LABOR AND SKILLS SHORTAGE IN CENTRAL & EASTERN EUROPE:

Causes, effects and responses by foreign direct investors

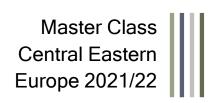
MASTER CLASS CENTRAL & EASTERN EUROPE 2021/22

WU
COMPETENCE CENTER FOR EMERGING MARKETS & CEE



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STRATEGY, INNOVATION, AND MANAGEMENT CONTROL | SUPPLY CHAIN MANAGEMENT

Corporate Partners

We want to thank our partners for the cooperation throughout the year.



Our partners not only make this program possible, but they provided us with real-life examples of management in CEE.



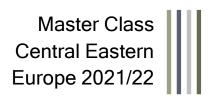






Executive Summary 1/2

CEE has a very tight labor market today and an expected further decline of the workforce does not offer much relief for the future



Labor and skills shortage in CEE was the topic of the **project seminar** of the **Master Class 2021/22** at the Competence Center for Emerging Markets & CEE at WU Vienna. Fourteen students from seven countries and eight WU master programs worked under the guidance of Program Director Arnold Schuh from November 2021 to June 2022 on this project. The aim of our study was to analyze **labor and skills shortages** in the **EU-CEE8 countries (EU-CEE11 without Baltics)** and the **responses of regional players** to these challenges.

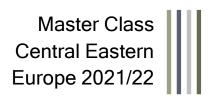
Data collection was based on **desk research** (academic literature, reports, statistics etc.) and **interviews** of executives of 13 multinational companies with (regional) headquarters in Austria. All of the companies can be considered regional players, namely leading competitors in their industries in the CEE region.

The labor market in many of the EU-CEE8 countries is **extremely tight**. CEE is the region with the **second lowest number of unemployed persons** in the world. A dramatic further **decline in working-age population** does not offer relief in the future. On a positive note, CEE governments were successful in raising the **share of the active population** to 65% (Romania) and 76% (Czech Republic) – the EU average is 73%.

Emigration has plagued the economies since the 1990s, especially Romania, Bulgaria and Poland, and it is still an issue. The large (although now shrinking) **wage differential** between CEE and Western Europe has been one driver of emigration. Average hourly labor costs are still **30-75% below EU-27 average** and lure foreign companies to the region. Even **huge increases in wages**, particularly in the lowest cost countries Romania, Bulgaria and Hungary, did not stop the **outflow of skilled people** and the **interest of MNCs** in sourcing from CEE or producing there.

Executive Summary 2/2

Firms respond by up- and reskilling and by offering more options in the way of working to their employees



So the main causes of labor and skills shortage are a **shrinking workforce**, the **wage differential** and the **mismatch** in offered and sought-after qualifictions on the labor markets. Interestingly, the **most-sought after occupations** can be found on both ends of the skills and wage spectrum, namely among **manual workers** in logistics/transportation/production and **engineers** and **IT specialists**.

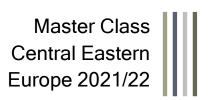
In the interviews nearly all managers confirmed that they are **strongly affected by the shortages**. The most affected countries are the **Czech Republic**, Romania, Poland and Slovenia. Besides the shrinking workforce, they spot the reason for the skills shortage in **weak education systems**. Curricula are too general and do not provide the skills needed on the labor market, creating a mismatch. Especially, the **vocational education** and practice-oriented trainings are underrepresented in national education systems.

The companies respond to the challenges by **upskilling**, for instance by promoting digital and language skills, and **reskilling** employees for a broader task set to increase **flexibility in operations**. To retain them employers are offering more options in their **way of working**, higher wages and more benefits. **Employer branding** on social networks, more cooperation with schools and colleges, boni for recruitments as well as approaching **less represented groups** in the labor market such as women and people aged 50+ are used in recruiting. The firms see themselves ahead of national governments and educational authorities in tackling the shortage problem.

Future initiatives should focus on better aligning the education with the demands of the businesses, especially in the field of **vocational/dual education**, and **facilitating cross-border work and mobility**. To find feasible solutions a higher **involvement of national governments** and the **EU** as well as a closer **cooperation** with businesses and HR service providers is necessary.

AGENDA

This presentation is split into four sections.



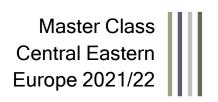


AGENDA



Relevance of this report

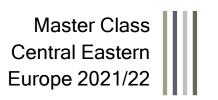
Labor shortage poses a problem for many companies operating in CEE.



- In the last three decades we have seen a continuous expansion of foreign multinationals to CEE. The huge market potential and a well-educated workforce at lower-costs were main drivers of this process. Foreign investors were welcome to reduce the high unemployment rates due to the transformation of their economies.
- High unemployment rates were a major challenge for CEE governments after the global financial crisis again, but from 2013 on the rates where falling. The COVID-19 pandemic only briefly interrupted this trend (Schuh, 2021).
- Today local and foreign firms are confronted with an unprecedented labor and skills shortage in the region which threatens the expansion of operations and businesses. It seems that the traditional "CEE business model" based on low-costs has reached its limits. Foreign and local firms are competing for a shrinking labor and skills pool. As the whole of Europe is affected it is difficult to find a way out. Labor markets have turned into candidate markets with rising wages and a stronger demand for flexible working arrangements. The availability of labor has become the determining factor for the expansion of businesses and new investment decisions.
- In our report we document the **developments** in the CEE labor markets, identify **causes** of shortages and explore the **responses** to the challenges by foreign direct investors.

