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Western Balkans Labor Market Brief 2023

Special Topic:
Disincentives to Formal Work – Modeling Social Benefits and Labor Taxation for Low-Income Households

August 2025

Western Balkans Labor Market Brief for 2023 highlights:

- This report uses data from national labor force surveys to examine key labor market indicators for the six Western Balkan economies – Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia – and selected European Union (EU) countries – Austria, Bulgaria, Croatia, and Hungary in 2023. At the time this report was prepared, that was the latest year for which official statistics were available for all six economies.

- Economic growth in 2023 slowed across all Western Balkan economies, driven by the ongoing cost-of-living and energy crises. Inflation remained high, at 9%, eroding real incomes and dampening consumption. However, despite the challenging macroeconomic environment, most labor market indicators continued to improve.

- Activity rates increased in most countries, driven mainly by gains among women. Nevertheless, the regional average (66%) remained well below the EU average (75%). The gender gap in labor market participation stood at 18 percentage points, with only Albania, Serbia, and Montenegro nearing EU female activity levels.

- Employment rates rose across the Western Balkans, reaching a regional average of 59%, still lagging behind the EU's 70%. Gains were recorded among both men and women, with older workers (55-64) experiencing the strongest improvements.

- Unemployment reached a historical low of 11.3% across the region but remained relatively high by EU standards. Youth unemployment and long-term unemployment continue to pose significant challenges, with 63% of the unemployed being out of work for over a year.

- Nominal gross wages grew strongly in 2023 across all economies, averaging 16%. This was partly driven by high inflation, and partly by tightening labor markets and minimum wage hikes, particularly in North Macedonia and Albania. However, despite improvements, wage levels remain substantially lower than in most EU comparator countries.

- Real net wages also rose in 2023, reversing the declines from the previous year. Kosovo recorded the strongest increase in real net wages, followed by Bosnia and Herzegovina and North Macedonia.

- Real unit labor costs increased in all Western Balkan economies due to higher real wages and weak GDP growth. The most significant rise was observed in Albania (18%), while Serbia saw only a marginal increase (1%).

This report and the accompanying database are available on the website of the Vienna Institute for International Economic Studies (wiiw) at https://data.wiiw.ac.at/seejobsgateway.html.

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Content

TABLES AND FIGURES

Abbreviations, country classification, and country codes

Abbreviations

EU	European Union
EUR	Euro
FSA	Financial social assistance
FTR	Formalization tax rate
GDP	Gross domestic product
GMA	Guaranteed minimum assistance
HH	Household
IESS	Integrated European Social Statistics (Regulation)
LFS	Labor Force Survey
NEET	Young people neither in employment nor in education and training
OECD	Organisation for Economic Co-operation and Development
PIT	Personal income tax
PMT	Proxy means test
pp	Percentage point
SAS	Social assistance scheme
SSC	Social security contribution(s)
wiiw	The Vienna Institute for International Economic Studies

Country/entity/bloc/region codes

AL	Albania
AT	Austria
BA	Bosnia and Herzegovina
BA - FBiH	Federation of Bosnia and Herzegovina
BA - RS	Republika Srpska
BG	Bulgaria
EU	European Union
HR	Croatia
HU	Hungary
ME	Montenegro
MK	North Macedonia
RS	Serbia
WB	Western Balkans
XK	Kosovo

Executive Summary

The Western Balkans Labor Market Brief presents highlights of the SEE Jobs Gateway labor market observatory. This brief describes the development of key labor market indicators for those aged 15-64 in 2023 for the six Western Balkan economies – Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia – and selected European Union (EU) countries as comparators – Austria, Bulgaria, Croatia, and Hungary. The data have been harmonized across countries, although selected indicators are not fully comparable due to methodological changes in the Labor Force Survey (LFS).[1] At the time this report was prepared, the latest year for which official statistics were available for the six Western Balkan economies was 2023. The full database, which includes all key labor market indicators disaggregated across gender, age, and education since 2010, is available at https://data.wiiw.ac.at/seejobsgateway-q.html.

Economic growth slowed markedly across the region in 2023, driven by the ongoing cost-of-living and energy crises. Inflation remained high, averaging 9% across the Western Balkans, eroding real incomes and dampening consumption and investment. Energy-intensive sectors were particularly affected by the surge in global energy prices, weighing on exports and industrial production.

Despite the economic slowdown, labor market outcomes continued to improve. Activity rates rose, driven in particular by gains among women, although the regional average remained well below the EU standard. The gender gap in labor market participation persisted, with female activity rates still significantly lower than male rates and EU levels. Youth labor market participation weakened slightly, widening the gap with the EU, and the share of NEET youth remained high.

Employment rates continued to increase across the region, reaching a record high of 59% but still lagging behind the EU average of 70%. Gains were seen among both men and women, with older workers (aged 55-64) experiencing the strongest improvements. Informal employment continued its gradual decline across the region.

Unemployment fell further, reaching 11.3%, the lowest rate recorded so far, although only Serbia achieved a single-digit rate. Youth and long-term unemployment remained major challenges.

Nominal wages rose strongly across all Western Balkan economies in 2023, averaging 16% growth, driven by the high inflation of the current and previous year. Real wages also increased, reversing the declines seen in 2022 and indicating some improvement in living standards, although the gap with EU wage levels remains substantial. Minimum wage hikes further supported wage growth in several countries, particularly in North Macedonia and Albania.

Real unit labor costs rose in 2023 in all economies, reflecting higher real wages and employment combined with sluggish GDP growth. The increase was most pronounced in Albania, while Serbia saw only a marginal rise.

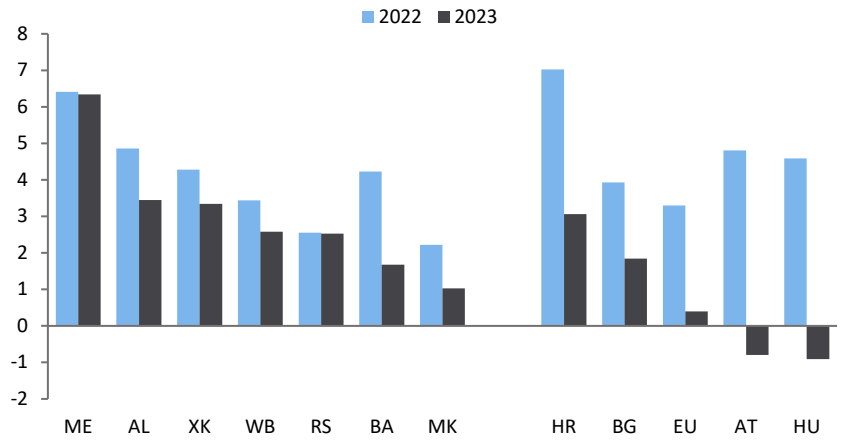
1 Three Western Balkan countries started publishing LFS data according to a new methodology in 2021 – Bosnia and Herzegovina, Montenegro, and Serbia. The changes were implemented in accordance with the new Regulation (EU) 2019/1700 of the European Parliament and the Council and followed new guidelines from the International Labour Organization (ILO). For further details, see Western Balkans Labor Market Brief 2021: https://wiiw.ac.at/western-balkans-labor-market-brief-2021-dlp-6636.pdf

1. Economic growth further slowing down despite slightly moderating inflation

GDP growth slowed across all Western Balkan economies in 2023, driven by the cost-of-living and energy crises (Figure 1). The price increases that began the previous year eroded real incomes, dampening consumption and economic activity. The surge in global energy prices, exacerbated by Russia's war on Ukraine and its subsequent decision to cut gas supplies to Europe, heavily impacted energy-intensive industries in the region. The resulting recessions in Germany and other EU countries further weakened Western Balkan exports. Consequently, the average growth for the whole region dropped to 2.6% in 2023 from the prior-year level of 3.4%.

Despite this, some Western Balkan economies performed notably well in 2023. Montenegro outpaced all other Western Balkan countries, growing 6.3%, due to the robust tourist season fueled by the post-pandemic recovery in tourism as well as the significant influx of Russian and Ukrainian nationals. Albania also performed solidly, growing by 3.5%, again mostly due to the strong tourist season. Additionally, both countries are relatively well positioned in terms of energy, being net exporters of electricity and generating most of it from renewable sources. In contrast, North Macedonia was the worst performer in the region, expanding by just 1%, largely due to its heavy reliance on imported energy – it imports one third of the electricity it consumes – and its economic dependence on exports to Germany, which make up more than 25% of the country's GDP.

Figure 1 / Real GDP growth rates in 2023 (%, year on year)



Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

Compared to the EU comparator countries (see Box 1), the Western Balkans fared relatively well. Croatia, the strongest performer among the EU comparators, only outpaced Serbia, Bosnia and Herzegovina, and North Macedonia. Meanwhile, North Macedonia, despite being the weakest Western Balkan economy, outperformed Austria, Hungary, and the EU average. The primary reason for the Western Balkans' superior performance, aside from economic convergence, was their lower dependence on gas.

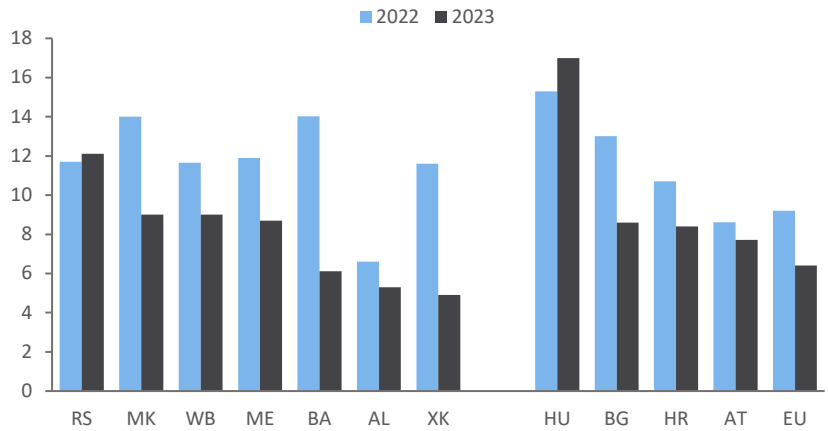
Box 1 / EU comparator countries for the Western Balkans in this report

This report, like the previous two, has selected four EU comparator countries for the Western Balkans – Austria, Bulgaria, Croatia, and Hungary. Throughout the text, the developments in the Western Balkan economies are compared to the developments in those four countries as well as to the EU averages, wherever possible. Bulgaria, Croatia, and Hungary have been selected because they are neighboring countries with similar histories, cultures, and economic developments to the Western Balkan economies. Austria has been added to this group due to its geographical proximity as well as because its economic indicators often serve as a benchmark to which countries in the Western Balkans aspire.

Inflation eased slightly across most Western Balkan economies in 2023, yet it remained notably high. For the region as a whole, it came down to 9% in 2023 from the prior-year level of 12%. Serbia recorded the highest inflation, at 12.1%, exceeding its previous year's rate due to the repeal of earlier price controls and an increase in some administered prices. In North Macedonia, inflation reached 9%, largely driven by the government's erratic stop-and-go use of price controls, which prompted businesses to raise prices more than necessary. Montenegro also faced relatively high inflation, at 8.7%, spurred by strong demand resulting from the influx of foreign nationals and a booming tourism sector. Conversely, Albania and Kosovo experienced relatively mild rates of inflation, of around 5%, thanks in large part to the price controls implemented by their respective governments (Figure 2).

Inflation in the Western Balkans during 2023 was largely in line with that of the EU comparator countries. No country in the region saw inflation as severe as Hungary's 17%, which was driven by the depreciation of its national currency, but Serbia, North Macedonia, and Montenegro all had higher inflation than Bulgaria, the second-highest among the EU comparators. Meanwhile, inflation in Albania and Kosovo was significantly lower than that in any of the EU comparator countries as well as the EU average.

Figure 2 / Annual consumer price inflation in 2023 (%)

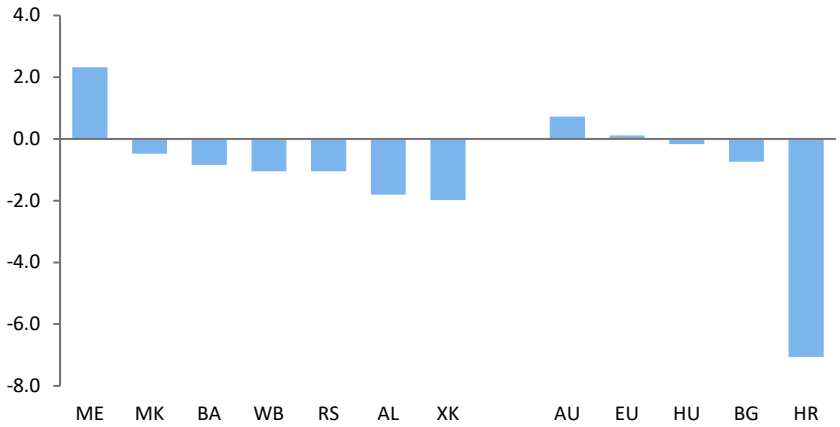


Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

2. Activity improving, including among women

The working-age population (defined as those aged 15-64) continued to decline across the Western Balkans in 2023. Every country saw a reduction, ranging from 0.5% in North Macedonia to 2% in Kosovo and Albania, with an average regional decrease of 1%. The only exception was Montenegro, where the working-age population grew by 2.3% due to an influx of Russian and Ukrainian nationals. In contrast, the EU experienced a slight increase in the working-age population in 2023, though only of 0.1%. Austria saw a more significant rise, of 0.7%, driven by immigration. Hungary and Bulgaria registered declines of 0.2% and 0.7%, respectively. Croatia experienced the largest drop, of 7%, although this was largely due to the results of the 2021 census being reflected in the 2023 Labor Force Survey data, which revealed a 10% decline in the country's total population between 2011 and 2021.

Figure 3 / Annual change in the working-age population (15-64) in 2023 (%)



Note: The big decline in Croatia is owed to the new census, according to which the country's population shrank by roughly 10% between 2011 and 2021.
Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

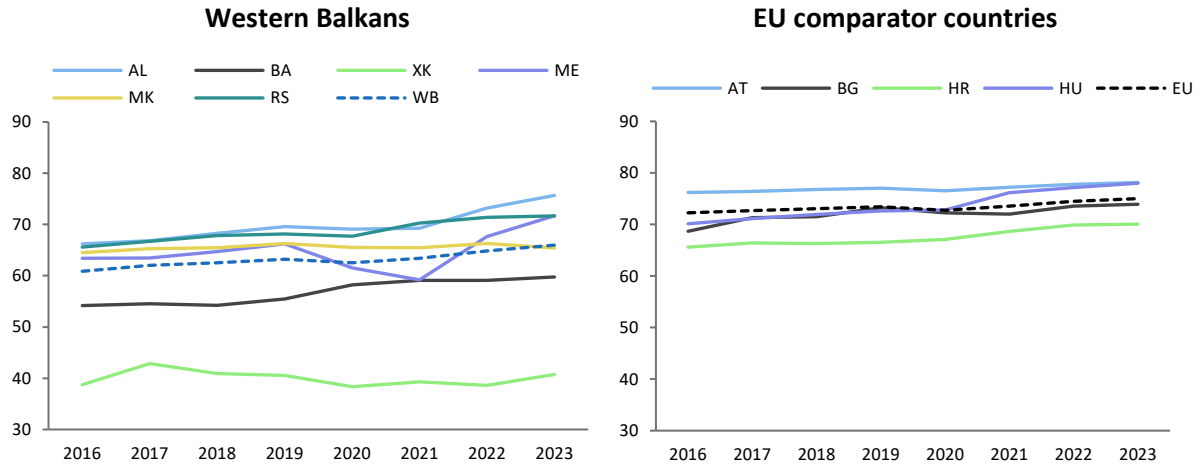
Activity rates[2] continued to improve across most of the Western Balkans in 2023. The regional activity rate reached 66%, an increase of 1.2 percentage points (pp) compared to the previous year. The largest rise was recorded in Montenegro, with a 4 pp increase, followed by Albania and Kosovo, where activity rose by around 2 pp. North Macedonia was the only country where activity declined, falling by 0.9 pp. These trends resembled those in the EU comparator countries, where activity also improved, though to a lesser extent, with increases of around 0.5 pp across the board (Figure 4).

Despite the improvement, activity in the Western Balkans remains significantly below EU standards. Albania stands out as the only country with a rate close to EU standards, reaching 75%, which is nearly on par with Austria and Hungary, where the rate is 78%. Still, one must also bear in mind that much of this is low-productivity self-employed agriculture work. Serbia and Montenegro also perform relatively well, each with an activity rate of 72%, surpassing Croatia's 70%. However, the rest of the region lags significantly behind, with Kosovo at the bottom, reporting an activity rate of just 41%,

2 The activity rate measures the share of the working-age population that is either employed or actively looking for work.

largely due to the exceptionally low participation of women. The regional average of 66% for the Western Balkans in 2023 remains well below the EU average of 75%.

Figure 4 / Activity rates in 2016-2023 (% of population aged 15-64)



Note: Since 2021, there has been a new methodology in line with the IESS in Bosnia and Herzegovina, Montenegro, Serbia, and the EU comparator countries.
Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat.

