



European Training Foundation

EUROPEAN  
TRAINING  
FOUNDATION

# Main results from the ETF study: How labour markets, human capital and migration interact in the Western Balkan countries



Ummuhan Bardak (ETF) and Michael Landesmann (wiiw), 1 December 2021



The Vienna Institute  
for International  
Economic Studies



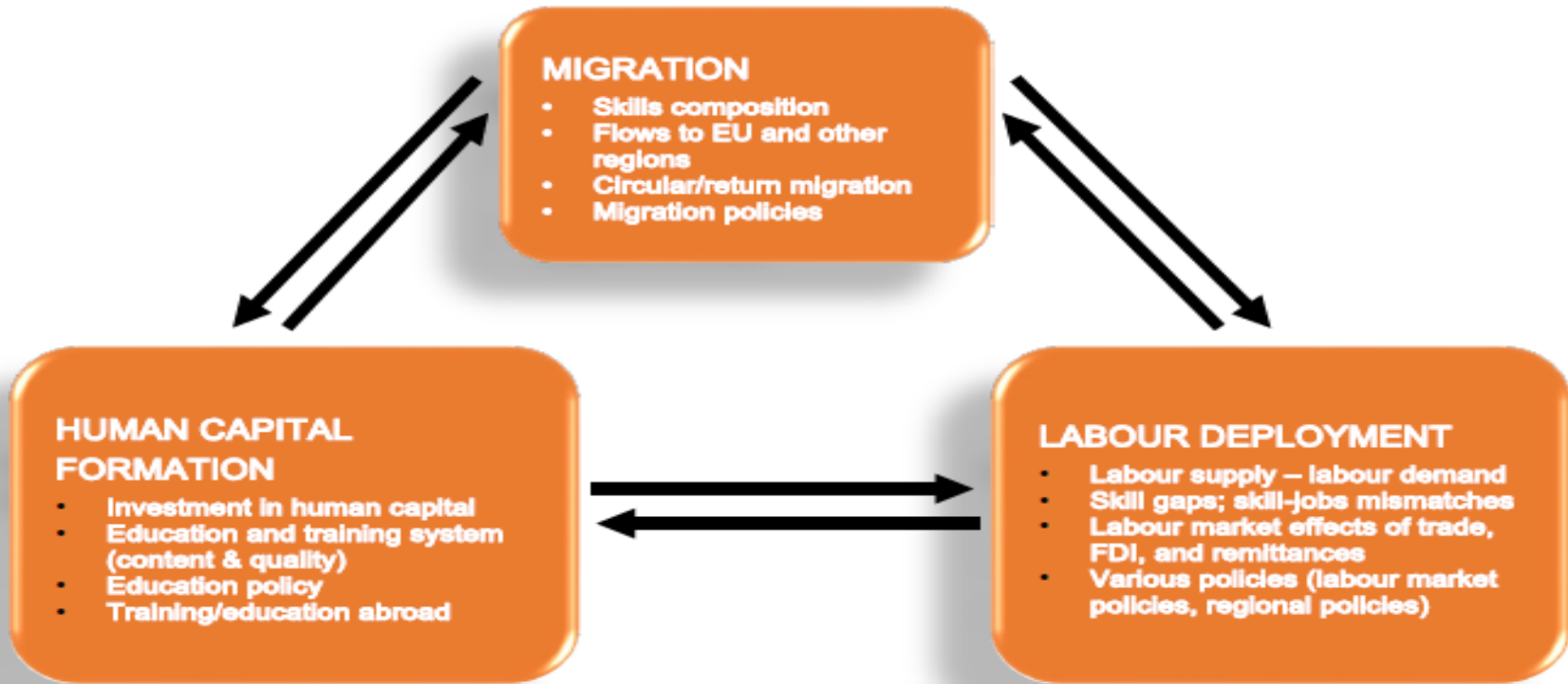
# A POLICY-ORIENTED RESEARCH PROJECT

- Guided by a common **analytical framework**: tracing the interrelationships between migration, human capital formation and labour markets
- 6 **country studies**: Albania, Bosnia and Herzegovina, Kosovo\*, Montenegro, North Macedonia, Serbia
- 3 **statistical background studies**: (i) estimating net migration flows by skill groups, (ii) macro-regional econometric study of the interrelationships, (iii) a supply-demand model of labour market scenarios to 2030
- **Regional comparative report**
- 6 **Validation Workshops** with academics and policy-makers
- Final **Regional Conference** (1 December 2021)

# WHAT MAKES THIS STUDY DIFFERENT FROM OTHERS?

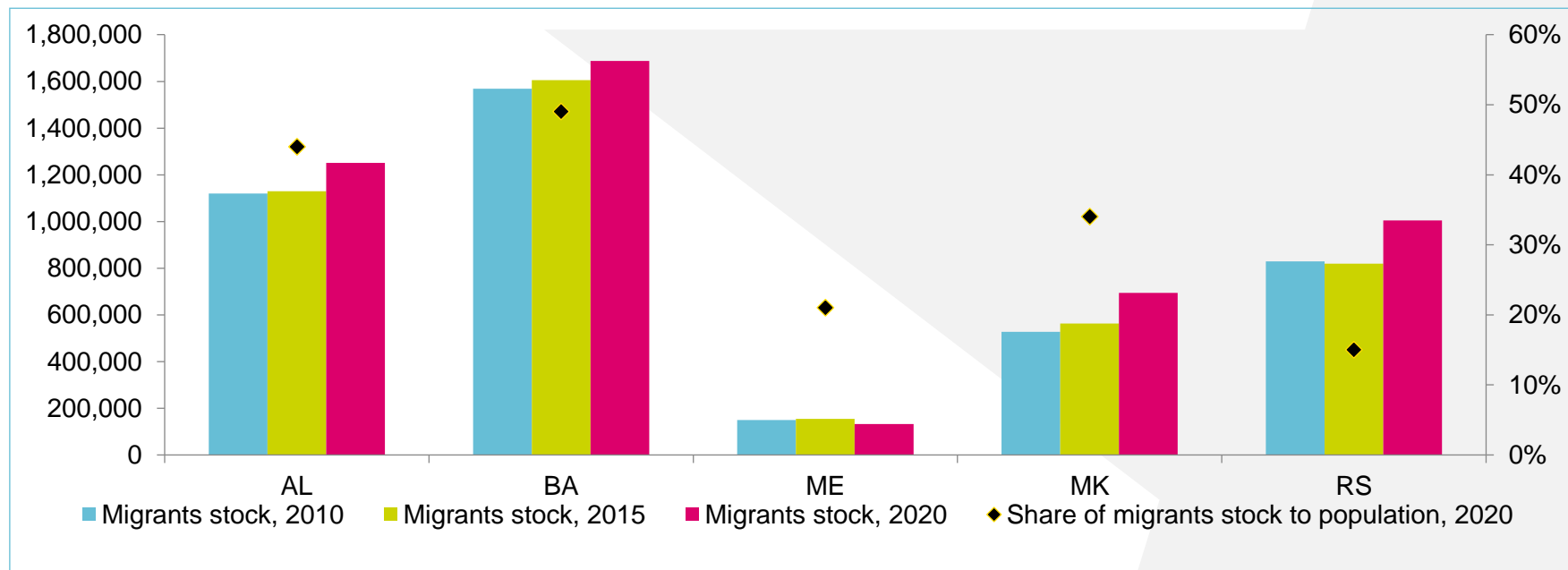
- Analyses most recent migration trends and interlinkages between migration, human capital and labour markets in WB6 – including case studies
- Contributes with three technical studies which estimate:
  - ✓ Emigration by level of education using the novel cohorts approach ( brain drain/brain gain)
  - ✓ Interactions between migration, human capital and labour market for WB5 using PVAR models
  - ✓ Labour supply and labour demand for 2020-2030 under different scenarios
- Presents new directions of policy actions at national level in cooperation with international partners, including the EU.

# SETTING THE SCENE: THE ANALYTICAL FRAMEWORK



# WHAT DO WE KNOW ABOUT RECENT MIGRATION TRENDS FROM WB6?

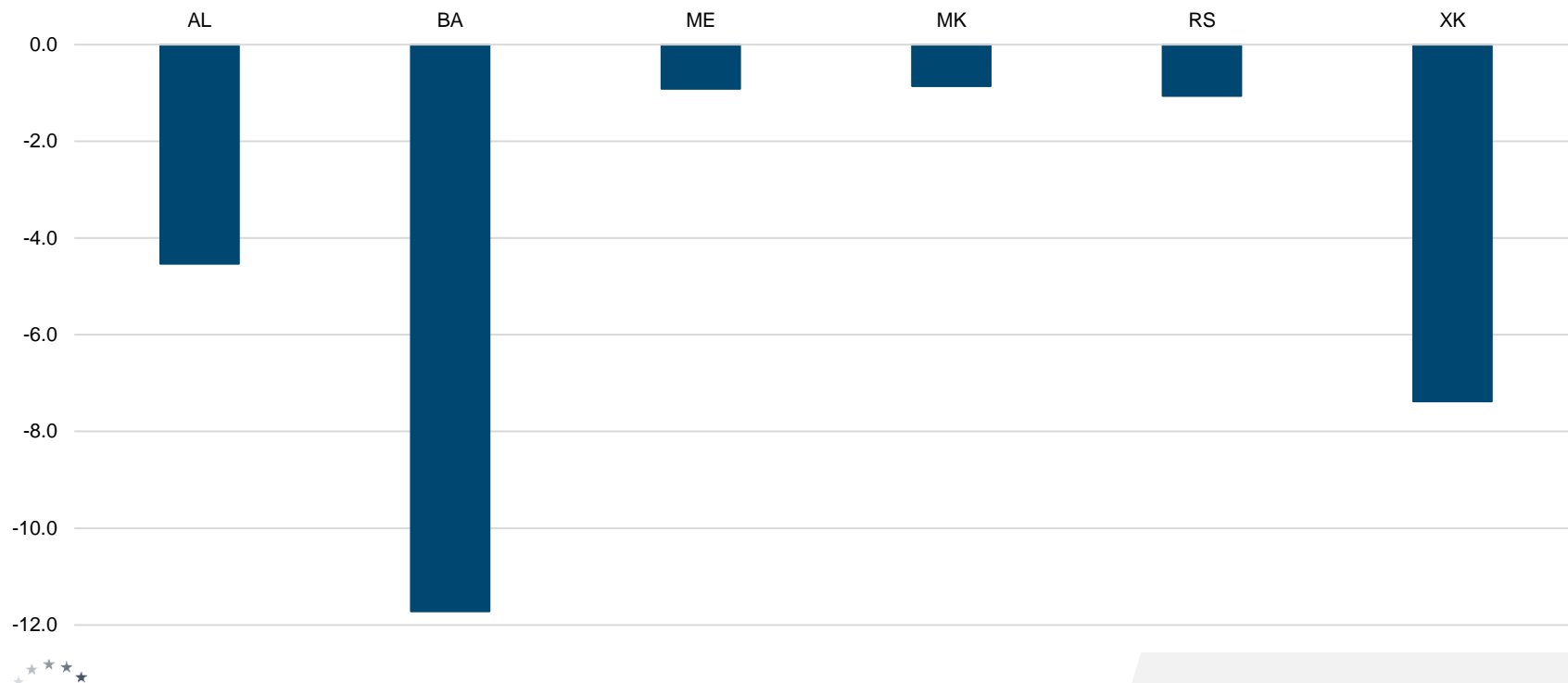
# STOCK OF WESTERN BALKAN MIGRANTS ABROAD, 2010-2020



