	Inter-municipal hub	Belt	Intermediate	Peripheral and ultraperiph.
Enrolled in academic track	40.5	37.7	39.5	37.6	38.6
Female	52.4	53.7	52.5	53	52.1
Born abroad	1.4	1.2	1.5	1.9	2.2
Parental social class					
Service I	14.8	13.9	15.1	16.4	16.1
Service II	27.2	22.2	22.3	20.9	19.8
Routine non-manual	17.3	15.5	15.6	16.1	16.7
Petty bourgeoisie	17.9	20.7	21	21.7	22.7
Working class	19	23.2	21.8	21.1	20.9
Not employed	3.9	4.5	4.2	3.9	3.8
Parental education					
Lower secondary or less	15.4	21.2	22.1	20	19.4

Upper secondary	49.5	53.6	52	54.5	57
Tertiary	35.1	25.2	25.8	25.5	23.6
Age	15.9	15.9	15.9	15.9	15.9
N	80,389	15,724	36,749	24,558	19,258

Source: own elaboration on INVALSI data (2017/2018; 2018/2019)

Tab. A4. Geographical marginality and probability of being enrolled in 4-5 yrs upper secondary schools, by macro-region. Linear probability models for IT-LFS data presented in Table 1. Beta coefficients and 95% confidence intervals in parentheses

	M1	M2	M3	North	Centre	South
Geographical marginality						
(ref. 1st tertile)						
2nd tertile	0.00	0.01***	0.00	0.01**	-0.01*	0.01***
	(-0.00 - 0.01)	(0.00 - 0.01)	(-0.00 - 0.00)	(0.00 - 0.01)	(-0.02 - -0.00)	(0.01 - 0.02)
3rd tertile	0.01***	0.02***	0.00	-0.06***	-0.00	0.04***
	(0.01 - 0.01)	(0.02 - 0.02)	(-0.00 - 0.01)	(-0.06 - -0.05)	(-0.01 - 0.00)	(0.04 - 0.05)
Female	0.04***	0.04***	0.04***	0.06***	0.03***	0.03***
	(0.04 - 0.04)	(0.04 - 0.05)	(0.04 - 0.05)	(0.06 - 0.07)	(0.02 - 0.04)	(0.02 - 0.03)
Born abroad	-0.21***	-0.16***	-0.15***	-0.17***	-0.16***	-0.10***
	(-0.21 - -0.20)	(-0.17 - -0.16)	(-0.16 - -0.15)	(-0.18 - -0.16)	(-0.18 - -0.14)	(-0.12 - -0.08)
Parental social class						
(ref. Service class)						
White collars		-0.24	-0.23	-0.12	-0.01	-0.37
		(-0.58 - 0.10)	(-0.57 - 0.11)	(-0.60 - 0.35)	(-0.02 - 0.01)	(-0.94 - 0.20)
Self-employed		-0.34**	-0.36**	-0.25	-0.03	-0.52***

	(-0.56 - -0.12)	(-0.58 - -0.14)	(-0.64 - 0.15)	(-0.24 - 0.18)	(-0.60 - -0.44)
Working class	-0.27*	-0.29**	-0.25	0.09	-0.42***
	(-0.49 - -0.06)	(-0.50 - -0.07)	(-0.63 - 0.12)	(-0.09 - 0.26)	(-0.49 - -0.36)
Not employed	-0.46***	-0.47***	-0.34	-0.01	-0.62***
	(-0.68 - -0.24)	(-0.69 - -0.26)	(-0.72 - 0.05)	(-0.05 - 0.03)	(-0.67 - -0.56)
Parental education					
(ref. No title)					
Primary	-0.06	-0.07	0.01	0.36***	-0.25**
	(-0.31 - 0.18)	(-0.31 - 0.16)	(-0.41 - 0.44)	(0.20 - 0.52)	(-0.43 - -0.07)
Lower secondary	0.00	-0.00	0.07	0.27**	-0.09***
	(-0.21 - 0.22)	(-0.21 - 0.21)	(-0.31 - 0.44)	(0.11 - 0.44)	(-0.11 - -0.06)
Upper secondary 2-3 yrs	0.02	0.03	0.12	0.20*	-0.02
	(-0.20 - 0.23)	(-0.18 - 0.25)	(-0.25 - 0.49)	(0.01 - 0.39)	(-0.04 - 0.00)
Upper secondary 4-5 yrs	0.08	0.08	0.18	0.32***	-0.03***
	(-0.13 - 0.29)	(-0.13 - 0.29)	(-0.19 - 0.55)	(0.16 - 0.48)	(-0.05 - -0.02)
Post-secondary non-tertiary	0.09	0.08	0.18	0.34***	-0.02*
	(-0.13 - 0.30)	(-0.13 - 0.30)	(-0.19 - 0.55)	(0.18 - 0.50)	(-0.03 - -0.00)

Tertiary	0.10 (-0.11 - 0.31)	0.09 (-0.12 - 0.31)	0.20 (-0.17 - 0.57)	0.34*** (0.18 - 0.50)	-0.02*** (-0.04 - -0.01)
Parental social class*					
parental education					
WhC - Primary	0.07 (-0.30 - 0.43)	0.05 (-0.31 - 0.42)	-0.05 (-0.60 - 0.49)	-0.38 (-0.77 - 0.01)	0.27 (-0.33 - 0.88)
WhC - Low sec	0.22 (-0.12 - 0.56)	0.21 (-0.13 - 0.55)	0.11 (-0.36 - 0.58)	0.00 (-0.04 - 0.04)	0.34 (-0.22 - 0.91)
WhC - Upper sec 2-3yrs	0.23 (-0.11 - 0.57)	0.22 (-0.12 - 0.56)	0.11 (-0.37 - 0.58)	0.12* (0.01 - 0.22)	0.31 (-0.26 - 0.88)
WhC - Upper sec 4-5yrs	0.23 (-0.11 - 0.57)	0.22 (-0.12 - 0.56)	0.11 (-0.36 - 0.58)	0.01 (-0.01 - 0.02)	0.36 (-0.21 - 0.93)
WhC - Post-sec non-tertiary	0.23 (-0.11 - 0.58)	0.22 (-0.12 - 0.56)	0.12 (-0.35 - 0.60)	-0.00 (-0.03 - 0.03)	0.35 (-0.22 - 0.92)
WhC - Tertiary	0.23 (-0.11 - 0.57)	0.22 (-0.12 - 0.56)	0.11 (-0.36 - 0.59)		0.36 (-0.21 - 0.93)
Self-employed - Primary	0.15	0.17	0.10	-0.24*	0.38***

