

Ingrid Kofler
Center for Advanced Studies





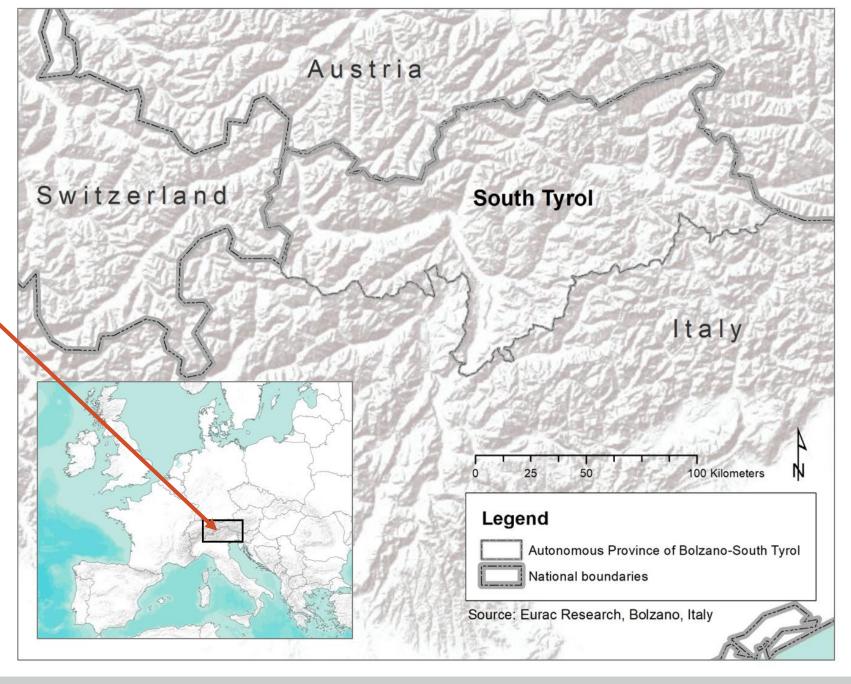
Eurac Research is a private research centre founded in 1992 in Bozen-Bolzano.

Eurac Research is the research flagship of the Autonomous Province of South Tyrol, Northern Italy.

Bozen-Bolzano
South Tyrol
Italy

European model region with a special autonomy anchored in the Italian Constitution

75% German-speaking minority





Minority Rights

Regional Development

Earth Observation Comparative Federalism

Applied Linguistics

Renewable Energies

Public Management

Mountain Emergency Medicine

Alpine Environment

Advanced Studies

Biomedicine

Mummy Studies

TerraXcube

Center for Advanced Studies



Research Projects of the Center for Advanced Studies Eurac Research

Criteria for Research Projects

Interdisciplinarity: The projects are to be interdisciplinary ("Cooperative Research")

"Glocality:" The projects have a global and local significance and combine the global and regional

level

• Long duration: The projects shall be long-term projects and thus pursue long-term goals

• **Theoretical orientation:** The projects will be theoretically based: Interdisciplinary and transdisciplinary

access allow new theoretical contexts and methods

• **Applied research:** The projects have a major focus in applicability

Process orientation: Applicability also means the initiation of interactive learning processes between

society and science (transformative research)

eurac research



GLOBAL COMPETITION FOR TALENTS: REGIONAL AND GLOBAL DISPARITIES

Ingrid Kofler

Eurac Research, Center for Advanced Studies



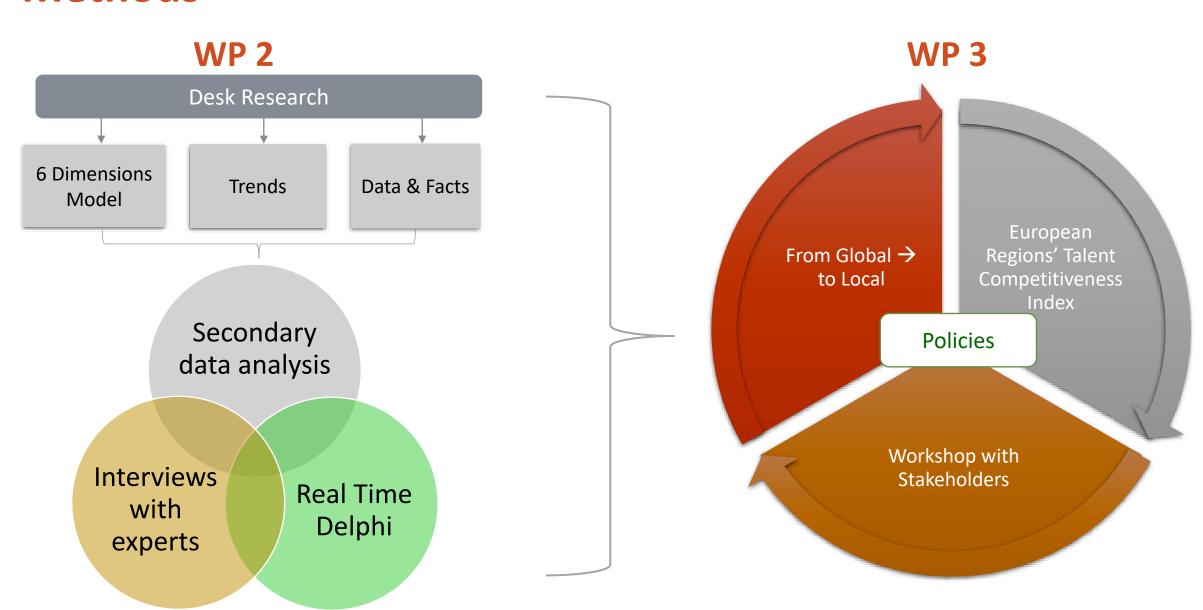


Research in progress: Talents, skills shortage and labor migration

WP 1 Regional problem of skills shortage WP 3 "Glocal" **WP 4 Policies** impacts WP 2 Global Trends research



Methods



Research questions

What measures should be taken to improve South Tyrol's position in the global competition for talents?

- How is the global labor market developing?
- Who will be the highly qualified of tomorrow?
- Which economic, political, demographic and technological changes and developments influence labor markets?
- How competitive and attractive is South Tyrol compared to the other European regions?



European Regions' Talent Competitiveness Index

Which trends will be shaping the future of work?

Current scientific, economic and cultural developments are impacting the labor market, causing considerable political and socioeconomic tensions.



Source: own elaboration

Which trends will be shaping the future of work?