Note: Data for Kosovo are not available. Serbia includes Kosovo. Share of migration to total population as of 2020 on the right axis.

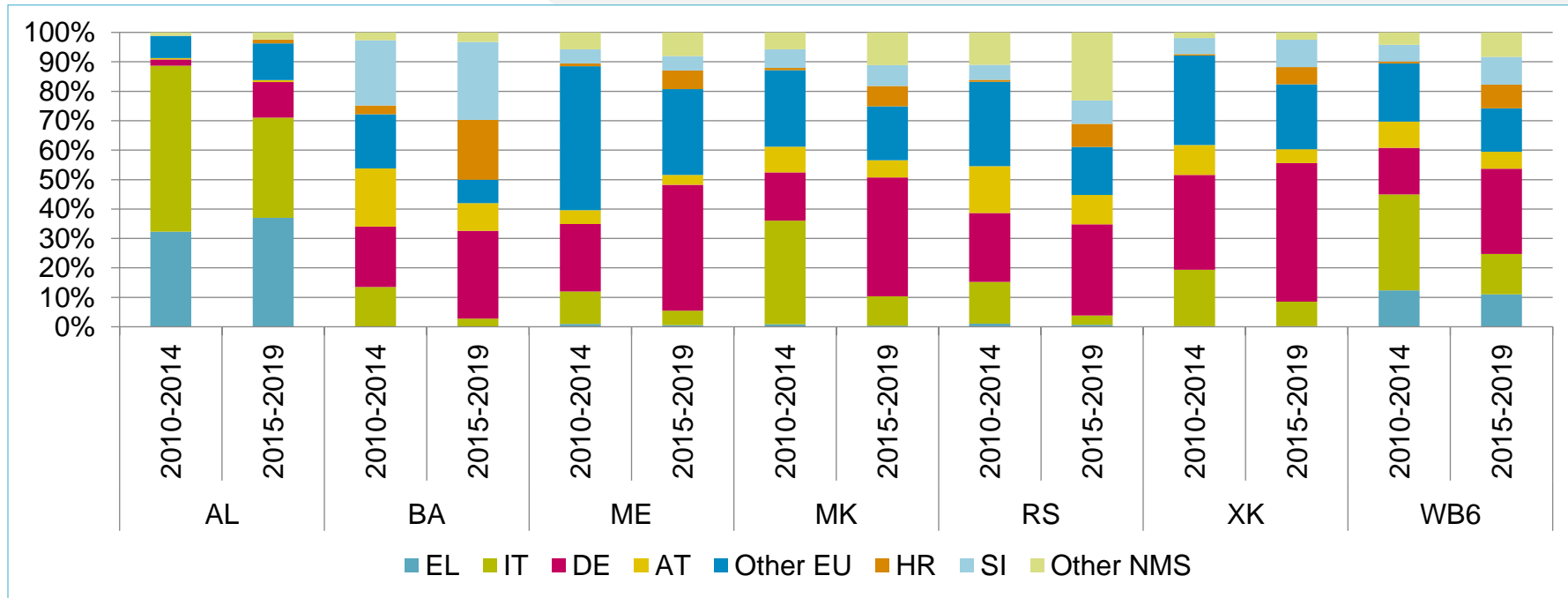
Source: United Nations, Department of Economic and Social Affairs. Population Division (2020). International Migrant Stock 2020 (United Nations database, POP/DB/MIG/Stock/Rev.2020). The stock of migrants by country of birth is reported. UN estimates as of July 2020.

## AVERAGE NET MIGRATION RATES (PER 1000 POPULATION), 2010-2019



Source: Leitner (2021) based on National Labour Force Surveys

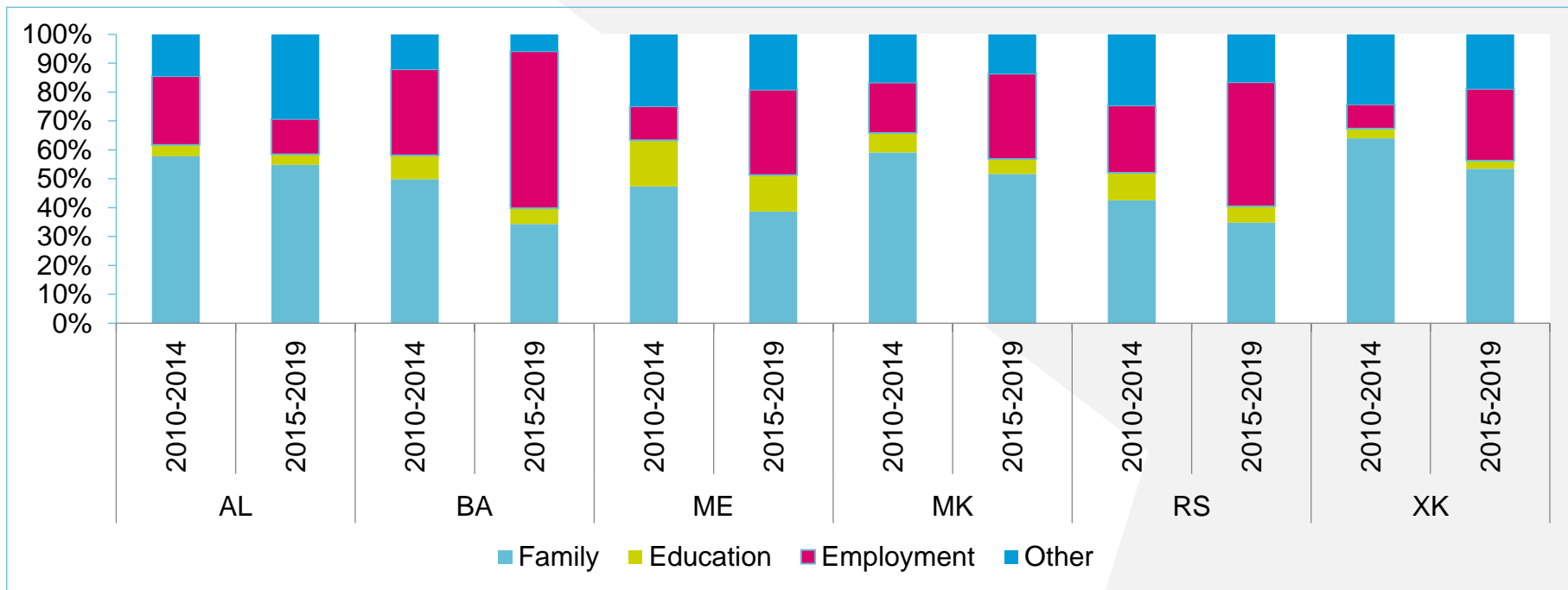
# FIRST RESIDENCE PERMITS ATTAINED IN EUROPEAN COUNTRIES BY MAIN DESTINATION, 2010-2014 AND 2015-2019



Source: Eurostat, First permits by reason [migr\_resfirst]