	(-0.10 - 0.40)	(-0.08 - 0.42)	(-0.35 - 0.55)	(-0.47 - -0.01)	(0.18 - 0.57)
Self-employed - Low sec	0.27*	0.29**	0.16	-0.01	0.45***
	(0.05 - 0.50)	(0.07 - 0.51)	(-0.23 - 0.56)	(-0.22 - 0.21)	(0.36 - 0.53)
Self-employed - Upper sec 2-3yrs	0.29*	0.30**	0.18	0.11	0.44***
	(0.06 - 0.51)	(0.08 - 0.52)	(-0.22 - 0.57)	(-0.13 - 0.35)	(0.36 - 0.53)
Self-employed - Upper sec 4-5yrs	0.32**	0.34**	0.22	0.02	0.50***
	(0.10 - 0.54)	(0.12 - 0.56)	(-0.18 - 0.61)	(-0.19 - 0.24)	(0.42 - 0.58)
Self-employed - Post-sec non-tertiary	0.30**	0.33**	0.20	0.04	0.46***
	(0.08 - 0.53)	(0.10 - 0.55)	(-0.20 - 0.60)	(-0.18 - 0.25)	(0.37 - 0.55)
Self-employed - Tertiary	0.32**	0.35**	0.23	0.01	0.51***
	(0.10 - 0.55)	(0.13 - 0.57)	(-0.17 - 0.62)	(-0.20 - 0.22)	(0.43 - 0.59)
WC - Primary	0.03	0.05	-0.02	-0.38***	0.26**
	(-0.21 - 0.28)	(-0.20 - 0.29)	(-0.45 - 0.41)	(-0.56 - -0.20)	(0.06 - 0.45)
WC - Low sec	0.16	0.18	0.12	-0.17	0.32***
	(-0.05 - 0.38)	(-0.04 - 0.39)	(-0.26 - 0.50)	(-0.35 - 0.01)	(0.25 - 0.39)
WC - Upper sec 2-3yrs	0.21	0.21	0.16	-0.03	0.33***
	(-0.01 - 0.43)	(-0.00 - 0.43)	(-0.22 - 0.54)	(-0.23 - 0.17)	(0.26 - 0.40)

WC - Upper sec 4-5yrs	0.22*	0.23*	0.18	-0.13	0.38***
	(0.00 - 0.44)	(0.01 - 0.44)	(-0.19 - 0.56)	(-0.31 - 0.04)	(0.31 - 0.44)
WC - Post-sec non-tertiary	0.23*	0.25*	0.23	-0.14	0.34***
	(0.01 - 0.45)	(0.03 - 0.47)	(-0.15 - 0.61)	(-0.33 - 0.05)	(0.25 - 0.44)
WC - Tertiary	0.24*	0.26*	0.21	-0.09	0.41***
	(0.03 - 0.46)	(0.05 - 0.48)	(-0.16 - 0.59)	(-0.27 - 0.09)	(0.34 - 0.48)
Not employed - Primary	0.25*	0.26*	0.18	-0.23***	0.46***
	(0.01 - 0.50)	(0.02 - 0.51)	(-0.25 - 0.62)	(-0.31 - -0.16)	(0.27 - 0.65)
Not employed - Low sec	0.32**	0.33**	0.20	-0.11***	0.45***
	(0.10 - 0.54)	(0.11 - 0.54)	(-0.18 - 0.58)	(-0.17 - -0.05)	(0.39 - 0.51)
Not employed - Upper sec 2-3yrs	0.39***	0.39***	0.22	0.09	0.49***
	(0.17 - 0.61)	(0.17 - 0.60)	(-0.16 - 0.61)	(-0.03 - 0.21)	(0.43 - 0.55)
Not employed - Upper sec 4-5yrs	0.41***	0.42***	0.27	-0.02	0.57***
	(0.20 - 0.63)	(0.20 - 0.63)	(-0.11 - 0.65)	(-0.07 - 0.03)	(0.51 - 0.62)
Not employed - Post-sec non-tertiary	0.42***	0.43***	0.34	-0.07	0.54***
	(0.20 - 0.64)	(0.21 - 0.65)	(-0.04 - 0.73)	(-0.26 - 0.12)	(0.46 - 0.63)
Not employed - Tertiary	0.42***	0.43***	0.30		0.55***

		(0.20 - 0.64)	(0.22 - 0.65)	(-0.08 - 0.69)		(0.49 - 0.62)
Geographical macro-region						
(ref. North-west)						
North-east			-0.01***			
			(-0.02 - -0.01)			
Centre			0.05***			
			(0.05 - 0.06)			
South			0.04***			
			(0.04 - 0.05)			
Constant	0.86***	0.87***	0.85***	0.77***	0.66***	0.97***
	(0.85 - 0.87)	(0.65 - 1.08)	(0.64 - 1.06)	(0.40 - 1.14)	(0.50 - 0.82)	(0.96 - 0.99)
N	184,452	184,452	184,452	76,210	26,930	81,312

***p<0.001, **p<0.01, *p<0.05

Source: own elaboration on IT-LFS data (2005-2014)

Note: Models also control for age and year of survey.

Tab. A5. Geographical marginality, probability of being enrolled in 2-3 yrs vocational schools and probability of not being enrolled in any upper secondary education programme, by macro-region. Linear probability models for IT-LFS data presented in Table 2. Beta coefficients and 95% confidence intervals in parentheses

	Enrolment in 2-3yrs vocational schools			Non-enrolment		
	North	Centre	South	North	Centre	South
Geographical marginality (ref. 1st tertile)						
2nd tertile	-0.01*** (-0.01 - -0.00)	0.01*** (0.01 - 0.02)	0.00** (0.00 - 0.01)	0.00 (-0.00 - 0.01)	-0.00 (-0.01 - 0.00)	-0.02*** (-0.03 - -0.01)
3rd tertile	0.04*** (0.04 - 0.05)	0.00 (-0.00 - 0.01)	-0.00 (-0.00 - 0.00)	0.01*** (0.01 - 0.02)	0.00 (-0.01 - 0.01)	-0.04*** (-0.05 - -0.04)
Female	-0.03*** (-0.04 - -0.03)	-0.01** (-0.01 - -0.00)	-0.00* (-0.00 - -0.00)	-0.03*** (-0.03 - -0.03)	-0.02*** (-0.03 - -0.02)	-0.03*** (-0.03 - -0.02)
Born abroad	0.08*** (0.07 - 0.09)	0.02*** (0.02 - 0.03)	0.01 (-0.00 - 0.01)	0.09*** (0.08 - 0.10)	0.14*** (0.12 - 0.15)	0.09*** (0.08 - 0.11)
Parental social class (ref. Service class)						
White collars	-0.05* (-0.05 - -0.04)	0.00 (0.00 - 0.00)	0.01 (0.01 - 0.01)	0.18 (0.18 - 0.18)	0.00 (0.00 - 0.00)	0.36 (0.36 - 0.36)

	(-0.10 - -0.01)	(-0.00 - 0.01)	(-0.00 - 0.02)	(-0.29 - 0.65)	(-0.00 - 0.01)	(-0.21 - 0.93)
Self-employed	0.16**	0.03	0.06**	0.09	-0.00	0.46***
	(0.04 - 0.27)	(-0.05 - 0.11)	(0.02 - 0.10)	(-0.30 - 0.47)	(-0.21 - 0.21)	(0.38 - 0.54)
Working class	0.17***	0.03	0.04**	0.08	-0.11	0.38***
	(0.11 - 0.23)	(-0.03 - 0.09)	(0.02 - 0.07)	(-0.28 - 0.45)	(-0.29 - 0.06)	(0.32 - 0.44)
Not employed	0.33***	-0.01**	0.07***	0.01	0.02	0.54***
	(0.23 - 0.42)	(-0.01 - -0.00)	(0.04 - 0.10)	(-0.36 - 0.38)	(-0.02 - 0.06)	(0.49 - 0.60)
Parental education						
(ref. No title)						
Primary	0.00	0.01	0.00	-0.02	-0.36***	0.25**
	(-0.03 - 0.03)	(-0.04 - 0.05)	(-0.00 - 0.01)	(-0.43 - 0.40)	(-0.52 - -0.20)	(0.07 - 0.43)
Lower secondary	0.07***	0.01	0.02**	-0.13	-0.28***	0.07***
	(0.03 - 0.10)	(-0.04 - 0.06)	(0.01 - 0.03)	(-0.49 - 0.23)	(-0.45 - -0.12)	(0.05 - 0.09)
Upper secondary 2-3 yrs	0.04*	0.13*	0.01	-0.16	-0.33***	0.01
	(0.01 - 0.07)	(0.02 - 0.24)	(-0.00 - 0.03)	(-0.52 - 0.20)	(-0.50 - -0.17)	(-0.00 - 0.01)
Upper secondary 4-5 yrs	0.02	0.01	0.01	-0.20	-0.33***	0.03***
	(-0.01 - 0.05)	(-0.04 - 0.05)	(-0.00 - 0.01)	(-0.55 - 0.16)	(-0.49 - -0.17)	(0.02 - 0.04)