FDI in CEE

Foreign direct investors are not only affected by labor shortages but they also shape local labor markets via their demands.



FDI is a driver of economic development

- Growth in FDI brings capital and technology to target firms and industries and drives up demand for labor.
- FDI is leading to higher wages, employment and productivity. But it is also responsible for increased wage inequality, mostly due to an increase in the skill premium (= difference between wages of skilled and unskilled workers).
- Increasing the demand for skilled labor results in higher overall labor demand, which is an issue in countries where skilled labor is scarce, and the technological gap is substantial.

Labor is still a key factor for investing

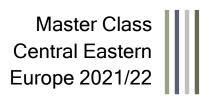
- Among the top five factors when searching for a location are employee motivation, employee productivity and employee qualifications
- A significant policy gap with the best EU-17 countries lies in the skills shortage. If this was closed, the gains in FDI inflows as share of GDP could increase by 15%.
- After the EU accession FDI grew rapidly to about € 700 billion.
- Considering FDI stock as a share of GDP, new CEE member states stick out with much higher percentage values vis-à-vis other EU countries.

Corporate View

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FDI and labor shortage

FDI promotes upgrading of national industries and upskilling of labor.



Advantages

- FDI brings along superior technology from more technologically advanced countries.
- It tends to shift labor composition away from less skilled to more skilled labor with the aim to raise productivity - automation, IT specialization and digitalization are good examples for it (in line with the results from our interviews with RBI and Erste Bank).
- Advanced technology may require overall less labor, therefore leading to a decline in overall labor demand.
- It increases job growth in the long term by enhancing labor productivity.

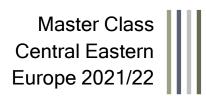
Disadvantages

- FDI decreases the number of jobs in the short run by introducing labor-saving technology.
- Increase in inequality within CEE countries foreign firms compete for skilled labor with the highest ability, making it difficult for domestic firms to hire those talents.
- Domestic firms are likely to struggle with increases of average wages driven by foreign MNCs.

Corporate View

Aim of this report

The following research questions were guiding our work.





What developments can we observe in CEE labor markets?



How do human capital, education, and skills compare in the region?



What is the outlook?



How are foreign direct investors in CEE affected by shortage?



What is causing the current shortages in CEE labor markets?



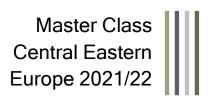
How do foreign direct investors respond to labor/skills shortage?



Are all countries/industries of the region affected in the same way?

Methodology

This report consists of secondary and primary data.



1

We have made a general analysis about labor and skills shortage in **eight countries of the CEE region (EU-CEE8)** through secondary research including reports, studies, statistics and general information. Poland, the Czech Republic, Slovakia, Hungary, Slovenia, Croatia, Bulgaria and Romania were chosen for economic importance for Austria.

2

To learn more about the impact on foreign firms and their dealing with the shortages, we conducted interviews with foreign direct investors active in the region as well as organized insight talks with our corporate partners. Additionally, we had several guest lectures during our visits to Bratislava, Ljubljana and Bled.

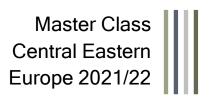
AGENDA



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Labor markets in CEE

We take now a closer look at developments in EU-CEE8 labor markets.



Research questions addressed



What developments can we observe in EU-CEE8 labor markets?



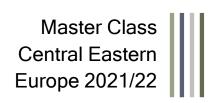
What is the outlook?

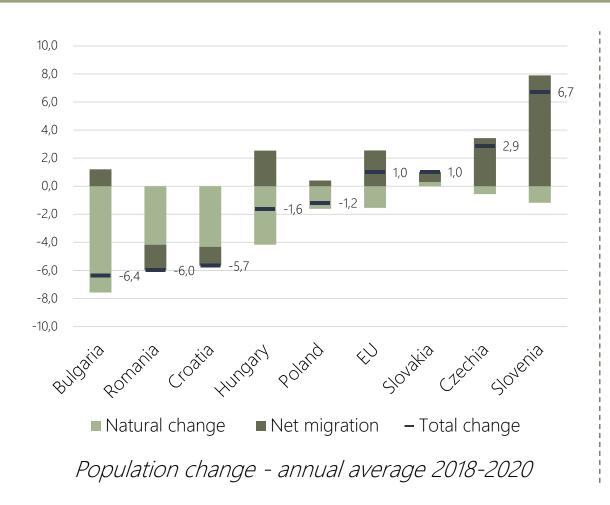
Focus areas

Demographics – now and in the future
Active population
Net migration
Unemployment trends
Job vacancy
Wage developments

Demographics - Overview

Especially in Southeastern Europe the populations are shrinking due to negative natural change and net migration.