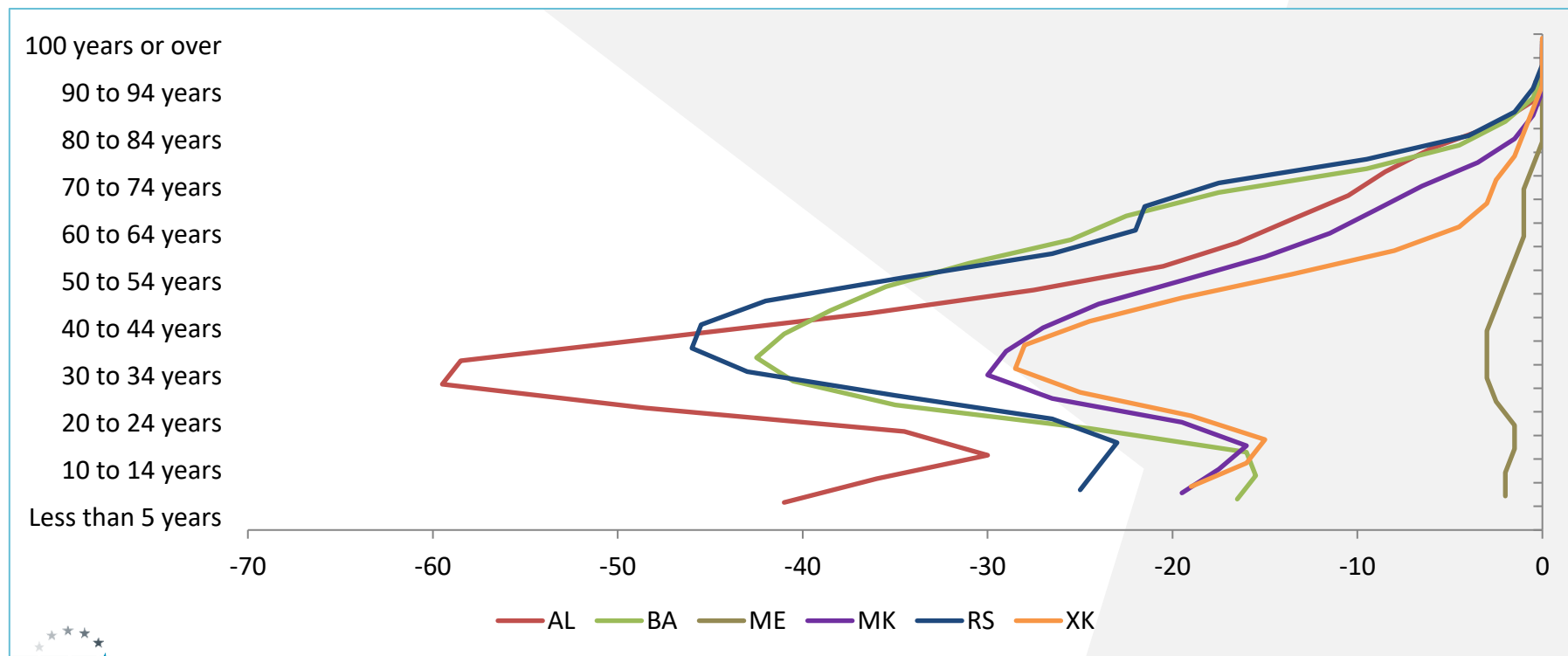


# FIRST RESIDENCE PERMITS ATTAINED IN EU BY PURPOSE, 2010-2014 AND 2015-2019



Source: Eurostat, First permits by reason [migr\_resfirst]

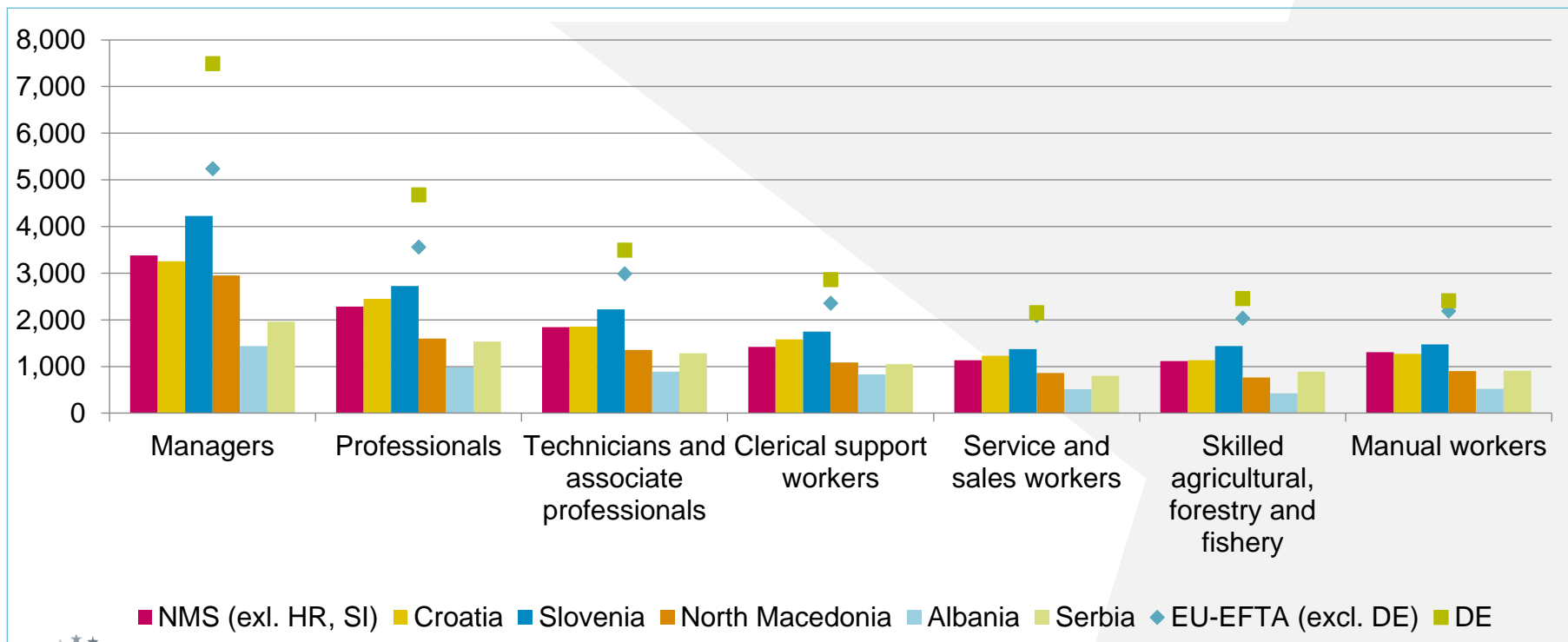
# AGE STRUCTURE OF EMIGRANTS FROM WB6 TO EU



Source: Eurostat

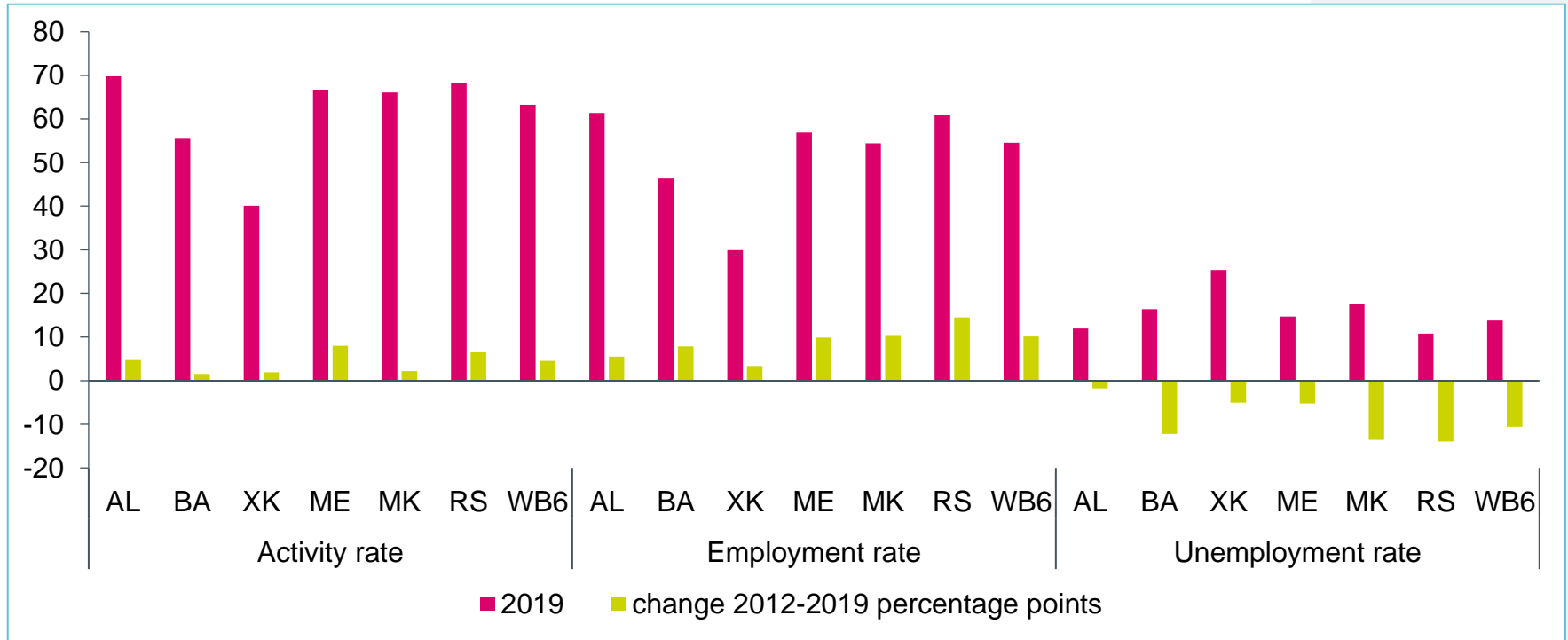
# WHAT ARE THE MAIN PUSH AND PULL FACTORS OF MIGRATION IN WB6?