Post-secondary non-tertiary	0.01 (-0.02 - 0.04)	0.01 (-0.04 - 0.06)	0.00 (-0.00 - 0.01)	-0.19 (-0.55 - 0.17)	-0.34*** (-0.50 - -0.18)	0.02* (0.00 - 0.03)
Tertiary	0.01 (-0.02 - 0.04)	-0.00 (-0.05 - 0.05)	0.01 (-0.00 - 0.01)	-0.21 (-0.57 - 0.15)	-0.34*** (-0.50 - -0.18)	0.02*** (0.01 - 0.03)
Parental social class*						
parental education						
WhC - Primary	0.08* (0.00 - 0.17)	-0.01 (-0.03 - 0.00)	0.04 (-0.01 - 0.09)	-0.03 (-0.57 - 0.51)	0.39* (0.01 - 0.78)	-0.31 (-0.92 - 0.29)
WhC - Low sec	0.08** (0.03 - 0.13)	0.03** (0.01 - 0.05)	-0.01 (-0.02 - 0.01)	-0.19 (-0.66 - 0.28)	-0.03 (-0.07 - 0.01)	-0.34 (-0.91 - 0.23)
WhC - Upper sec 2-3yrs	0.09*** (0.04 - 0.14)	-0.13** (-0.23 - -0.03)	0.01 (-0.01 - 0.03)	-0.20 (-0.67 - 0.27)	0.02 (-0.03 - 0.06)	-0.32 (-0.89 - 0.25)
WhC - Upper sec 4-5yrs	0.07** (0.02 - 0.11)	-0.00 (-0.01 - 0.01)	-0.00 (-0.01 - 0.01)	-0.18 (-0.65 - 0.29)	-0.01 (-0.02 - 0.01)	-0.36 (-0.93 - 0.21)
WhC - Post-sec non-tertiary	0.07** (0.02 - 0.12)	0.01 (-0.01 - 0.03)	-0.00 (-0.01 - 0.01)	-0.19 (-0.67 - 0.28)	-0.00 (-0.03 - 0.02)	-0.34 (-0.91 - 0.23)
WhC - Tertiary	0.06* (0.01 - 0.11)		-0.01 (-0.02 - 0.00)	-0.17 (-0.64 - 0.30)		-0.35 (-0.92 - 0.22)

	(0.01 - 0.10)		(-0.02 - 0.00)	(-0.64 - 0.30)		(-0.92 - 0.22)
Self-employed - Primary	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00 - 0.00)	(0.00 - 0.00)	(0.00 - 0.00)	(0.00 - 0.00)	(0.00 - 0.00)	(0.00 - 0.00)
Self-employed - Low sec	-0.03	0.02	-0.02	-0.07	0.22	-0.35***
	(-0.15 - 0.10)	(-0.07 - 0.12)	(-0.06 - 0.02)	(-0.51 - 0.37)	(-0.01 - 0.44)	(-0.55 - -0.15)
Self-employed - Upper sec 2-3yrs	-0.11	-0.01	-0.05**	-0.05	0.02	-0.39***
	(-0.23 - 0.00)	(-0.10 - 0.07)	(-0.09 - -0.01)	(-0.44 - 0.33)	(-0.19 - 0.24)	(-0.48 - -0.31)
Self-employed - Upper sec 4-5yrs	-0.09	-0.12	-0.04	-0.08	0.01	-0.40***
	(-0.21 - 0.02)	(-0.25 - 0.01)	(-0.08 - 0.00)	(-0.47 - 0.30)	(-0.21 - 0.23)	(-0.48 - -0.32)
Self-employed - Post-sec non-tertiary	-0.14*	-0.03	-0.05**	-0.08	0.01	-0.44***
	(-0.25 - -0.02)	(-0.11 - 0.05)	(-0.09 - -0.01)	(-0.46 - 0.31)	(-0.21 - 0.22)	(-0.52 - -0.36)
Self-employed - Tertiary	-0.13*	-0.04	-0.06**	-0.07	0.01	-0.40***
	(-0.25 - -0.01)	(-0.13 - 0.04)	(-0.09 - -0.02)	(-0.46 - 0.31)	(-0.21 - 0.22)	(-0.49 - -0.31)
WC - Primary	-0.15*	-0.03	-0.06**	-0.08	0.02	-0.46***
	(-0.26 - -0.03)	(-0.11 - 0.05)	(-0.10 - -0.02)	(-0.46 - 0.30)	(-0.19 - 0.23)	(-0.54 - -0.38)
WC - Low sec	0.00	0.00	0.00	0.00	0.00	0.00
	(0.00 - 0.00)	(0.00 - 0.00)	(0.00 - 0.00)	(0.00 - 0.00)	(0.00 - 0.00)	(0.00 - 0.00)

WC - Upper sec 2-3yrs	0.02 (-0.05 - 0.08)	-0.02 (-0.08 - 0.04)	-0.01 (-0.03 - 0.02)	0.00 (-0.42 - 0.42)	0.39*** (0.22 - 0.57)	-0.25** (-0.44 - -0.06)
WC - Upper sec 4-5yrs	-0.09** (-0.15 - -0.02)	0.01 (-0.05 - 0.07)	-0.03* (-0.06 - -0.00)	-0.03 (-0.40 - 0.33)	0.16 (-0.01 - 0.34)	-0.28*** (-0.35 - -0.22)
WC - Post-sec non-tertiary	-0.09** (-0.15 - -0.03)	-0.12* (-0.23 - -0.00)	-0.02 (-0.06 - 0.01)	-0.07 (-0.44 - 0.29)	0.14 (-0.03 - 0.32)	-0.30*** (-0.37 - -0.24)
WC - Tertiary	-0.13*** (-0.19 - -0.07)	-0.01 (-0.07 - 0.05)	-0.03* (-0.06 - -0.01)	-0.05 (-0.42 - 0.31)	0.14 (-0.03 - 0.31)	-0.35*** (-0.41 - -0.28)
Not employed - Primary	-0.12** (-0.19 - -0.04)	-0.00 (-0.08 - 0.07)	-0.00 (-0.06 - 0.05)	-0.11 (-0.48 - 0.25)	0.14 (-0.04 - 0.32)	-0.34*** (-0.42 - -0.26)
Not employed - Low sec	-0.17*** (-0.23 - -0.11)	-0.01 (-0.08 - 0.05)	-0.05*** (-0.07 - -0.02)	-0.05 (-0.41 - 0.32)	0.10 (-0.07 - 0.28)	-0.36*** (-0.44 - -0.29)
Not employed - Upper sec 2-3yrs	0.00 (0.00 - 0.00)	0.00 (0.00 - 0.00)	0.00 (0.00 - 0.00)	0.00 (0.00 - 0.00)	0.00 (0.00 - 0.00)	0.00 (0.00 - 0.00)
Not employed - Upper sec 4-5yrs	-0.15** (-0.25 - -0.05)	0.05** (0.02 - 0.08)	-0.04** (-0.08 - -0.01)	-0.03 (-0.46 - 0.39)	0.19*** (0.12 - 0.26)	-0.41*** (-0.60 - -0.23)
Not employed - Post-sec non-tertiary	-0.25***	0.06***	-0.05***	0.05	0.05	-0.40***