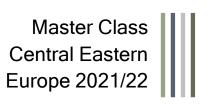


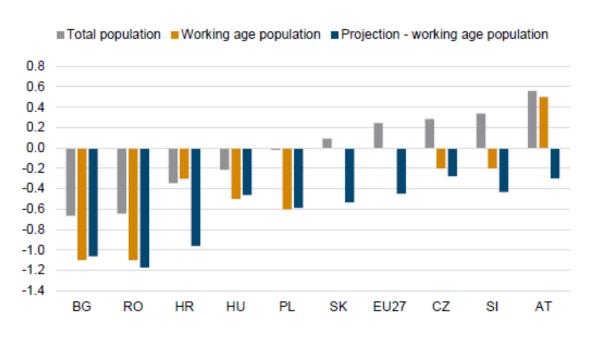


- For most of the observed countries, the population was shrinking over the past years.
- There is a negative trend in natural population growth, due to the decreasing number of births and increasing number of deaths.
- In addition, negative net migration, particularly in Bulgaria, Romania and Croatia, contributes to declining population trend.
- Moreover, since younger age groups are emigrating and the countries are experiencing the aging of the population, a decrease in the working age population is even stronger than in the total population.

Demographic trends

In the next 20 years a decline of up to 25% of the working-age population is expected especially in Bulgaria, Romania and Croatia.



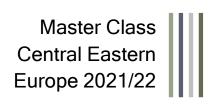


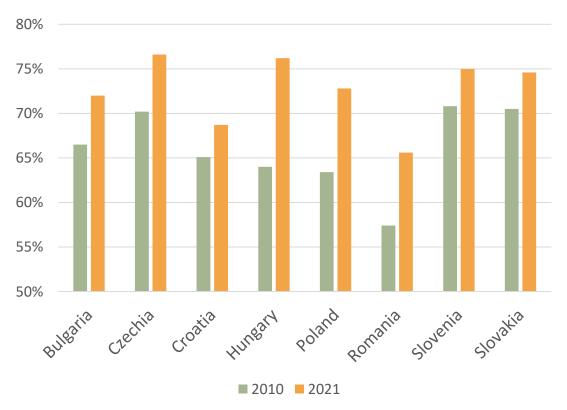
Annual average growth rates of total population and working-age population (15-64), 2002-2019 and projections of working-age population (15-64), 2019-2040

- According to Eurostat forecast, in countries that are already experiencing a decreasing trend in working-age population, this trend is expected to continue over the following years. This is particularly relevant for Romania, Croatia and Bulgaria.
- Projected negative developments of the working-age population are attributable to negative population growth
 declining birth rates from already low levels and higher mortality rates due to the age structure of the population.
- Thus, the effect of shrinking working-age population on present labor shortages might increase even further.

Active population

The share of the active population in the EU-CEE8 countries is increasing.



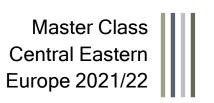


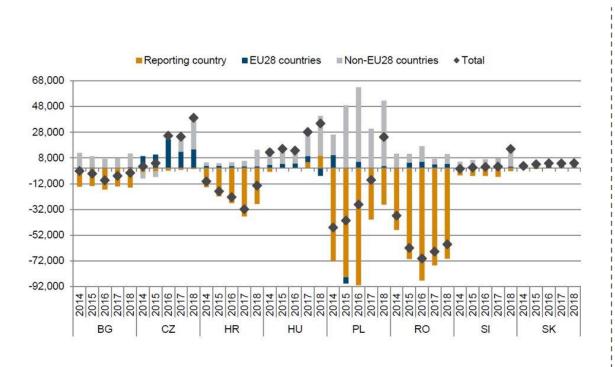
Percentage of active population by citizenship, age group 15 to 64 years

- Over the past decade, more and more people have been pouring into the labor market due to government policies, corporate efforts, and low unemployment rates.
- Hungary (12 percentage points), Poland (9pp) and Romania (8pp) have experienced the biggest increase of active people in the labor force.
- Czechia, Hungary, Slovenia and Slovakia perform even better than the average of all EU27 countries (74%).
- In Romania and Croatia, there is still a great potential to integrate more people into the labor market.

Net migration

Emigration is an issue, but not in every EU-CEE8 country.



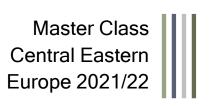


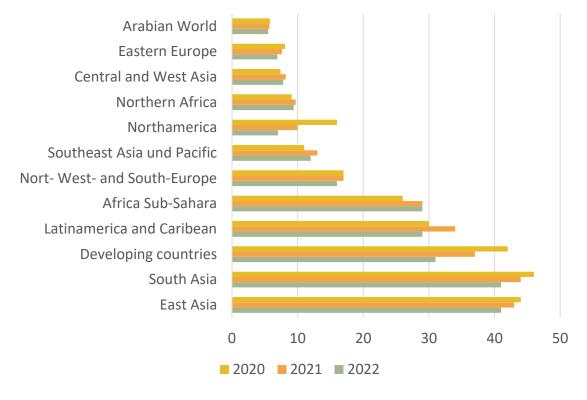
Average net migration per year by citizenship, 2014-2018

- According to Eurostat statistics data, within the last 10 years, 3 out of 8 observed CEE countries experienced a negative net migration:
 - Croatia: -112,000 people
 - Poland: -228,000 people
 - Romania: -424,000 people
- The same data shows that there is sometimes a significant age difference between emigrants and immigrants. In Bulgaria and Croatia, this difference is on average 5 and 2.5 years, respectively, which means that young emigrants are replaced by older immigrants.