# MEAN MONTHLY EARNINGS BY OCCUPATION, EUR (PPS), 2018



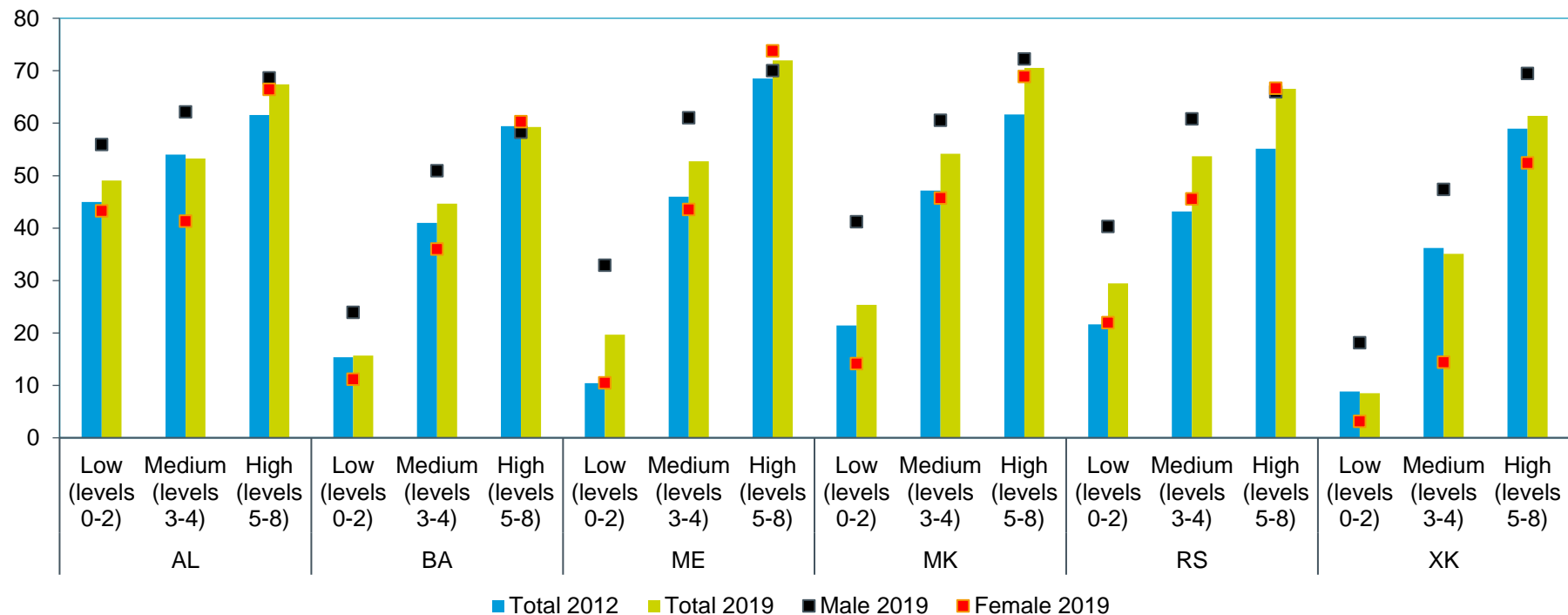
Source: Eurostat

# LABOUR MARKET DRIVERS



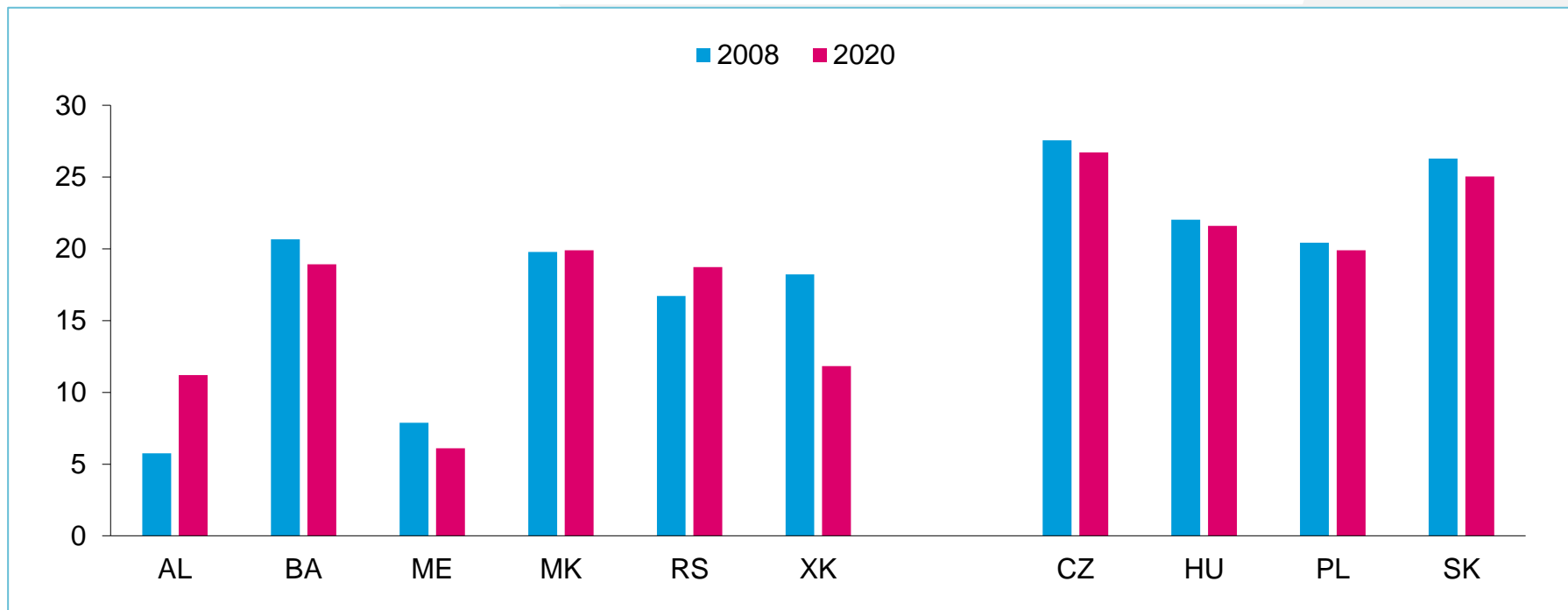
Source: SEE Jobs Gateway Database.

# EMPLOYMENT RATES BY EDUCATION AND GENDER



Source: SEE Jobs Gateway Database

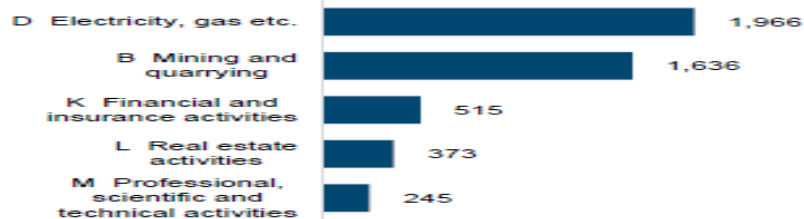
## STRUCTURAL MACRO-ECONOMIC DIFFERENCES ACROSS WB6: SHARE OF EMPLOYMENT IN MANUFACTURING IN TOTAL EMPLOYMENT (%)



Note: AL 2008 reg. NACE1, BA, XK 2008 reg. Data, employees. MK 2008 data refer to 2009. ME 2008 refer to 2011  
Source: wiiw Annual Database using Eurostat LFS statistics