The improvement in activity in 2023 was particularly notable among women. In five of the six Western Balkan economies, female activity increased more strongly than male activity, with Kosovo being the only exception. Across the region, female activity rose by 1.7 pp, compared to a 0.6 pp increase among men. The most significant rise in female activity was recorded in Montenegro, where it surged by 4.9 pp (compared to a 3.1 pp increase among men). Albania followed, with female activity rising by 2.9 pp, outpacing the 2 pp increase among men. In Kosovo, the only exception from this pattern, both female and male activity improved, by 2.2 pp and 2.3 pp, respectively (Table 1).

This trend of stronger gains in female activity was also observed in the EU comparator countries, though to a lesser extent. Across the EU, female activity increased by 0.7 pp in 2023, compared to a 0.3 pp increase among men.

Table 1 / Changes in activity rates in 2023 vs. 2022 for men and women (pp)

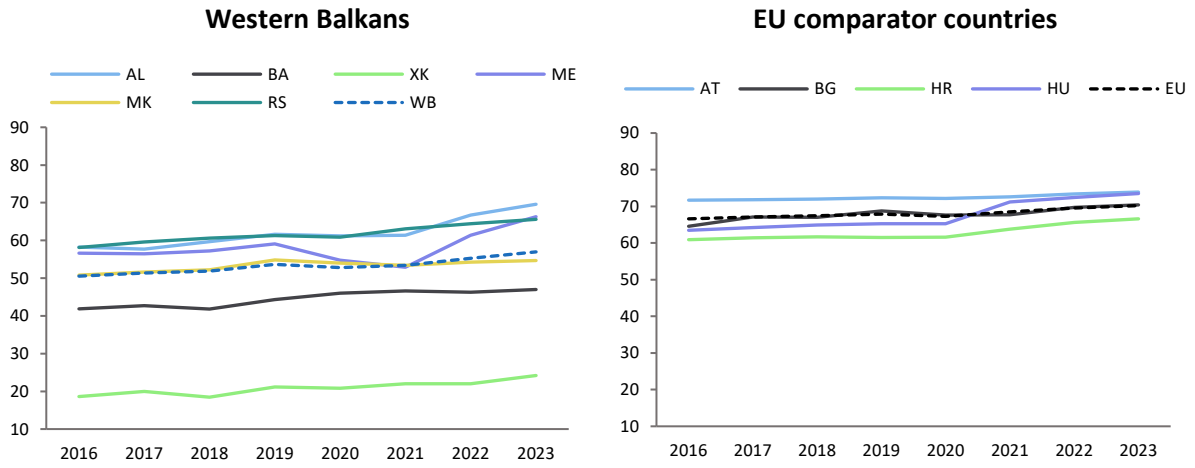
	Total	Male	Female
Albania	2.4	2.0	2.9
Bosnia and Herzegovina	0.6	0.6	0.7
Kosovo	2.1	2.3	2.2
Montenegro	4.0	3.1	4.9
North Macedonia	-0.9	-2.3	0.5
Serbia	0.8	0.0	1.6
Western Balkans	1.1	0.6	1.7
Austria	0.4	0.3	0.5
Bulgaria	0.2	-0.1	0.5
Croatia	0.2	-0.6	1.0
Hungary	0.8	0.5	1.1
European Union	0.5	0.3	0.7

Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

Despite these improvements, women's participation in the labor market remains relatively low across the Western Balkans, significantly trailing that of men. In 2023, the gender gap in activity stood at 18 pp across the region, with even the better-performing countries (e.g., Albania, Serbia, and Montenegro) showing gaps of over 10 pp. In Kosovo, the gap was particularly stark, exceeding 30 pp (Figure 5).

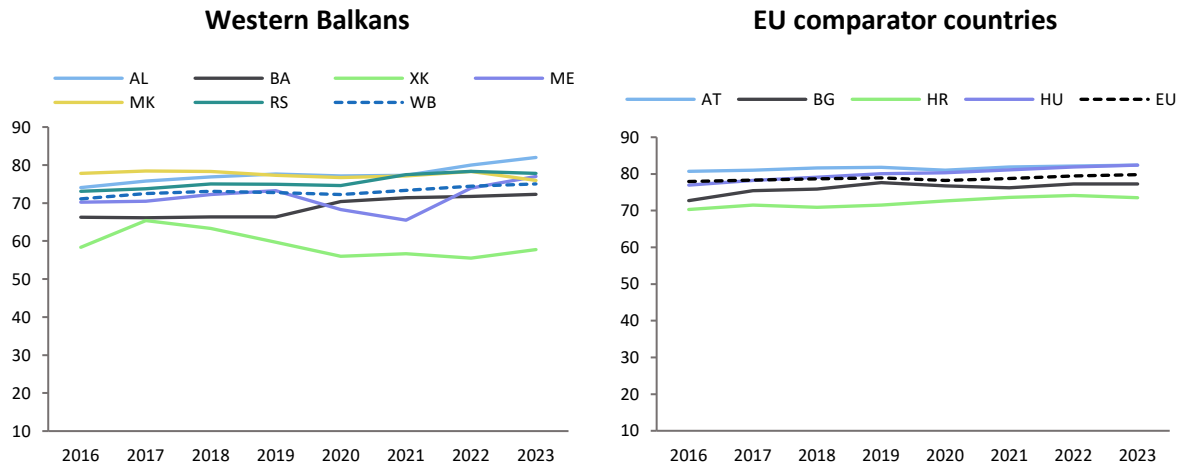
Female activity in the region also lags behind that of the EU comparator countries. Only Albania, Serbia, and Montenegro achieved female activity rates close to EU levels (around 65-70%). The average gap between the Western Balkans and the EU in female activity was 13 pp, while female participation was as low as 24% in some economies (e.g., Kosovo).

Figure 5 / Female activity rates in 2016-2023 (% of female population aged 15-64)



Note: Since 2021, there has been a new methodology in line with the IESS in Bosnia and Herzegovina, Montenegro, Serbia, and the EU comparator countries. For North Macedonia, the 2021 census is applied from 2022 onwards.
Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

Figure 6 / Male activity rates in 2016-2023 (% of male population aged 15-64)

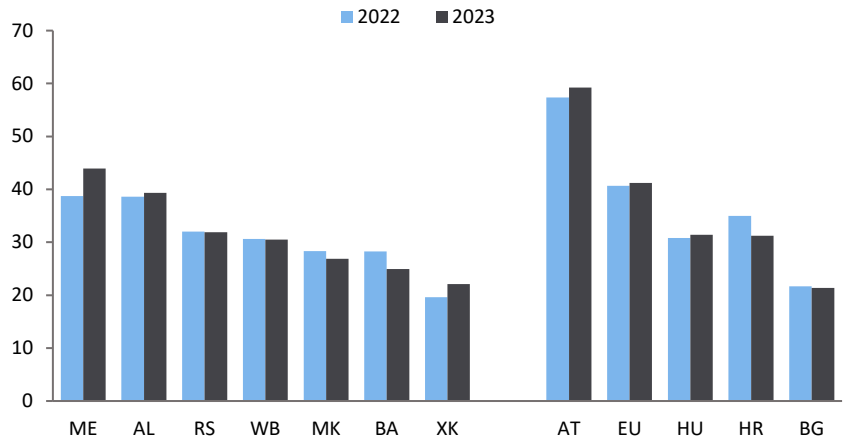


Note: Since, there has been a new methodology in line with the IESS in Bosnia and Herzegovina, Montenegro, Serbia, and the EU comparator countries. For North Macedonia, the 2021 census is applied from 2022 onwards.
Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

In contrast, male activity in the Western Balkans is much closer to EU standards. Most economies in the region recorded male activity rates that were nearly in line with the EU average, with the average gap standing at just 5 pp in 2023. The only significant outlier was Kosovo, where male activity reached just 58%, or 22 pp below the EU average (Figure 6).

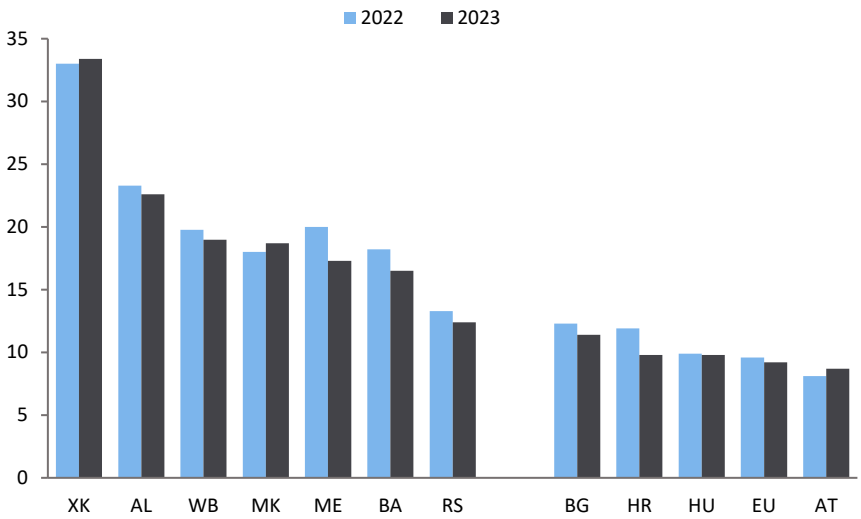
Youth participation in the labor market saw a slight decline in 2023 across the Western Balkans. Overall for the whole region, the activity rate fell by 0.1 pp, to 30.5%. However, there were notable differences across the region: While Montenegro, Kosovo, and Albania recorded improvements, the other three countries experienced declines. This contrasted with trends in the EU, where youth activity increased by 0.5 pp in 2023, reaching 41.2%. As a result, youth labor force participation in the Western Balkans remained significantly lower than in the EU, with the gap widening to nearly 11 pp in 2023 (Figure 7).

Figure 7 / Activity rates among persons aged 15-24 in 2022-2023 (% of population aged 15-24)



Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

Figure 8 / NEET rates (young people aged 15-24 neither in employment nor in education or training) in 2022-2023 (% of population aged 15-24)

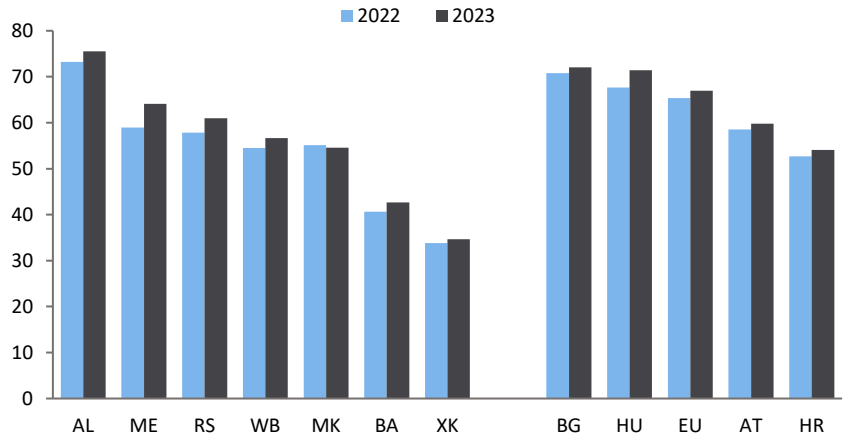


Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

The share of young people aged 15-24 who are neither in employment nor in education or training (NEET) declined in most Western Balkan countries in 2023. Across the region, the NEET rate dropped by 0.8 pp, reaching 19%, with Montenegro experiencing the largest decrease, of 2.7 pp. However, in some economies (e.g., Kosovo and North Macedonia), the NEET rate increased by around 0.5 pp. The NEET rate also fell in the EU comparator countries, with Austria being the only exception. Despite this improvement, the NEET rate in the Western Balkans remains significantly higher than – in fact, more than double – the EU average, of 9.2%.

Activity among older individuals (aged 55-64) improved across most of the Western Balkans in 2023, with the regional average rising by 1.1 pp, to 56.6%. The largest gains were seen in Montenegro and Serbia, while North Macedonia again experienced a setback, with activity among older individuals declining. In the EU comparator countries, activity for this age group increased universally, with the EU average reaching 67%, surpassing the Western Balkans' average by more than 10 pp.

Figure 9 / Activity rates among persons aged 55-64 in 2022-2023 (% of population aged 55-64)



Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

Activity rates improved across all education levels in 2023, though there were notable differences between countries. For the Western Balkans as a whole, the largest gains were observed among those with low education levels, while the smallest improvements were seen among those with higher education levels. This pattern was also evident in Montenegro and North Macedonia. However, in Albania, Bosnia and Herzegovina, and Serbia, the most significant increase was among highly educated individuals, while it was among those with medium education levels in Kosovo. Trends in the EU comparator countries were equally varied, with Austria and Hungary seeing the biggest gains among those with lower education levels, while Bulgaria and Croatia recorded the largest improvements among the highly educated.

Table 2 / Change in activity rates in 2023 vs. 2022 by educational levels (pp)

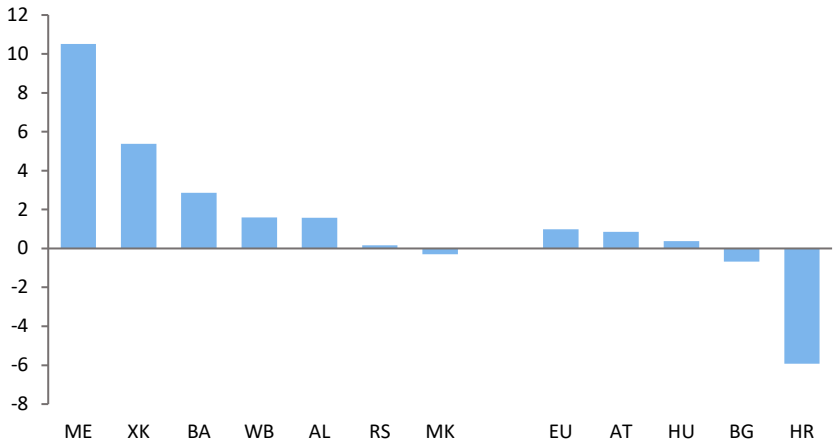
	Low	Medium	High
Albania	0.5	3.4	5.0
Bosnia and Herzegovina	-0.1	0.7	0.7
Kosovo	1.4	2.0	0.8
Montenegro	4.8	4.1	1.9
North Macedonia	4.5	-1.6	-8.8
Serbia	0.1	0.4	0.9
Western Balkans	1.0	0.9	0.6
Austria	1.2	0.1	0.0
Bulgaria	-0.5	-0.4	0.7
Croatia	-2.1	-0.6	0.4
Hungary	1.8	0.5	0.2
EU	0.3	0.4	0.3

Note: A low level of education indicates attainment of lower secondary education or below; a medium level of education indicates upper secondary education or post-secondary non-tertiary education; a high level of education indicates short-cycle tertiary education, a bachelor's degree (or equivalent), a master's degree (or equivalent), or a doctorate (or equivalent).
Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

3. Employment improving too, but still far below EU levels

The number of employed persons aged 15-64 increased in 2023 across most of the Western Balkans. Montenegro saw the largest rise, with employment growing by more than 10%, driven by strong economic growth. Kosovo followed with a 5.4% increase. At the other end of the spectrum was North Macedonia, where employment fell by 0.3% as a result of a weak economy. Serbia fared only slightly better, with modest employment growth of 0.2%. Overall, employment in the Western Balkans expanded by 1.6%.

Figure 10 / Annual change in number of employed persons in 2023 (%)

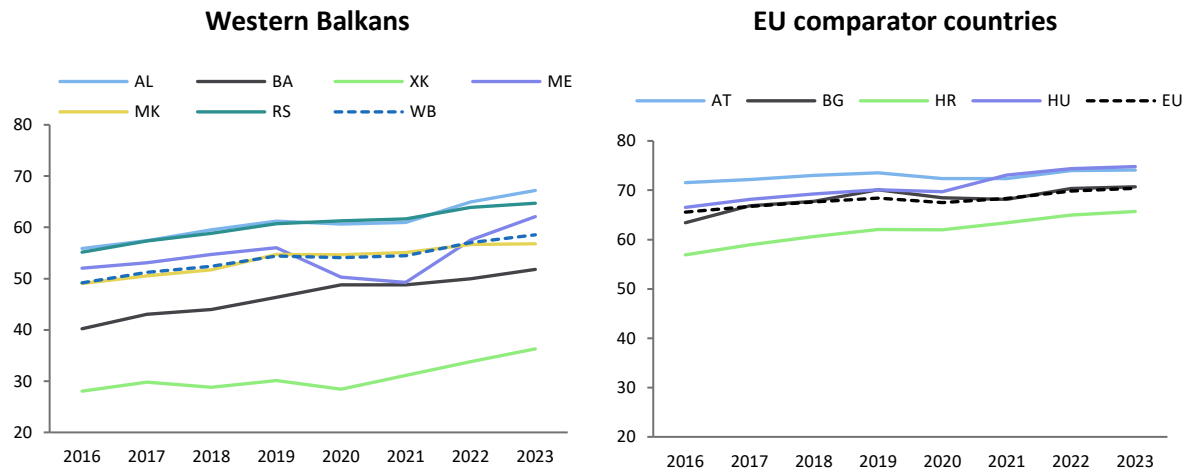


Note: The big decline in Croatia is owed to the new census, according to which the country's population shrank by roughly 10% between 2011 and 2021.
Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

The EU comparator countries also experienced improvements in employment, though at a more modest pace. The EU as a whole saw a 1% increase, Austria 0.9%, and Hungary 0.4%. In contrast, Bulgaria recorded a 0.7% decline in employment, while Croatia experienced a significant drop, of 5.9%, largely due to the new census, which revealed a substantial decline in population.