Unemployment trends

Labor markets have been resilient during the pandemic.



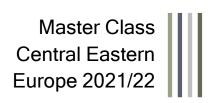


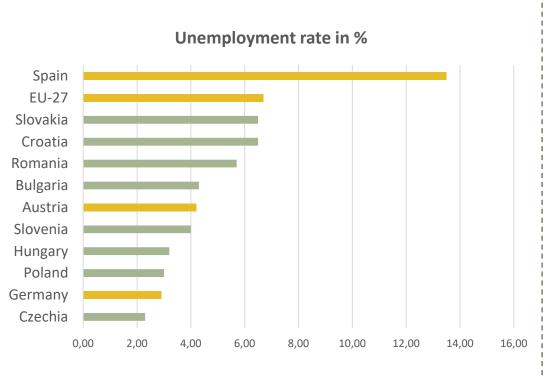
Number of unemployed by world region in 2020 to 2022 (in millions)

- The unemployment rate is used to measure the labor supply utilization. It indicates an economy's capacity to create jobs.
- Eastern Europe has the second lowest number of unemployed people of all world regions.
- Unemployment rates have been resilient despite the pandemic - nevertheless they are expected to fall further in most CEE countries.
- Croatia and Romania are amongst the countries with the highest expected growth in unemployment rate, followed by Hungary, Poland and Slovakia.

Unemployment trends

All EU-CEE8 countries are below the average EU unemployment rate.



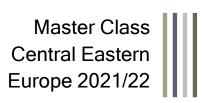


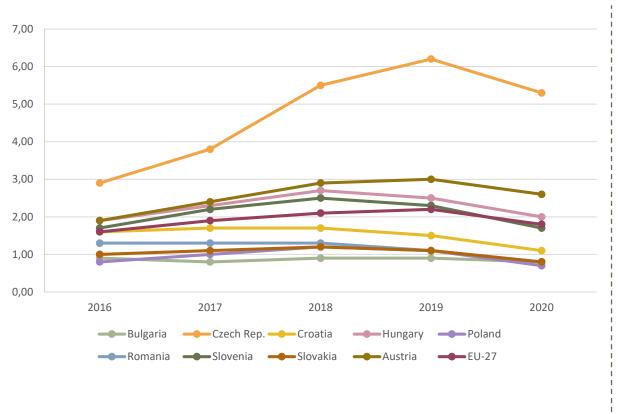
Unemployment rate EU-CEE8 and Europe country comparison (2022) in %

- The CEE region has experienced a strong decline in unemployment. This has been particularly notable in the Czech Republic. In most CEE countries unemployment fell below 4.5% in 2019 (in comparison Austria = 4.5%) and in the Czech Republic even at 2%. Even Slovakia and Croatia (5.8% and 6.6% respectively), are below the EU average of 6.7%.
- However, due to the COVID-19 crisis, we could observe an upward trend in unemployment rates across all EU-CEE countries in 2020.

Job vacancy rate

Even though job vacancy has been high and stable in the past few years, it might see a downward trend after the pandemic.



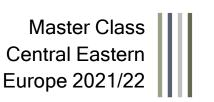


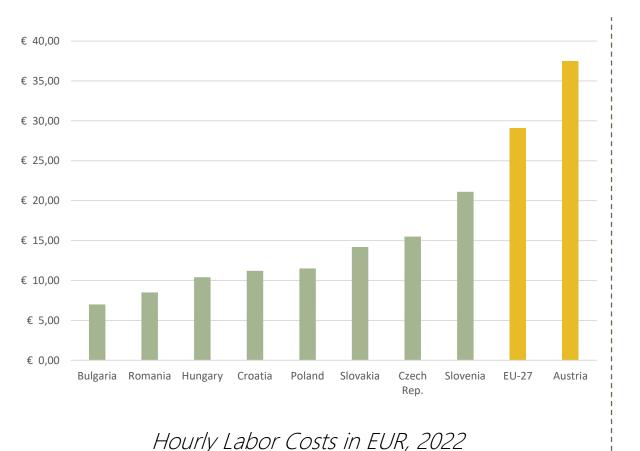
Job vacancy rate, annual average in %

- A job vacancy is defined as a paid post for which the employer is taking active steps to find a suitable candidate from outside the firm.
- Particularly in Czech Republic (6.2% in 2019), but also in Hungary and Slovenia, job vacancy rates were on a high level compared to the average EU level (1,6 % - 2,2 %) from 2016 onwards.
- Only in 2019 the labor market situation started to stabilize in most countries. Since the outbreak of the Covid-19 pandemic the job vacancy rate has shown a downward trend in all EU-CEE countries.

Labor cost

Low labor costs still lure foreign investors.

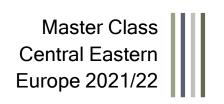


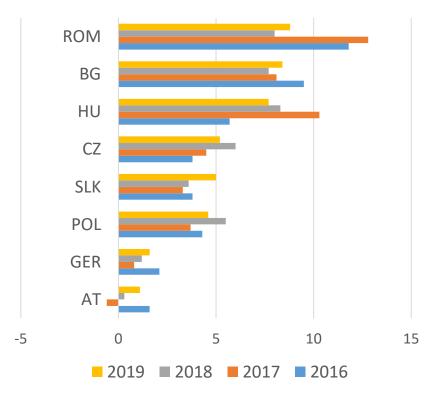


- Labor costs in Central Eastern Europe are still the lowest in the entire European Union.
- Between the EU country with the lowest cost (Bulgaria, €7.00 in 2021) and Austria (€ 37.50 in 2021), there is a difference of € 30.50. Even compared to the EU-average – € 29.10 in 2021 – Bulgaria is offering cost savings of €22.90.
- Unsurprisingly, low labor costs are still a leading motive to invest in Bulgaria and other CEE countries.

