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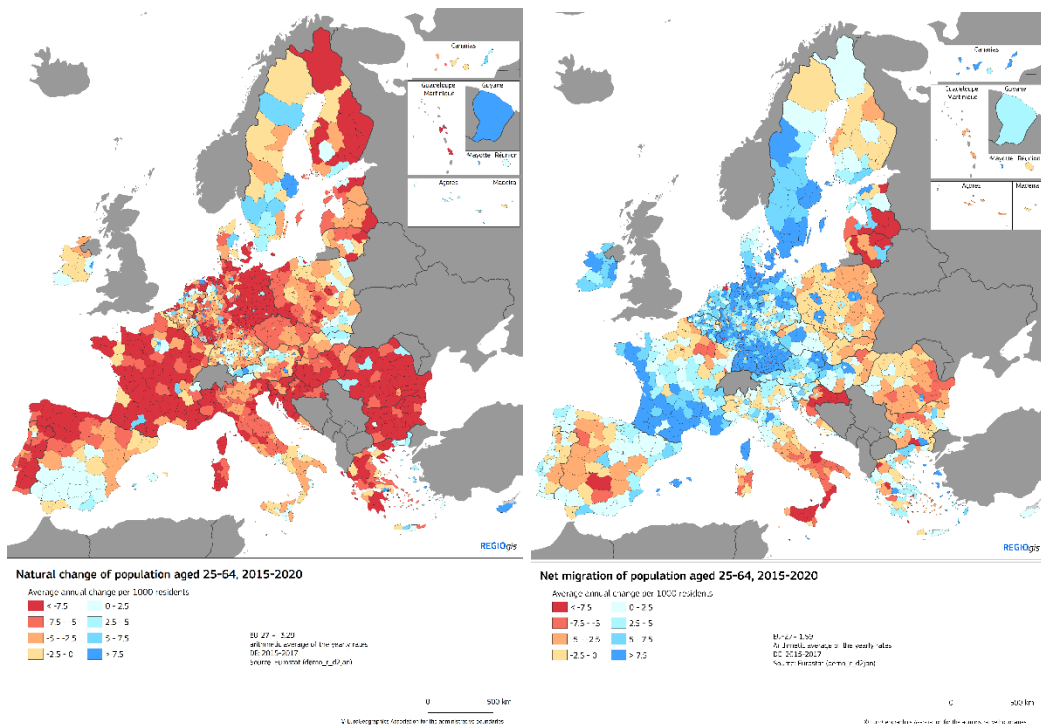
**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

Harnessing talent in Europe's regions

ANNEX

1. Demographic transition in the EU

	EU	Shrinking working-age population and lagging level of tertiary education	Net out-migration aged 15-39	Other regions	Sources
Population in 2020 in millions	447	74	59	315	(demo_r_pjanaggr3)
Share of population in 2020	100%	16%	13%	70%	(demo_r_pjanaggr3)
Number of NUTS-2 regions	240	46	36	158	NUTS regulation



2. Regions impacted by the combination of working age population decline and insufficient development of talents and those affected by net out-migration of people aged 15-39

The NUTS-2 regions below were selected based on the following criteria:

Shrinking working-age population and lagging level of tertiary education:

- An average annual change of the population aged 25-64 of less than -7.5 per 1 000 residents between 1 January 2015 and 1 January 2020
- A share of persons with a tertiary education aged 25-64 in 2020 below the EU average
- The share of persons with a tertiary education aged 25-64 increased by less than half of the EU increase, i.e. 2.2 percentage points.