Employment rates[3] continued to improve across the Western Balkans in 2023, with the regional average increasing by 1.5 pp. The largest gain was recorded in Montenegro, where employment rose by 4.6 pp. Albania, Bosnia and Herzegovina, and Kosovo each saw improvements of around 2 pp, while Serbia and North Macedonia had more modest gains, of 0.8 and 0.1 pp, respectively. The EU comparator countries also experienced growth in employment rates in 2023, ranging from 0.1 pp in Austria to 0.8 pp in Croatia, with an average increase of 0.6 pp for the EU as a whole. Despite these improvements, the Western Balkans continue to lag behind the EU in employment levels, with a regional employment rate of 59% in 2023, compared to 70% in the EU.

Figure 11 / Employment rates in 2016-2023 (% of population aged 15-64)



Note: Since 2021, there has been a new methodology in line with the IESS in Bosnia and Herzegovina, Montenegro, Serbia, and the EU comparator countries. For North Macedonia, the 2021 census is applied from 2022 onwards.
Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

The improvement in employment rates in 2023 was evident among both men and women, with women experiencing slightly stronger gains. Across the Western Balkans, female employment increased by 1.8 pp, compared to 1.2 pp among men. Four of the six economies (i.e., Albania, Bosnia and Herzegovina, North Macedonia, and Serbia) recorded greater improvements in female than male employment. However, in Montenegro, which saw the strongest overall employment growth in the region, men experienced larger gains in employment, and the same happened in Kosovo.

Among the EU comparator countries, female employment grew more than male employment across the board. In fact, female employment rates improved in all the EU comparator countries, while male employment rates declined in Austria, Bulgaria, and Croatia.

3 The employment rate measures the share of the working-age population that is currently employed.

Table 3 / Change in employment rates in 2023 vs. 2022 for men and women (% of the population aged 15-64), (pp)

	Total	Male	Female
Albania	2.2	1.6	2.8
Bosnia and Herzegovina	1.9	1.7	2.0
Montenegro	4.6	5.7	3.5
North Macedonia	0.1	-0.8	1.0
Serbia	0.8	0.1	1.5
Kosovo	2.5	3.9	1.5
Western Balkans	1.5	1.2	1.8
Austria	0.1	-0.1	0.2
Bulgaria	0.1	-0.2	0.3
Croatia	0.8	-0.2	1.7
Hungary	0.4	0.2	0.6
EU	0.6	0.4	0.8

Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

When examining employment rates across different age groups, one can see that older workers saw the greatest improvements in 2023. For the Western Balkans as a whole, employment among individuals aged 55-64 rose by 2.4 pp, outpacing gains in the other two age groups. The 25-54 age group was second, with an increase of 1.3 pp, while employment among the youngest cohort, aged 15-24, improved by just 0.4 pp. This pattern was observed in four economies (i.e., Albania, Bosnia and Herzegovina, North Macedonia, and Serbia). Kosovo and Montenegro were exceptions, where the youngest group experienced the largest employment gains. The trend of older age groups achieving stronger employment growth compared to younger groups was also present in the EU.

Table 4 / Change in employment rates in 2023 vs. 2022 for different age groups (pp)

	15-24	25-54	55-64
Albania	0.3	2.3	2.7
Bosnia and Herzegovina	-0.9	2.1	2.3
Montenegro	6.4	2.9	5.1
North Macedonia	-0.1	-0.2	1.1
Serbia	-0.3	0.3	3.1
Kosovo	2.9	2.9	0.7
Western Balkans	0.4	1.3	2.4
Austria	1.1	-0.3	0.9
Bulgaria	-0.6	0.4	1.2
Croatia	-3.4	1.1	1.6
Hungary	-0.2	-0.2	3.6
EU	0.5	0.5	1.7

Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

When looking at the employment patterns across educational levels, it can be seen that employment gains were more pronounced among individuals with lower education levels in 2023. For the Western Balkans as a whole, the largest improvement was seen among those with medium education, where employment increased by 1.5 pp. This was followed by the low-educated group, which saw a rise of 0.9 pp in employment. However, there were more pronounced variations across countries. In Serbia, it was the highly educated group that experienced the biggest gain, whereas the low-educated group saw the strongest improvement in Montenegro and North Macedonia. EU

comparator countries and the EU as a whole were similar to the Western Balkans in this matter, with lower-educated individuals having the largest employment growth in 2023, too.

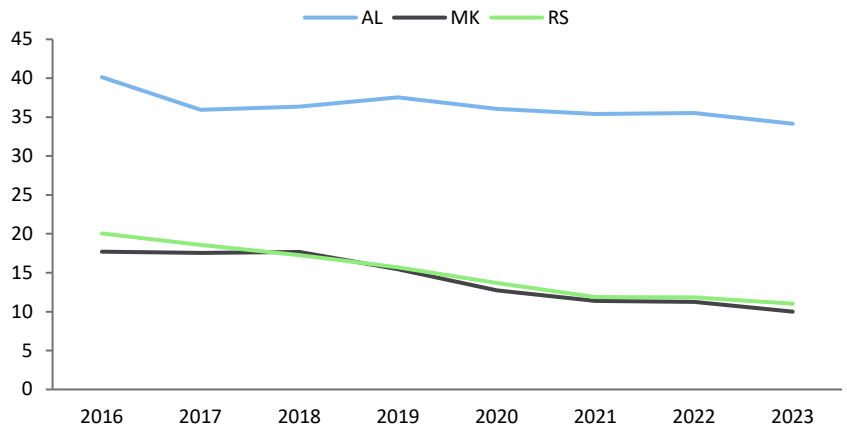
Table 5 / Change in employment rates in 2023 vs. 2022 for people aged 15-64 with different levels of education (pp)

	Low	Medium	High
Albania	0.4	2.6	2.2
Bosnia and Herzegovina	0.5	2.2	1.7
Montenegro	4.5	4.2	-0.3
North Macedonia	4.5	-0.2	-4.7
Serbia	-0.1	0.7	0.8
Kosovo	0.9	2.5	1.7
Western Balkans	0.9	1.5	0.6
Austria	0.9	-0.3	-1.2
Bulgaria	-0.6	-0.6	0.0
Croatia	-1.9	-0.3	1.5
Hungary	1.0	0.0	-1.0
EU	0.5	0.5	0.0

Note: A low level of education indicates attainment of lower secondary education or below; a medium level of education indicates upper secondary education or post-secondary non-tertiary education; a high level of education indicates short-cycle tertiary education, a bachelor's degree (or equivalent), a master's degree (or equivalent), or a doctorate (or equivalent).
Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

Informal employment continued to decline in all countries that publish data on it. These figures, based on official Labor Force Survey (LFS) data, include self-employed individuals in unregistered businesses, wage workers without written contracts, and unpaid family workers. In 2023, informal employment fell by around 1 pp in Albania, North Macedonia, and Serbia, the three countries publishing related data. However, significant differences remain in the levels of informal employment. Albania still has a high rate, of close to 34%, while North Macedonia and Serbia report levels of around 10-11% (of the formal employment level).

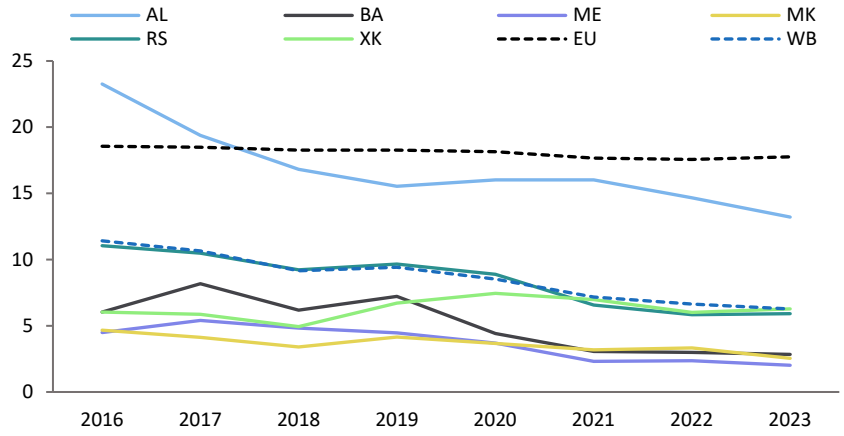
Figure 12 / Informal employment in Albania, North Macedonia, and Serbia in 2016-2023 (% of employed 15-64)



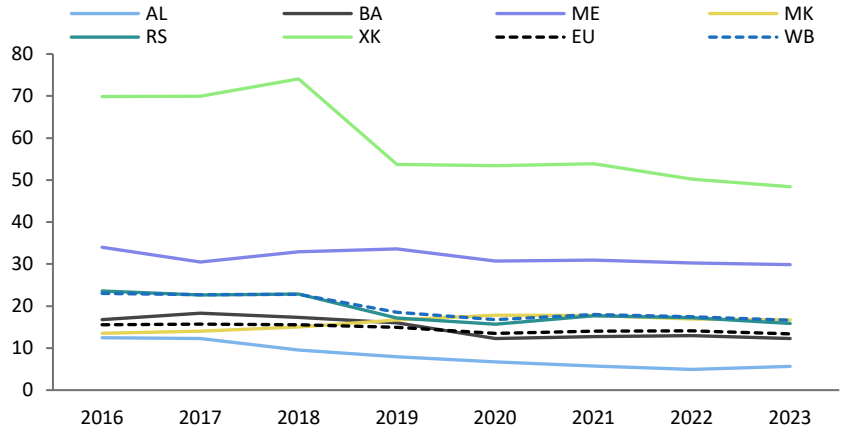
Note: Informal employment encompasses self-employed persons in unregistered businesses, wage workers without a written contract, and unpaid family workers.
Source: SEE Jobs Gateway Database, based on data from national statistical offices

Figure 13 / Share of part-time employed, temporary employees, and self-employed persons in 2016-2023 (% of employed 15-64)

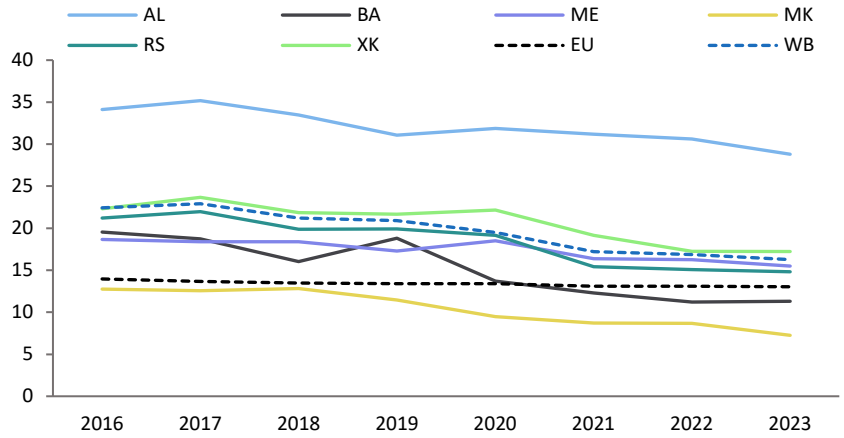
A) Part-time employed



B) Temporary employed



C) Self-employed



Note: The share of temporary employees refers to total employees.
Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

All three non-standard forms of employment (i.e., part-time, temporary, and self-employment) declined in the Western Balkans in 2023, each by around 0.5 pp. While there were some differences across countries, the overall trend shows a gradual decline in part-time and self-employment, with temporary employment mostly stagnating. Notably, there are significant differences between the Western Balkans and the EU in this regard. Part-time employment tends to be lower in the Western Balkans than in the EU, while self-employment and temporary employment are generally higher.

There are also some interesting country-specific cases. For example, Albania is close to the EU level in part-time employment, standing out from the rest of the region. On the other hand, Kosovo has a remarkably high rate of temporary employment, with nearly half of its workforce employed on a temporary basis. Albania also leads the region in self-employment, with nearly one third of all employed individuals falling into this category.

Table 6 / Change in the share of part-time employed, temporary employed, and self-employed persons between 2023 and 2022 (aged 15-64), (pp)

	Part-time employment share	Temporary employees' share	Self-employment share
Albania	-1.4	0.7	-1.8
Bosnia and Herzegovina	-0.2	-0.7	0.1
Montenegro	-0.4	-0.4	-0.7
North Macedonia	-0.8	-0.3	-1.4
Serbia	0.1	-1.4	-0.3
Kosovo	0.3	-1.8	0.0
Western Balkans	-0.4	-0.8	-0.6
Austria	0.4	0.3	0.0
Bulgaria	-0.1	-0.7	0.0
Croatia	-1.0	-3.5	0.4
Hungary	-0.2	-0.4	-0.4
EU	0.2	-0.7	-0.1

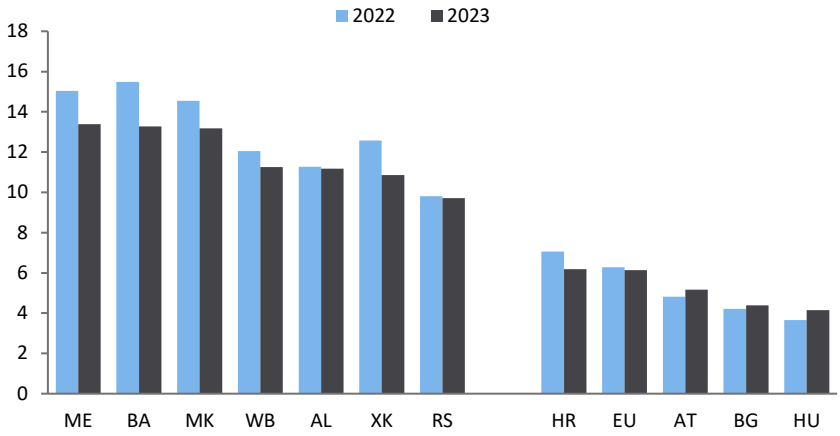
Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

4. Unemployment at historical lows, but still double-digit in most of the countries

Unemployment[4] continued to decline across the Western Balkans in 2023, reaching record lows in many countries. For the region as a whole, the unemployment rate dropped to 11.3%, a decrease of 0.8 pp from the previous year, marking the lowest level in recent times. The most significant decline was observed in Bosnia and Herzegovina, where the rate fell by 2.2 pp. Kosovo and Montenegro also recorded substantial drops, of around 1.6 pp. In contrast, Serbia and Albania saw only minimal decreases, each registering a decline of just 0.1 pp.

The long-term downward trend in unemployment can be attributed to several factors: shrinking working-age populations, improvements in labor market participation, and the overall increase in employment. However, despite this positive trend, unemployment remains relatively high across the region, with only Serbia achieving a single-digit rate. By comparison, unemployment in the EU comparator countries is much lower; even Croatia, the worst performer among them, has an unemployment rate of around 6%. On the other hand, many of the EU comparator countries (e.g., Austria, Bulgaria, and Hungary) experienced increases in their unemployment rates in 2023.

Figure 14 / Unemployment rates in 2022 and 2023 (% of labor force 15-64)

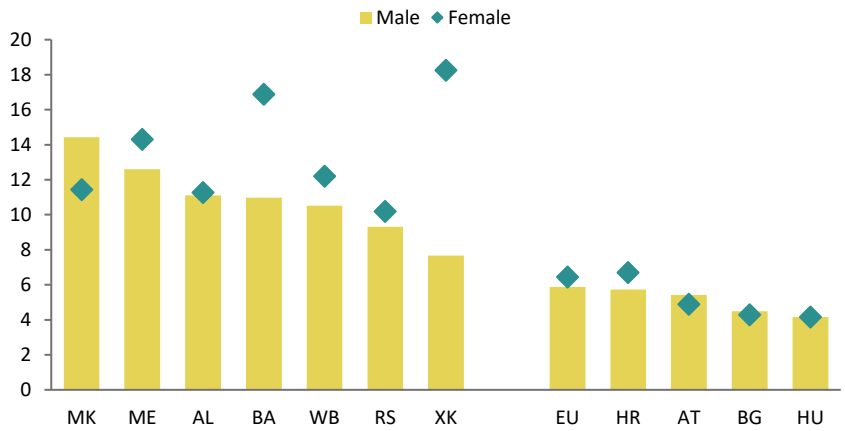


Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

Female unemployment remains significantly higher than male unemployment across the Western Balkans. In 2023, unemployment among women fell to 12.2%, compared to 10.5% among men. North Macedonia remains the only country in which female unemployment is lower than male unemployment, 11.4% versus 14.4%. However, this is largely due to the much lower labor market participation of women in the country, which is around 20 pp lower than that of men. Albania also shows relatively similar unemployment rates of men and women. On the other side of the spectrum, the gap between female and male unemployment remains above 10 pp in Kosovo, while the difference stands at about 6 pp in Bosnia and Herzegovina. While female unemployment is generally higher than male unemployment in the EU, as well, the disparity there is much smaller, with an average gap of just 0.5 pp.

4 The unemployment rate measures the share of the active population that is not employed but is actively looking for work.