Migration

Focus on three main drivers:

- 1) Technological progress
- 2) Demographic change
- 3) Migration



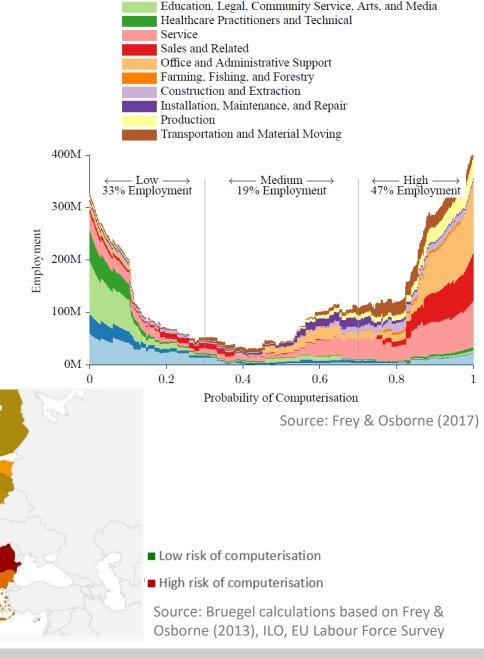
Technological progress

How susceptible are jobs to computerization?

Not a matter of high-skilled vs. low-skilled jobs, but rather of *routine* vs. *non-routine tasks* (more on this topic).

- perception and manipulation tasks
- creative intelligence task
- social intelligence tasks

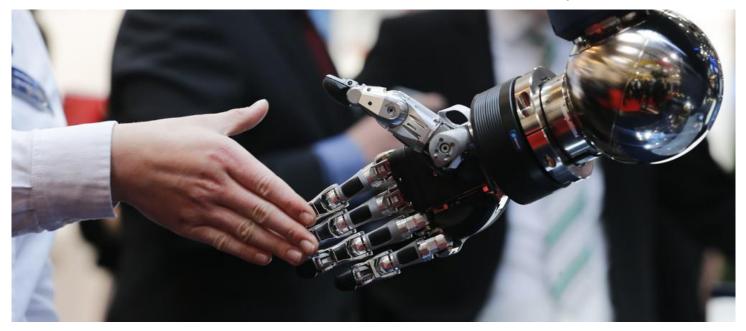
As technology advances, a wide range of non-routine tasks become computerisable: **47%** of US workers could be replaced by computers and algorithms within the next 10-20 years (Frey & Osborne, 2017), **45-60%** in Europe (Bowles, 2014).



Management, Business, and Financial Computer, Engineering, and Science

Technological progress

Automation, Big Data, Artificial Intelligence (AI) affect labor markets, completely changing the nature of jobs and skills requirements as we know them (the so-called *Fourth Industrial Revolution*).



Is technological progress more of an **opportunity** or a **threat**? Old question, different answers...

Technological progress

PROS...

- Enhances productivity
- Enables work flexibility: remote work, smart working etc.
- Creates new job/income opportunities (freelance jobs, platform economy)





...CONS

- (Partial or full) job destruction
- Quality of jobs: impact on wages, working hours, individual wellbeing?
- Ethical issues

Demographic change

- Changes in global demography
- World population is growing more slowly
- Ageing

→ demographic changes vary significantly *across* and *within* countries.

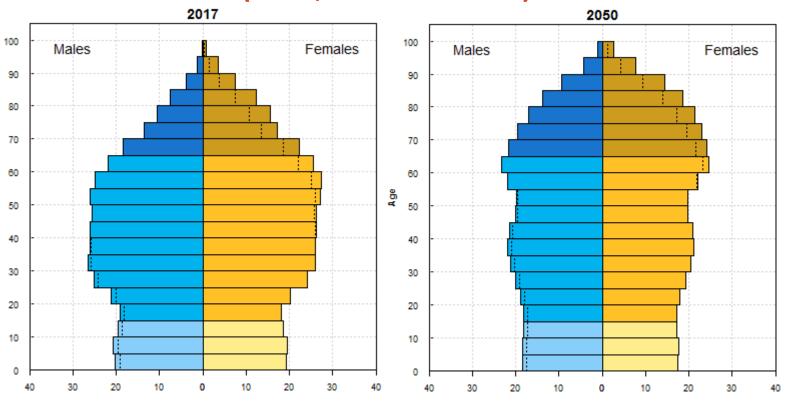


Demographic change

In more developed regions (Europe in particular):

- increase in the old-age dependency ratio
- decline in the share of working-age population.

Population pyramid Europe (2017, 2050 forecasts)



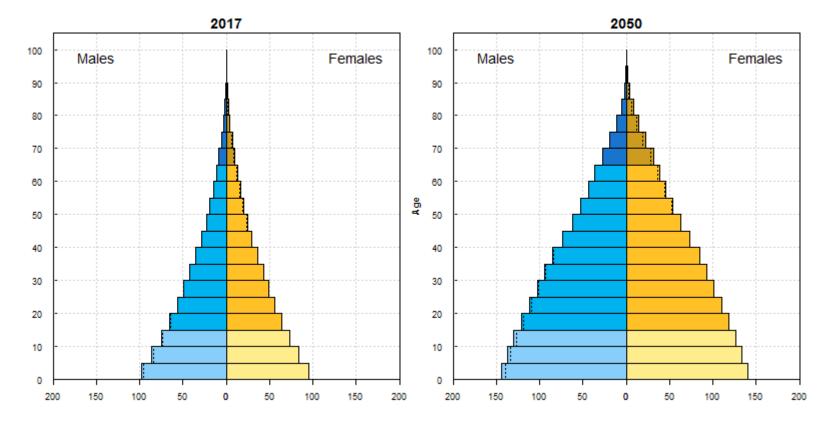
Source: United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision.

Demographic change

Population pyramid Africa (2017, 2050 forecasts)

In less developed regions:

- high fertility rates
- lower infant mortality
- rising life expectancy
- increase in the young and working-age population.



Source: United Nations, Department of Economic and Social Affairs, Population Division (2017). World Population Prospects: The 2017 Revision.

(High skilled) Migration

Migration is not a new phenomenon.

However, today's migrants (in the OECD countries) are on average:

- Younger than locals
- More educated than locals.
- → From *brain drain* to **skilled migration** (Clemens, 2015): not always negative for sending countries and positive for receiving countries positive and negative effects may balance out at the aggregate level. Consider the effects of trade, capital flows, networks, educational aspirations in the home country (Beine et al., 2008).
- → Skilled migration could be much more than a tool to alleviate skill shortages or to reverse population ageing trends, through the creation of positive externalities

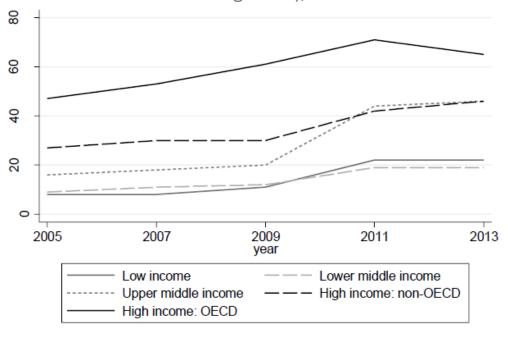


High skilled migration attraction and retention

Increasing interest in high-skilled migration not only by traditional migration countries (Australia, Canada, USA, Europe) seeking to attract foreign talented people

... but also by middle-less developed countries (in Asia, Latin America) seeking to retain local talent — see Cerna (2018).