	(-0.35 - -0.16)	(0.03 - 0.08)	(-0.09 - -0.02)	(-0.32 - 0.42)	(-0.01 - 0.11)	(-0.46 - -0.34)
Not employed - Tertiary	-0.24***	-0.10	-0.04*	0.01	0.01	-0.45***
	(-0.33 - -0.14)	(-0.20 - 0.00)	(-0.08 - -0.00)	(-0.36 - 0.38)	(-0.06 - 0.08)	(-0.51 - -0.39)
Constant	-0.00	0.00	0.00	0.23	0.33***	0.02**
	(-0.03 - 0.03)	(-0.05 - 0.05)	(-0.01 - 0.01)	(-0.13 - 0.59)	(0.17 - 0.49)	(0.01 - 0.04)
Observations	76,210	26,930	81,312	76,210	26,930	81,312
R-squared	0.06	0.02	0.01	0.08	0.09	0.12

***p<0.001, **p<0.01, *p<0.05

Source: own elaboration on IT-LFS data (2005-2014)

Note: Models also control for age and year of survey.

Tab. A6. Geographical marginality and probability of being enrolled in the academic track, by macro-region. Linear probability models for IT-LFS data presented in Tables 3 and 4. Beta coefficients and 95% confidence intervals in parentheses

	M1	M2	M3	North	Centre	South
Geographical marginality						
(ref. 1st tertile)						
2nd tertile	-0.01*** (-0.02 - -0.01)	-0.00 (-0.01 - 0.00)	-0.01*** (-0.02 - -0.01)	-0.04*** (-0.05 - -0.03)	0.04*** (0.03 - 0.06)	-0.01* (-0.02 - -0.00)
3rd tertile	-0.01*** (-0.02 - -0.01)	0.01*** (0.01 - 0.02)	-0.03*** (-0.03 - -0.02)	-0.08*** (-0.09 - -0.07)	0.02** (0.01 - 0.04)	-0.01 (-0.02 - 0.00)
Female	0.04*** (0.03 - 0.04)	0.04*** (0.04 - 0.05)	0.05*** (0.04 - 0.05)	0.01*** (0.01 - 0.02)	0.04*** (0.03 - 0.05)	0.08*** (0.07 - 0.08)
Born abroad	-0.17*** (-0.18 - -0.16)	-0.11*** (-0.12 - -0.10)	-0.09*** (-0.10 - -0.08)	-0.08*** (-0.09 - -0.07)	-0.09*** (-0.11 - -0.07)	-0.11*** (-0.12 - -0.09)
Parental social class						
(ref. Service class)						
White collars		-0.31 (-0.76 - 0.13)	-0.30 (-0.75 - 0.15)	-0.00 (-0.59 - 0.58)	-0.12*** (-0.16 - -0.09)	-0.79*** (-1.24 - -0.34)
Self-employed		-0.36	-0.39*	-0.16	-0.14*	-0.62**

	(-0.72 - 0.00)	(-0.75 - -0.03)	(-0.63 - 0.31)	(-0.26 - -0.01)	(-1.08 - -0.17)
Working class	-0.38*	-0.39*	-0.06	-0.18***	-0.71**
	(-0.74 - -0.02)	(-0.75 - -0.04)	(-0.53 - 0.42)	(-0.28 - -0.09)	(-1.16 - -0.25)
Not employed	-0.43*	-0.45*	-0.17	-0.19***	-0.70**
	(-0.79 - -0.06)	(-0.81 - -0.09)	(-0.65 - 0.30)	(-0.28 - -0.11)	(-1.16 - -0.25)
Parental education					
(ref. No title)					
Primary	-0.36	-0.37	0.09	-0.28***	-0.68**
	(-0.74 - 0.01)	(-0.74 - 0.01)	(-0.45 - 0.63)	(-0.37 - -0.18)	(-1.14 - -0.22)
Lower secondary	-0.25	-0.25	-0.05	-0.01	-0.47*
	(-0.61 - 0.11)	(-0.60 - 0.11)	(-0.52 - 0.42)	(-0.12 - 0.10)	(-0.92 - -0.01)
Upper secondary 2-3 yrs	-0.25	-0.22	0.00	0.18*	-0.53*
	(-0.62 - 0.11)	(-0.57 - 0.14)	(-0.47 - 0.47)	(0.00 - 0.37)	(-0.98 - -0.07)
Upper secondary 4-5 yrs	-0.02	-0.01	0.19	0.18***	-0.21
	(-0.38 - 0.34)	(-0.36 - 0.35)	(-0.28 - 0.66)	(0.08 - 0.27)	(-0.66 - 0.24)
Post-secondary non-tertiary	0.07	0.08	0.24	0.29***	-0.09
	(-0.29 - 0.43)	(-0.28 - 0.44)	(-0.23 - 0.71)	(0.18 - 0.41)	(-0.54 - 0.37)

Tertiary	0.26 (-0.10 - 0.62)	0.27 (-0.09 - 0.63)	0.47 (-0.00 - 0.94)	0.48*** (0.39 - 0.57)	0.05 (-0.40 - 0.50)
Parental social class*	0.25 (-0.21 - 0.71)	0.22 (-0.25 - 0.69)	-0.23 (-0.89 - 0.43)	0.16*** (0.11 - 0.21)	0.77** (0.30 - 1.24)
parental education					
WhC - Primary	0.27 (-0.18 - 0.71)	0.25 (-0.20 - 0.70)	-0.02 (-0.60 - 0.57)	0.04 (-0.03 - 0.12)	0.72** (0.27 - 1.18)
WhC - Low sec	0.30 (-0.14 - 0.74)	0.28 (-0.17 - 0.73)	-0.01 (-0.60 - 0.57)	-0.11 (-0.28 - 0.06)	0.83*** (0.37 - 1.29)
WhC - Upper sec 2-3yrs	0.25 (-0.19 - 0.70)	0.23 (-0.22 - 0.68)	-0.07 (-0.66 - 0.51)	0.07** (0.02 - 0.11)	0.71** (0.26 - 1.17)
WhC - Upper sec 4-5yrs	0.23 (-0.21 - 0.68)	0.22 (-0.24 - 0.67)	-0.06 (-0.65 - 0.52)	0.06 (-0.03 - 0.16)	0.65** (0.19 - 1.11)
WhC - Post-sec non-tertiary	0.20 (-0.24 - 0.65)	0.19 (-0.26 - 0.64)	-0.14 (-0.73 - 0.44)		0.70** (0.25 - 1.16)
WhC - Tertiary	0.00 (0.00 - 0.00)	0.00 (0.00 - 0.00)	0.00 (0.00 - 0.00)	0.00 (0.00 - 0.00)	0.00 (0.00 - 0.00)
Self-employed - Primary	0.33	0.35	-0.13	0.30***	0.67**