Figure 15 / Male and female unemployment rates in 2023 (% of labor force 15-64)



Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

In 2023, female unemployment in the Western Balkans declined at a slower pace than male unemployment. Across the region, female unemployment dropped by 0.6 pp, while male unemployment fell by 0.9 pp. There were some differences across countries, though. In Albania and Bosnia and Herzegovina, female unemployment decreased more than male employment, whereas the opposite was true in Montenegro, North Macedonia, and Kosovo. In Serbia, both male and female unemployment decreased at the same rate. In the EU comparator countries, there were no significant differences in the dynamics of male and female unemployment, with female unemployment showing only marginally better improvement.

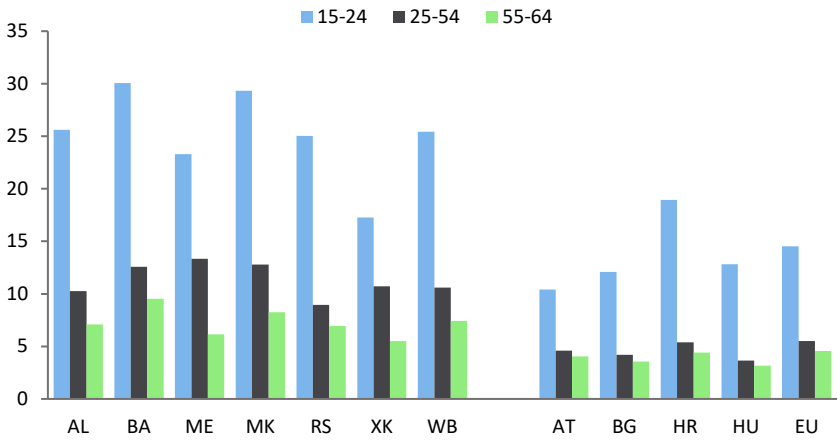
Table 7 / Change in the unemployment rates for men and women between 2022 and 2023 (% of labor force 15-64), (pp)

	Total	Male	Female
Albania	-0.1	0.2	-0.4
Bosnia and Herzegovina	-2.2	-1.7	-3.0
Montenegro	-1.6	-4.0	1.2
North Macedonia	-1.4	-1.5	-1.1
Serbia	-0.1	-0.1	-0.1
Kosovo	-1.7	-3.3	1.7
Western Balkans	-0.8	-0.9	-0.6
Austria	0.4	0.4	0.3
Bulgaria	0.2	0.1	0.3
Croatia	-0.9	-0.5	-1.2
Hungary	0.5	0.4	0.6
EU	-0.1	-0.1	-0.2

Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

Unemployment rates among young people (aged 15-24) remained significantly higher than those of other age groups across the Western Balkans. In 2023, youth unemployment for the region reached 25%, compared to 11% for those aged 25-54 and 7.5% among those aged 55-64. In some economies (e.g., North Macedonia and Bosnia and Herzegovina), youth unemployment was as high as 30%. While this age-related pattern of higher unemployment among younger people is also evident in the EU and the EU comparator countries, the scale in both is much smaller. In 2023, youth unemployment in the EU averaged 14.5%, while unemployment for the 25-54 and 55-64 age groups was around 5%.

Figure 16 / Unemployment rates in 2023 for different age groups (%)



Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

On a positive note, the decline in unemployment in 2023 was most pronounced among young people. Across the Western Balkans, youth unemployment fell by 1.7 pp, compared to a 0.7 pp decrease among older age groups. This trend was particularly evident in four of the six regional economies (i.e., Bosnia and Herzegovina, Montenegro, North Macedonia, and Kosovo). In contrast, Albania and Serbia saw the largest declines in unemployment among individuals aged 55-64. Part of the drop in youth unemployment may also reflect continuing emigration trends, which have reduced the number of young people active in the labor market of the home country. In the EU comparator countries, youth unemployment increased across the board in 2023, with young people experiencing the most negative trends of all age groups.

Table 8 / Change in the unemployment rates between 2022 and 2023 for different age groups (pp)

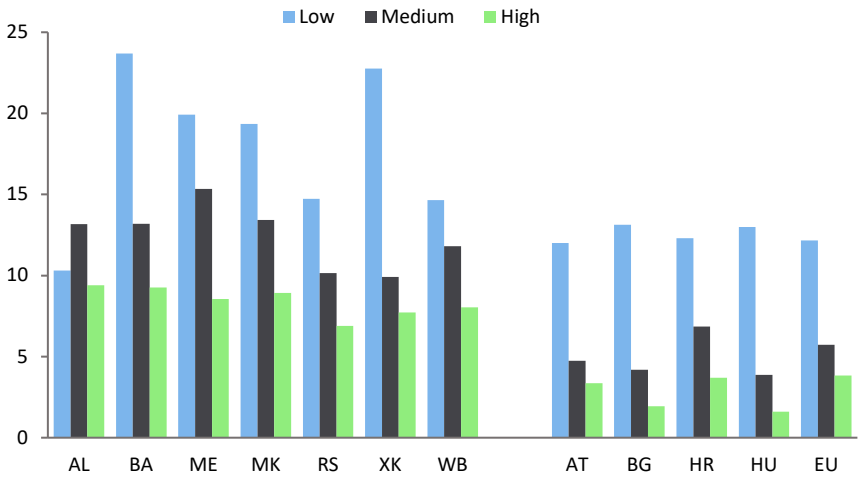
	15-24	25-54	55-64
Albania	0.7	0.1	-0.8
Bosnia and Herzegovina	-5.1	-1.8	-1.2
Montenegro	-6.1	-1.2	-0.4
North Macedonia	-3.2	-0.8	-3.0
Serbia	0.7	-0.1	-0.3
Kosovo	-4.1	-1.7	0.5
Western Balkans	-1.7	-0.6	-0.8
Austria	1.0	0.2	0.3
Bulgaria	1.4	0.2	0.1
Croatia	0.9	-1.0	-0.4
Hungary	2.3	0.5	0.1
EU	0.0	-0.1	-0.2

Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

When examining unemployment rates by education level, it becomes clear that individuals with lower levels of education continue to face higher unemployment rates across the Western Balkans. However, Albania stands out as an exception, where the highest unemployment rates were observed among individuals with medium levels of education rather than among those with low education.

In both the Western Balkans and the EU, the overall trend remains the same: Higher education generally leads to lower unemployment rates. However, some subtle differences exist between the regions. Among those with low education, the unemployment gap between the Western Balkans and the EU is relatively small, at just 2.5 pp. However, this gap widens considerably among individuals with medium education, reaching 6.1 pp, as well as among the highly educated, where it stands at 4.2 pp.

Figure 17 / Unemployment rates in 2023 for different education levels (% of labor force 15-64) (%)



Note: A low level of education indicates attainment of lower secondary education or below; a medium level of education indicates upper secondary education or post-secondary non-tertiary education; a high level of education indicates short-cycle tertiary education, a bachelor's degree (or equivalent), a master's degree (or equivalent), or a doctorate (or equivalent).
Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

All three educational groups saw a decline in unemployment in 2023, with the largest drop observed among those with medium education, where unemployment fell by 1 pp. However, significant country-level differences make it difficult to draw generalizations about the trends. In Bosnia and Herzegovina and North Macedonia, the most notable declines were seen among individuals with low education; in Serbia and Kosovo, those with medium education experienced the greatest improvements; and Albania and Montenegro saw the largest unemployment reductions among highly educated individuals. Similarly, no clear patterns emerge when looking at the EU comparator countries. However, across the EU as a whole, those with low education saw a larger decline in unemployment than the other two groups.

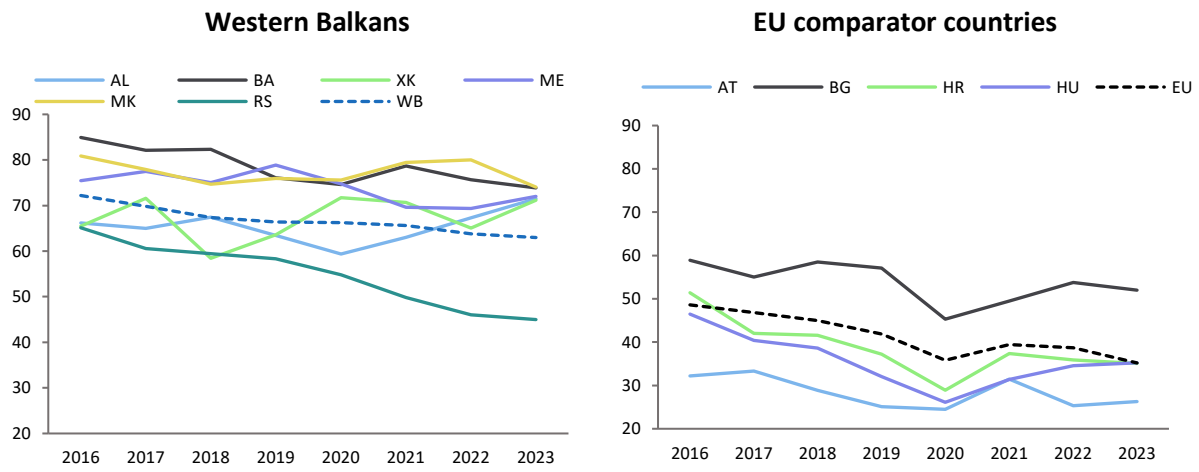
Table 9 / Change in the unemployment rates between 2022 and 2023 for people aged 15-64 with different education levels (pp)

	Low	Medium	High
Albania	0.0	0.4	-1.1
Bosnia and Herzegovina	-2.5	-2.3	-1.6
Montenegro	-2.5	-1.0	-2.7
North Macedonia	-2.6	-1.7	-0.7
Serbia	0.5	-0.5	0.7
Kosovo	1.2	-1.6	-3.1
Western Balkans	-0.2	-1.0	-0.5
Austria	0.4	0.5	0.1
Bulgaria	0.4	0.2	0.3
Croatia	0.2	-0.4	-1.6
Hungary	1.3	0.6	0.1
EU	-0.4	-0.1	0.0

Note: A low level of education indicates attainment of lower secondary education or below; a medium level of education indicates upper secondary education or post-secondary non-tertiary education; a high level of education indicates short-cycle tertiary education, a bachelor's degree (or equivalent), a master's degree (or equivalent), or a doctorate (or equivalent).
Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

Most of the unemployment in the Western Balkans remains long-term in nature. In 2023, 63% of the unemployed in the region had been out of work for more than a year. Although this represents an improvement over 2016, when the respective figure was 72%, it is still significantly higher than the EU standards, where the average long-term unemployment in 2023 was 35%. Only in Serbia is the long-term unemployment somewhat lower, standing at 45% in 2023, down from 65% in 2016. Despite the overall downward trend in long-term unemployment over the past decade, some countries (e.g. Albania, Kosovo, and Montenegro) actually saw an increase in long-term unemployment over the past year.

Figure 18 / Share of long-term unemployment in total unemployment between 2016-2023 for people aged 15-64 (%)



Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

5. Real wages improving after the declines of the previous year

Gross wages saw double-digit nominal growth across all Western Balkan economies in 2023, driven largely by the inflationary pressures from that and the previous year. The average wage increase for the region was 16%, with Albania experiencing the highest growth, of 25%, largely due to increases in the minimum wage and public-sector salaries. On the other hand, Montenegro had the lowest growth, at 12%, partly because of a significant wage increase in the previous year. The other four economies saw wage growth ranging between 13% and 17%. These trends were not very different from those in the EU comparator countries, where Bulgaria, Croatia, and Hungary experienced similar wage increases, ranging between 13% and 17%. Austria, however, stood out with a more modest increase, of just 8%.

As a result of this growth, the average gross wage in the Western Balkans reached EUR 900 per month in 2023. Serbia, Bosnia and Herzegovina, and Montenegro had the highest average gross monthly wages, at around EUR 1,000. North Macedonia followed closely with EUR 900, while Albania and Kosovo remained lower, with gross wages of EUR 650 and EUR 610, respectively. Despite these increases, wages in the region are still well below those in most EU comparator countries. Only Bulgaria had a similar wage level, at EUR 1,030. By comparison, gross wages in Hungary and Croatia were significantly higher, ranging from EUR 1,500 to EUR 1,600, while Austria stood far ahead, with an average gross wage of EUR 3,900.

Figure 19 / Average nominal monthly gross wages in 2023 (EUR)

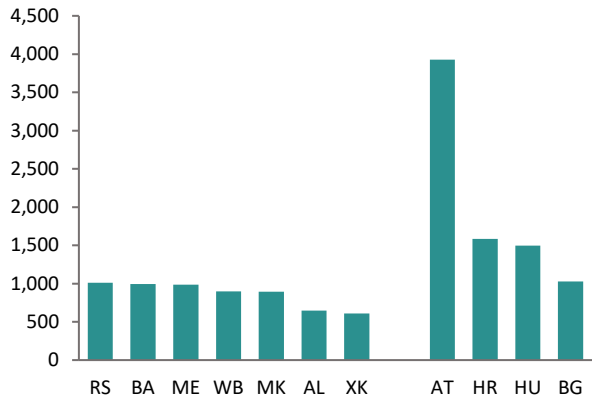
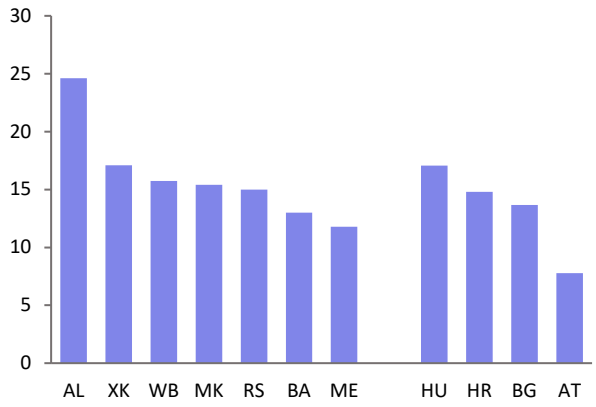


Figure 20 / Annual growth in average nominal gross wages in 2023 (%)



Note: Average wages per employee per month on a gross basis (before deduction of income tax and social security contributions). This figure includes the basic wage and additional payments (bonuses; overtime; night work; payments for statutory, contractual or voluntarily granted leave; etc.). The data only refer to formally employed persons and are taken from register-based statistics (administrative sources). Data for Austria refer to the National Accounts concept (gross wages per employee, domestic concept, divided by 12 months).
Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

In 2023, the minimum wage was increased in several Western Balkan countries. North Macedonia saw the largest rise, with an almost 35% increase following three years of stagnation. Albania also raised its minimum wage, by around 20%, while Serbia saw an increase of approximately 15%. Montenegro did not adjust its minimum wage in 2023, following a significant hike the previous year. In Kosovo, the minimum wage remained unchanged, staying at the same level since 2011. By comparison, the EU comparator countries saw somewhat smaller increases in their minimum wages. Bulgaria led with a 20% increase, followed by Croatia with a 12% rise and Hungary with a 7% rise.

When comparing minimum wages to average wages, Montenegro and North Macedonia had minimum wages that were 54% of the average wage, while this figure was around 45% in Albania and Serbia. Kosovo lagged behind, with the minimum wage amounting to just 27% of the average wage. In the EU comparator countries with available data, the ratio ranged between 39% and 44%.

After a decline in the previous year, real net wages increased in 2023 across all Western Balkan economies, indicating an improvement in living standards. This growth was largely driven by slowing inflation and rising nominal wages, spurred by the inflationary pressures of the previous year. Kosovo saw the largest increase, with real net wages rising by 11%, thanks to relatively low inflation and the increase in public-sector wages. Bosnia and Herzegovina, along with North Macedonia, followed with increases of between 5% and 6%. Montenegro and Serbia showed more modest growth, with real net wages rising by just 2%.[5] In comparison, real net wages in Croatia grew by 5% in 2023, while Hungary experienced a 3% decline due to the high inflation there.

Figure 21 / Annual nominal change in the gross minimum wage expressed in EUR in 2023 (%)

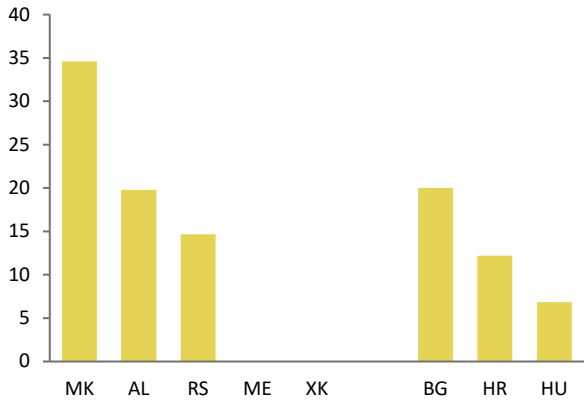
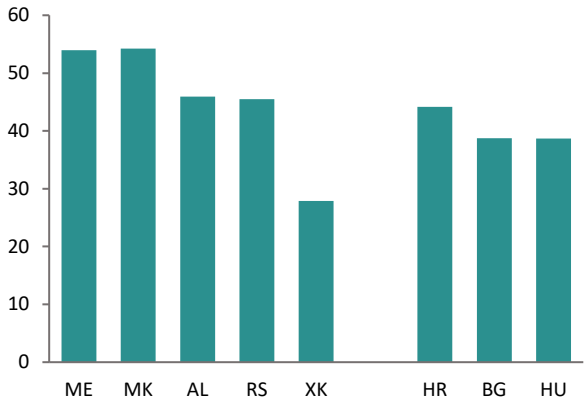


Figure 22 / Gross minimum wage in 2023 (% of gross average wage)



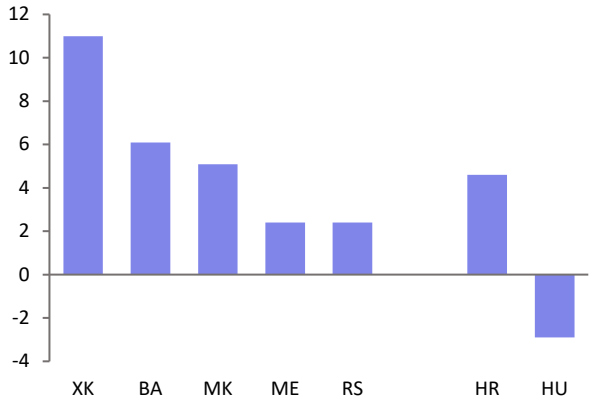
Note: For Bosnia and Herzegovina, monthly gross minimum wages are available for the three entities separately but not for the whole territory. Montenegro and Kosovo did not increase their minimum wages in 2023. Austria does not have a statutory minimum wage.
Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

Despite these increases, net wages in the Western Balkans remain considerably lower than in the EU comparator countries. Montenegro reached nearly EUR 800 per month, followed by Serbia at EUR 730 and Bosnia and Herzegovina at EUR 650. North Macedonia was slightly lower, with a net wage of 590 EUR per month, while it stood at EUR 520 in Kosovo. For comparison, in 2023, the average net wage was EUR 1,000 in Hungary and EUR 1,150 in Croatia.