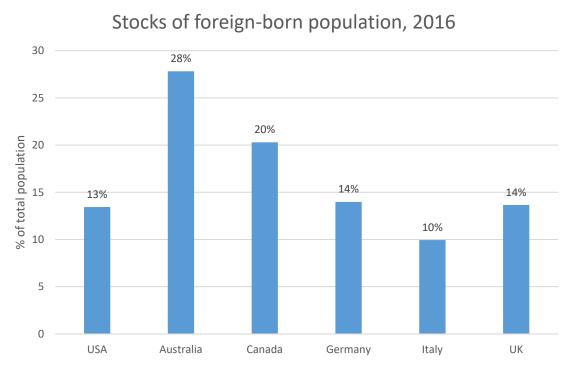
Government policy objectives on high-skilled migration (% of countries aiming to raise high-skilled immigration), 2005-2013



Source: Czaika & Parsons (2017)

European high-skilled migration policy

Is Europe attractive to high-skilled migrants?



Source: OECD, International Migration Outlook 2018

EU Member States host proportionately **fewer international migrants** than other OECD destination countries. A large part of the foreign-born population (37% in 2010-2011) is in fact born in another EU Member State.

The attractiveness of EU Member States to international migrants varies with the country of origin: Spain, France, UK appeal to largely non-European migrants, while Austria and Germany have high shares of migrants from European countries, Russia and Turkey – see OECD/EU (2016).

European high-skilled migration policy

Jurisdiction: the EU lays down the conditions governing *entry* into and *legal residence* in a Member State for third-country nationals. Member States retain the right to determine *volumes of admission* for people coming from third countries to seek work.

→ Patchwork of national and EU policies.

To establish more attractive entry and residence conditions for high-skilled third country nationals, the «Blue Card Directive» (Directive 2009/50/EC) was approved and entered into force in 2009.

Requirements:

- Recognized diploma or at least 5 years of professional experience
- Have been offered a job, paid at least 1.5 times the average gross salary in the EU
 Member State.



The Blue Card Directive

Number of Blue Cards granted, 2012-2017

	Number of Bide Cards granted, 2012-2017							
	2012	2013	2014	2015	2016	2017		
European Union								
(Tot)	3,664	12,964	13,869	17,104	20,979	24,305		
Belgium	0	5	19	19	31	37		
Bulgaria	15	14	21	61	115	121		
Czechia	62	72	104	181	194	204		
Germany	2,584	11,580	12,108	14,620	17,630	20,541		
Estonia	16	12	15	19	22	14		
Greece	0	0	0	0	0	0		
Spain	461	313	39	4	21	28		
France	126	371	604	657	750	1,032		
Croatia	:	10	9	32	32	29		
Italy	6	87	165	237	254	301		
Cyprus	0	0	0	0	0:			
Latvia	17	10	32	87	112	201		
Lithuania	:	26	92	128	127	144		
Luxembourg	183	236	262	336	636	671		
Hungary	1	4	5	15	5	9		
Malta	0	4	2	0	12	11		
Netherlands	1	3	8	20	42	58		
Austria	124	108	128	140	163	177		
Poland	2	16	46	369	673	471		
Portugal	2	4	3	0	1	3		
Romania	46	71	190	140	92	118		
Slovenia	9	3	8	15	19	22		
Slovakia	7	8	6	7	4	8		
Finland	2	5	3	15	33	74		
Sweden	0	2	0	2	11	31		

The number of Blue Cards have steadily increased since 2012, but Germany remains the main destination country.

Many Member States (e.g. the Netherlands, France, Spain) prefer recruiting high-skilled migrants through their national policies (Cerna, 2018).

→ Blue Card Directive revision in 2016 to harmonize requirements and rights granted.

Source: Eurostat [migr_resbc1]

Implications



These shifts in the labor market create considerable uncertainty, alongside the potential benefits, with profound implications in terms of:

- Skills mismatch
- Job polarization
- Rural urban divide

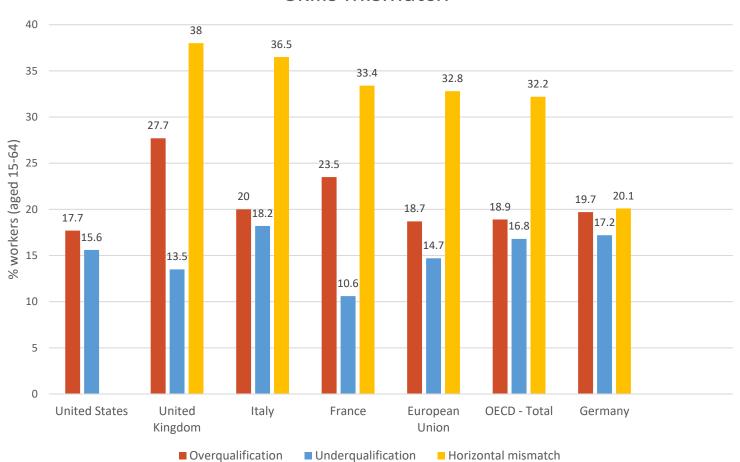
Skills mismatch

Technological, social and economic changes put the education and training systems under pressure, both at the individual and at the firm level:

- Vertical mismatch (over/undereducation or over/underskilling)
- Horizontal mismatch (field of study)
- Skill obsolence (e.g. due to technological change)
- Skill gaps (employees lack the necessary skills)
- **Skill shortages** (inability to find suitable candidates for vacant posts) (Mc Guinness et al., 2018).

Skills mismatch

Skills mismatch



Countries differ widely in the degree of horizontal and vertical mismatch.

The two phenomena do not have the same consequences: while horizontal mismatch does not necessarily have a negative impact on workers (e.g. on wages), vertical mismatch leads to a significant wage penalty (OECD, 2017).

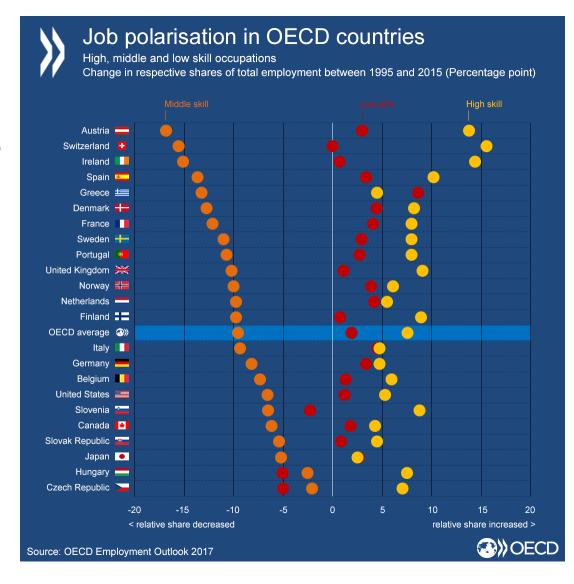
Source: OECD Skills for jobs database, own elaboration. Accessed 01/21/19. No data available for USA (horizontal mismatch).