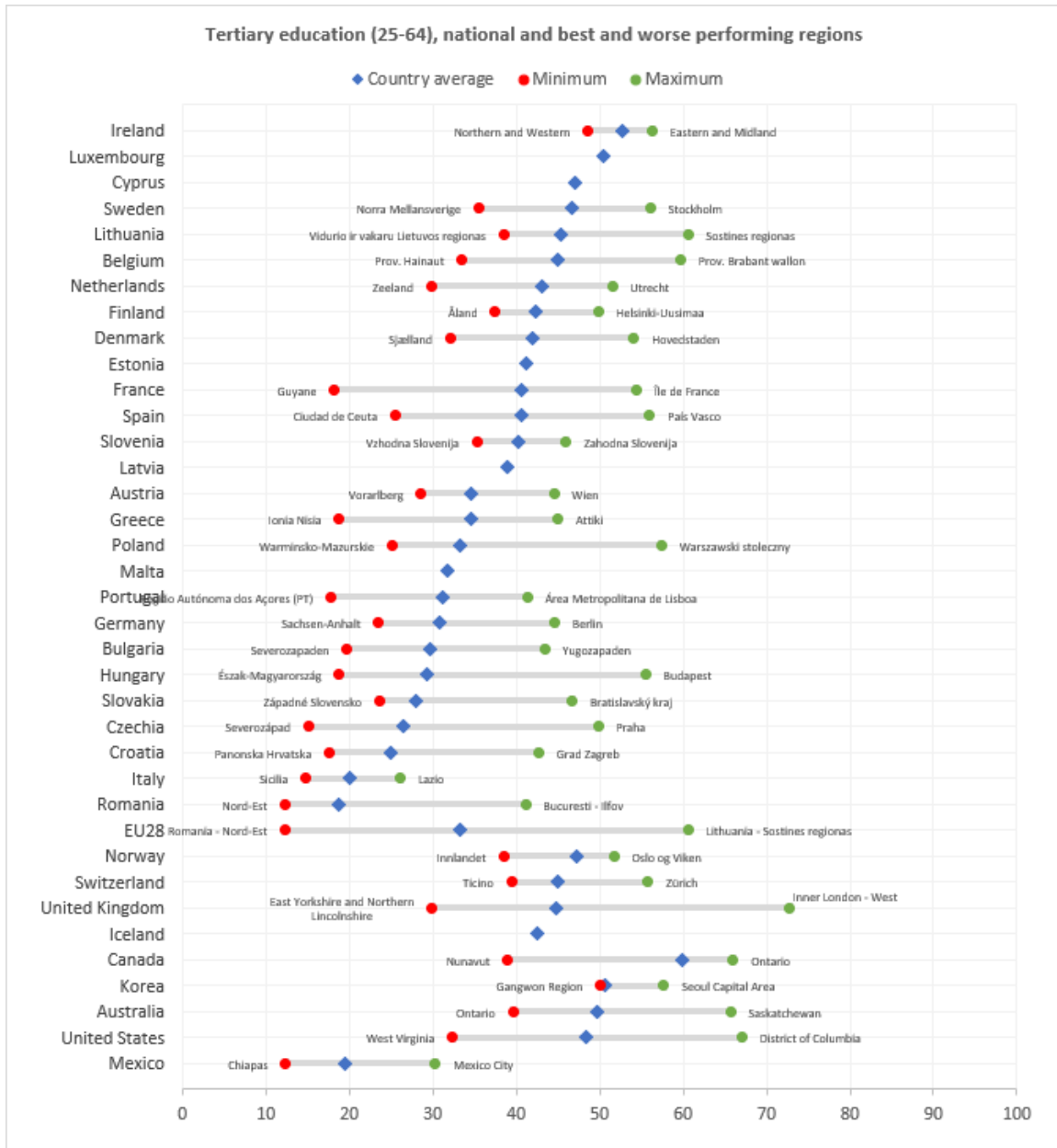
Net out-migration of people aged 15-39:

- An average annual crude net-migration rate of the population aged 15-39 of less than -2 per 1 000 residents of that age between 1 January 2015 and 1 January 2020