5 Albania does not publish data on net wages.

Figure 23 / Average nominal monthly net wages in 2023 (EUR)

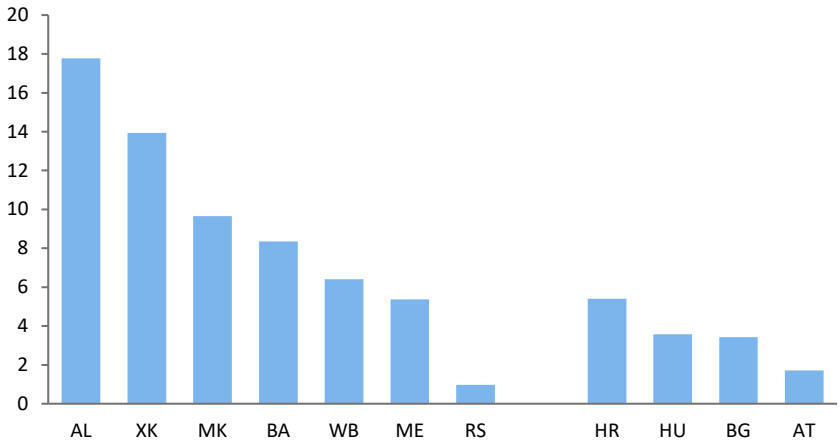
Figure 24 / Real growth in average net wages in 2023 (%)



Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

Due to the increase in the real wages and employment as well as the relatively weak GDP growth triggered by the global crisis, real unit labor costs increased everywhere in the Western Balkans in 2023. The most significant increase was observed in Albania, where real unit labor costs surged by nearly 18%, followed by Kosovo with a 14% rise. North Macedonia, Bosnia and Herzegovina, and Montenegro saw increases ranging between 5% and 10%. Serbia experienced a much more modest rise, with real unit labor costs increasing by just 1%. Real unit labor costs increased in the EU comparator countries, as well, though by a much lower rate, ranging between 2% in Austria and 5% in Croatia.

Figure 25 / Annual change in real unit labor costs, exchange rate adjusted, in 2023 (%)



Note: Real unit labor costs are defined as average nominal gross wages in EUR divided by nominal GDP per employed person (calculated by wiiw).
Source: SEE Jobs Gateway Database, based on data from national statistical offices and Eurostat

6. Conclusion

GDP growth slowed across all Western Balkan economies in 2023, driven by the cost-of-living and energy crises. Price increases, which began in the previous year, eroded real incomes, dampening consumption and economic activity. The surge in global energy prices, exacerbated by Russia's decision to cut gas supplies to Europe, heavily impacted energy-intensive industries and exports. Inflation remained high, at 9% for the region as a whole.

The working-age population continued to decline across the Western Balkans in 2023. The only exception was Montenegro, where it grew due to an influx of Russian and Ukrainian nationals. Activity rates improved in most countries, but the regional average, of 66%, remained well below the EU average, of 75%. Women saw particularly notable gains in activity, though participation rates for women still lagged behind those of men and the EU average. The gender gap in activity stood at 18 pp, with only Albania, Serbia, and Montenegro achieving female activity rates close to EU levels (around 65-70%). The average gap between the Western Balkans and the EU in female activity was 13 pp, while male activity in the Western Balkans was much closer to EU standards.

Youth labor market participation declined slightly in 2023, with a widening gap between the Western Balkans and the EU, which now stands at 11 pp. The share of young people (15-24) neither in employment, education, nor training (NEET) fell in most Western Balkan countries but remained more than double the EU average.

Employment rates continued to rise across the Western Balkans, though they still lagged behind the EU, where employment averaged 70% compared to 59% in the region. Gains were seen among both men and women, with older workers experiencing the greatest improvements.

Unemployment continued its downward trend, reaching 11.3% for the whole region, a record low. However, unemployment remains relatively high across the region, with only Serbia achieving a single-digit rate. Female unemployment remains significantly higher than male unemployment, and unemployment rates among young people (aged 15-24) remain significantly higher than those of other age groups. Long-term unemployment remains a persistent issue, with 63% of the unemployed out of work for more than a year, which is significantly higher than the EU level, of 35%.

Gross wages experienced double-digit nominal growth in 2023 across all Western Balkan economies, averaging 16%. Albania led with a 25% increase, while Montenegro saw the lowest rise, at 12%. The average gross wage in the region reached EUR 900 per month, ranging from EUR 1,000 in Serbia, Bosnia and Herzegovina, and Montenegro to around EUR 650 in Albania and Kosovo. Despite these increases, wages in the Western Balkans are still well below those in most EU comparator countries.

The minimum wage was increased in several Western Balkan countries. North Macedonia saw the largest rise, with an almost 35% increase after three years of stagnation. Albania raised its minimum wage by around 20%, while Serbia saw an increase of approximately 15%. The other two economies did not adjust their minimum wages.

Real net wages also increased in 2023, indicating an improvement in living standards, with Kosovo leading with an 11% rise. However, net wages remain considerably lower than they are in the EU.

Real unit labor costs rose across the Western Balkans in 2023 due to higher real wages and employment coupled with weak GDP growth. The increase was most pronounced in Albania, at 18%, while Serbia saw the smallest rise, at just 1%.

Special Topic: Disincentives to Formal Work – Modeling Social Benefits and Labor Taxation for Low-Income Households

Executive Summary

This special topic section analyses the social benefit and labor taxation systems in the six Western Balkan countries (WB6) and illustrates via modeling their impact on labor participation decisions. It draws on detailed assessments of poverty-alleviation schemes, child allowances, energy subsidies, and labor taxes that individuals have to pay when they enter formal employment. The report examines how these systems may influence labor market outcomes, informality, and employment incentives, with a particular focus on low-income and part-time workers.

Social benefits in the WB6 typically include general cash assistance programs targeted to low-income households. They also include child allowances to support families with children and energy subsidies aimed at assisting low-income consumers in managing utility costs. Benefit levels vary significantly across the region, with total monthly benefits being EUR 70 in Albania, EUR 191 in Kosovo, EUR 207 in North Macedonia, EUR 267 in Montenegro, EUR 282 in Serbia, EUR 304 in the Federation of BiH, and EUR 335 in Republika Srpska, for the household analyzed here (see below).

The analysis is based on a standard tax-benefit model that examines how social benefits and tax systems affect household income during the transition from informal to formal employment and as formal earnings rise. The modeling is based on a detailed review of relevant legislation and uses simulations for a hypothetical household consisting of two adults and two pre-school children, which was chosen because it is the most common in the region and reflects a typical family structure. Although the model does not rely on real-world data from household surveys, it nevertheless captures the key incentives and disincentives households face when deciding whether to take up formal work. A key metric is the formalization tax rate (FTR), which represents the proportion of income lost when a household transitions from informal to formal work. This rate is calculated across different income levels to quantify the immediate financial impact of formal (vs. informal) work and to identify the points at which disincentives are most pronounced.

A critical issue identified in the analysis is the abrupt withdrawal of social benefits when individuals enter formal employment. In most WB6 countries, benefits are lost at very low income levels. This rigid approach creates strong disincentives to formal employment, particularly for low-income, part-time, or flexible jobs. Serbia and Albania are notable exceptions. In Serbia, the main social benefit is not withdrawn entirely when someone starts working but, instead, is reduced in line with earned income. In Albania, the main benefit is also not lost when a household member enters formal employment, as the program uses a formula to determine eligibility; if the value given by the formula exceeds the threshold, the household is not eligible. Kosovo has also introduced a so-called “income disregard,” but only as part of a pilot measure for 2025/2026. In the rest of the region, however, the main poverty-related benefit is fully withdrawn once formal employment begins.

These disincentives stemming from benefit-scheme designs primarily affect formal employment rather than discouraging work altogether. At the same time, the disincentives are largely associated with the design of the benefit programs rather than their generosity. Levels of poverty-targeted benefits are relatively low across all WB6 countries, with the average benefit being approximately 39% of the minimum wage for a household of two adults and two children (World Bank 2023).

Policy options to mitigate these disincentives include allowing households to receive social benefits while working formally, with benefit amounts being gradually reduced in line with earned income. Instead of limiting eligibility to those without any formal income, this approach enables individuals to retain partial support when entering formal employment but reducing the total benefit amount provided to the household by a share of the formal income generated. This income disregard may increase the short-term budgetary expenditures of social assistance programs, as more individuals would be eligible for partial benefits. However, it may also reduce costs related to those who would otherwise work informally while receiving full benefits. Regardless of the short-term impact, in the long run it is expected to generate net benefits by encouraging employment, preventing skills erosion, and promoting social inclusion.

Among low-income earners, minimum social security contributions (SSCs) may also create disincentives to enter formal employment. Most WB6 economies apply minimum bases that are no longer binding for low-income full-time workers due to the recent increases in minimum wages. However, the minimum contribution base may still impact part-time workers, who often earn less than the minimum wage. The share of part-time employment in the WB6 is around 6% of total employment (which is much lower than Austria's rate of 29%, for example), potentially due to the presence of minimum bases in the former, among other factors. The justification for maintaining these bases is to reduce incentives for underreporting wages and to preserve the protections they offer workers, such as for health insurance or securing higher pensions upon retirement. However, by pushing some workers into informal employment, the minimum bases may leave them without any social insurance or pension entitlements at all. Reducing the minimum bases could therefore not only lower disincentives to formal work at low income levels but also expand access to essential social protection.

Policy makers considering adjustments in SSC bases and/or rates should carefully consider trade-offs between different reform outcomes. Incentivizing formal work is one objective, and lowering the FTR to this end may encourage more workers to do so. Participating in formal work also has other benefits, such as access to health insurance, unemployment protection, and old-age pensions, which are made possible through part of the SSCs. Other in-work benefits may also be beneficial. On the other hand, the level of SSCs should be viewed in relation to the quality of services available to citizens and their fiscal sustainability. Reform development would have to be accompanied by efforts to understand the fiscal implications, choices, and trade-offs made by individual households as well as to ensure that wages are not underreported and that workers are protected in case of sickness or old age by the share of SSCs that finance entitlements, for example.

In this context, it is important to note that the findings of this study align closely with the existing literature, which has long recognized the same challenges and recommended similar reforms. While some steps have been taken (e.g., the pilot initiative for income disregard in Kosovo), progress has been slow, particularly with regard to lowering minimum SSC bases. Fiscal concerns are likely one reason for this cautious stance. Although there are arguments that the proposed reforms could even yield positive fiscal effects, further research is clearly needed to better assess their budgetary impact and to support evidence-based policy decisions that promote formal employment. This analysis shows that the driver of disincentives is coming more strongly from the social-benefit side in some countries (i.e., Kosovo and Montenegro) and more strongly from the labor-taxation side in other countries (e.g., Albania). Hence, policy makers should carefully account for the trade-offs and limitations when considering reform options as well as assess from where the biggest gains may come.

Other barriers (e.g., cultural norms and care responsibilities) also play a significant role in limiting labor force participation in the region, particularly among women. These factors often interact with the disincentives created by tax and benefit systems, making formal employment even less accessible. For example, women with care obligations may be more likely to seek part-time or flexible jobs, which are precisely the types of employment most discouraged by high minimum SSC rates and the abrupt withdrawal of benefits. Addressing these structural and social barriers alongside tax-benefit reforms is essential not only for improving labor market inclusion, but also for advancing social justice and promoting greater gender equality.

1. Introduction

This special topic analyses the tax and social benefit systems in the six Western Balkan (WB6) economies to assess how they may influence decisions about formal employment. Taxes and social benefits affect household income in different ways depending on whether household members are formally employed or not. For instance, households may lose some or all of the social benefits they receive once they transition to formal employment, which can discourage them from registering as employed. Likewise, labor taxes that have to be paid when registered as employed may be high, discouraging both workers and employers from formalizing employment. These disincentives can also arise when a household member increases their working hours in addition to when they first register as formally employed.

Understanding how the tax and benefit system affects these outcomes is important because the WB6 economies face significant labor market challenges. As highlighted earlier in the first part of this report, the labor market activity rate in the WB6 averaged 66% in 2023, well below the EU average of 75%. Similarly, the employment rate in the WB6 stood at 59%, compared to 70% in the EU. While tax and social benefit systems are certainly not the sole or primary causes of these challenges, they can be important contributing factors. Their impact can be particularly pronounced among certain groups, such as women and youth. For example, female labor force participation in the Western Balkans was just 57% in 2023, compared to 70% in the EU. The rate for young people in the Western Balkans who were neither in employment nor in education and training (NEET) stood at 19% in 2023, compared to 9% in the EU.

The role of tax and benefit systems is especially critical for specific types of employment, such as part-time jobs, short-hour contracts, and flexible working arrangements. These jobs, often loosely referred to as “mini,” “midi” or “gig” jobs, are relatively uncommon in the WB6 economies, at least according to official data. Part-time employment accounted for only 6% of total employment in the WB6 in 2023, compared to 18% in the EU. This disparity may partly stem from tax and benefit systems that discourage individuals and companies from formally reporting such employment arrangements. It may also stem from other disincentives to work associated with social factors (e.g., women’s care responsibilities) or from high reservation wages driven by remittance incomes from the large Western Balkan diaspora.

Experience from other countries shows that reducing taxes and SSCs on low-income jobs can encourage formal employment by making it more attractive for both workers and employers. A well-known example is Germany’s special tax and benefit treatment for low-wage employment. Its “mini-job” and “midi-job” schemes were designed to ease the tax and contribution burden for low-paid workers and facilitate entry into formal employment, particularly for women. Studies have found that the reform increased labor market participation and supported transitions into formal employment, especially among women. However, it has also been associated with some drawbacks, including reinforced labor market inequalities and limited opportunities for upward mobility (Konle-Seidl 2021; Herget and Riphahn 2022).

This special topic is organized as follows. Section 2 provides a brief overview of the tax and benefit systems in the WB6 economies. Section 3 includes a review of existing literature on tax and benefit systems in the region and a modeling illustration of the impact they have on labor market outcomes.

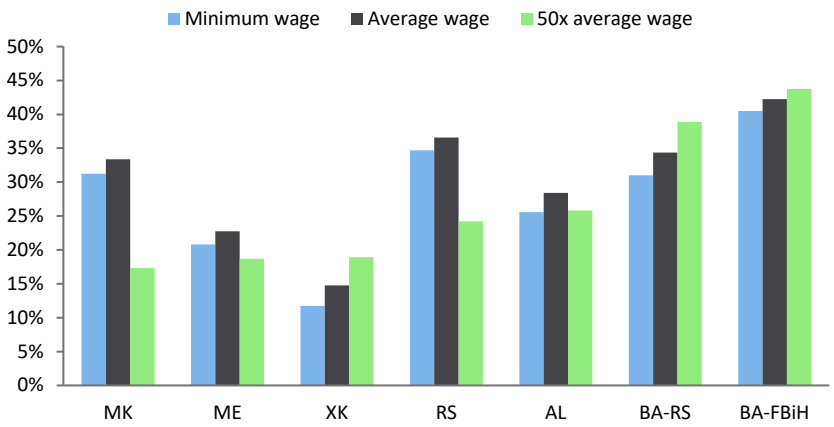
Section 4 outlines the methodology used in the analysis. Section 5 presents a summary of the main findings of the analysis for the region as a whole in addition to including separate analyses of each of the WB6 economies. Lastly, Section 6 summarizes the key messages and policy implications.

2. Overview of the tax and social benefits systems in the Western Balkans

This special topic builds on the analysis of tax systems conducted in the *Western Balkans Labor Market Brief 2022* (Jovanović et al. 2024). That brief found that most labor tax systems in the WB6 are to some extent regressive, meaning that individuals with lower incomes face higher effective labor tax rates than those with higher incomes. To illustrate this, Figure 26 compares the tax wedges for the minimum wage, average wage, and wages 50 times the average in the WB6 economies. In Montenegro, North Macedonia, and Serbia, the tax wedge for wages 50 times the average is lower than that for the minimum wage, while in Albania it is the same. Only Kosovo and the two entities in Bosnia and Herzegovina stand out as exceptions to this pattern, having mildly progressive labor tax systems.