	(-0.04 - 0.71)	(-0.02 - 0.73)	(-0.68 - 0.41)	(0.15 - 0.45)	(0.20 - 1.14)
Self-employed - Low sec	0.29	0.32	0.13	0.01	0.53*
	(-0.07 - 0.65)	(-0.04 - 0.67)	(-0.35 - 0.60)	(-0.13 - 0.15)	(0.07 - 0.99)
Self-employed - Upper sec 2-3yrs	0.32	0.34	0.10	-0.15	0.67**
	(-0.05 - 0.68)	(-0.02 - 0.70)	(-0.37 - 0.58)	(-0.36 - 0.05)	(0.21 - 1.14)
Self-employed - Upper sec 4-5yrs	0.26	0.29	0.06	0.02	0.51*
	(-0.10 - 0.63)	(-0.07 - 0.65)	(-0.41 - 0.53)	(-0.11 - 0.15)	(0.05 - 0.96)
Self-employed - Post-sec non-tertiary	0.20	0.23	0.09	-0.05	0.34
	(-0.17 - 0.57)	(-0.13 - 0.59)	(-0.38 - 0.57)	(-0.23 - 0.13)	(-0.13 - 0.80)
Self-employed - Tertiary	0.20	0.23	-0.01	-0.03	0.48*
	(-0.17 - 0.56)	(-0.13 - 0.59)	(-0.48 - 0.46)	(-0.16 - 0.11)	(0.03 - 0.94)
WC - Primary	0.00	0.00	0.00	0.00	0.00
	(0.00 - 0.00)	(0.00 - 0.00)	(0.00 - 0.00)	(0.00 - 0.00)	(0.00 - 0.00)
WC - Low sec	0.33	0.33	-0.19	0.25***	0.72**
	(-0.04 - 0.71)	(-0.04 - 0.71)	(-0.73 - 0.36)	(0.15 - 0.35)	(0.25 - 1.18)
WC - Upper sec 2-3yrs	0.29	0.29	0.00	0.05	0.58*
	(-0.07 - 0.65)	(-0.07 - 0.65)	(-0.47 - 0.48)	(-0.06 - 0.16)	(0.13 - 1.03)

WC - Upper sec 4-5yrs	0.32 (-0.04 - 0.69)	0.32 (-0.04 - 0.68)	-0.01 (-0.48 - 0.47)	-0.10 (-0.29 - 0.08)	0.70** (0.24 - 1.16)
WC - Post-sec non-tertiary	0.18 (-0.18 - 0.54)	0.18 (-0.18 - 0.53)	-0.15 (-0.62 - 0.33)	-0.04 (-0.13 - 0.06)	0.47* (0.02 - 0.92)
WC - Tertiary	0.15 (-0.22 - 0.51)	0.16 (-0.20 - 0.52)	-0.05 (-0.53 - 0.44)	-0.27*** (-0.41 - -0.13)	0.42 (-0.05 - 0.89)
Not employed - Primary	-0.03 (-0.39 - 0.34)	-0.00 (-0.36 - 0.35)	-0.36 (-0.83 - 0.12)	-0.13* (-0.25 - -0.01)	0.31 (-0.15 - 0.77)
Not employed - Low sec	0.00 (0.00 - 0.00)	0.00 (0.00 - 0.00)	0.00 (0.00 - 0.00)	0.00 (0.00 - 0.00)	0.00 (0.00 - 0.00)
Not employed - Upper sec 2-3yrs	0.40* (0.03 - 0.78)	0.41* (0.03 - 0.78)	-0.04 (-0.59 - 0.51)	0.34*** (0.23 - 0.45)	0.72** (0.26 - 1.19)
Not employed - Upper sec 4-5yrs	0.34 (-0.03 - 0.70)	0.33 (-0.03 - 0.69)	0.14 (-0.33 - 0.62)	0.07 (-0.04 - 0.18)	0.56* (0.11 - 1.02)
Not employed - Post-sec non-tertiary	0.40* (0.04 - 0.77)	0.39* (0.03 - 0.75)	0.12 (-0.36 - 0.60)	-0.09 (-0.28 - 0.10)	0.73** (0.27 - 1.19)
Not employed - Tertiary	0.30	0.30	0.04	0.10*	0.51*

		(-0.06 - 0.66)	(-0.06 - 0.65)	(-0.44 - 0.52)	(0.00 - 0.20)	(0.06 - 0.96)
Geographical macro-region						
(ref. North-west)						
North-east			-0.03***			
			(-0.03 - -0.02)			
Centre			0.04***			
			(0.03 - 0.04)			
South			0.09***			
			(0.08 - 0.09)			
Constant	0.36***	0.50**	0.47**	0.29	0.28***	0.74**
	(0.35 - 0.37)	(0.14 - 0.86)	(0.11 - 0.82)	(-0.18 - 0.76)	(0.18 - 0.37)	(0.29 - 1.19)
N	159,258	159,258	159,258	64,106	24,392	70,760

***p<0.001, **p<0.01, *p<0.05

Source: own elaboration on IT-LFS data (2005-2014)

Note: Models also control for age and year of survey.

Tab. A7. Geographical marginality and probability of being enrolled in the academic track, by macro-region. Linear probability models for INVALSI data presented in Tables 3 and 4. Beta coefficients and 95% confidence intervals in parentheses

	M3	North	Centre	South
Geographical marginality – SNAI				
(ref. City-hub)				
Inter-municipal hub	-0.01*** (-0.02 - -0.01)	-0.00 (-0.01 - 0.00)	-0.03** (-0.04 - -0.01)	-0.00 (-0.01 - 0.00)
Belt	-0.01*** (-0.01 - -0.01)	-0.03*** (-0.04 - -0.03)	-0.01* (-0.02 - 0.00)	0.02*** (0.02 - 0.03)
Intermediate	-0.00 (-0.01 - 0.00)	-0.03*** (-0.04 - -0.02)	0.01* (0.00 - 0.02)	0.02*** (0.01 - 0.02)
Peripheral and ultra-peripheral	0.01* (0.00 - 0.01)	-0.06*** (-0.07 - -0.04)	0.01 (-0.01 - 0.02)	0.03*** (0.02 - 0.04)
Female	-0.04*** (-0.04 - -0.04)	-0.06*** (-0.06 - -0.05)	-0.05*** (-0.06 - -0.05)	-0.01*** (-0.01 - 0.00)
Born abroad	-0.09*** (-0.09 - -0.08)	-0.07*** (-0.08 - -0.06)	-0.09*** (-0.11 - -0.08)	-0.12*** (-0.13 - -0.10)
Parental social class				
(ref. Service class I)				
Service class II	0.05** (0.03 - 0.06)	0.02 (0.01 - 0.05)	0.04* (0.01 - 0.09)	0.01 (0.02 - 0.07)
White collars	0.018*** (0.01 - 0.03)	0.03* (-0.01 - 0.02)	0.05* (0.00 - 0.05)	0.05*** (0.00 - 0.03)
Self-employed	0.01* (0.00 - 0.02)	-0.01 (-0.02 - 0.01)	0.01 (-0.01 - 0.04)	0.02* (-0.01 - 0.01)
Working class	-0.01* (-0.03 - 0.00)	0.02 (-0.01 - 0.05)	0.01 (0.02 - 0.10)	-0.00 (-0.00 - -0.01)
Not employed	-0.01* (-0.02 - 0.00)	-0.00 (-0.01 - 0.01)	-0.06*** (-0.07 - -0.05)	-0.02** (-0.03 - -0.01)