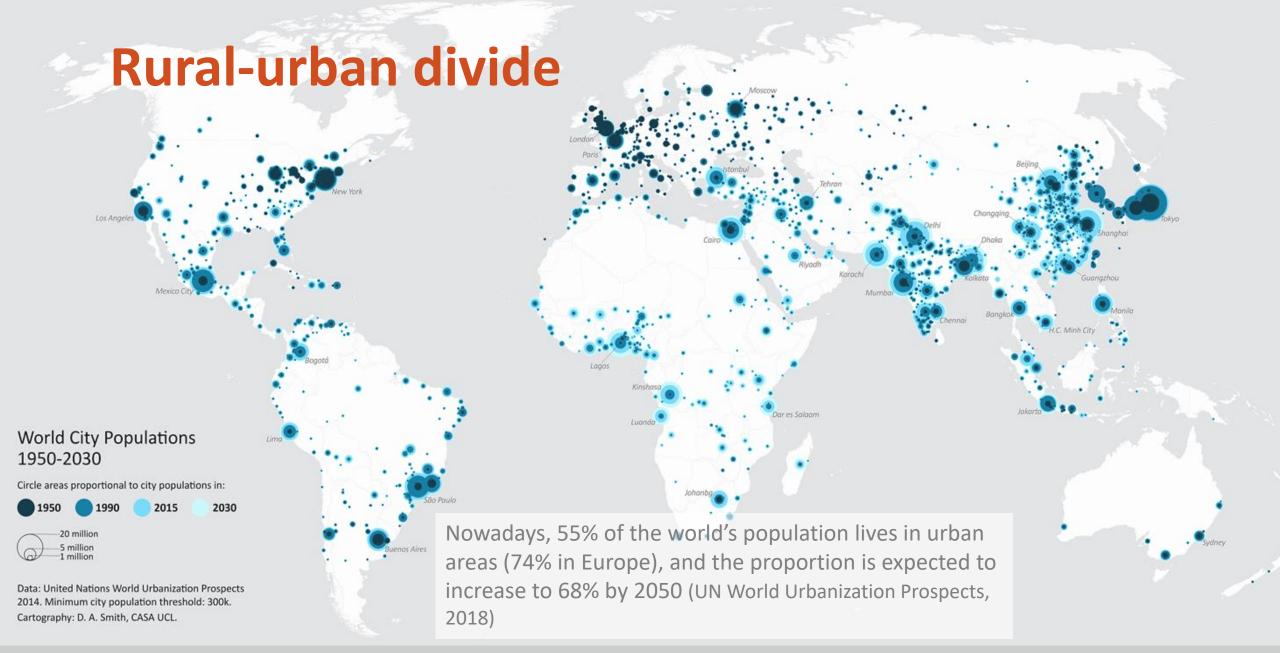
Job polarisation

In more developed countries, we are currently observing a **growth in the share of highest and lowest paid jobs** at the expense of **middle-wage jobs**.

This is happening both in the USA and in Europe - see Salvatori (2018) for UK; Harrigan et al. (2016) for France.

Another phenomenon linked to qualification-related structural change that has not received so much attention up to now is that of **workplace segregation by skill:** labour demand is increasingly divided into firms (and regions) hiring predominantly low skills, or knowledge-intensive industries and services recruiting high skills.





Rural-urban divide

Cities play an important role in attracting talented and creative people:

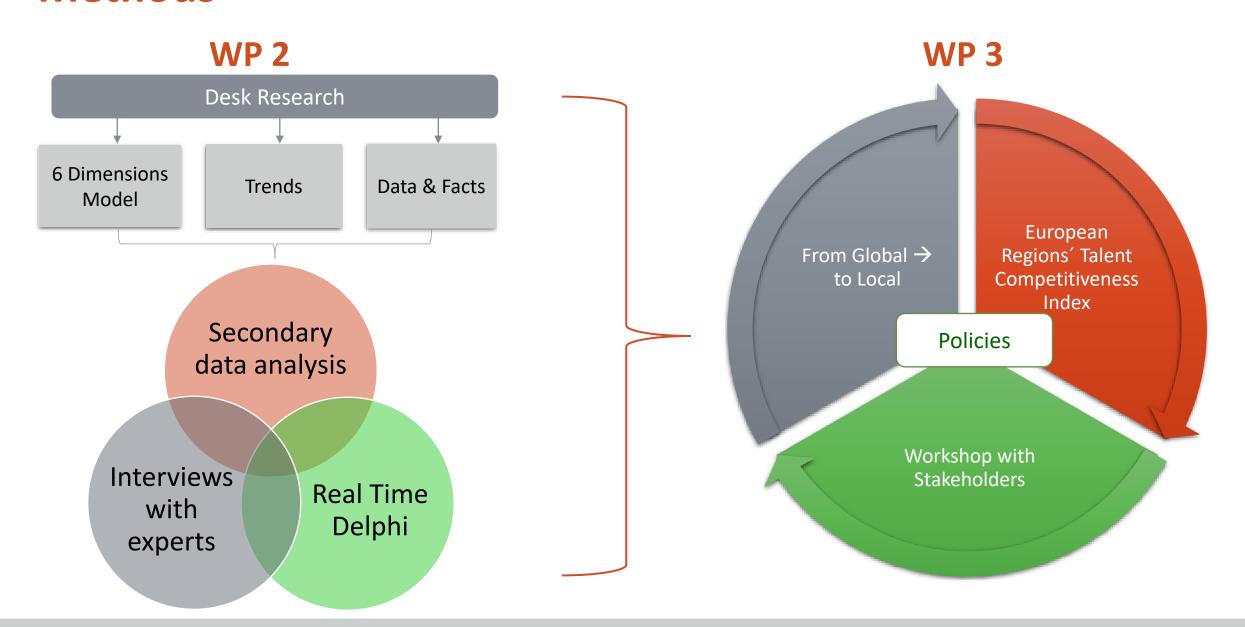
- Not only more job opportunities or labour costs advantages (traditional view)
 but also
- More amenities, entertainment and free time opportunities
- Lower entry barriers (in terms of diversity, openness to immigration).
- Clustering of talented people is associated with productivity gains and positively contributes to regional economic growth see Florida (2002).

Global cities (Sassen, 2004) create new inequalities, rather than increasing income and welfare of the whole population.

Consequences: urban-rural gap, regional disparities, growing urbanization.