# TOP 5 SECTORS WITH HIGHEST FDI INFLOWS IN WB6, 2010-2019 (€ Million)

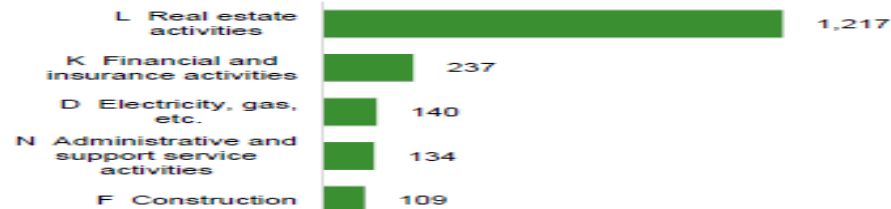
## Albania



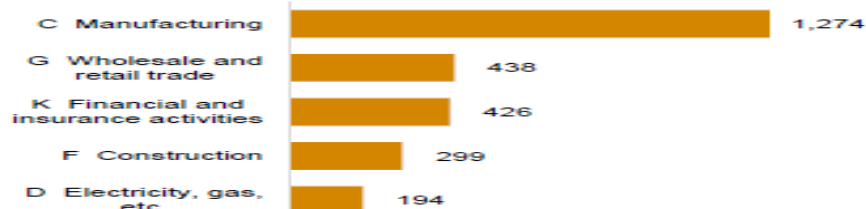
## Bosnia and Herzegovina



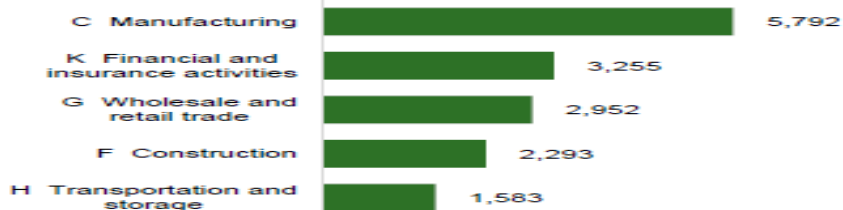
## Kosovo



## North Macedonia



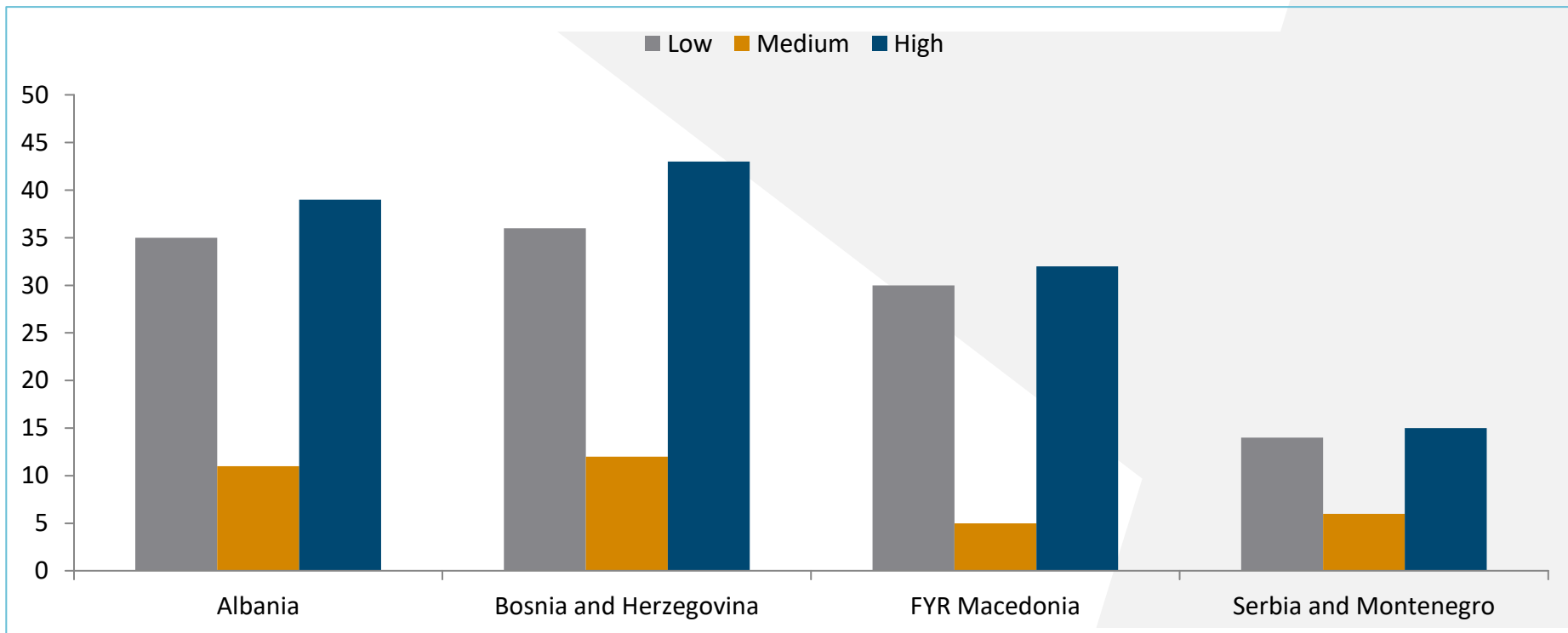
## Serbia





# BRAIN DRAIN OR BRAIN GAIN: WHAT ARE RECENT TRENDS FROM WB6?

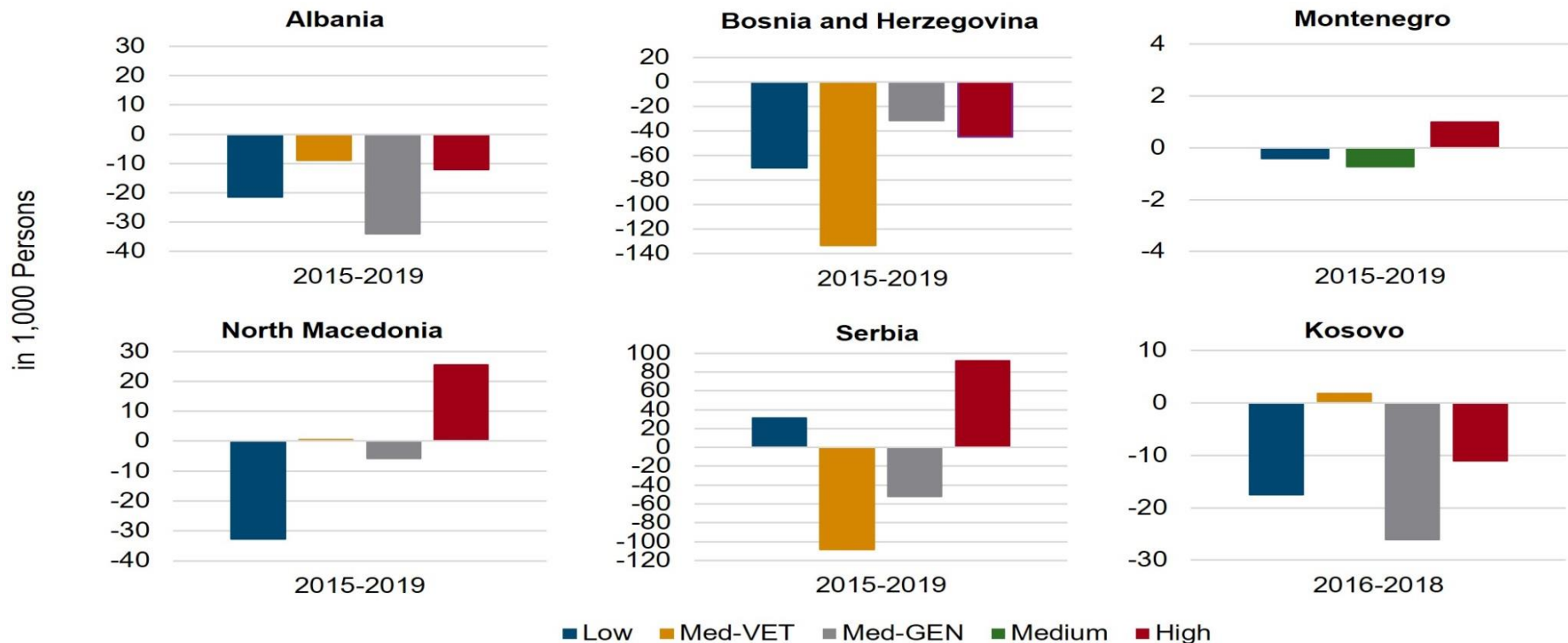
## EMIGRATION RATES BY EDUCATION LEVEL, 25+, IN %, 2010



Source: IAB Brain Drain Database (Brücker et al., 2013).  
The only study available with the estimates as of 2010.

# THE NOVEL COHORT APPROACH TO ESTIMATE RECENT BRAIN DRAIN/GAIN

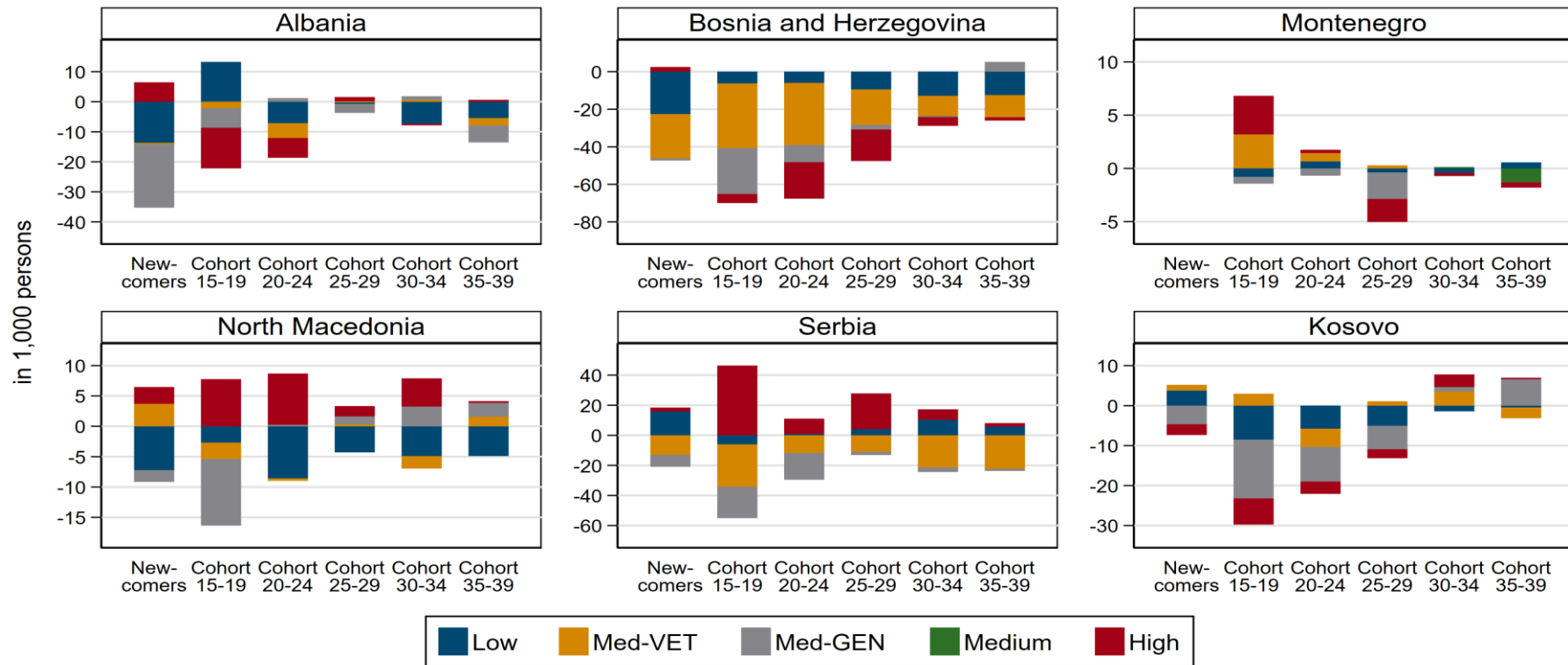
## THE CUMULATIVE NET MIGRATION FLOWS BY EDUCATION: 2015-2019



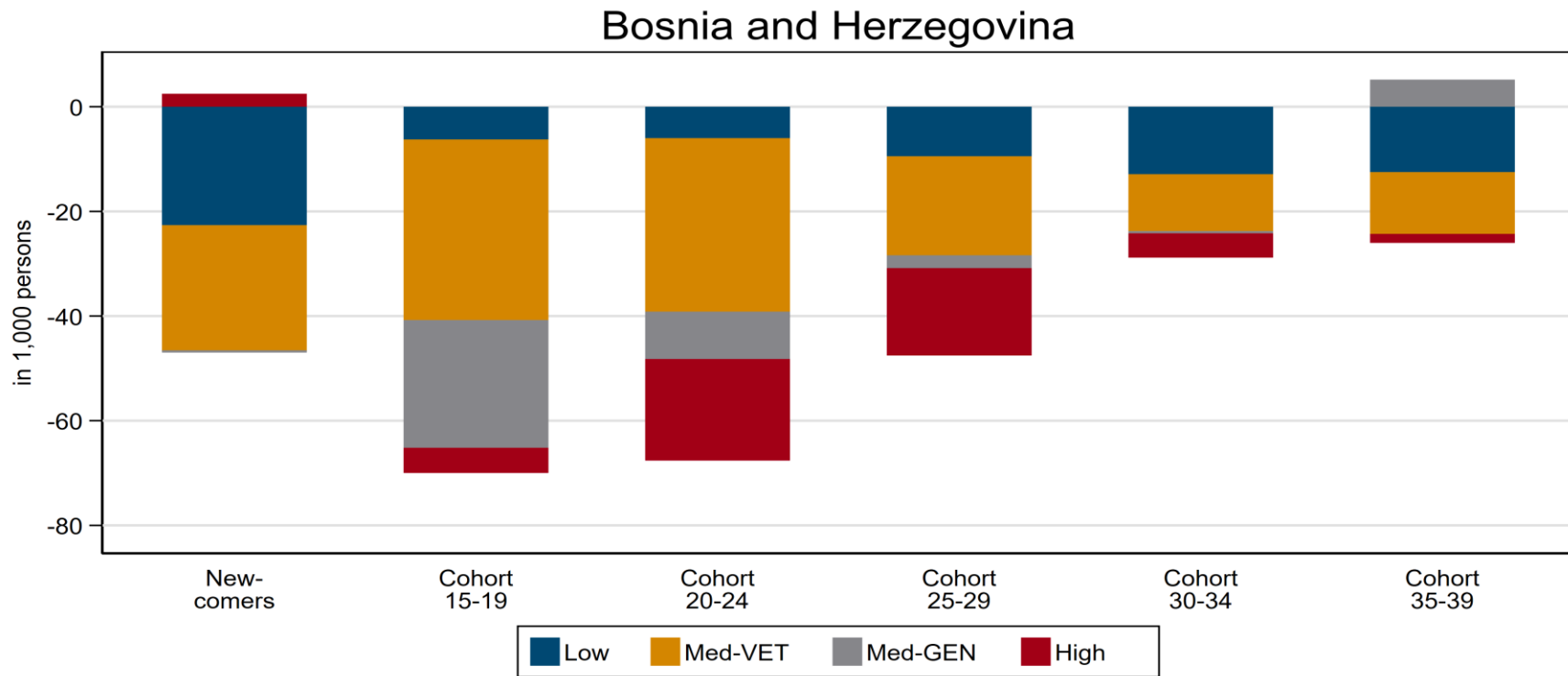
Source: Leitner (2021) based on National Labour Force Surveys