This regressivity largely stems from the minimum and maximum contribution bases used to calculate SSCs. These floors and caps result in disproportionately higher contribution rates for low-income earners while favoring those with high earnings. These features have been part of the tax systems in the WB6 for decades and remained unchanged between 2022 (i.e., the period to which the previous special topic referred) and 2024 (i.e., the period covered by this brief). Some countries have announced reductions in SSCs for 2025, but these are unlikely to bring about substantial changes, as only the rates – and not the bases – are likely to change.

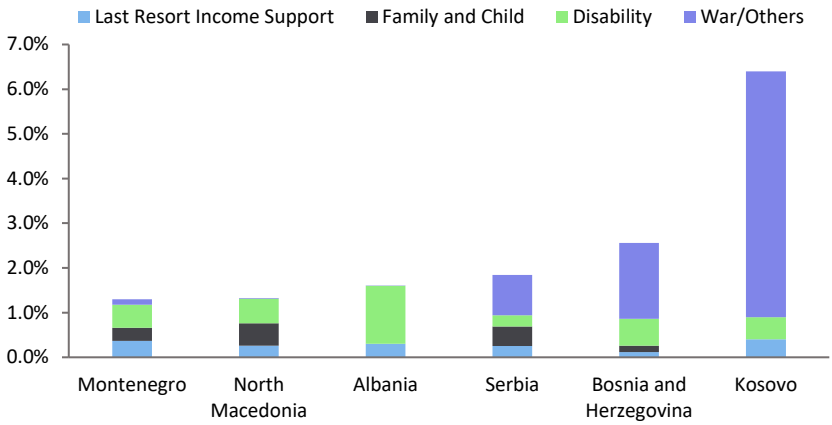
Figure 26 / Total tax wedges for the minimum wage, average wage, and wage 50 times higher than the average in 2022 (% of total labor cost)



Note: Jurisdictions are ordered by the tax wedge for the highest wage, from low to high.
Source: Jovanović et al. (2024)

Turning to social protection systems, countries in the WB6 spend, on average, around 10% of GDP on social protection benefits (World Bank 2023). While this is lower than the EU average of 16.5% of GDP (Eurostat 2024), it still represents a significant share, especially considering the region's lower overall government spending and the older population structure in the EU. Although the majority of this spending goes toward pensions, a substantial portion is allocated to social assistance programs, many of which are linked to employment status or include income-based eligibility criteria (Figure 27).

Figure 27 / Social assistance spending in the Western Balkans in 2019, % of GDP



Note: Data refer to 2019 for all countries, except Bosnia and Herzegovina, for which it is 2017.
Source: World Bank (2023)

These social assistance programs typically include: general poverty-alleviation schemes for households with no or very low income; energy subsidies to help low-income households cover utility costs; child allowances, which are often subject to income thresholds; and educational allowances aimed at helping low-income families to cover school-related expenses. The analysis in this brief focuses on these types of programs. Some countries also offer additional benefits for specific population groups (e.g., persons with disabilities or war veterans). While these schemes can be sizeable and reach a broad share of the population, they are not included in the main analysis due to their different objectives (although they are briefly discussed in Box 2).

3. Overview of existing studies on the disincentive effects of tax and benefit systems in the Western Balkans

Several studies have explored how tax and benefit systems in the WB6 create work disincentives, particularly for low-wage earners, and thereby contribute to informality. World Bank (2011) highlights that social benefits in the region can create labor disincentives, particularly through the design and implementation of last-resort social assistance programs, which are often means-tested and withdraw benefits entirely or significantly as individuals start earning (formal) labor income. This abrupt withdrawal of benefits creates high marginal effective tax rates, discouraging low-income earners from taking formal jobs. Similar findings are obtained by Gotcheva and Sundaram (2013), Bartlett and Uvalić (2022), and World Bank (2023), highlighting that this in turn leads to high informality and social exclusion.

Koettl (2012) uses the OECD Tax-Benefit Model to explore how income taxation, SSCs, and social assistance programs create disincentives to formal employment in Montenegro. The paper highlights that these disincentives are particularly severe for low-income earners, especially single parents or one-earner families with children receiving social assistance. The abrupt withdrawal of benefits, combined with high marginal effective tax rates (exceeding 100% in some cases), makes part-time or low-paying formal jobs economically unviable compared to remaining unemployed or working informally. Koettl (2013) conducts a similar analysis for Serbia, arriving at similar conclusions, highlighting that the floor on the SSCs disproportionately burdens low-wage workers, making formal "mini" and "midi" jobs economically unviable. Similarly, Aleksić and Arandarenko (2022) examine the tax wedges in the region, finding that they disproportionately burden low-income workers, discouraging formal employment among low-skilled individuals and limiting formal employment in labor-intensive sectors.

A set of studies have also applied micro-simulations using models similar to EUROMOD based on household survey data to assess issues such as these. Žarković-Rakić and Ranđelović (2012) examine the effects of Serbia's tax and benefit system on work incentives, using the micro-simulation model for Serbia (SRMOD), confirming what other studies have found, namely, that high tax wedges for low-wage earners – combined with the abrupt withdrawal of social benefits when individuals formalize employment – create significant disincentives to formal work. They also simulate a policy reform that abolishes the mandatory minimum SSC base, finding that this would have positive efficiency and no adverse distributional effects, which they interpret as an argument for abolishing the minimum contribution base. Žarković-Rakić, Ranđelović and Vladisavljević (2016) go one step further and assess the employment effects of abolishing the minimum base, finding that it would not have significant effects on labor market participation and formalization, though they note that their model may not be best suited for this purpose. A policy brief by FREN (2011) examines similar issues in Serbia and North Macedonia in a similar way.

The studies propose similar and complementary recommendations on how to overcome these issues. World Bank (2011) recommends introducing gradual benefit reductions as income rises, integrating social assistance with active labor market programs, and improving targeting to reduce reliance on informal income reporting. Koettl (2012, 2013) proposed multiple potential reform options, including income disregards, reductions of the minimum base for calculating SSCs, and better integration of social benefits with active labor market policies to facilitate formal workforce participation. FREN (2011) has proposed "make work pay" policies (e.g., employment-conditional cash transfers) to encourage formal workforce participation.

While the challenges posed by tax and benefit systems to formal employment in the WB6 have been explored in previous research, this analysis offers several new contributions. First, it applies the tax-benefit model across all WB6 economies, whereas earlier applications were limited to Montenegro and Serbia in addition to being conducted more than a decade ago. Second, the analysis explicitly distinguishes between the role of tax systems and the role of benefit systems in shaping work incentives, providing a clearer picture of the relative importance of each. Third, it assesses alternative policy options for each of the economies to illustrate their potential impact on formal employment incentives, offering practical insights for reforms tailored to national contexts. Finally, by applying a common framework to all WB6 economies, the analysis enables a systematic comparison across countries, highlighting cross-country similarities and differences as well as providing an opportunity for each of them to learn from the experiences of the others.

4. Methodology

The analysis in this special topic uses the standard tax and benefits model widely employed in the literature, including by institutions like the OECD (2022). The model assesses the different types of incomes, social benefits, and labor taxes that a representative household would receive or pay at different levels of gross wages. At each of the levels of gross wage assessed, the model calculates the net total income that the household would receive if that gross wage were earned through either *formal* or *informal* employment. The former, called "net total income," is equal to the sum of the net wage and the social benefits that the household retains when working formally. The latter, called "income if informal," is equal to the net wage, the unpaid labor taxes, and all social benefits, including those that the household loses when working formally. For each country and entity, the analysis shows the two measures depicted in a single graph along the gross wage.

As the analysis starts from the gross wage, it assumes that the employer offers a fixed gross wage to the worker, who then decides whether to accept the job or not and, if yes, whether to work formally or informally. If the worker chooses informal employment, they retain the entire gross wage. If they choose formal employment, they receive the net wage, while the employer pays the corresponding labor taxes. This assumption implies that the bargaining power lies predominantly with the employer, who determines the gross wage unilaterally. The worker, in turn, has limited scope to negotiate and simply decides whether to accept the job offer and in what form. From the employer's perspective, it is irrelevant whether the worker is employed formally or informally; what matters is the gross wage, as it represents the total cost of labor. In our view, this reflects the reality in many WB6 countries, where workers' bargaining power is weak due to high unemployment, deteriorating labor rights, and ineffective enforcement of worker protections.

A key concept in the analysis is the formalization tax rate (FTR). Introduced by Koettl and Weber (2012), the FTR measures the proportion of income lost when transitioning from informal to formal employment. It is calculated as a difference between "net total income" and "income if informal," as a percentage of the "income if informal." It consists of the labor taxes and SSCs that have to be paid when some of its members start working (formally) and social benefits are lost upon formalization.

While applying the tax and benefits model, the analysis follows the approach of Koettl (2012, 2013). It begins by selecting a representative household and then assesses the labor income, social benefits, and labor taxes that the household would receive or pay at various income levels. Based on this, the key indicators described earlier (i.e., net total income, "income if informal," and the FTR) are calculated. A household consisting of two working-age adults and two pre-school children is used, as this is the most typical household in the region.[6] It is assumed that both adults are capable of working and that the household does not receive disability benefits, pensions, or other forms of special assistance.

The social benefits included in the analysis are non-contributory means-tested programs that cover a significant share of the population. In the WB6, these typically consist of: a poverty-alleviation scheme (also referred to as a "last-resort social assistance program"); an energy allowance or subsidy to help cover higher utility costs during the colder months; and a child allowances to support families with children. Some countries also offer educational allowances (i.e., programs that provide support while children attend school), but they are excluded from the analysis for the sake of simplicity. In any case, they do not materially affect the results, add unnecessary complexity, and are not available in all countries.

Importantly, insurance-based schemes (e.g., pensions and unemployment insurance) as well as specialized programs (e.g., disability support or war veterans' benefits) are excluded from the analysis. Some of these, particularly war veterans' benefits, are sizeable in certain countries and cover a substantial share of the working-age population – as is the case in Kosovo and Bosnia and Herzegovina (see Figure 27) – and may therefore influence decisions about work. However, these schemes are targeted at specific population groups based on personal characteristics or past circumstances rather than being available to a typical household. In addition, eligibility is generally not linked to income or employment status. For these reasons, they are excluded from the core analysis. However, their design and potential impact on work disincentives are briefly discussed in Box 2.

6 Findings will not change even if different types of household are used, as the main issues identified in the analysis are common for all households.

Box 2 / Other significant social benefits in the region and their relationship to employment decisions

In addition to the social benefit programs examined in this analysis, some WB6 countries have specialized schemes targeting specific groups (e.g., war veterans and persons with disabilities). These programs are sizeable in certain countries and cover a large portion of the working-age population, influencing decisions about work in various ways. However, as they are designed for specific categories of people with different objectives, they are not included in the main analysis. This box discusses some of these programs and their potential impact on work disincentives.

War veteran pensions represent a significant share of social spending in Bosnia and Herzegovina and Kosovo. Since they are not means-tested and are often given to people who are still able to work, they may create significant disincentives to formal employment.

- In **Kosovo**, the war veteran pension system serves as both a recognition and financial-support mechanism for those who fought in the Kosovo Liberation Army (KLA). Veterans are divided into three categories according to their involvement in the conflict. Those who joined the KLA before 1998 and remained active until the war's conclusion receive EUR 250 per month. Veterans mobilized later, particularly after March 1998 and March 1999, receive lower pensions of EUR 170 and EUR 120, respectively, reflecting the duration and intensity of their service. Successors of deceased veterans are also entitled to a fixed pension of EUR 250 per month.
- In **Bosnia and Herzegovina**, spending on war veteran benefits, as a proportion of total social assistance expenditure, is the highest in the Europe and Central Asia region. In 2017, assistance for war veterans, war veterans with disabilities, and their families accounted for 1.6% of GDP, making up over 61% of total social assistance spending. In the Republika Srpska entity, the war veteran allowance reaches 14.1% of the population. Although spending on war veteran benefits has gradually decreased, a substantial number of individuals continue to receive them.

Disability benefits are also sizeable in some countries. In **Albania**, the disability allowance provides financial support to individuals with disabilities through a cash transfer scheme funded by general taxation. Over the years, the system has evolved, and with the introduction of a new bio-psychic-social assessment model, it is transitioning toward a more inclusive and equitable approach. In 2021, the standard monthly benefit was set at EUR 88 (ALL 10,563), an amount that did not account for varying levels of disability severity under the older model. Under the new system, benefits are adjusted according to severity, ranging from EUR 56 (ALL 6,763) to EUR 111 (ALL 13,406), with a base amount of EUR 92 (ALL 11,147).

However, recipients of **full disability benefits** are not allowed to work formally, which entirely excludes them from the labor market. **This may encourage informal employment**, as some individuals might still be capable of limited work but risk losing their benefits if detected. For those with **partial disabilities**, formal employment is allowed, but **the amount of the benefit is reduced**, creating a disincentive to formal work and not recognizing the extra costs associated with disabilities.

The results of the analysis are presented through a set of figures. The first figure for each country plots gross wage/total labor cost,[7] social benefits, net total income, and "income if informal" across different income levels. The aim is to observe how these curves evolve across the wage spectrum, identifying points along the income scale where net income drops – indicating the emergence of disincentives to formal employment – and understanding the specific reasons generating these disincentives. The social benefits curve highlights the potential impact of benefit withdrawals, while the gross wage/total labor cost curve reflects the effect of labor taxes. The difference between "net total income" and "income if informal" directly illustrates the extent of these disincentives.

7 Some WB6 economies distinguish between gross wage and total labor cost, though both ultimately refer to the sum of the net wage and associated labor taxes and SSCs. In systems that make this distinction, the gross wage consists of the net wage plus the employee's SSCs and personal income tax (PIT), but excludes the employer's SSCs. The total labor cost, by contrast, represents the full expense borne by the employer and includes both the gross wage and the employer's SSCs. In economies that do not distinguish between gross wage and total labor cost, the two are effectively equal and encompass the net wage, PIT, and both employee and employer SSCs.

The second figure presents the FTR. Calculated as the difference between "net total income" and "income if informal," expressed as a share of "income if informal," it allows the disincentives created by the tax and benefit system to be observed more clearly. The FTR is further broken into two components: the labor taxes and social contributions paid when formal employment begins, and the social benefits lost upon formalization.

While the tax and benefits model provides valuable insights, it is not without its limitations. First, the model relies on laws and decrees rather than actual observed data, and it does not incorporate household-level survey data. Instead, it uses a theoretical "typical" household, which may not fully reflect real-world households. Second, the model omits certain types of income and social benefits. As noted earlier, programs such as war veteran pensions or disability benefits, as well as incomes from service contracts and other non-standard forms of work, are excluded even though these can be sizeable and significantly influence household income and decisions regarding formal employment. Third, the model does not account for the likelihood of detection when working informally, a factor that exists in reality and acts as a deterrent to engaging in informal work. Fourth, the model is static and does not consider dynamic effects (i.e., the potential changes and adjustments that might occur over time as policies or household behaviors evolve). Despite these limitations, the model still allows the main features of the tax and benefits system in the region to be assessed as well as their main weaknesses to be identified.

5. Main findings for the region as a whole

Table 10 summarizes the key characteristics of the current social benefit systems in the WB6. Specifically, the table outlines the types and amounts of social benefits available to a typical household composed of two adults and two children, highlighting the conditions under which these benefits are withdrawn. Only the programs that have been analyzed in this brief are included (in their current versions) rather than pilot or planned schemes. Details for each of the programs, including benefit amounts and eligibility conditions, are provided in the individual country sections that follow this section.

Table 10 / Summary of the social benefits in the WB6 in 2024

Country/entity	Types of social benefits analyzed	Monthly benefit amount (2 adults, 2 children)	Income threshold for eligibility	Minimum SSC base & minimum amount to be paid
Albania	Ndihma Ekonomike (economic aid), energy allowance	Ndihma Ekonomike = EUR 60; energy allowance = EUR 10. Total = EUR 70	No direct threshold since the proxy means test (PMT) is used without any direct income test threshold. For the sake of this analysis, an example of a household that loses the NE when its income reaches 20% of the average wage is used.	Minimum SSC base = EUR 407; minimum SSC amount = EUR 114
Federation of BiH	Social assistance, child allowance	Social assistance = EUR 184; child allowance = EUR 120. Total = EUR 304	Social assistance lost with formal employment; child allowance withdrawn after household (HH) income reaches EUR 505.	Minimum SSC base = EUR 485; minimum SSC amount = EUR 201
Republika Srpska	Social assistance, child allowance	Social assistance = EUR 215; child allowance = EUR 120. Total = EUR 335	Social assistance lost with formal employment; child allowance withdrawn after HH income reaches EUR 368.	Minimum SSC base = EUR 686; minimum SSC amount = EUR 213
Kosovo	Social assistance scheme (SAS), energy subsidy, child allowance	SAS = EUR 130; energy subsidy = EUR 21; child allowance = EUR 40. Total = EUR 191	SAS lost with formal employment; energy subsidy declines at EUR 200 and EUR 400 in HH income.	Minimum SSC base = EUR 170; minimum SSC amount = EUR 17
Montenegro	Material support, child allowance	Material support = EUR 153; child allowance = EUR 114 (reduced to EUR 60 after losing material support). Total = EUR 267	Material support lost with formal employment; child allowance reduced to EUR 60 after material support lost.	No minimum SSC base
North Macedonia	Guaranteed minimum assistance (GMA), energy allowance, child allowance	GMA = EUR 145; energy allowance = EUR 21; child allowance = EUR 41. Total = EUR 207	GMA and energy allowance lost with formal employment; child allowance withdrawn after HH income reaches EUR 254.	Minimum SSC base = EUR 468; minimum SSC amount = EUR 131
Serbia	Financial social assistance (FSA), child allowance	FSA = EUR 210; child allowance = EUR 72. Total = EUR 282	FSA reduced in line with income earned and fully lost at EUR 210 net labor income; child allowance withdrawn after HH income reaches EUR 432.	Minimum SSC base = EUR 343; minimum SSC amount = EUR 120

Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

The table shows the three primary types of social benefits that are present: general poverty-alleviation schemes (aimed at providing basic subsistence), child allowances (to financially support families with children), and energy allowances (designed to mitigate high energy expenses for low-income families, particularly during colder months).