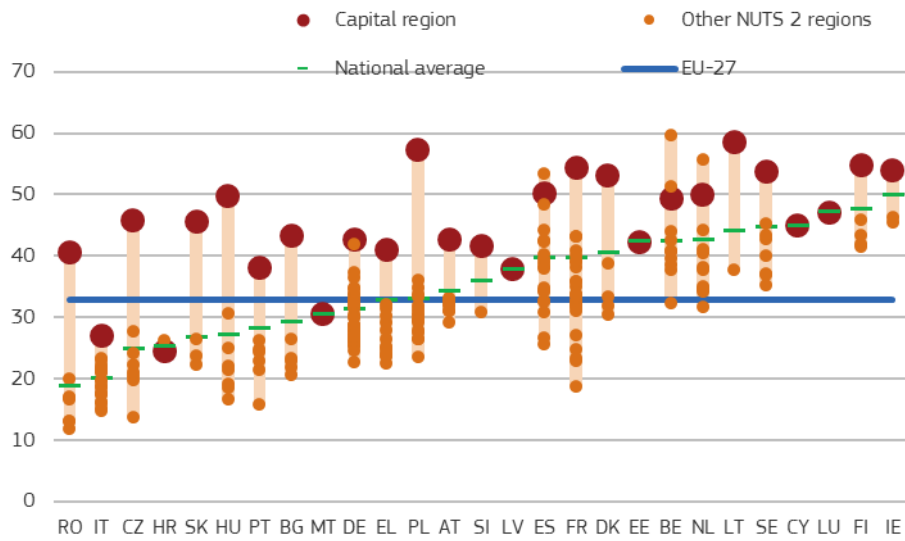
NUTS code	Shrinking working-age population and lagging level of tertiary education	NUTS code	Net out-migration aged 15-39
BG31	Severozapaden	EL53	Dytiki Makedonia
BG32	Severen tsentralen	EL54	Ipeiros
BG33	Severoiztochen	EL61	Thessalia
BG34	Yugoiztochen	EL63	Dytiki Ellada
BG42	Yuzhen tsentralen	ES41	Castilla y León
CZ04	Severozápad	ES42	Castilla-La Mancha
CZ08	Moravskoslezsko	ES43	Extremadura
DE80	Mecklenburg-Vorpommern	ES63	Ciudad Autónoma de Ceuta
DED2	Dresden	ES64	Ciudad Autónoma de Melilla
DED4	Chemnitz	FIID	Pohjois- ja Itä-Suomi
DEE0	Sachsen-Anhalt	FRB0	Centre - Val de Loire
DEG0	Thüringen	FRC1	Bourgogne
EL62	Ionia Nisia	FRC2	Franche-Comté
EL65	Peloponnisos	FRD1	Basse-Normandie
FRD2	Haute-Normandie	FRE1	Nord-Pas de Calais
FRF2	Champagne-Ardenne	FRE2	Picardie
FRF3	Lorraine	FRH0	Bretagne
FRY1	Guadeloupe	FRI2	Limousin
FRY2	Martinique	FRI3	Poitou-Charentes
HR03	Jadranska Hrvatska	FRY4	La Réunion
HR04	Kontinentalna Hrvatska	ITF3	Campania
HU23	Dél-Dunántúl	LT02	Vidurio ir vakarų Lietuvos regionas

HU31	Észak-Magyarország	LV00	Latvija
HU32	Észak-Alföld	PL52	Opolskie
HU33	Dél-Alföld	PL62	Warmińsko-mazurskie
ITC1	Piemonte	PL72	Świętokrzyskie
ITC2	Valle d'Aosta/Vallée d'Aoste	PL81	Lubelskie
ITC3	Liguria	PL82	Podkarpackie
ITF1	Abruzzo	PL84	Podlaskie
ITF2	Molise	PL92	Mazowiecki regionalny
ITF4	Puglia	PT11	Norte
ITF5	Basilicata	PT20	Região Autónoma dos Açores
ITF6	Calabria	PT30	Região Autónoma da Madeira
ITG1	Sicilia	RO11	Nord-Vest
ITG2	Sardegna	SK03	Stredné Slovensko
ITH4	Friuli-Venezia Giulia	SK04	Východné Slovensko
ITI2	Umbria		
ITI3	Marche		
PL71	Łódzkie		
PT18	Alentejo		
RO12	Centru		
RO21	Nord-Est		
RO22	Sud-Est		
RO31	Sud - Muntenia		
RO41	Sud-Vest Oltenia		
RO42	Vest		