	(-0.02 - -0.01)	(-0.01 - 0.00)	(-0.04 - -0.01)	(-0.01 - 0.00)
Parental education				
(ref. Lower secondary or less)				
Upper Secondary	0.19***	0.15***	0.2***	0.19
	(0.48 - 0.50)	(0.13 - 0.17)	(0.18 - 0.22)	(0.18 - 0.21)
Tertiary	0.49***	0.44***	0.50***	0.49***
	(0.01 - 0.03)	(0.42 - 0.46)	(0.48 - 0.53)	(0.48 - 0.51)
Parental social class*				
Parental education				
Ser II - Upper sec	0.00	-0.01	-0.02	0.04***
	(-0.01 - 0.02)	(-0.03 - 0.02)	(-0.06 - 0.02)	(0.01 - 0.06)
Ser II - Tertiary	-0.00	-0.01	-0.04*	0.05***
	(-0.02 - 0.01)	(-0.04 - 0.01)	(-0.08 - 0.00)	(0.03 - 0.07)
WhC - Upper sec	-0.00	-0.00	-0.00	0.05***
	(-0.02 - 0.02)	(-0.03 - 0.02)	(-0.05 - 0.04)	(0.02 - 0.07)
WhC - Tertiary	-0.11***	-0.11***	-0.12***	-0.05***
	(-0.12 - -0.09)	(-0.13 - -0.08)	(-0.17 - -0.08)	(-0.08 - -0.03)
Self-employed - Upper sec	-0.06***	-0.06***	-0.08***	-0.04***
	(-0.07 - -0.05)	(-0.08 - -0.04)	(-0.11 - -0.05)	(-0.06 - -0.03)
Self-employed - Tertiary	-0.21***	-0.18***	-0.25***	-0.20***
	(-0.22 - -0.19)	(-0.2 - -0.15)	(-0.29 - -0.22)	(-0.22 - -0.18)
WC - Upper sec	-0.09***	-0.08***	-0.10***	-0.07***
	(-0.1 - -0.08)	(-0.09 - -0.06)	(-0.13 - -0.07)	(-0.08 - -0.05)
WC - Tertiary	-0.26***	-0.25***	-0.27***	-0.23***
	(-0.27 - -0.24)	(-0.27 - -0.22)	(-0.31 - -0.24)	(-0.26 - -0.21)
Not employed - Upper sec	-0.10***	-0.12***	-0.17***	-0.08***
	(-0.11 - -0.08)	(-0.16 - -0.09)	(-0.22 - -0.12)	(-0.1 - -0.06)

Not employed - Tertiary	-0.23***	-0.24***	-0.30***	-0.24***
	(-0.26 - -0.2)	(-0.29 - -0.18)	(-0.37 - -0.23)	(-0.29 - -0.19)
Geographical macro-region				
(ref. North)				
Centre	0.08***			
	(0.07 - 0.08)			
South	0.12***			
	(0.11 - 0.12)			
Constant	0.11***	0.17***	0.19***	0.17***
	(0.1 - 0.11)	(0.16 - 0.19)	(0.16 - 0.21)	(0.16 - 0.18)
N	504,123	229,609	97,385	176,679

***p<0.001, **p<0.01, *p<0.05

Source: own elaboration on INVALSI data (2017-2018; 2018-2019)

Note: Models also control for age and year of survey.

Tab. A8. Geographical marginality and educational choices, by macro-region. Logit and multilevel models for IT-LFS data. Average marginal effects (logit models) and beta coefficients (multilevel models) and 95% confidence intervals in parentheses

Logit models													
	Enrolment in 4-5 years vocational schools				Enrolment in 2-3 years vocational schools			Non-enrolment			Enrolment in academic track		
	M3	North	Centre	South	North	Centre	South	North	Centre	South	North	Centre	South
Geographical marginality (ref. 1st tertile)													
2nd tertile	0.00	0.01**	-0.01*	0.01***	-0.01***	0.01***	0.00**	0.00	-0.00	-0.02***	-0.04***	0.04***	-0.01*
	(-0.00 - 0.01)	(0.00 - 0.01)	(-0.02 - 0.00)	(0.00 - 0.02)	(-0.01 - 0.00)	(0.01 - 0.02)	(0.00 - 0.01)	(-0.00 - 0.01)	(-0.01 - 0.01)	(-0.02 - 0.01)	(-0.05 - 0.03)	(0.03 - 0.06)	(-0.02 - 0.00)
3rd tertile	0.01*	-0.06***	-0.01	0.04***	0.04***	0.00	-0.00	0.01***	0.00	-0.04***	-0.08***	0.02**	-0.01
	(0.00 - 0.01)	(-0.06 - 0.05)	(-0.01 - 0.00)	(0.04 - 0.05)	(0.04 - 0.05)	(-0.00 - 0.01)	(-0.00 - 0.00)	(0.01 - 0.02)	(-0.00 - 0.01)	(-0.05 - 0.04)	(-0.09 - 0.07)	(0.01 - 0.04)	(-0.02 - 0.00)
Multilevel models													
	Enrolment in 4-5 years vocational schools				Enrolment in 2-3 years vocational schools			Non-enrolment			Enrolment in academic track		
	M3	North	Centre	South	North	Centre	South	North	Centre	South	North	Centre	South
Geographical marginality													

(ref. 1st tertile)													
2nd tertile	0.00	0.01	-0.01	0.03	-0.01	0.01	0.00	0.00	-0.00	-0.03	-0.02*	0.02	0.00
	(-0.01 - 0.02)	(-0.01 - 0.03)	(-0.02 - 0.01)	(-0.01 - 0.06)	(-0.02 - 0.00)	(-0.00 - 0.02)	(-0.01 - 0.01)	(-0.01 - 0.01)	(-0.02 - 0.01)	(-0.06 - 0.00)	(-0.05 - 0.00)	(-0.03 - 0.07)	(-0.05 - 0.05)
3rd tertile	0.00	-0.06***	-0.00	0.04**	0.04**	0.00	-0.00	0.02	0.00	-0.04**	-0.07***	0.02	-0.00
	(-0.02 - 0.02)	(-0.09 - 0.02)	(-0.02 - 0.01)	(0.01 - 0.07)	(0.02 - 0.06)	(-0.01 - 0.01)	(-0.01 - 0.01)	(-0.00 - 0.03)	(-0.01 - 0.02)	(-0.06 - 0.01)	(-0.11 - 0.03)	(-0.03 - 0.07)	(-0.05 - 0.04)

***p<0.001, **p<0.01, *p<0.05

Source: own elaboration on IT-LFS data (2005-2014)

Note: Models control for sex, immigrant status, age, year of survey, parental education and occupation.

Tab. A9. Geographical marginality and probability of being enrolled in the academic track, by macro-region. Logit and multilevel models for INVALSI data. Average marginal effects (logit models) and beta coefficients (multilevel models) and 95% confidence intervals in parentheses

	Logit models				Multilevel models			
	M3	North	Centre	South	M3	North	Centre	South
Geographical marginality – SNAI								
(ref. City-hub)								
Inter-municipal hub	-0.01**	0.00	-0.02**	0.00	0.00	-0.01	0.02	0.01
	(-0.02 - -0.00)	(-0.01 - 0.00)	(-0.04 - -0.00)	(-0.01 - 0.00)	(-0.03 - 0.03)	(-0.07 - 0.05)	(-0.02 - 0.06)	(-0.03 - 0.05)
Belt	-0.01***	-0.03***	-0.01*	0.02***	-0.01	-0.03	0.00	0.02
	(-0.01 - -0.01)	(-0.03 - -0.03)	(-0.02 - -0.00)	(0.01 - 0.03)	(-0.03 - 0.02)	(-0.07 - 0.01)	(-0.04 - 0.04)	(0.00 - 0.04)
Intermediate	0.00	-0.03***	0.01*	0.01**	0.00	0.00	-0.02*	0.02
	(-0.01 - 0.00)	(-0.04 - -0.02)	(0.00 - 0.02)	(0.00 - 0.02)	(-0.02 - 0.02)	(-0.04 - 0.04)	(-0.04 - -0.00)	(-0.02 - 0.06)
Peripheral and ultra-peripheral	0.01*	-0.06***	0.01	0.03***	0.01	-0.02	0.02	0.03
	(0.00 - 0.01)	(-0.08 - -0.04)	(-0.01 - 0.03)	(0.02 - 0.04)	(-0.01 - 0.04)	(-0.06 - 0.02)	(-0.02 - 0.06)	(-0.01 - 0.07)

***p<0.001, **p<0.01, *p<0.05

Source: own elaboration on INVALSI data (2017-2018; 2018-2019)

Note: Models control for sex, immigrant status, age, year of survey, parental education and occupation.