Benefit amounts vary notably in the region. Republika Srpska provides the highest total monthly benefit (EUR 335), combining social assistance and child allowances. Conversely, Albania offers the lowest total monthly benefits (EUR 70), consisting of Ndihma Ekonomike (economic aid) and an energy allowance. Other countries' total monthly benefits are as follows: the Federation of BiH (EUR 304), Serbia (EUR 282), Montenegro (EUR 267), North Macedonia (EUR 207), and Kosovo (EUR 191).

The thresholds at which these benefits are withdrawn differ significantly, but a common pattern is that most poverty-related benefits are lost upon the initiation of formal employment, even at minimal income levels. Serbia and Albania are the only exceptions here. In Serbia, the financial social assistance (FSA) declines in line with income earned and is only fully lost at EUR 210 net labor income. In Albania, the Ndihma Ekonomike is not lost automatically when a household member starts employment, but the program uses a proxy means test (PMT) formula to determine eligibility. This formula, recalculated every 12 months, assigns certain weight to formal employment, and if the value given by the formula exceeds the threshold for receiving Ndihma Ekonomike, the household is not eligible. For the sake of calculation, this paper assumes that the benefit is lost when the formal wage reaches 20% of the national average. Kosovo also has a gradual phase-out of its social assistance scheme (SAS), but only in the pilot version of the scheme, which is being tested now, and not in the main scheme, which is the legally institutionalized program. In all other countries in the region (i.e., Bosnia and Herzegovina, North Macedonia, Montenegro), the main poverty-related benefit is lost upon formal employment.

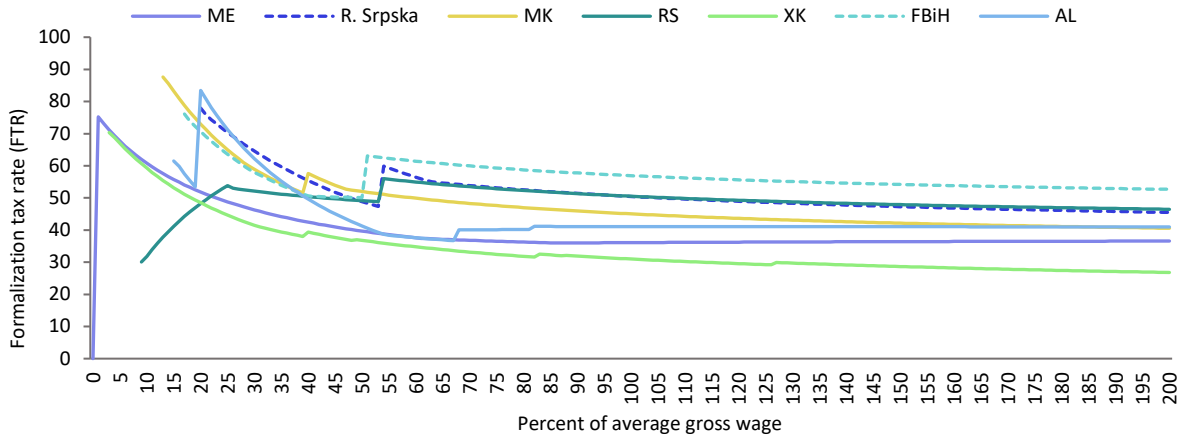
Moreover, the table underscores another crucial structural feature of most WB6 tax-benefit systems: the existence of minimum bases for SSCs. These minimum thresholds require that contributions are paid on at least a certain gross wage level regardless of actual earnings. As a result, households with very low formal incomes face disproportionately high contribution burdens, which undermines incentives to register such income formally. For example, in Republika Srpska, the minimum SSC base is EUR 686, generating a contribution of EUR 213. Even if a person earns just EUR 50 net from part-time work, their total formal labor cost amounts to EUR 263, meaning that more than 80% of it consists of SSCs. Montenegro is the only country in the region that does not impose such a minimum base, and Kosovo's is relatively low (EUR 170, leading to a minimum SSC of EUR 17). In the remaining economies, however, the minimum SSC bases are high and represent a significant barrier to formalization at the lower end of the income scale.

These minimum SSC bases interact with rigid benefit-withdrawal mechanisms, which typically remove social assistance the moment a household earns any formal income. Together, these factors create a sharp trade-off for low-income households, as entering formal employment can lead to the loss of key benefits and the imposition of full contributions, even for marginal earnings. This combination creates strong disincentives to formalize part-time, low-paid, or flexible forms of work.

These disincentives, which are captured in the FTR, are much higher for low-income households in the WB6 compared to OECD countries. As noted, the FTR measures the proportion of household income lost when transitioning from informal to formal employment. Figure 28 illustrates the FTRs across income levels for each WB6 country. At very low formal income levels, the FTR is particularly high – often exceeding 60% or even 75% – reflecting steep immediate losses in net household income upon formalization. For example, in Montenegro, even EUR 1 of formal labor income results in a 75% FTR due to the full withdrawal of benefits despite negligible net income gains. As income rises, the

FTR tends to decline, since the income lost through formalization becomes smaller relative to total earnings. This means that disincentives weaken at higher income levels. However, in many cases, relatively high FTRs persist until roughly two-thirds of the average wage, indicating that disincentives to formalize remain strong even at moderate income levels. These high FTRs at low income levels are much higher than they are in some OECD countries, in which FTRs roughly range between 30% and 40% for the same income group.[8]

Figure 28 / The FTR for each of the WB6 economies under the current system



Note: For some countries, the FTR is only starting at rates above 1% of the average gross wage because of the floor on social contributions (i.e., the minimum level of formal income that can be earned starts well above EUR 1).
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

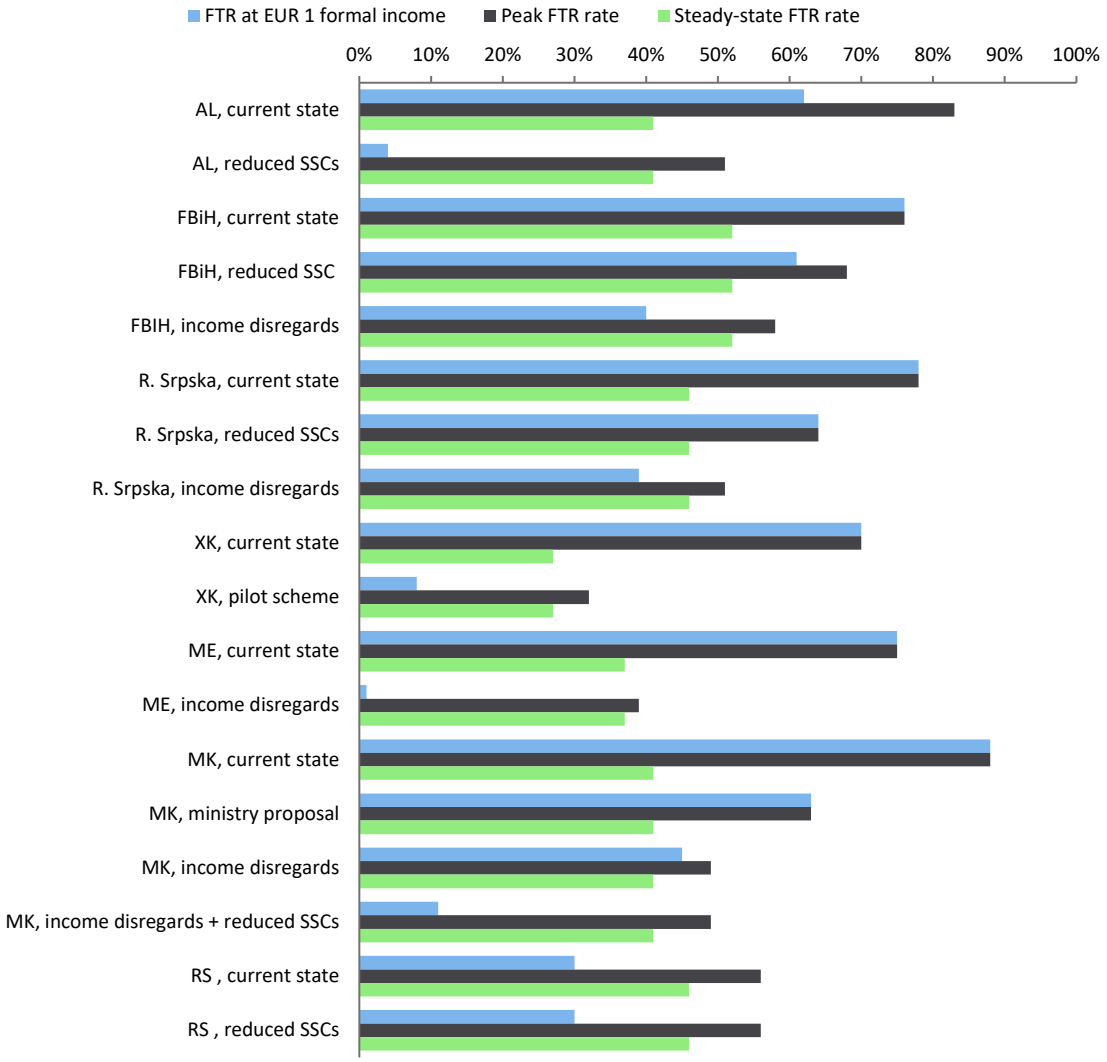
Formal work is not even possible at very low income levels, so these cases are excluded from the calculations. This can be seen as well in Figure 28 as a gap in the FTR line that does not begin at zero income, but only appears from a certain income level onward. For example, the line starts only at 20% of the average gross wage in Republika Srpska, at 17% in the Federation of BiH, at 15% in Albania, at 13% in North Macedonia, at 9% in Serbia, and at 3% in Kosovo. Montenegro is the only country in the region with a fully continuous line. This comes from the minimum bases for SSCs, which sets a floor below which formal total labor costs cannot fall (as net income would be negative). In North Macedonia, for instance, the lowest total labor cost considered in the analysis is EUR 132, which consists of just EUR 1 in formal labor income and EUR 131 in SSCs. As a result, jobs offering lower informal monthly wages (e.g., EUR 100) are excluded from this analysis, as they fall below the minimum formal cost threshold.

Given that the FTR combines the taxes imposed by the loss of benefits and those stemming from labor taxation, it is possible to compare the main drivers of the work incentives in each country. Comparing the FTR figures in each of the country analyses below, it is evident that the contribution from benefits and taxes is relatively evenly split. In Kosovo and Montenegro, the FTR is mainly driven by the benefit design structure, while the FTR is strongly linked to high SSCs in Albania. In the other countries, the split is more even. For this reason, to stimulate formal work participation, policy makers in Kosovo and Montenegro should focus reforms on social benefit programs, in Albania they should focus on adjustments to SSC bases, while in the other countries, they should focus on both.

8 For examples from Australia and the US, see Weber (2015).

Figure 29 summarizes the FTRs at key points for each of the WB6 countries, both under the current system and under the different policy options assessed in the country-specific sections that follow. The policy options consist of 1) reducing the minimum base at which SSCs must be paid, and 2) introducing income-disregard option (i.e., allowing households to continue receiving social benefits while working, with benefit amounts gradually declining in line with earned income). As shown in the table, scenarios involving reduced minimum bases for the calculation of SSCs or income disregards consistently result in significantly lower FTRs, particularly at the initial stages of formal employment. These findings highlight the potential effectiveness of reforms that combine more gradual benefit withdrawals with lower SSC thresholds, thereby strengthening incentives to formal employment and helping to reduce informality in the region. These findings are explored in greater detail in the following sections, which analyze each individual economy.

Figure 29 / The FTRs for the different analyzed options in each of the WB6 economies



Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

5.1. ALBANIA

Short description of the main social benefits and the tax system in Albania

The main social assistance scheme in Albania, Ndihma Ekonomike (economic aid), provides cash benefits to low-income families unable to meet basic needs. Households can receive benefits for up to five years or, if they have employment income, for up to four years. Monthly benefits are calculated at the household level and are adjusted depending on the household composition using the modified OECD equivalence scale.[9] In 2024, a benefit of ALL 2,178 (EUR 22.1) was provided per adult equivalent. A typical household consisting of two adults and two children hence receives ALL 5,881 in this analysis, or the equivalent of approx. EUR 60.

Ndihma Ekonomike is supplemented by an energy allowance and an educational allowance. The energy allowance adds ALL 1,280 (EUR 10.5) per household per month. The educational allowance provides ALL 300 (EUR 2.6) per child attending school and ALL 100 (EUR 0.8) per child for completing vaccinations. However, since the typical household in this analysis only includes pre-school children, the latter is not included in the analysis.

Eligibility for Ndihma Ekonomike is determined through a proxy means test (PMT). The PMT assesses a household's economic status based on indicators such as household composition, housing conditions, asset ownership, and employment status. Each factor is assigned a weight in the scoring formula, and households scoring below the PMT threshold qualify for assistance. The exact formula is not publicly disclosed in order to prevent manipulation.

Beneficiaries of Ndihma Ekonomike are eligible to receive the benefit even if formally employed, and they continue to remain eligible as long as their PMT score stays below the threshold. According to the Albanian Ministry of Health and Social Protection, around 7,000 employed individuals currently receive Ndihma Ekonomike, most of them in households with five or more members.

The labor tax system in Albania consists of the personal income tax (PIT) and the SSCs. It was described and analyzed in detail in *Western Balkans Labor Market Brief 2022* (Jovanović et al. 2024). Since then, there have not been any major changes, apart from adjustments in the tax brackets. The PIT is nominally progressive with three rates: 0%, 13%, and 23%. If the person has a monthly income below ALL 50,000 (EUR 505), the tax rate is 0%. If the person has a monthly income between ALL 50,001 and ALL 60,000 (EUR 506 and EUR 610), the tax rate is 0% on the first ALL 35,000 and 13% for the amount above that. If the person has a monthly income above ALL 60,001 (EUR 611), the first ALL 30,000 have a tax rate of 0%, the income between ALL 30,001 and ALL 200,000 has a tax rate of 13%, and the income above ALL 200,000 has a tax rate of 23%. The SSCs consist of contributions for social insurance and health insurance, and total 27.9% of the gross wage. There are both minimum and maximum bases for calculating the SSCs. The minimum base is equal to the minimum monthly *gross* wage, which was EUR 407 in 2024. This means that the lowest amount of SSCs that can be paid is equal to EUR 114 (27.9%*407).

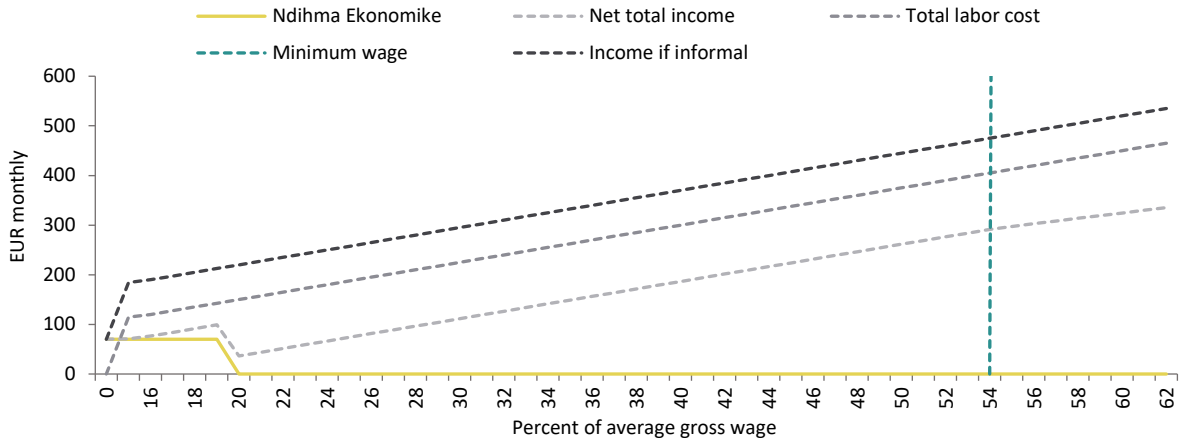
9 Equivalence scales are standardized tools used to adjust the income and benefit amounts of households to incorporate economies of scale. The OECD-modified scale assigns a weight of 1 for the first adult, 0.5 for each additional adult, and 0.3 for each child.