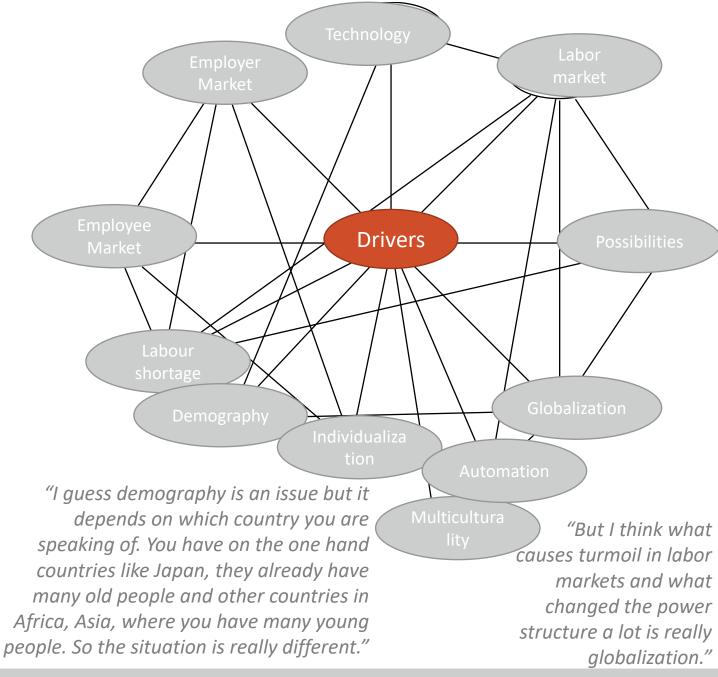
Methods



Interviews with Experts

Main results:

- Drivers of change in the labor market: demographic change and globalisation; shift from employer to employee market.
- Competences: Lifelong learning; digital competences.
- Away from occupations towards activities.



Real - Time Delphi

- ✓ 30 out of 115 experts from 20 countries
- ✓ Scholars and/or practitioners
- ✓ Fields: economy, sociology, political science, humanities, law; psychology; management; human resources
- ✓ Online survey 6 weeks June & July 2018
- ✓ Consensus: COV = 100 stdev/average* 100
- √ 69 statements on the following topics:
 - 1. Future of work
 - 2. Talents of tomorrow
 - 3. Education
 - 4. Work organization
 - 5. Location factors

1	Switzerland		Belgium
2	Singapore	17	United Arab Emirates
3	United States	18	Austria
4	Norway	19	Germany
5	Sweden	20	Japan
6	Finland	21	France
7	Denmark	22	Estonia
8	United Kingdom	23	Qatar
9	Netherlands	24	Israel
10	Luxembourg	25	Czech Republic
11	Australia	26	Malta
12	New Zealand	27	Malaysia
13	Ireland	28	Slovenia
14	Iceland	29	Portugal
15	Canada	30	South Korea

Delphi survey: The future of work

STATEMENT	CONSENSUS	COMMENTS
The gap between the highly skilled and the less qualified is steadily widening.	82.66% (agreement)	 High skilled employment creates demand for lower skilled services which also increases earnings of the less qualified groups The current labor market is characterized by a polarization of employment forms. Highly skilled workers generally enjoy good working conditions. () There is also an increase in atypical work, which affects certain populations (women, immigrants, etc.). New social inequalities are emerging, both internationally and within countries.
The high-population, high-growth, emerging markets such as China and India have a great influence on the European labour market.	77.34% - (agreement) -	,
The shortage of highly skilled workers in the Western industrialized countries is accelerating automation.	56.06% - (agreement) - -	,

Delphi survey: Talents of tomorrow

STATEMENT	CONSENSUS	COMMENTS
The activities of certain professions will change considerably as a result of digitisation and automation, making job profiles appear completely different and creating new job profiles.	85.63% (agreement)	
New professions will emerge that require far more creativity and flexibility than many of today's professions.	82.27% (agreement)	
Social skills, such as teamwork and communication skills, are becoming increasingly important.	82.05% (agreement)	
The professional position is losing its importance in terms of social status.	60.15% (disagreement)	 Upskilling needed in different competencies, continuous learning is important Tomorrow's talents will have a lot of different skills from today's talents, but I believe some skills, for example soft skills (e.g. social and communication skills) are important both now and in the future. They will need different competencies
Tomorrow's highly skilled and creative workers will not differ significantly from those of today.	54.96% (disagreement)	Having a job will be something exclusive for loyal and reliable citizens - the rest will be unemployed.

Which competences will distinguish the highly skilled from the low-skilled workers?



Delphi survey: Education

STATEMENT	CONSENSUS
Education policy is a decisive issue for the future of a competitive location.	84.91% (agreement)
It can be assumed that required digital skills are increasingly regarded as basic skills that are necessary for many occupations.	83.38% (agreement)
Inter- and transdisciplinarity as well as inter- and transdisciplinary skills for coping with complex challenges and interface activities will become increasingly necessary, for which more integrated courses of study will have to be created.	82.66% (agreement)
Employees will increasingly need to undergo continuous further training in order to survive in the labour market.	80.28% (agreement)
In order to meet the requirements of the labour market, the more practice- and application-oriented university institutions will gain significance.	65.74% (agreement)
Companies prefer unskilled newcomers who are trained by the company itself.	 69.16% (disagreement) to hire on lower levels, and then develop the person themselves, but not overwhelmingly Basic skills always needed as starting point

Delphi survey: Organization of work

STATEMENT	CONSENSUS	COMMENTS
50 percent of jobs will be carried out in virtual offices, service centers, home work and other smart working forms.	78.18% (agreement)	 Though increasing, 50% probably too high a figure I don't think it is moving that fast, but it is moving in this direction Most of them.
Employees will have to work less (weekly/monthly hours) and longer (years).	76.13% (agreement)	
The individualisation of the labour market makes it increasingly difficult to pursue personnel policy/management.	72.90% (agreement)	
The relationship between employer and employee is changing: the negotiating power is shifting in favour of employees.	53.30% (agreement)	 It depends on the level of qualification of the employee. This is true in some sectors, especially for high skilled workers. The situation is different for other workers, who are suffering from the consequences of the new economy. It epends. In a context of slow growth, employers have more leverage to impose their conditions to workers, even when these are involved in skilled activities that evolve rapidly.