Tab. A10. Geographical marginality and educational choices, by macro-region. Linear probability models with an interaction between macro-region and a categorical (upper panel) and continuous measure of marginality (lower panel) for IT-LFS data. Average marginal effects and 95% confidence intervals in parentheses

Categorical measure of geographical marginality												
	Enrolment in 4-5 years schools			Enrolment in 2-3 years vocational schools			Non-enrolment			Enrolment in academic track		
	North	Centre	South	North	Centre	South	North	Centre	South	North	Centre	South
Geographical marginality (ref. 1st tertile)												
2nd tertile	0.00	-0.01**	0.01***	-0.01**	0.01***	0.01***	0.00	-0.00	-0.02***	-0.04***	0.05***	-0.01*
	(-0.00 - 0.01)	(-0.02 - -0.00)	(0.01 - 0.02)	(-0.01 - 0.00)	(0.01 - 0.02)	(0.00 - 0.01)	(-0.00 - 0.00)	(-0.01 - 0.01)	(-0.03 - 0.01)	(-0.04 - 0.03)	(0.03 - 0.06)	(-0.02 - 0.00)
3rd tertile	-0.06***	-0.00	0.05***	0.05***	0.00	0.00	0.01***	0.00	-0.05***	-0.08***	0.02**	-0.01
	(-0.07 - -0.05)	(-0.01 - 0.01)	(0.04 - 0.05)	(0.04 - 0.05)	(-0.00 - 0.01)	(-0.00 - 0.00)	(0.01 - 0.02)	(-0.01 - 0.01)	(-0.05 - 0.04)	(-0.09 - 0.07)	(0.01 - 0.04)	(-0.01 - 0.00)
Continuous measure of geographical marginality												
	Enrolment in 4-5 years schools			Enrolment in 2-3 years vocational schools			Non-enrolment			Enrolment in academic track		
	North	Centre	South	North	Centre	South	North	Centre	South	North	Centre	South

Geographical marginality	-0.03***	-0.00	0.03***	0.02***	0.00	-0.00*	0.01***	0.00	-0.02***	-0.04***	0.01**	-0.00
	(-0.03 - - 0.02)	(-0.01 - 0.00)	(0.02 - 0.03)	(0.02 - 0.02)	(-0.00 - 0.00)	(-0.00 - - 0.00)	(0.00 - 0.01)	(-0.00 - 0.00)	(-0.03 - - 0.02)	(-0.04 - - 0.03)	(0.00 - 0.02)	(-0.01 - 0.00)

***p<0.001, **p<0.01, *p<0.05

Source: own elaboration on IT-LFS data (2005-2014)

Note: Models control for sex, immigrant status, age, year of survey, parental education and occupation.

Tab. A11. Geographical marginality and probability of being enrolled in the academic track, by macro-region. Linear probability models with an interaction between macro-region and marginality for INVALSI data. Average marginal effects and 95% confidence intervals in parentheses

	North	Centre	South
Geographical marginality – SNAI			
(ref. City-hub)			
Inter-municipal hub	0.00 (-0.01 - 0.00)	-0.03*** (-0.05 - -0.01)	-0.01 (-0.01 - 0.00)
Belt	-0.03*** (-0.03 - -0.02)	-0.01* (-0.02 - -0.00)	0.02*** (0.01 - 0.03)
Intermediate	-0.03*** (-0.04 - -0.02)	0.01* (0.00 - 0.02)	0.01* (0.00 - 0.02)
Peripheral and ultra-peripheral	-0.05*** (-0.06 - -0.04)	0.01 (-0.01 - 0.02)	0.03*** (0.02 - 0.04)

***p<0.001, **p<0.01, *p<0.05

Source: own elaboration on INVALSI data (2017-2018; 2018-2019)

Note: Models control for sex, immigrant status, age, year of survey, parental education and occupation.

Tab. A12. Geographical marginality and probability of being enrolled in 2-3 yrs vocational schools, by macro-region. Linear probability models excluding those enrolled in in 4-5 yrs upper secondary schools for IT-LFS data. Predicted probabilities, beta coefficients and 95% confidence intervals in parentheses

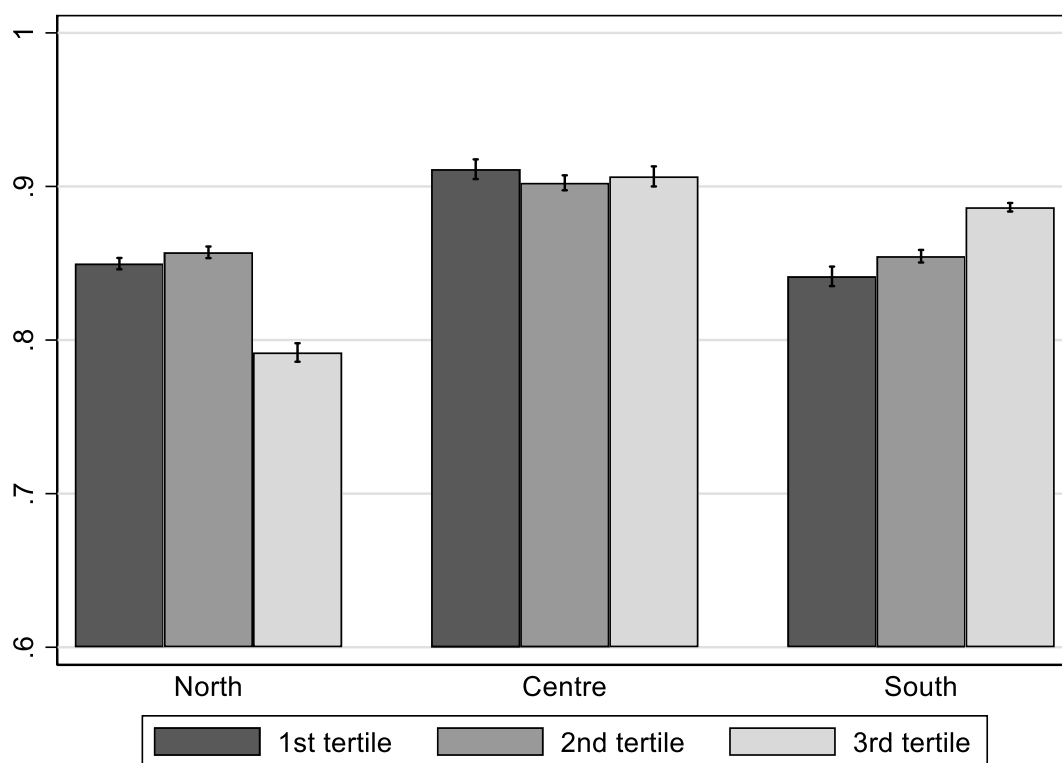
	Predicted probabilities		
	North	Centre	South
Geographical marginality			
1st tertile	0.51*** (0.50 - 0.52)	0.24*** (0.21 - 0.27)	0.11*** (0.10 - 0.13)
2nd tertile	0.47*** (0.46 - 0.49)	0.33*** (0.30 - 0.36)	0.16*** (0.15 - 0.17)
3rd tertile	0.58*** (0.56 - 0.60)	0.25*** (0.22 - 0.28)	0.15*** (0.14 - 0.16)
	Beta coefficients		
	North	Centre	South
Geographical marginality (ref. 1st tertile)			
2nd tertile	-0.03** (-0.05 - -0.01)	0.09*** (0.05 - 0.13)	0.05*** (0.03 - 0.07)
3rd tertile	0.07*** (0.05 - 0.09)	0.01 (-0.03 - 0.06)	0.03*** (0.02 - 0.05)
N	12,104	2,538	10,552