Wage developments by country EU-CEE8

Hourly wages have been growing since the global financial crisis in 2009.



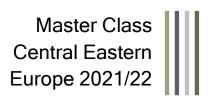


Average real wage growth in selected countries in %

- We can observe increasing real wages again since the early 2010s. The positive trend shows that most CEE countries have managed to recover from the 2009 market shock. The highest increase can be observed in the least developed CEE countries, Bulgaria and Romania and they are also those with the lowest wage levels among the EU-CEE8.
- However, in Hungary, the average real hourly wages have fallen by
 10% overall between 2010 and 2019.
- Wage increases vary greatly across countries. However, despite the growth average wages in EU-CEE8 remain below those of Western Europe with the closest follow-up being Slovenia with 17.7€/h in 2021 (in comparison to Austria 27.5€/h)

Wage developments by industry

Real estate and IT are the industries with the fastest growing wages.





Wages in real estate were increasing the most from 2010-2016 (27%), especially in Poland, Bulgaria and Romania. However, employment in this sector decreased across almost all EU-CEE8 countries (except Croatia and Slovakia).



Wages also increased by a large margin in "business services" and "information & communication" Employment grew strongly in these industries in the entire region (in some cases by 30-40%). Reviewed literature suggests that rising wages in these sectors strongly correlate with growing labor demand.



The lowest increase could be observed in public administration with only 2% cumulative increase since 2010. It seems that that governments were economizing after the financial crisis.



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Wage increases have also been lagging in technical services, construction and the financial sector.

Corporate View

Wage developments - manufacturing

Central Eastern

Europe 2021/22

Master Class

The manufacturing industry has witnessed above average wage growth.

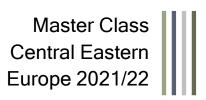
- Moving manufacturing to CEE in order to produce for the local market and exports is a major motivation among foreign MNCs, particularly in the automotive and metal processing industry. Developments in the manufacturing sector have been following similar trends within all EU-CEE8 countries. However, there are still many differences within the industry between CEE countries.
- The manufacturing industry has witnessed above average wage growth overall. However, there is strong heterogeneity between manufacturing specializations. For example: Metal production and processing (+35%) compared to pharmaceutical (+3%), or coking and refining (-3% - the only sector with a negative development).
- Wage levels tend to be highest in coke and refined petroleum in most EU-CEE8 countries, with the exception being Croatia and Slovenia. Installation machinery has a similarly high level in Poland and Romania, whereas in Slovenia, the **pharmaceutical industry** offers the highest wages in the manufacturing sector. For Croatia, the manufacture of computer equipment offers the highest salaries. The lowest paying sectors are textile, wood product and furniture manufacturing almost everywhere in the region.

AGENDA



Shortages in labor markets in CEE

We look at the following focus areas in particular.



Research questions addressed



What is causing the current shortages in CEE labor markets?



Are all countries/industries of the region affected in the same way?



How do human capital, education, and skills compare in the region?

Focus areas

Causes

Current developments

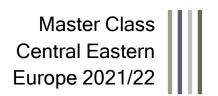
Geographic differences

Differences by job types and industries

Actions of CEE governments

Causes of labor shortages in CEE

Reasons for difficulties in recruiting and retaining qualified applicants.





Dynamic external and domestic demand

CEE businesses have faced a higher export and market demand. Therefore, the demand for labor is high.



Lower salaries and wages

In comparison to Western European countries, CEE countries offer lower wages for the same task.



Insufficient level of education for most-sought after industries

For example, graduates in the field of IT are in high demand but the education system is not producing enough of them.



Shrinking working-age population

The decrease in the working-age population is resulting from emigration and low birth rates.



Missing work-life balance

Younger people want more work flexibility, more free time and additional work benefits.

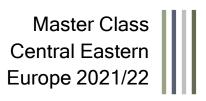


Inadequate economic policies relating to missing legal framework

The protection laws of foreign direct investors in some CEE countries are relatively weak.

Current developments causing the shortages

Job polarization and partial job de-routinization create shortages in specific tasks.



Increasing Job Polarization

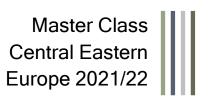
- Jobs are becoming increasingly less manual work intensive as it is the case in the rest of Europe.
- There is a U-shaped growth of wages in CEE, at the low and high ends. Especially the middlewage occupations suffer a lot. There are efforts of structural change and education expansion. In particular, the growing demand for a second language skill is high. However, these solutions cannot prevent this polarization.

Partial Job De-Routinization

- Unlike in the rest of the EU, "routine cognitive" task employment is growing.
- Therefore, offshoring was a positive force that has routinized middle-skill jobs. There is also a demand for low-skilled non-routine manual work, which is not yet prone to automation and can be performed by humans relatively cheaply. That leads to shortages in high- but also lowskilled workers.