# THE NOVEL COHORT APPROACH

## THE CUMULATIVE NET MIGRATION FLOWS BY EDUCATION: 2015-2019

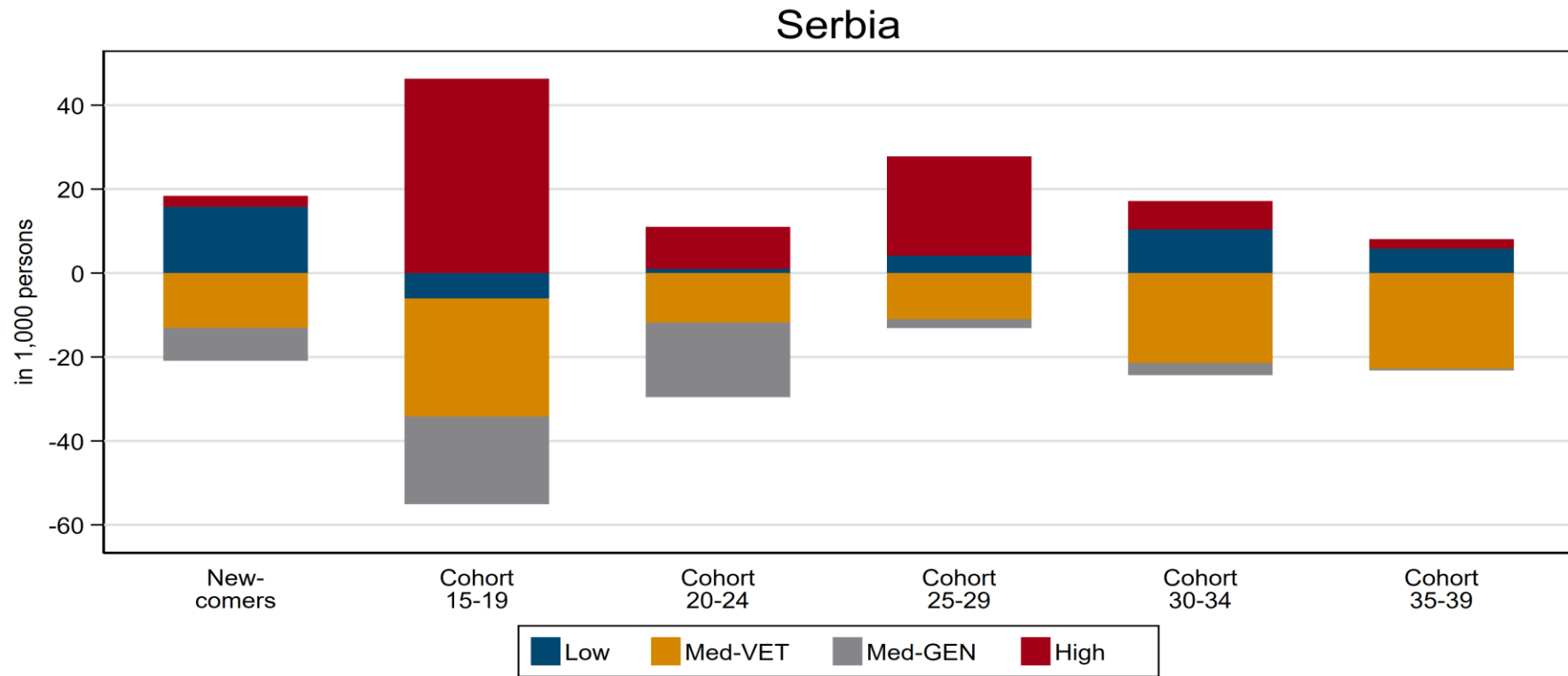


# THE CUMULATIVE NET MIGRATION FLOWS BY EDUCATION: 2015-2019



Source: Leitner (2021) based on National Labour Force Surveys

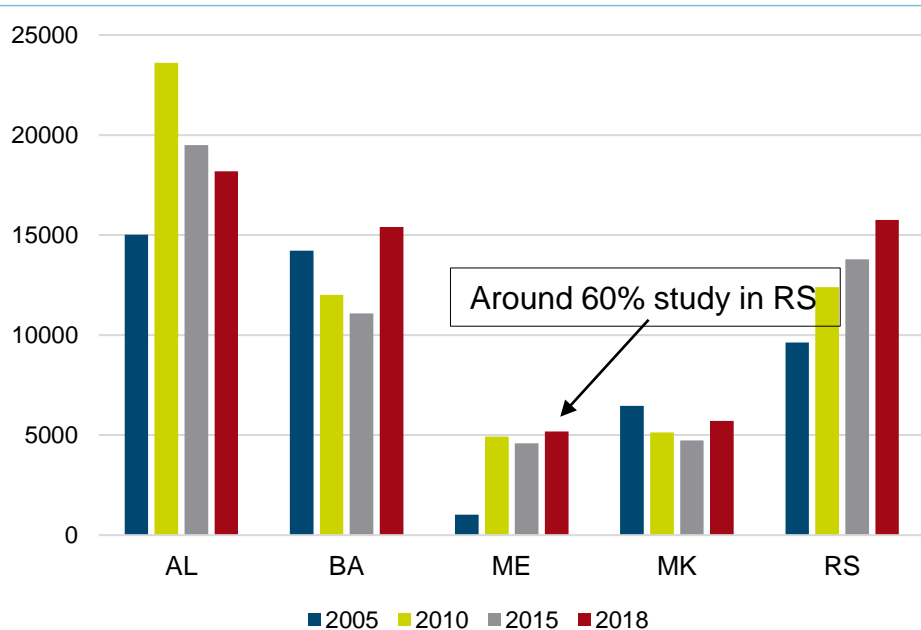
# THE CUMULATIVE NET MIGRATION FLOWS BY EDUCATION: 2015-2019



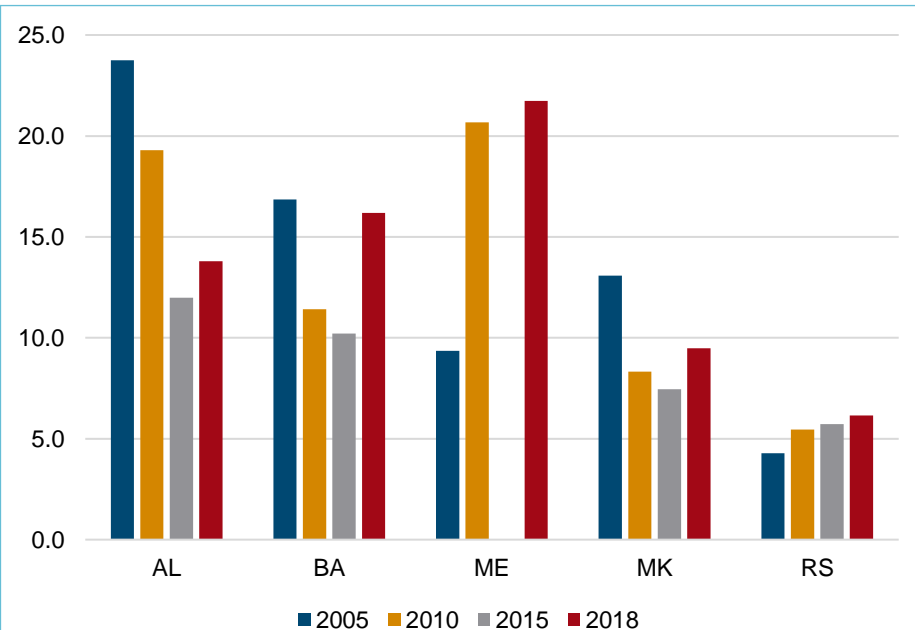
Source: Leitner (2021) based on National Labour Force Surveys

# INTERNATIONAL STUDENTS MOBILITY FROM WB6

## Number of tertiary students abroad



## Share of tertiary students abroad (%)\*



Source: UNESCO UIS statistics

Note: \* Number of students from a given country studying abroad, expressed as a percentage of total tertiary enrolment in that country

# HOW DO MIGRATION, HUMAN CAPITAL AND LABOUR MARKET INTERACT IN THE WB6?



# SETTING THE SCENE ON THESE TRIANGULAR INTERACTIONS

**“Vicious” and “Virtuous” circle of interrelationships can emerge**

A **“vicious circle”** of interrelationships emerges if the domestic labour market:

- does **not** generate **enough jobs** - especially for highly educated persons
- **fails** to fully **utilise** its **workforce** and their skills

Under such conditions people are pushed to migrate and leave the country. As consequence **outward mobility** – especially of the highly educated:

- generate **shortages** of high-skilled workers for carrying out certain services
- Such shortages can become a **trap for the economy** and its sectors to:
  - ✓ invest
  - ✓ innovate
  - ✓ being competitive and attracting FDI

This **“vicious circle”** can be broken and **turned** into a **“virtuous”** one if there is a proper **coordination** between:

- demand and supply of skills
- the quality and orientation of the education system
- labour market functioning
- the migration policy framework

Furthermore, **outward mobility** is likely to generate **positive impacts** if there is engagement of migrants and their networks abroad to:

- start cross-border economic activities and attract FDI
- establish new trade links
- transfer knowledge, skills, technology
- invest at home thereby contributing to job creation