3. Interregional disparities on education attainment

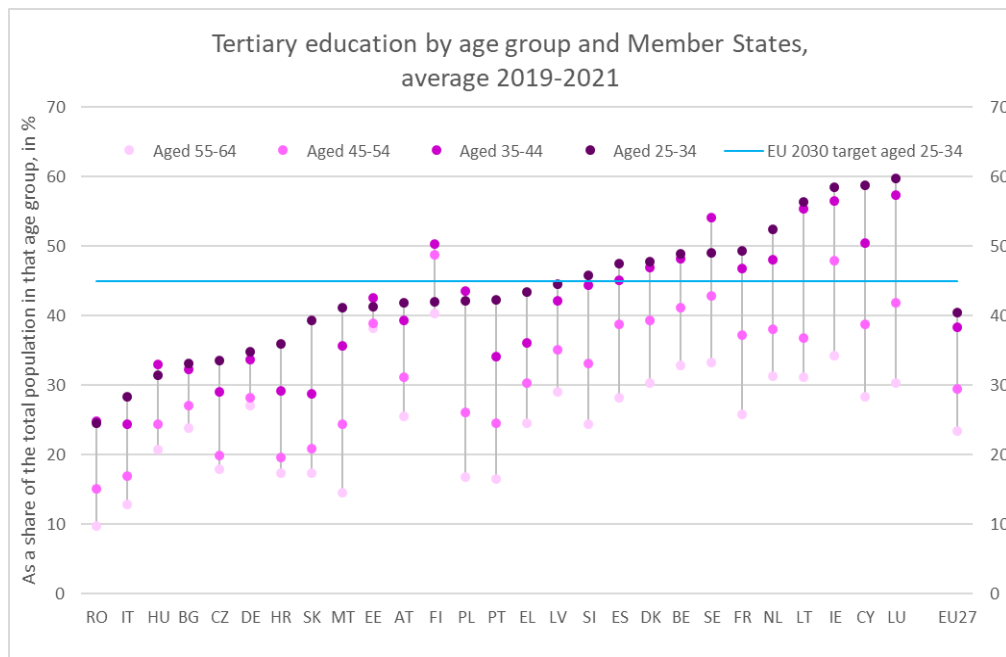


Regional variation in shares of those aged 25-64 with tertiary education (ISCED 5-8), 2020



Member States ranked by national averages.

4. Cohort structure of persons with a tertiary education



5. Features of the most affected regions

Natural changes are dominant

<i>annual change in population aged 25-64 per 1000 residents</i>	EU	Shrinking working-age population and lagging level of tertiary education	Net out-migration aged 15-39	Other regions
2015-2019				
Population change	-1.7	-10.3	-5.8	+1.1
Natural population change	-3.3	-7.7	-4.4	-2.1
Net migration rate	+1.6	-2.6	-1.4	+3.2
2020-2024				
Population change	-3.8	-10.3	-8.1	-1.7
Natural population change	-6.1	-10.6	-7.5	-4.9
Net migration rate	+2.3	+0.3	-0.6	+3.3
2025-2029				
Population change	-5.4	-9.3	-8.5	-4.1
Natural population change	-7.4	-10.3	-8.0	-6.8
Net migration rate	+2.0	+1.0	-0.6	+2.7

Regions are predominantly rural and intermediate

	EU	Shrinking working-age population and lagging level of tertiary education	Net out-migration aged 15-39	Other regions	Sources
Share of population in urban regions, 2020 (% of total population)	40	17	17	50	(demo_r_pjanaggr3)
Share of population in intermediate regions, 2020 (% of total population)	39	51	42	35	(demo_r_pjanaggr3)
Share of population in rural regions, 2020 (% of total population)	21	31	41	15	(demo_r_pjanaggr3)

Higher, though declining importance of agriculture

	EU	Shrinking working-age population and lagging level of tertiary education	Net out-migration aged 15-39	Other regions	Sources
Share of employment in sector A (Agriculture, forestry and fishing) in %, 2018	4.7	11.7	8.9	2.7	JRC ARDECO database based on eurostat regional accounts
Change in employment share in sector A (Agriculture, forestry and fishing) in pp, 2010-2018	-1.2	-2.9	-2.5	-0.4	
Share of employment in sector B-E (Industry) in %, 2018	16.2	19.5	16.9	15.4	
Change in employment share in sector B-E (Industry) in pp, 2010-2018	-0.4	0.3	0.4	-0.6	

Less attractive remunerations and level of development

	EU	Shrinking working-age population and lagging level of tertiary education	Net out-migration aged 15-39	Other regions	Sources
Compensation per employee (PPS), index EU27=100, 2019	100.0	81.5	82.0	105.8	(nama_10r_2coe,nama_10r_2emhrw)
Change in compensation per employee (PPS) index, 2010-2019	0.0	0.7	-0.5	-0.3	(nama_10r_2coe,nama_10r_2emhrw)
Disposable household income per capita (PPS), index EU27=100, 2019	100	81	83	108	(nama_10r_2hhinc)
Change in disposable household income per capita (PPS) index, 2010-2019	0.0	4.5	1.0	-1.9	(nama_10r_2hhinc)
GDP/head (PPS), index EU27=100, 2020	100	69	70	113	(nama_10r_2gdp,nama_10r_3popgdp)
Change in GDP/head (PPS) index, 2010-2020	0.0	2.5	0.5	-1.4	(nama_10r_2gdp,nama_10r_3popgdp)
Share of population in less developed regions, 2020	27.7	65.1	62.0	12.5	(demo_r_pjanaggr3)