***p<0.001, **p<0.01, *p<0.05

Source: own elaboration on IT-LFS data (2005-2014)

Note: Models control for sex, immigrant status, age, year of survey, parental education and occupation.

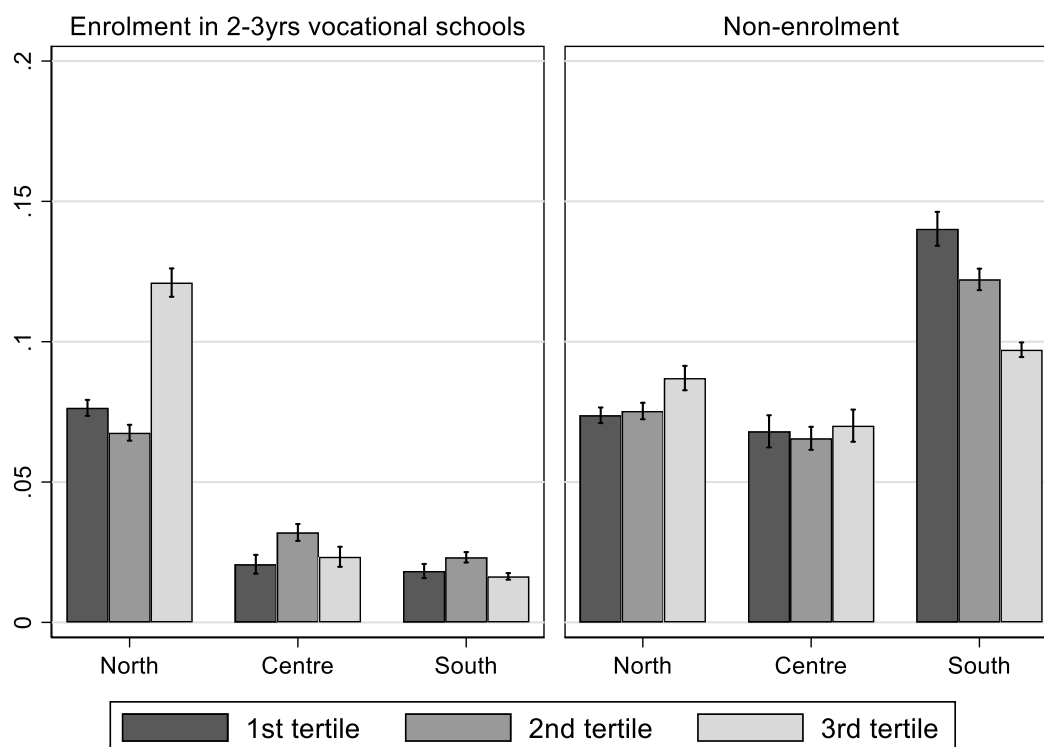
Figure A1. Geographical marginality and probability of being enrolled in 4-5 yrs upper secondary schools, by macro-region. Linear probability models. Predicted probabilities and 95% confidence intervals in parentheses



Source: own elaboration on IT-LFS data (2005-2014)

Note: Models control for sex, immigrant status, age, year of survey, parental education and occupation.

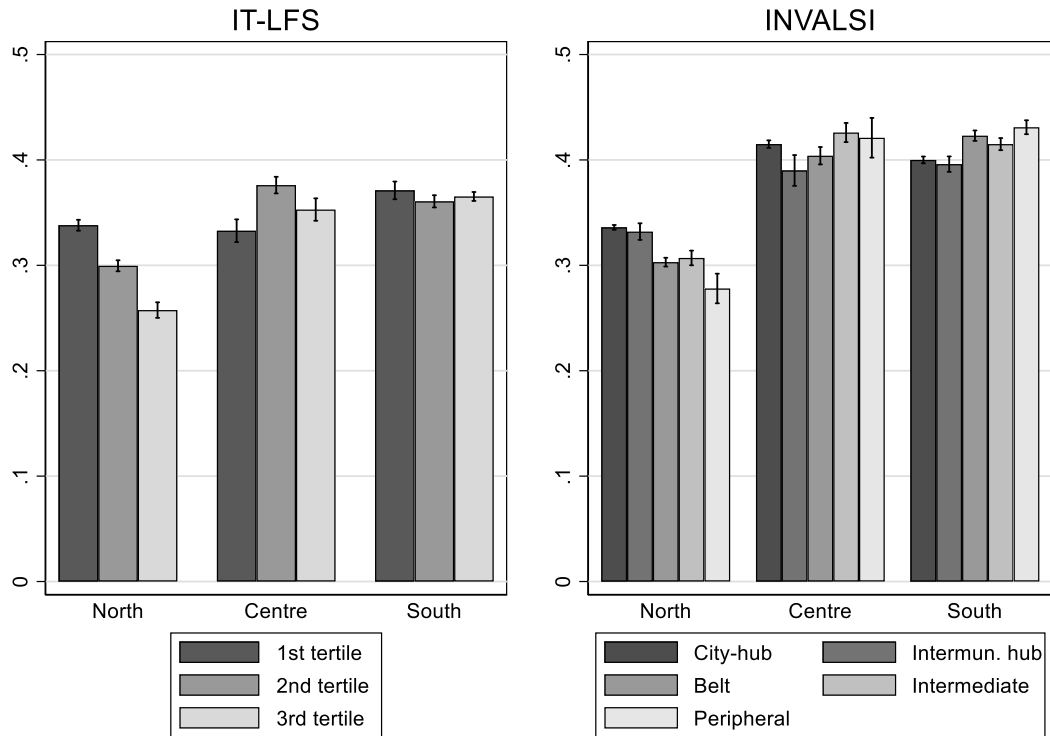
Figure A2. Geographical marginality, probability of being enrolled in 2-3 yrs vocational schools and probability of not being enrolled in any upper secondary education program, by macro-region. Linear probability models. Predicted probabilities and 95% confidence intervals in parentheses



Source: own elaboration on IT-LFS data (2005-2014)

Note: Models control for sex, immigrant status, age, year of survey, parental education and occupation.

Figure A3. Geographical marginality and probability of being enrolled in the academic track, by macro-region. Linear probability models. Predicted probabilities and 95% confidence intervals in parentheses



Source: own elaboration on IT-LFS data (2005-2014) and INVALSI data (2017/2018; 2018/2019)

Note: Models control for sex, immigrant status, age, year of survey, parental education and occupation.