# CASE STUDIES OF INTERRELATIONSHIPS



## Case study 1 of triangular relationships:

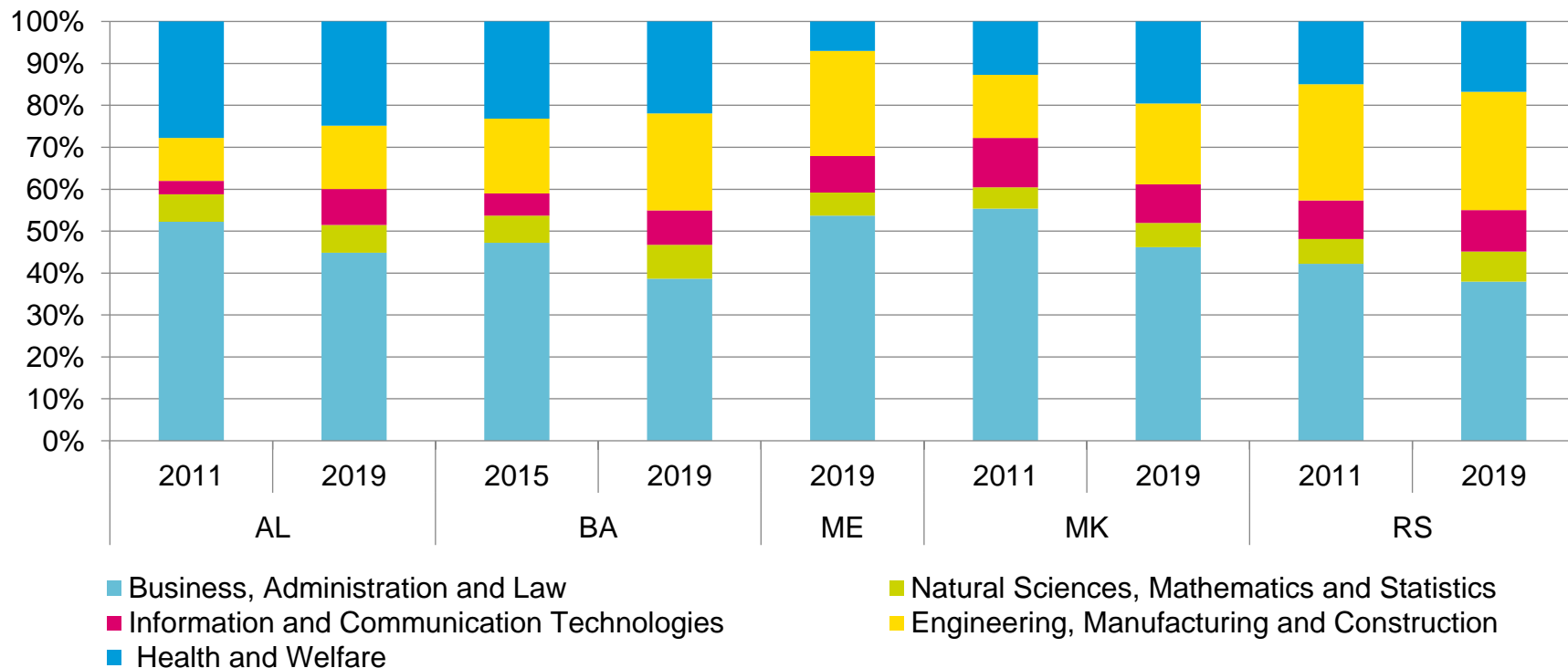
- Health professionals



## Case study 2 of triangular relationships:

- IT professionals

# ENROLLMENT IN TERTIARY EDUCATION PROGRAMMES IN HEALTH AND ICT VERSUS OTHER PROGRAMMES

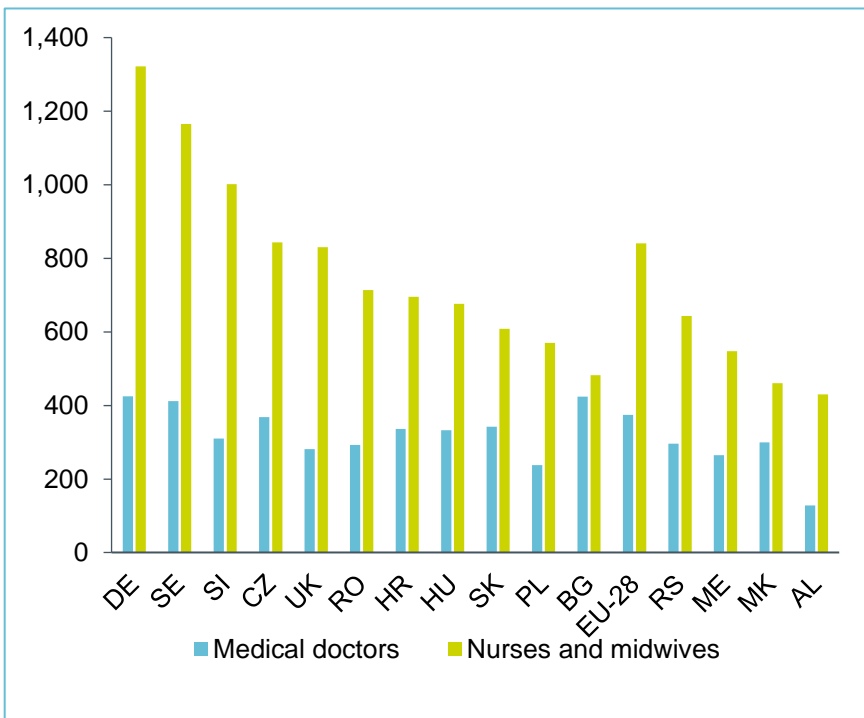


Note: Data for Kosovo are not available.

Source: UNESCO Institute for Statistics

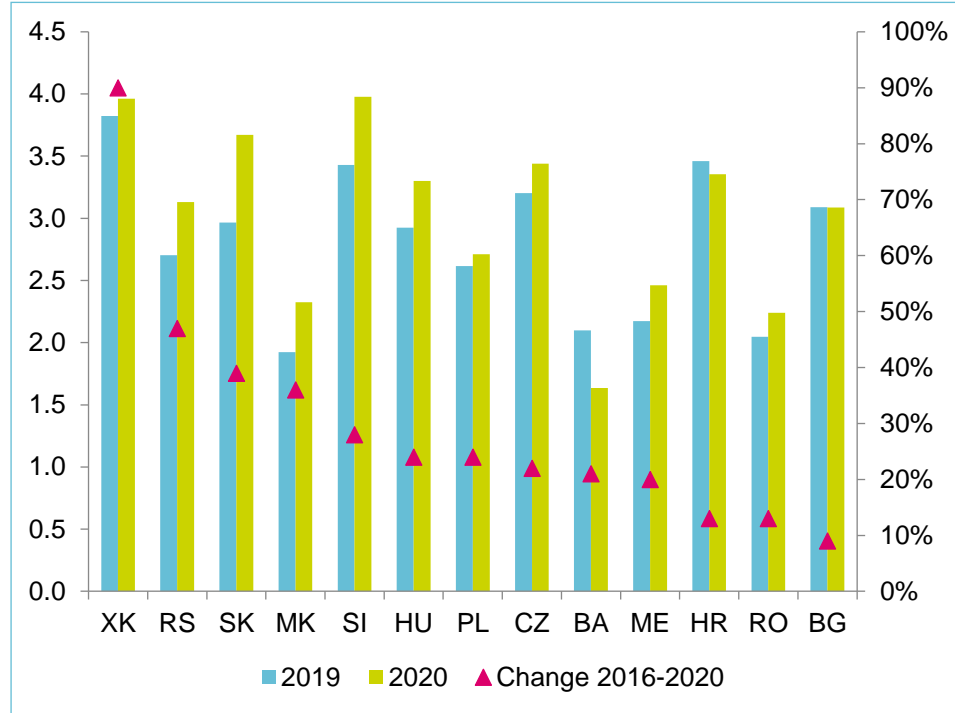
# EMPLOYMENT IN HEALTH AND ICT SECTORS

Health professionals: medical doctors, nurses and midwives per 100,000 inhabitants, 2017



Source: Eurostat [hlth\_rs\_prsrg]

The ICT sector's share in total employment and change in ICT employment in the 2016-2020 period



Note: Share of employment in the ICT sector to total employment, in percent – left axis. Change in employment in ICT sector, in percent – right axis.  
Source: wiiw Annual Database.



# Case Study 1 of Triangular Relationships: Health Professionals (HP)

## Facts

- 7,000 doctors work abroad (13% of doctors working in the region)
- 10,000 nurses work abroad (10% of nurses working in the region)
- Real numbers are higher

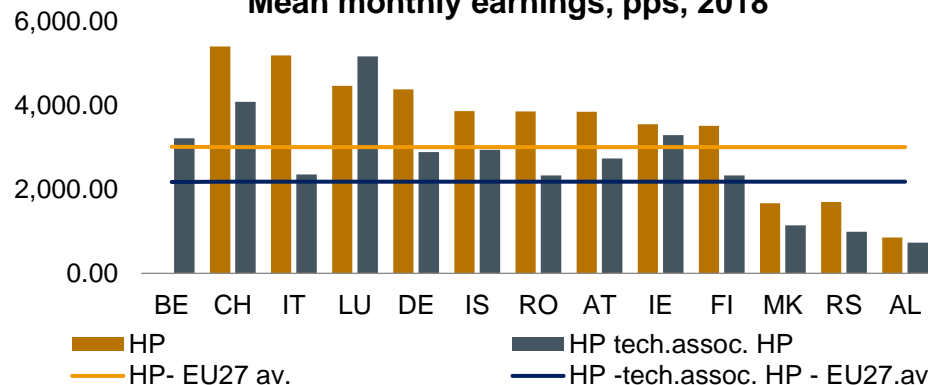
## Why HP leave

- HP fail to find a decent job at home
- Public sector remains the main employer
- Private sector is underdeveloped
- Weak public spending on health is an impediment to generate new jobs for HP
- Better earnings and working conditions abroad

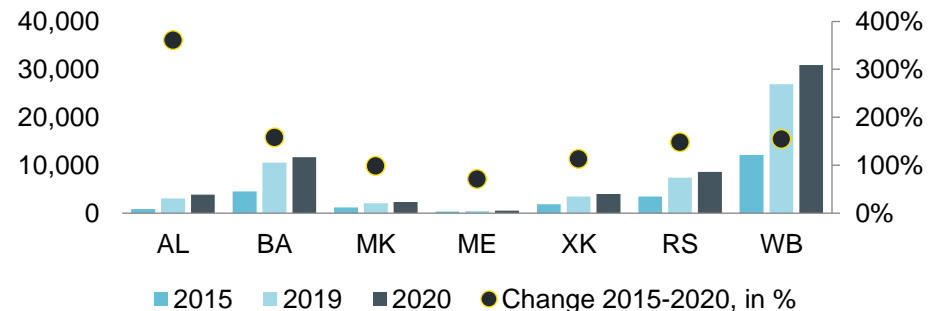
## Consequences

- Further shortages of HP
- Deterioration of provision of health care services
- Questionable whether it is worth training HP if they are destined to move abroad.