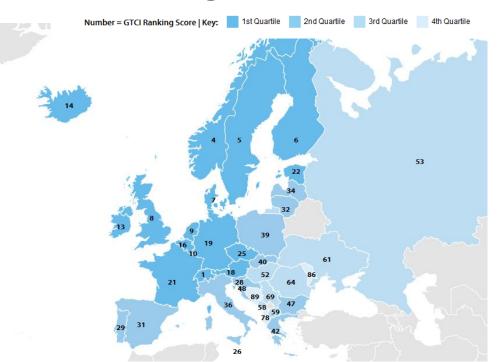
Delphi survey: Location factors

STATEMENT	CONSENSUS	COMMENTS
Accessibility and connectivity play a central role in the selection of a location.	87.04% (agreement)	
Political measures to attract highly skilled and creative people are becoming increasingly important for states.	79.98% (agreement)	
Tomorrow's talents will live in urban spaces.	78.18% (agreement)	 No, only those who have well-paid and secure jobs - others (highly skilled or not) cannot afford it. Mostly, on the other hand, they will work on-line and thus it does not matter where they are Except for digital nomads who will live in places where they can best pursue their hobbies/interests
Only people with low qualifications will be living in the periphery.	(disagreement)	 Highly educated people with irregular jobs cannot afford to live in cities Anyone can work and live anywhere with high speed internet connection Depending on what periphery is, many young professional families choose to move out of the 'city' and work from home or commute Pillars of the new economy (tertiary and quaternary sectors) are based on other economic sectors. The presence of high skilled workers also implies that of low skilled workers. Sustainability concerns will drive many people away from urbanized centers
Companies that are not internationally networked and globally active are not interesting for highly skilled people.	(disagreement)	 Small start-ups, for instance, can be interesting too. Not everybody has international aspirations Most of the people will work in small entities such as start-ups, spin-offs or born globals, and most of them will be international from the start

European Regions' Talent Competitiveness Index

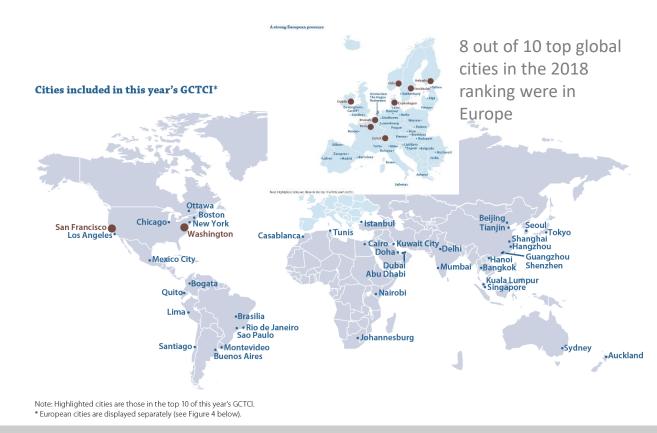
Our starting point: Global Talent Competitiveness Index (GTCI)

- ✓ Launched in 2013, developed by INSEAD, the Adecco Group and Tata Communications
- ✓ Annual study ranking countries at the global level in their ability to attract, develop and retain talent.
- ✓ Coverage: 119 countries (2018 edition).
- ✓ Benchmarking tool



Global City Talent Competitiveness Index (GCTCI)

- ✓ Ranks major cities at the global level, using a model similar to the GTCI one.
- ✓ Coverage: 90 cities (2018 edition).



European Regions' Talent Competitiveness Index

Preliminary choices:

- Using the term "talent" in a holistic way
 - Talents defined through the level of education: *people with tertiary education*
- Regional level defined by the NUTS2-level of the European Union including Iceland, Norway and Switzerland (excluding overseas regions)
- 277 regions compared
- Data collection: May June 2018

Data sources:

- Eurostat
- Forbes
- Numbeo

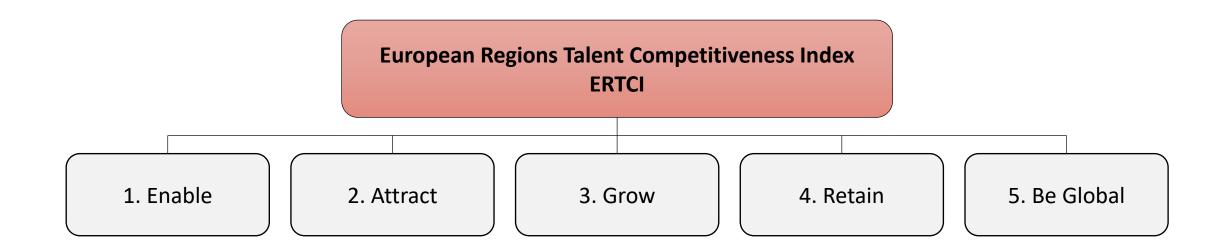
- OECD Regional Well-Being & OECD
- World University Rankings 2018
- Regional Competitive Index 2016

Data availability & missing data:

- Data cut-off year = 2007
- Replacement of missing values by max 2-year older data points or with proxies
- Other missing data was not considered in the calculation of sub-pillar scores

European Regions' Talent Competitiveness Index *Model Architecture*

- = based on the Global Cities Talent Competitiveness Index (GCTCI)
- > analysing and comparing 277 regions of the European Union (EU-27 and the UK), Iceland, Norway, and Switzerland



5 Subdimensions

Enable

Attract

Grow

Retain

Be Global

The "Enable" pillar portrays the market, business and regulatory landscape within a region in terms of business clusters, innovation and technology, as these factors fundamentally affect one region's competitiveness, growth, and ultimately talent attraction.

"Attracting" talents points at the ability one region has to attract both people from outside the country (e.g. through high-skilled migration) and people from inside the same country. Attraction is possible only when the quality of life within that region is perceived to be higher compared to other regions.

"Growing" talents refers to one region's ability to provide learning opportunities within an intellectually stimulating environment. For this reason, not only the presence of universities within a region is recorded, but also tertiary enrolment rates.

"Retaining" talents points at the creation of a safe and friendly environment where to live. The indicators chosen here aim at measuring the costs of living, health, safety and lifestyle within one region.

"Being global" includes a region's ability to develop global knowledge skills (measured through its tertiaryeducated workforce and population), as well as by its global transport connectivity (measured by the accessibility to passenger flights).

Data and Variables

European Regions Talent Competitiveness Index ERTCI 1. Enable 5. Be Global 2. Attract 3. Grow 4. Retain 4.1 Personal Safety 5.1 Population (30-34) with 3.1 Presence of Top 1.1 R&D Expenditure 2.1 GDP (at current prices) (Homicide Rate) **Tertiary Education** Universities (top 500 2.2 People at Risk of World University Ranking) 1.2 ICT access (% 4.2 Physicians' Density (per 5.2 Workforce (25-64) with Poverty or Social Exclusion households with internet) 100,000 inhabitants) **Tertiary Education** 3.2 Students in Tertiary 1.3 Presence of Forbes 5.3 Accessibility to 2.3 Crude Mortality Rate Education 4.3 Cost of Living Global 2000 companies Passenger Flights 3.3 Participation in Social 2.4 Life Expectancy Networks 4.4 Rent Index 2.5 Level of Air Pollution $(PM2.5 \mu g/m^3)$ 4.5 Local Purchasing Power Index 2.6 Civic Engagement (Voter Turnout) 2.7 Households with **Broadband Access** 2.8 Activity Rates (15-64) by **Tertiary Education Level** 2.9 Life Satisfaction (Selfevaluation)