Geographic differences

The geographic labor force distribution impacts the labor shortage heavily.



- The labor markets differ strongly, mostly between Central European Countries (Visegrad 4) and Southeast European Countries.
- Companies are facing problems regarding the mismatch in the location of the workforce. The workforce could be often found in the country. However, they are located elsewhere, and staying in their hometown is more important than moving for work. Demographic changes in countries are another common cause of labor shortage. Locals are either too young or old to work, and, thus, out of reach for companies.
- Especially working conditions become more important and young people tend to move to areas or countries where they have better working conditions and salaries.

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Corporate View

Differences by job types and industries

Master Class Central Eastern Europe 2021/22

There is wide variation in the scarcity of certain job types and industries.

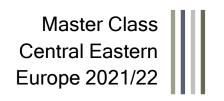
- According to a study made in 2020, there are significant differences in labor shortages between job types. Workers and engineers are harder to find compared to the other job areas. In all cases the main reason for labor shortages was competition among employers, however, also low wages and lack of skilled labor were rated among the top reasons. Industries that suffer the most are the high-tech industry, construction, hospitality businesses, services, shipping, and the IT sector.
- The table underneath shows the top 3 jobs hard to fill in percent per country (according to the response of surveyed HR managers in the countries). Engineers and manual workers are currently the most sought-after specializations.

Work type/ country	HU	CZ	RU	SK	AT
Manual worker	36,8	36,4	28,6	29,9	10,0
Engineer	20,9	11,0	34,9	21,4	15,0
Salesperson	11,7	8,2	7,9	10,6	5,0

Corporate View

Responses by CEE governments

Investment in digitalization and vocational education as main measures taken by governments



Investment in R&D/Digitization

Although many countries in the CEE region are lagging behind the EU average in R&D and digitization (except for the Czech Republic and Slovenia), there have been some initiatives for some time trying to increase the knowledge of the population in this area.

Bulgaria, for example, is focusing on further training in these areas with its "Digital Bulgaria 2025" program.



Investment in Education

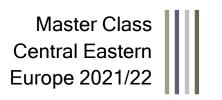
Some countries in the CEE region are actively pursuing further developments in the field of education. Croatia is investing money in scholarships for vocational secondary schools that provide training for 62 high demand occupations.

In **Poland**, they offer a program specifically designed to promote girls in the fields of science, technology, engineering and mathematics.



Responses by CEE governments

Other measures were also taken to alleviate labor shortage.



Investment in family

Some EU-CEE countries, such as Poland and Hungary, are trying to tackle the problem of labor shortage and population decline with their own family policies.

Poland, for example, has a universal child benefit scheme, in which families receive €120 per month for each additional child. In Hungary, families receive a total of €30,000 if they have three children within 10 years.



Investment in minimum wage

In EU-CEE countries, the minimum wage plays a greater role than in other **EU countries** as there are significantly more low wage earners, both relatively and absolutely compared to the population.

Higher minimum wages allow the income gap between different occupations not to become too wide, thus, keeping workers in shortage occupations.

Corporate View



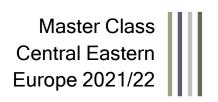
AGENDA



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Interviews with company representatives

The interviews were intended to get a better understanding of the individual company's point of view.



Research questions addressed



How are foreign direct investors in CEE affected by shortage?



How do foreign direct investors respond to labor/skills shortage?

Focus areas

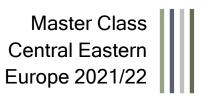
Labor and skills shortages

Responses by MNCs

Measures

Research on labor and skills shortage in CEE

Regional players with headquarters in Austria shared their view on labor and skills shortages with us.



Target groups

- Western multinational firms active in CEE region
- Group HR/Head of CEE country HR
- CEO/CEE division head

Interviews

- Interviews took place between May 8 to May 24, 2022
- 13 total interviews were held in English or German

Additional research

- Insight talks with CEE companies
- Insights through company visits

Present in 15+ countries in the CEE region





























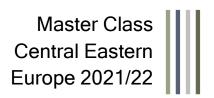


Regional players from 10 different industries

Introduction

Research on challenges of labor shortage in CEE

Interview covered impact, responses and recommendations of those regional players.



Labor and skills shortages

- How is your company affected by labor and skills shortages in Central and Eastern Europe?
- Which activities of the value chain, positions and countries are mainly affected?
- Did the shortages already threaten/disrupt operations?
- What are the main reasons for these shortages?

Responding to those challenges

- What are the major measures taken in retaining and recruiting new employees?
- Is further qualification something that makes sense in the context of shortage?
- Do shortages affect the attractiveness of countries as an investment location?

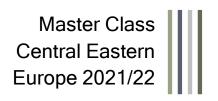
Measures coping with challenges

- What can national governments, industry associations, HR service providers or the European Union do to improve the situation?
- Where would you start?

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Consequences of labor and skills shortages

All interviewed firms are affected by shortages and their consequences.



The interviewed companies confirm what the literature analysis has shown before: In the CEE region, companies are affected by labor and skills shortages. This is manifested in the challenges they face, especially in areas of supply chain, IT or logistics.

They are facing rising wages, increasing difficulties to fill positions and a shortage of adequately qualified employees, while struggling with delayed delivery times and increased pressure on existing employees related to higher workloads.