Mean monthly earnings, pps, 2018



HP from WBs in Germany



Source: Eurostat, DE Stats.



## Case Study 2 of Triangular Relationships: IT Professionals

### Facts

- Emigration of ITs to DE more than doubled: up to 2,700, ( rise of 170% for 2015-2020)
- Enrolment in IT programmes: up to 6% in 2019.
- Online Freelancers: increases fast (e.g. Serbia up to 3,5 per 1000 inhabitants)

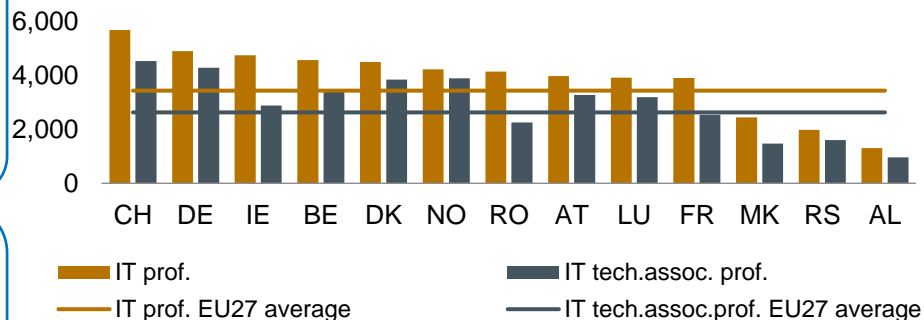
### Why ITs leave

- Emigration because of better earnings and working conditions abroad, but
- part is coming back and starting their companies;
- part establishes business connections and attract foreign companies to invest in WB6
- Recent graduates, via remote work, offer more services to foreign companies abroad, without the need to emigrate

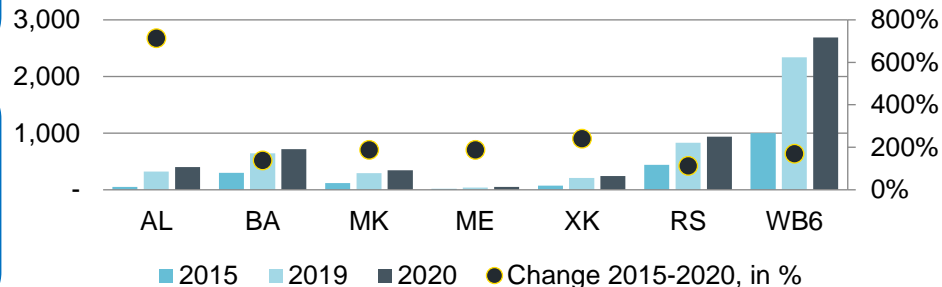
### Consequences

- Share of ICT sector to GDP, up to 4% in 2020.
- Share of FDI to ICT: up to 7% in 2020
- Contribution of IT sector to employment: low (3%), but rising by 50% over 2016-2020)

Mean monthly earnings, pps, 2018



ITs from WB6 in Germany



# PROGRAMMES COMBINING SKILLS DEVELOPMENT WITH MOBILITY

Existence of (mostly private) education/training offers that combines training investment with migration prospects

- **DEKRA Academy**, one of the largest private education providers in Germany, is operational in Albania (2015) and Kosovo (2019) to offer professional training for nurses as well training courses in German language
- **Heimerer College** is another training provider in healthcare professions since 2010, accredited by the Kosovan authorities: dual-track model, training students for labour opportunities in Germany and for the local Kosovo labour market
- **DEKRA Working Group** is also engaged in recruitment process in Bosnia and Herzegovina, North Macedonia and Serbia
- Importance of **Microsoft Development Centre** in Serbia since 2005: **Semos Education Serbia** provided free online training for 5,000 young people in a project (within the framework of **Microsoft Global Skills**), through mentoring workshops and training related to several ICT occupations (Software Developer, Data Analyst, IT Administrator, AI Practitioner, etc.)

# **PROJECTING LABOUR SUPPLY AND LABOUR DEMAND: 2019 – 2030 SCENARIO ANALYSIS**



# PROJECTING LABOUR SUPPLY AND LABOUR DEMAND

## 2019 – 2030: SCENARIO ANALYSIS (LEITNER, 2021<sub>B</sub>)

- **Base scenario:** extrapolation of past trends (labour supply & labour demand): in most countries: switchover points from 'excess labour' to 'labour shortage'
- **Labour supply policies:**
  - Labour market policy scenario: increasing activity rates
  - Improved education scenario: upgrading educational attainment
- **Labour demand policies:**
  - Structural change scenario: upgrading skill-content of labour demand
  - High GDP growth scenario
- **Development scenario:** this scenario combines the four active policy scenarios; tailored to different countries' needs, i.e. upgrading of labour supply and labour demand side through educational and activation policies; and through industrial/regional and other growth policies

# WHAT CONCLUSIONS AND POLICY RECOMMENDATIONS?



## Recommendation 1: Narrowing the gap in economies and labour markets between WB6 and main destinations

- ✓ a **sustained development strategy** and expansion of economic activities that need well-trained and educated workers
- ✓ economic leapfrogging in the context of '**near shoring**' in post-Covid period by attracting higher foreign direct investment with a stronger impact on employment
- ✓ cooperation between foreign and domestic companies to facilitate technological spill overs, avoiding being stuck in a '**functional specialisation trap**' in low-value added functions
- ✓ using the **comparative advantages** (geographical position, cheap labour), but also 'soft' factors such as cultural proximity and the reputation of the 'skilled/ hard-working workers'
- ✓ a **structural shift in the economy** from labour to skill-intensive activities which could counteract skilled emigration and retain skilled labour force
- ✓ improving attractiveness of **peripheral regions** (infrastructural connectivity, governance, business support, facilities for health and educational/training needs)



## Recommendation 2: Adjusting employment policies to the needs of domestic and international labour markets

- ✓ implementing strong **activation policies** (especially women, low skilled), and active labour market policies for youth for better skills-jobs matching
- ✓ better **monitoring of skills and occupations in demand and supply**, both at national and international level
- ✓ exploiting the potential of **online labour markets** and digital platforms, with strong investments in **digital and ICT skills**, and training schemes with domestic and foreign companies
- ✓ providing specific incentives and easy start-up conditions for companies to support the development of **selected economic sectors with high potential**
- ✓ levelling up the **employment conditions in both public and private sectors** in terms of job quality and working conditions



### Recommendation 3: Adapting education and training policies for producing a modern and skilled workforce

- ✓ further **investment into education/training** to improve quality and relevance, aligning better with the skill needs especially of the private sector
- ✓ adapting **the educational curricula** and training requirements to new trends in both domestic and international markets
- ✓ Improving **VET quality** through more investment in infrastructure, training programmes and work-based learning
- ✓ developing accessible lifelong learning systems for **upskilling and reskilling adults**, up-grading skills of older age cohorts (ie. acquiring digital skills)
- ✓ promoting **cooperation** with the education and VET institutions of main destination countries (e.g. twinning, dual certification programmes, common curricula, student exchanges, international traineeships)



## Recommendation 4: Tapping the potential of emigrants/ diaspora

- ✓ a **cross-institutional approach** at national level for managing migration and better coordination of policies across all stakeholders (private and public)
- ✓ mobilising the **engagement of diaspora** through investment, business development and know-how transferability
- ✓ promoting the **return – also ‘virtual’** – of migrants abroad, improving the policy framework for the **reintegration of returnees** (short term migrants, permanent migrants and diaspora)
- ✓ negotiating **bilateral agreements** to support migrants abroad, favouring **temporary mobility** and exchange schemes
- ✓ improving **institutional governance**, avoiding back-sliding towards political instability and regional fragmentation



## Recommendation 5: EU's support to WB6 to extend the skills' pool and further invest in human capital formation

- ✓ expanding dramatically **WB6 participation in EU programmes** in pre-accession stage, close to mimicking the position of member states
- ✓ developing new instruments and mechanisms which motivate and **encourage the return** of students/researchers, scientists, professionals from WB6
- ✓ encouraging more **fluid mobility both ways** in the EU exchange programmes to ensure both outbound and inbound mobility between WB6 and the EU
- ✓ further support for **upgrading the research infrastructure** and training/ educational facilities, scientific laboratories, opening of new regional centres of excellence
- ✓ encouraging destination countries to contribute to **skills acquisition** and further **investment in skills development** in the WB6 through EU funding
- ✓ developing programmes combining **skills development with (circular/return) mobility** in sectors with high labour mobility to address skill needs of both countries (ie. Talent Partnerships)

# FINAL MESSAGE

**There is no reason that the WB6 could not in due course follow the example of the successful catching-up processes of the Visegrad countries:**

- ✓ Geographic location, relatively good endowment of skilled labour force, and accession perspective (plus substantial financial, institutional and technical support pre- and post-accession)
- ✓ A strong re-industrialisation process through FDI, integration into international production networks (IPNs), including the next stage of digital skills-based IPNs

## **vital conditions:**

- ✓ anchorage in EU integration /accession process
- ✓ political stability at national and regional levels
- ✓ increasing regional economic integration process