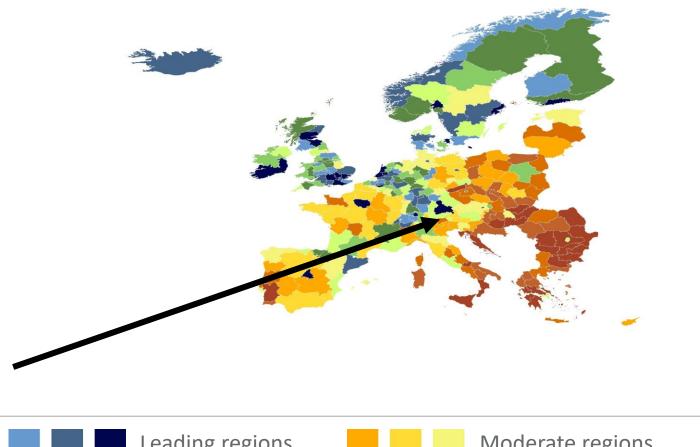
Data and Variables

	GCTCI 2018 variables	No data	ERCTCI 2018 variables
	Gross expenditure on R&D (% of GDP) (Eurostat)		Gross expenditure on R&D (% of GDP) (Eurostat)
	Gross expenditure on R&D (% of GDP) (Eurostat) ICT access (% Households with internet access at home) (Eurostat) Prosperse of Forbes Global 2000 companies (Forbes)		ICT access (% Households with internet access at home) (Eurostat)
	Presence of Forbes Global 2000 companies (Forbes)		Presence of Forbes Global 2000 companies (Forbes)
\bigcirc	GDP per capita (Eurostat)		GDP per capita – current prices in Euro (Eurostat)
	Quality of life (Numbeo, UN habitat)		Quality of life indicators (OECD Regional Well-Being)
	&		Mortality rate (Eurostat)
	Environmental quality (WHO Air pollution database)		Life expectancy (Eurostat)
	AACT		Regional air pollution (OECD, Eurostat)
	ATTRACT	X	Civic Engagement (OECD)
	₹		Households with broadband access (Eurostat)
			Labour force activity rates by tertiary education (Eurostat)
			Perceived social network support (OECD)
			Self-assessment of life satisfaction (OECD, Eurostat)
			NEW: People at risk of poverty or social exclusion (Eurostat)
(3)	Major universities (%) (Academic Ranking of World Universities)		Number of Top 500 World Universities (World University Rankings 2018)
	Tertiary enrolment (%) (Eurostat)		Number of students enroled in tertiary enrolment (Eurostat)
	Individuals in social networks (%) (Eurostat)		Individuals in social networks (%) (Eurostat)
(4)	Personal safety score (EIU + NEC Safe Cities Index)	Х	Personal safety (OECD, Eurostat)
	Physicians density (physicians per 1000 people) (Eurostat)		Physicians or doctors' density (physicians per 1000 people) (Eurostat)
	Monthly expenses for four-person family (PPP-adjusted US \$) (Numbeo)	l x	Cost of Living Index (Numbeo)
	(Numbeo)		Rent Index (Numbeo)
	Rent per month, three-bedroom apartment city centre (PPP-	l x	Local Purchasing Power Index (Numbeo)
	adjusted US\$) (Numbeo)	_ ^	Price to Income Ration (Numbeo)
(5)	Workforce with tertiary education (%) (Eurostat)		Workforce with tertiary education (%) (Eurostat)
	Population with tertiary education (%) (Eurostat)	х	Population aged 30-34 with tertiary education (%) (Eurostat)
	Airport connectivity (largest airport servicing the city; adjusted by population) (Airports Council International)		Accessibility to passenger flights (Regional Competitive Index 2016)
	population) (Airports Council International)	Х	
	Intergovernmental organisations (number of IGOs adjusted by	х	>no suitable indicator<
	population) (Yearbook of International Organizations)		

Outcomes: Final Score of the Index

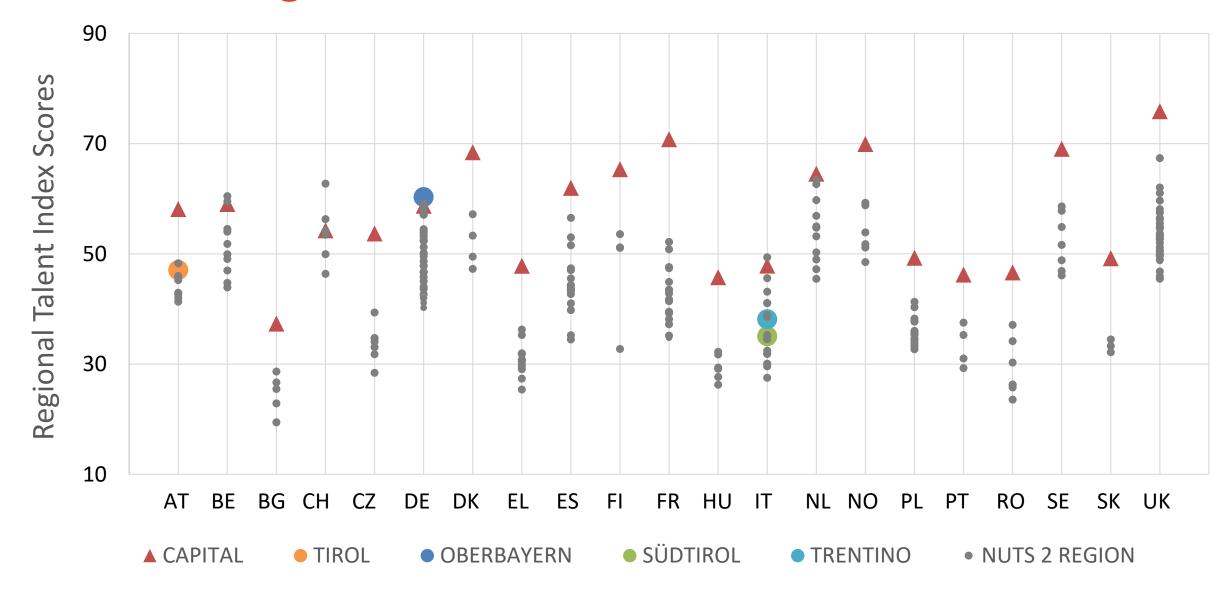
Top 10 Regions

Ranking	Country	NUTS-2 Region	Final Score
1	UK	London	75.89
2	France	Île de France (Paris)	70.81
3	Norway	Oslo and Akershus	69.93
4	Sweden	Stockholm	69.06
5	Denmark	Hovedstaden (Copenhagen)	68.44
6	UK	Berkshire, Buckinghamshire and Oxfordshire	67.39
7	Finland	Helsinki-Uusimaa	65.36
8	Netherlands	Noord-Holland (Amsterdam)	64.56
9	Netherlands	Utrecht	63.49
10	Switzerland	Zurich	62.73