Potential for increasing employment rates

	EU	Shrinking working-age population and lagging level of tertiary education	Net out-migration aged 15-39	Other regions	Sources
Employment rate (% of population 20-64), 2020	72	67	67	74	(lfst_r_lfsd2pwc)
Change in employment rate (20-64) (pp), 2010-2020	4.4	4.5	4.3	4.2	(lfst_r_lfsd2pwc)
Unemployment rate (% of labour force 15-74), 2020	7.1	7.5	9.2	6.7	(lfst_r_lfsd2pwc)
Change in unemployment rate (15-74) (pp), 2010-2020	-2.8	-2.6	-3.3	-2.7	(lfst_r_lfsd2pwc)
Employment rate of persons with a tertiary education aged 25-64 2020, in %	85.3	83.7	83.8	85.7	(lfst_r_lfe2eedu,lfst_r_lfsd2pop)
Unemployment rate (% of labour force 15-34), 2020	11.1	13.0	14.6	10.2	(lfst_r_lfp2act,lfst_r_lfe2emp,lfst_r_lfu3pers)
Change in unemployment rate (15-34) (pp), 2010-2020	-3.4	-2.6	-4.2	-3.3	(lfst_r_lfp2act,lfst_r_lfe2emp,lfst_r_lfu3pers)
Change in employment rate of persons with a tertiary education (25-64) 2015-2020, in pp	1.5	2.3	2.0	1.2	(lfst_r_lfe2eedu,lfst_r_lfsd2pop)

Share of high skilled jobs in %, 2020	43	33	37	45	(ad-hoc LFS extraction)
Change in share of high skilled jobs in pp, 2015-2020	1.5	0.1	2.6	1.5	(ad-hoc LFS extraction)
Older people employment rate (% of population 55-64), 2020	59.6	54.7	52.0	62.2	(lfst_r_lfsd2pwc)

Larger gender employment gap

	EU	Shrinking working-age population and lagging level of tertiary education	Net out-migration aged 15-39	Other regions	Sources
Number of men aged 25-64 per 100 women of that same age, 2020	99.6	101.2	99.0	99.4	(demo_r_d2jan)
Female employment rate aged 20-64, 2020	66	59	61	69	(lfst_r_lfsd2pwc)
Gender gap in employment rate (20-64) (pp), 2020	12	16	13	10	(lfst_r_lfsd2pwc)
Female unemployment rate, 2020	7.4	7.8	9.6	7.0	(lfst_r_lfsd2pwc)
Share of persons with a tertiary education women aged 25-64, 2020	35.1	21.4	26.8	39.2	(lfst_r_lfsd2pop)

Less performing educational system

	EU	Shrinking working-age population and lagging level of tertiary education	Net out-migration aged 15-39	Other regions	Sources
Persons with a tertiary education (% of population 25-64), 2020	33	21	29	36	(lfst_r_lfsd2pop)
Change in share of persons with a tertiary education (pp), 2010-2020	8	4	8	9	(lfst_r_lfsd2pop)
Projected change in share of persons with a tertiary education (pp), 2020-2030	6	4	6	6	REGIO calculations based on LFS
Persons with a tertiary education (% population 25-34), average of 2018-2020	39	26	37	43	(lfst_r_lfsd2pop)
People in tertiary education or with a tertiary degree (% of population aged 20-24), average of 2018-2020	47	41	48	49	(lfst_r_lfsd2pop)
Population within a 45-minutes drive by car to a university campus in %, 2016	88	78	79	92	REGIO calculations based on ETER data

	EU	Shrinking working-age population and lagging level of tertiary education	Net out-migration aged 15-39	Other regions	Sources
Early leavers from education or training (% population 18-24) , average 2018-2020	10	13	10	9	(edat_lfse_16,lfst_r_lfsd2pop)
Young people neither in employment nor in education and training (NEET rates) (% of population 15-29), average 2018-2020	13	19	17	11	(edat_lfse_22, lfst_r_lfsd2pop)
Participation in training (or education) in the last four weeks (% of population 25-64), average 2018-2020	10	6	9	11	(trng_lfse_04, lfst_r_lfsd2pop)
People with at least an upper secondary qualification (% population 20-24) , average 2018-2020	84	83	86	83	(lfst_r_lfsd2pop)

Digital divide

	EU	Shrinking working-age population and lagging level of tertiary education	Net out-migration aged 15-39	Other regions	Sources
Share of population living in household with broadband internet access in %, 2020	89	82	86	92	(isoc_r_broad_h)
Change in share of population having broadband internet access (pp), 2015-2020	13	15	14	12	(isoc_r_broad_h)
Share of population living in areas with average tested broadband speed of at least 100 Mbps in %, 2020	43	26	40	48	REGIO calculations based on data from Ookla for Good TM

Lower quality of public governance

	EU	Shrinking working-age population and lagging level of tertiary education	Net out- migration aged 15-39	Other regions	Sources
Regional Innovation Scoreboard, 2021	100	60	71	115	RIS2021
European Quality of Government Index, 2021	100	65	85	107	Study on quality of government
Quality Dimension	100	61	88	108	
Impartiality Dimension	100	67	86	106	
Corruption Dimension	100	70	84	106	