Most affected activities

- 1. Supply chain
- 2. IT (but rather due to international sourcing)

Most affected positions

- 1. IT (46 % of interviewed companies)
- 2. Engineering
- 3. Logistics
- 4. Simple activities (drivers, warehouse...)

Most affected CEE countries

- 1. Czech Republic
- 2. Romania
- 3. Poland
- 4. Serbia
- 5. Slovenia

ASPIAG

Education and demography as bottlenecks

Job seekers don't have the skills that would be needed.

Master Class Central Eastern Europe 2021/22

- Demographic trends are a key factor in labor shortages.
 - The increasingly aging society results in fewer people available on the labor market.
 - As a result, there is a shortage of important human resources, which companies compensate for by means of digitization and automation, for example.
- Skills shortages are primarily due to education and the future perspectives of young people in the respective countries.
 - Due to the lack of education, people have not developed the skills that would be urgently needed in the labor market.
 - As a result of better job opportunities in Western countries, an increasing number of young people decides to leave the CEE region (especially in Serbia & Romania).

Quote on Slovenia:
"The (labor-)market is empty"

RACLE

"The shortage had no impact so far"

"Students graduate with not enough knowledge. additional trainings are needed"

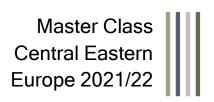
RB

EIWAG

"Wage demands in CEE are higher than in Austria"

Finding and retaining talent

Focus on retaining employees and broad mix of measures for recruiting new ones.





Measures retaining employees

- The measures of the companies are different, but all try to satisfy the needs of the employees to boost their level of satisfaction.
- Companies focus on increasing flexibility in the work context by enabling hybrid working.
- Besides benefits (cafeteria, health benefits), there is also a strong emphasis on appreciating employees through honors, celebrating anniversaries or highlighting good performance.



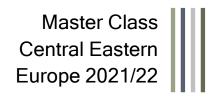
Measures recruiting employees

The mix of methods is becoming increasingly important:

- Employer branding on social networks as an important part of reaching new employees
- Some companies have also implemented a bringfriend system
- Increasingly, they are focusing on stronger cooperation with schools and universities

Flexibility at Pivovarna Laško Union, Slovenia

Employees can choose what work arrangement fits them best in agreement with their department head.



Gregor Rajšp Human Resources Director, Pivovarna Laško Union, Slovenia

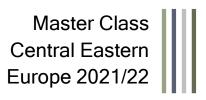
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Rajsp (2022)

Importance of reskilling and upskilling

Companies train employees on their own, if needed skills are not available.



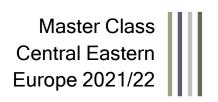
Continuing education is important to solve the problem

- To overcome the problems of shortages and the increasing demand in the area of digitization, on the one hand, upskilling is taking place. On the other hand, companies are also paying close attention to reskilling employees in order to increase the flexibility in their operations.
- Cooperation with special institutions for the further education of employees.
- Expanding own units for training & education
- Companies offer further training for every position (e.g., language courses or further training from "normal" worker to electrician).

- ASPIAG mentioned that buddies, mentors and colleagues are an important part for making job education easier. This also increases the opportunities for advancement: At REWE, 70% of managers were trained within the company.
- Companies mentioned that they are reaching out to universities to recruit students even before finishing their studies to get a hold of talents.
- Furthermore, inquisitive students can be identified in this way. This is done through **internships** (e.g., Erste Bank), collaborations (e.g., Reiwag Facility Services) and case studies with universities (e.g., Henkel).

Set of measures at Mondi

Tackling the challenge of labor shortage as biggest employer in town through supporting employees and local communities.





Štětí plant in Czech Republic

- Strong emphasis on people development
 - Improving skills and education of the employees by providing programs for future leaders and on-the-job rotations
- Women and older working-age population (50+) put in focus
 - Encouraging and enabling less represented groups in labor market to realize their potential through providing flexible working hours
- Building pride
 - Fostering employees' pride for both their own and company's accomplishments
- Supporting local communities
 - Creating a positive environment for employees to benefit from outside of work-hours

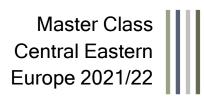
Corporate View

- Keeping up with the technology trends
 - Investing in automatization and digitalization

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Narrowing down recruiting trends

Companies react by recruiting new employees in more innovative ways.



Importance of labor/skills shortages on appeal as an investment destination

- This depends very much on the industry, valueadding activities and size of the company.
- For Essity, it's not a problem in the countries the interviewee was responsible for, there are only small marketing & sales units and no production.
- For grocery retailer REWE demographic trends and the shortage of workers who have a somewhat lower level of education are important.
- Thanks to a well-educated workforce the construction group STRABAG invests in Serbia, Bulgaria and Romania.

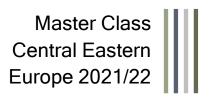
The regulatory framework should allow companies to innovate in work design

- Henkel: "Policymakers are reacting extremely slowly in the implementation of working environment related legislative and educational changes. "
- Lasko: "We need to have a bigger toolbox!
 Companies are more innovative regarding work design compared to government-regulation!"

"Don't just follow, rather influence the trends" - Henkel

Improvements in educational & regulatory environment

National governments can create a more favorable investment and business environment through improving the education system.