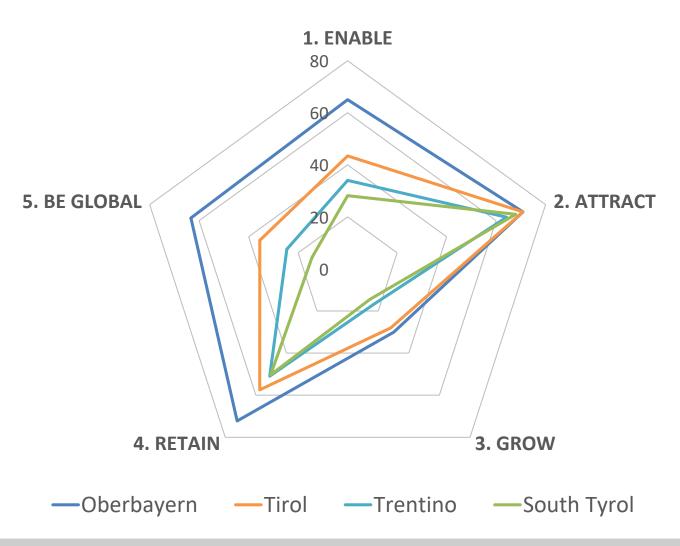




Outcomes: Regional variation of the index scores



South Tyrol: subdimension in comparison



SOUTH TYROL POSITIONING

- + STRENGTHS: Attract and Retain quality of life indicators. Particularly high scores in life expectancy, voter turnout, and low risk of poverty or social exclusion.
- WEAKNESSES: Grow and Be Global. Particularly low scores in tertiary education enrolment.

IDM: talent attraction management

Future Place Leadership™ Talent Attraction Management

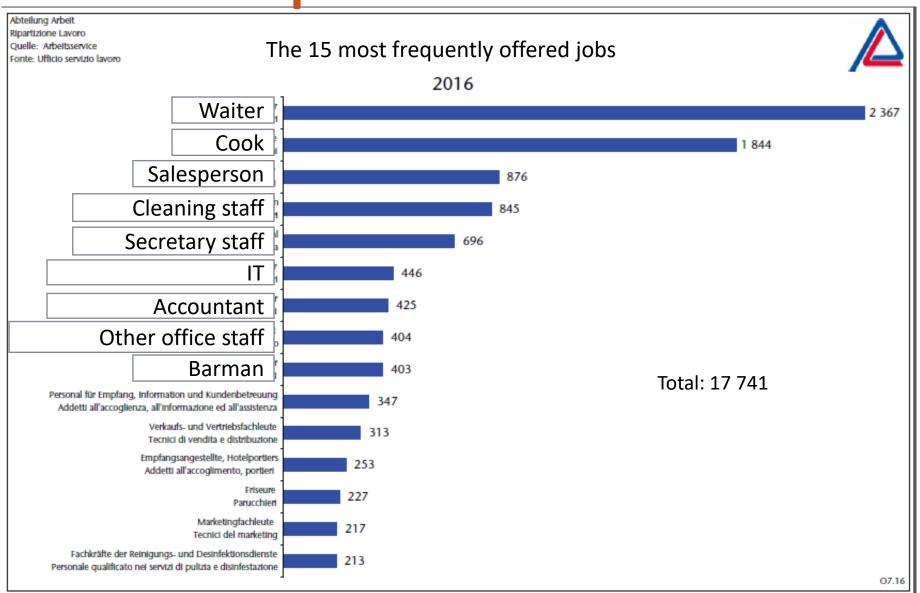
South Tyrol – a Talent Attraction Management Strategy for 3 years





https://futureplaceleadership.com/cases/south-tyrol-talent/

Regional vacant positions



Policy challenges

Migration:

- Increasing political tensions over immigration (at the regional, national and European level)
- Complicated regulations

Education and training system:

- A matter of skills? STEM, soft skills, highly specialized or interdisciplinary curricula?
- Overestimation of skills shortages in EU

At the regional level:

- Connectivity and accessibility as keypoint: rural urban connection OR rural urban divide?
- Awareness of indexes and benchmarking tools for policy-makers.

References

Beine, M., Docquier, F., & Rapoport, H. (2008). Brain Drain and Human Capital Formation in Developing Countries: Winners and Losers. *The Economic Journal*, 118(528), 631-652.

Bowles, J. (2014). The Computerisation of European Jobs. Bruegel, 24 July.

http://bruegel.org/2014/07/the-computerisation-of-european-jobs/.

Cerna, L. (2018). European High-skilled Migration Policy: Trends and Challenges. In: Czaika, M. (2018).

High-skilled Migration: Drivers and Policies. Oxford University Press.

Clemens, M. (2016). Losing Our Minds? New Research Directions on Skilled Emigration and Development. *International Journal of Manpower*, *37*(7), 1227-1248.

Commission of the European Communities. Adult Learning: It is never too late to learn. COM(2006) 614 final. Brussels, 23.10.2006. https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:52006DC0614

Czaika, M., & Parsons, C. R. (2017). The Gravity of High-skilled Migration Policies. *Demography, 54(2),* 603-630.

Florida, R. (2002). The Economic Geography of Talent. *Annals of the Association of American geographers*, *92(4)*, 743-755.

Florida, R., & Tinagli, I. (2004). Europe in the Creative Age. London, Demos.

References

Frey, C. B., & Osborne, M. A. (2017). The Future of Employment: How susceptible are jobs to computerisation?. *Technological forecasting and social change*, *114*, 254-280.

Harrigan, J., Reshef, A., & Toubal, F. (2016). The march of the techies: Technology, trade, and job polarization in France, 1994-2007 (No. w22110). *National Bureau of Economic Research*.

McGuinness, S., Pouliakas, K., & Redmond, P. (2018). Skills mismatch: concepts, measurement and policy approaches. *Journal of Economic Surveys*.

OECD/European Union (2016). How attractive is the European Union to skilled migrants?. In: Recruiting Immigrant Workers: Europe 2016, OECD Publishing, Paris.

OECD (2017). Getting Skills Right: Skills for Jobs Indicators, Getting Skills Right. *OECD Publishing*, Paris, https://doi.org/10.1787/9789264277878-en.

Salvatori, A. (2018). The anatomy of job polarisation in the UK. *Journal for labour market research, 52(1),* 8.

Sassen, S. (2004). The global city: Introducing a concept. Brown J. World Aff., 11, 27.

Schlitte, F. (2012). Local human capital, segregation by skill, and skill-specific employment growth. *Papers in Regional Science*, *91*(1), 85-106.

The Economist (2017). Lifelong learning is becoming an economic imperative. https://www.economist.com/special-report/2017/01/12/lifelong-learning-is-becoming-an-economic-imperative



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