Education

- Raise interest for technical professions, especially among young girls
- Provide and raise awareness of practical experience (apprenticeships, dual training models) and training opportunities, by using dual education models

Working Flexibility

- Facilitate obtaining working permits and cross-border working
- Support mobility
- Improve regulatory environment
- Stronger emphasis on remote working

Incentives

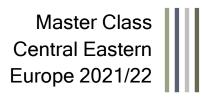
- Increase wages
- Adapt to inflation
- Support IT students: scholarships/incentives for studies and trainings in much needed positions/fields)

62% of interviewed companies emphasized the importance of improvement in education – ranging from investing in the overall education system to the significance of practice-related programs

→ Make (vocational) education more attractive (e.g., apprenticeship system) to supply future professionals

Favorable FDI Environment

Low wages that attracted FDI originally are now backfiring regarding filling local positions.













3 out of 5 companies that underlined **legal hurdles** for international work operate in **retail industry**

"There are major hurdles for international work: legal framework - national and EU-wide - difficult"

DM

Inadequate compensation in CEE countries and, thus, **not being able to compete** with Western countries was an issue for

40%

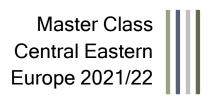
of surveyed companies. This mainly affected the areas IT, digitalization and automation.

"There are no chances to get people from the west, because the wages are at a lower level than in the west"

Mondi Czech Republic

To steer the change, a stronger cooperation between national governments, HR service providers and the European Union is required

Conclusions



A shrinking labor pool is threatening business expansion in the region.

Labor and skills shortages are on **top of the management agenda** of regional players in CEE. Our analyses of labor markets and interviews of executives give a coherent picture: the EU-CEE8 labor markets are empty and it is difficult to fill positions on the **low and high end of the skills spectrum**.

The CEE region has been experiencing a constant **population decline**. This is especially pronounced in Southeastern Europe. The good news is: the **share of active population** between 15 and 64 has **increased in all EU-CEE8** countries over the last decade.

Some of them have still good potential to grow, for others, the increase is starting to level off. But this depends mainly on measures taken by governments as well as flexibility and innovativeness on the side of the businesses.

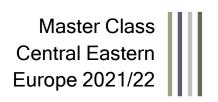
Unemployment in the EU-CEE8 countries is amongst the **lowest worldwide**. Additionally, there is a high number of job vacancies in some of these nations. Especially **younger generations** are leaving their home countries, leading to a shrinking labor pool.

A tight labor market is **pushing wages up** and spurring **competition for candidates** between firms. The most sought-after positions are **manual workers**, **engineers and sales-personnel**.

Companies across all industries in CEE countries feel the impact of labor shortages. Although present in each occupational area, most affected are IT and logistics sector.

Conclusions

New and innovative approaches and close cooperation between the key players are needed to solve the shortages.



For dealing with difficulties in retaining employees and recruiting new ones in this **candidate market**, the companies have become **more innovative and flexible** by responding to the increasing demands of employees and candidates.

Firms have become more active in searching for the right candidates: **Employer branding** on social networks, boni for recruitments, bring-your-friend systems and closer **cooperation** with schools and universities are popular.

The firms see themselves far **ahead of national governments** in tackling the problem of shortages and show an unprecedented flexibility in accommodating employees and candidates.

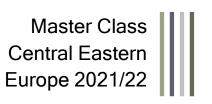
Future initiatives should focus on education in general and in practice-related fields, facilitating cross-border work and mobility as well as providing stronger incentives in terms of wages and financial support for young people in most-wanted sectors.

Hence, a higher level of involvement of national governments and EU, and an active cooperation with companies and HR service providers is necessary to create a good match of supply and demand in CEE labor markets.

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Overview of sample

The sample for the interviews included different industry types and sizes.



Company	Industry/Business	Main products/services	Revenues	Presence in CEE
Henkel	Home & Beauty Care	Laundry & Home Care, Beauty Care and Adhesive Technologies	€20 billion	10 countries
Reiwag Facility Services	Facility Management	Cleaning and maintenance of buildings	€87.3 million	6 countries
Böhringer-Ingelheim	Pharmacy	Human pharma business, animal health, biopharmaceutical production	€1.47 billion	All countries
DB Schenker	Logistic Service Provider	Global Transport and Supply Chain solutions	€17.67 billion	14 countries
ASPIAG (Spar International)	Retail	Supermarkets	€6.45 billion	3 countries
Essity	Hygiene	Tissues, diapers, feminine care, wound care, etc.	€12.2 billion	17 countries
Strabag AG	Construction	Construction (e.g., flight operation areas, roads, etc.), development, engineering, management	\$18.09 billion	8 countries
Oracle	IT	Software and cloud solutions	€40.5 billion	All countries
DM	Retail	Drug stores	€12.27 million	10 countries
Mondi Czech Republic	Packaging	Packaging solutions and paper	€7.7 billion	11 countries
Raiffeisen Bank International	Banking and financial services	Corporate banking services (e.g., investments, loans, accounts, cards, etc.)	€1.4 billion	5 countries
Erste Bank	Banking and financial services	Corporate banking services (e.g., investments, loans, accounts, cards, etc.)	€4 billion	5 countries
REWE Group	Retail	Supermarkets	N/A	4 countries

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