Despite being nominally progressive, the labor tax system is effectively regressive at low and high levels of income due to the minimum and maximum bases for calculating SSCs. The minimum base for the SSCs has particularly significant implications for low-wage earners, who are the focus in this brief. For example, if a person earns a net wage of only EUR 50 per month (e.g., if they work only part-time), their SSCs would still be EUR 114. Since SSCs in the country are paid by the employer, this means that the worker will get the net wage of EUR 50, but the employer will have to pay EUR 164 in total (the PIT is zero at this level of income), resulting in an effective labor tax rate of 70%.

Analysis of the potential impact of the existing social benefits and taxes on household income in Albania

As stated above, the design of Ndihma Ekonomike does not automatically exclude individuals in formal employment, nor are benefit amounts reduced based on the level of formal income. Households lose Ndihma Ekonomike when their PMT exceeds the threshold for receiving the benefit. Since the formula is not publicly known, the analysis done here cannot pinpoint the exact income level at which a typical household would lose access to the benefit. For the purposes of this assessment, an approximation is made that Ndihma Ekonomike is withdrawn once household's gross wage reaches around 20% of the average in the country, although this may vary in reality depending on other household characteristics. In any case, even if the withdrawal occurs at a different income level, the overall findings of the analysis would remain qualitatively the same and only the point at which the benefit is lost would differ.

Figure 30 / Income and social benefits at different levels of gross wage for a household with two adults and two pre-school children in Albania



Note: The total labor cost jumps from 0% of the average gross wage to 15% because of the floor on social contributions (i.e., since social contributions cannot be lower than EUR 114, the total labor cost for the employer is EUR 115, or 15% of the average gross wage, even for net labor income of EUR 1).
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

Figure 30 illustrates how household income and benefits change for a typical household as the gross wage increases. The orange solid line illustrates the benefit amount received from Ndihma Ekonomike, while the dashed grey lines illustrate different types of income: (i) the net total income of the household, consisting of Ndihma Ekonomike and the net wage (light-grey); (ii) the total labor cost, consisting of the net wage plus the labor taxes (medium-grey); and (iii) the "income if informal," consisting of the net wage, labor taxes, and Ndihma Ekonomike (dark-grey). Additionally, the minimum wage in the country is shown as a vertical dashed green line, which serves as a reference point for the segment of the wage distribution to which the analysis refers (295 EUR *net*).

The amount of Ndihma Ekonomike remains constant in the figure until the household's gross wage reaches 20% of the national average. At this point, according to the chosen approximation, the household's PMT score exceeds the eligibility threshold, resulting in the loss of Ndihma Ekonomike. The net total income correspondingly declines, as Ndihma Ekonomike forms part of it. In contrast, the other two income lines (i.e., total labor cost and "income if informal") continue to increase monotonically: the total labor cost because it does not include Ndihma Ekonomike, and the "income if informal" because the household would continue receiving the benefit while working informally.

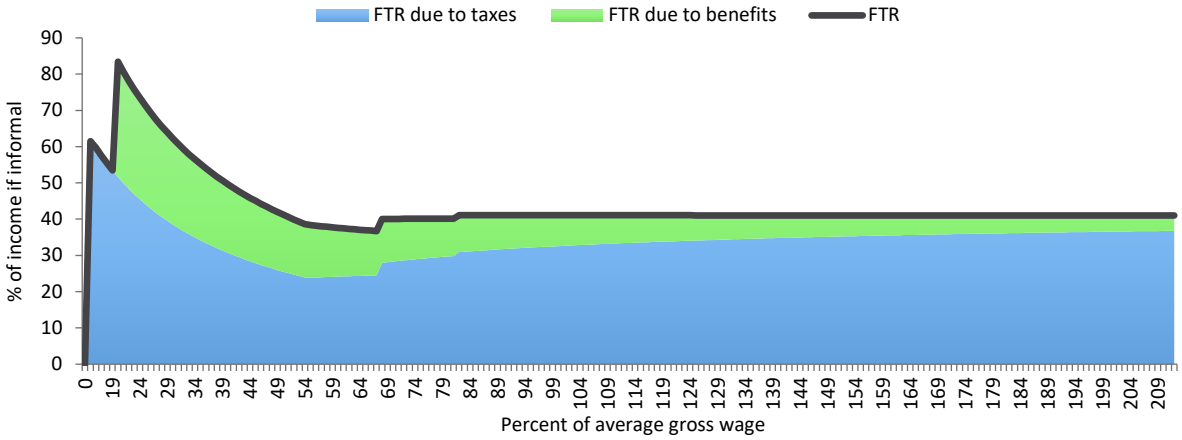
The FTR for Albania indicates that disincentives to formal work created by the tax system are most drastic at low income levels. This can be seen in Figure 31, which shows the FTR. As explained earlier, the FTR measures the income lost when transitioning from informal to formal employment – specifically, the difference between net total income and "income if informal," expressed as a percentage of "income if informal." The figure plots the FTR across different gross wage levels and shows that the rate jumps from 0% when no one in the household works to 62% once a household member starts formal employment. This steep rise is due to the minimum level of SSCs, which require a relatively high amount to be paid even at very low income levels (the minimum SSC in Albania is EUR 114). If a household member were to earn just EUR 1 in formal wages, the household's net total income would be EUR 71, consisting of the net wage plus the Ndihma Ekonomike benefit. By contrast, if the same person worked informally, the household's income would be EUR 185 – comprising the net wage, Ndihma Ekonomike, and the EUR 114 that would otherwise be deducted as SSCs. As a result, the household would lose 62% of its income when transitioning from informal to formal employment at this wage level, which in this case is equal to the minimum SSC amount of EUR 114.

As labor income rises, the FTR gradually declines. However, when a household's gross wage reaches 20% of the average, the household loses Ndihma Ekonomike, according to the assumption. As a result, the FTR jumps to its peak level of 83%. Afterwards, it continues to decline gradually, with occasional increases due to the progressive PIT. Around the average wage, the FTR stabilizes at approximately 40%. The 40% to which the FTR converges refers to the labor taxes (i.e., PIT and SSCs) that have to be paid when working formally. It is also worth noting that a majority of the FTR, throughout the whole wage distribution, refers to taxes (the blue area in Figure 31), while the part that refers to the loss of Ndihma Ekonomike is smaller (the green area in the figure).

It is also important to note that these disincentives primarily affect formal work rather than employment in general. To illustrate this, it is useful to compare social benefits with the minimum wage. In 2024, Albania's minimum wage was around 55% of the average wage, corresponding to a net income of EUR 295 per month. This was more than four times the EUR 70 provided through Ndihma Ekonomike, making it difficult to argue that social benefits in Albania are high enough to discourage

work entirely. Social benefits alone are simply too low to sustain a livelihood without additional labor income. As a result, the disincentives they create are more likely to lead people to seek alternative income sources, including from informal employment, which allows them to retain social benefits while earning a wage.

Figure 31 / The FTR at different levels of gross wage for a household with two adults and two pre-school children in Albania



Note: The average gross wage scale on the horizontal axis jumps from 0% to 15% because of the floor on social contributions.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

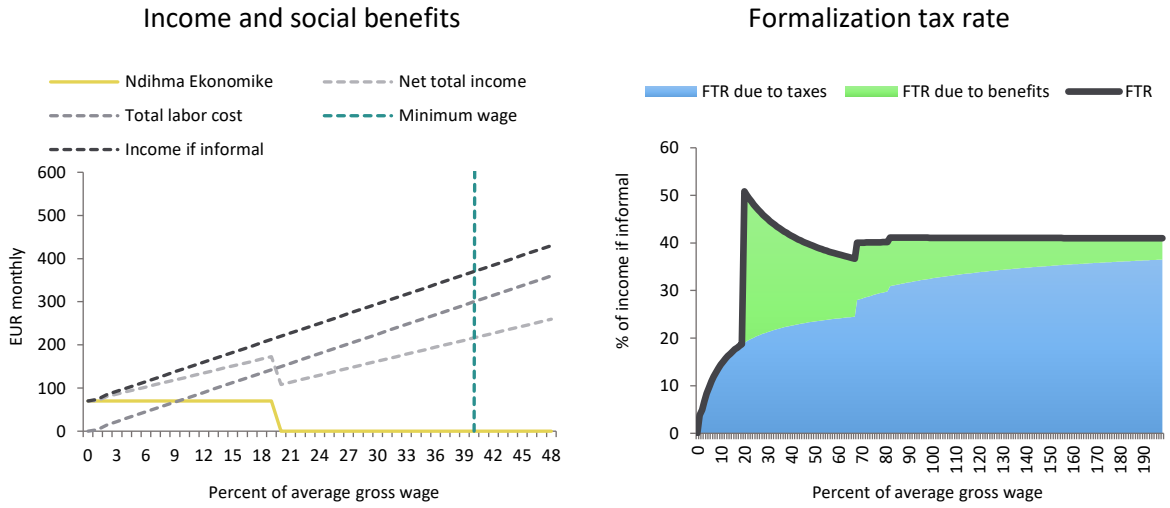
Issues with the tax and benefits system in Albania and potential solutions

The analysis presented so far shows that most disincentives to formal employment in Albania stem from labor taxes rather than social benefits. The FTR is highest at low income levels. This is by in large due to the high levels of SSCs at low levels of wages as a result of the minimum base for their calculation, which is currently set at the gross minimum wage. Given the most recent minimum wage in 2024 (EUR 407), SSCs cannot be lower than EUR 114 even if individuals earn lower levels of net wages in part-time work.

A reduction in the minimum base for calculating SSCs could improve the incentives to enter or formalize mini- or midi-jobs. Figure 32 illustrates the potential impact of lowering the minimum base for SSCs from EUR 407 per month to EUR 10 per month. The FTR increases only gradually under this option (i.e., without a sudden jump), highlighting the significant role that the minimum base for SSCs plays in shaping disincentives at low income levels. However, when the gross wage reaches the approximated level at which it triggers loss of Ndihma Ekonomike, the FTR jumps from 19% to 51%. Afterward, it gradually declines to the same steady-state level as before, of around 40%. This suggests that while reducing the minimum base for SSCs may have a notable impact at the initial stages of income growth, its influence diminishes at higher income levels. The minimum base is, therefore, more critical in addressing disincentives for low-wage earners than for those earning closer to the average wage.

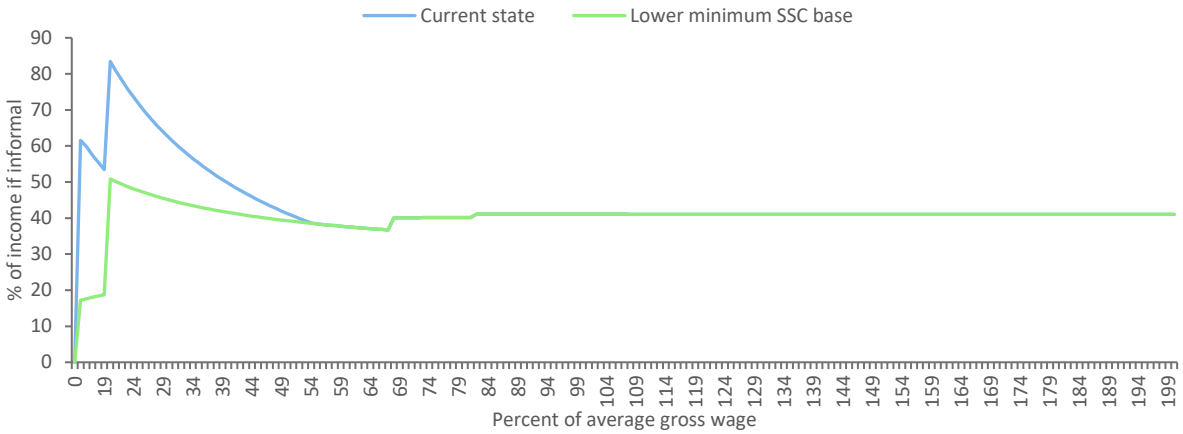
However, the abrupt withdrawal of Ndihma Ekonomike continues to create strong disincentives even when the minimum SSC base is reduced. When the gross wage reaches the approximated level that triggers the loss of Ndihma Ekonomike, the FTR jumps sharply, from 19% to 51%, even under the base scenario with reduced SSCs. This indicates that as long as Ndihma Ekonomike is withdrawn abruptly at any specific income threshold, significant disincentives will persist. To address this issue, social benefits should be phased out gradually, with their amounts decreasing progressively as household income rises.

Figure 32 / Income, social benefits, and the FTR at different levels of gross wage in Albania, with minimum SSC base of EUR 10



Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

Figure 33 / Comparison of the FTR under the two analyzed options for Albania



Note: The average gross wage scale on the horizontal axis jumps from 0% to 15% because of the floor on social contributions. "Current state" refers to the FTR as it currently is. "Lower minimum SSC base" refers to the FTR according to the proposal for lowering the minimum base for SSCs.

Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

The difference in the FTR under the two options is also visible in Figure 33. The option with the lower minimum SSC base results in a clearly lower FTR in the initial part of the figure, indicating significantly smaller disincentives to formal work. However, once wages reach 50% of the average, the two lines converge, meaning that beyond this point, the disincentives to formalization become the same under both options. This suggests that while lowering the minimum SSC base would be effective in reducing disincentives at low income levels, its impact diminishes as wages increase.

Summary of main findings for Albania

- **Ndihma Ekonomike amount and eligibility:** Albania's Ndihma Ekonomike (economic aid), together with the energy allowance, amounts to EUR 70 per month for a typical household of two adults and two pre-school children. In principle, it allows employed individuals to retain benefits even while working formally, but eligibility is eventually determined by a PMT, which takes into account formal employment. This creates uncertainty regarding when a household would lose benefits upon entering or formalizing employment. For the purposes of this analysis, it has been assumed that Ndihma Ekonomike is lost once the labor income that the household receives reaches 20% of the average wage.
- **High formalization tax rate (FTR):** The first euro of formal labor income results in a sharp FTR increase, to 62%, due to high SSCs. After that, the FTR starts declining but again spikes more than 80%, when the household loses eligibility for Ndihma Ekonomike.
- **Social security contributions (SSCs) as a key barrier:** SSCs have a minimum base equal to the minimum wage (EUR 407 in 2024), leading to excessively high contributions for low-wage earners. Even for minimal formal income, SSC payments of at least EUR 114 must be made, creating a significant tax burden at low levels of income.
- **Potential policy solution:** Reducing the minimum SSC base would significantly lower the FTR at low income levels, easing the transition into formal employment without major fiscal costs.
- **Gradual phase-out of Ndihma Ekonomike:** Reducing the SSC base alone will not eliminate the spike in the FTR caused by the abrupt, full withdrawal of Ndihma Ekonomike, which in this analysis was assumed to occur when labor income reaches 20% of the average wage. In practice, this may happen at different income levels, but it is always in an abrupt manner with a full loss of the benefit. To address this, the government of Albania may wish to consider introducing a gradual reduction of Ndihma Ekonomike as formal household income increases rather than a sudden loss of the benefit.

5.2. BOSNIA AND HERZEGOVINA

Bosnia and Herzegovina has a decentralized social protection system, with separate systems in each of its administrative units. Because of this, the following sections present and analyze the systems in the Federation of BiH (FBiH) and Republika Srpska. Brčko District also has its own system, but no elaboration of it is provided here given its small size. The systems are largely similar, as they are based on the same principles regarding the types of benefits and eligibility criteria (some of which even have the same names), with only minor differences in parameters (e.g., benefit amounts and eligibility thresholds).

5.2.1 The Federation of BiH

Short description of the main social benefits and the tax system in the Federation of BiH

The main means-tested social protection programs in the Federation of BiH include social assistance and a child allowance. The social assistance program provides financial support to individuals and households with no significant income or assets who are *unable to work* and have no legally responsible family members capable of providing support. That means that once a household member starts working formally, the household loses the right to receive social assistance. Eligibility is determined by local social welfare authorities, and benefit amounts vary by canton. For example, in canton Sarajevo, a four-member household received KM 360 (EUR 184) per month in 2024.

A child allowance is granted to children up to the age of 18, provided that per-member household income does not exceed 40% of the minimum net wage. As the minimum net wage in 2024 was EUR 316,[10] this amounted to EUR 505 for a four-member household. The allowance is set at 19% of the net minimum wage, amounting to EUR 60 per child per month (or EUR 120 EUR for the household analyzed here).[11]

The labor tax system in the Federation of BiH consists of the personal income tax (PIT) and the SSCs. It was described and analyzed in detail in *Western Balkans Labor Market Brief 2022* (Jovanović et al. 2024). The entity applies a flat PIT rate of 10%. However, a personal tax allowance introduces a degree of effective progressivity to the system. The allowance is set at KM 300 (approximately EUR 153), meaning that the first EUR 153 of labor income is exempt from taxation. The total rate of SSCs is 41.5% of the gross wage – the highest in the WB6. A reduction of 5.5 pp (to 36%) has been announced for July 2025. But since this change had not been implemented at the time of writing and is only supposed to start in 2025, the current analysis is based on the 41.5% rate. There is a minimum base for SSC calculations set at EUR 485 per month, meaning that the lowest amount of SSCs that a company has to pay when formally employing a worker, even if only part-time, is EUR 201. There is no maximum cap on SSCs.

10 As of January 2025, the minimum wage has been increased to EUR 510 net. However, since this analysis refers to 2024, all figures are based on data from that year.

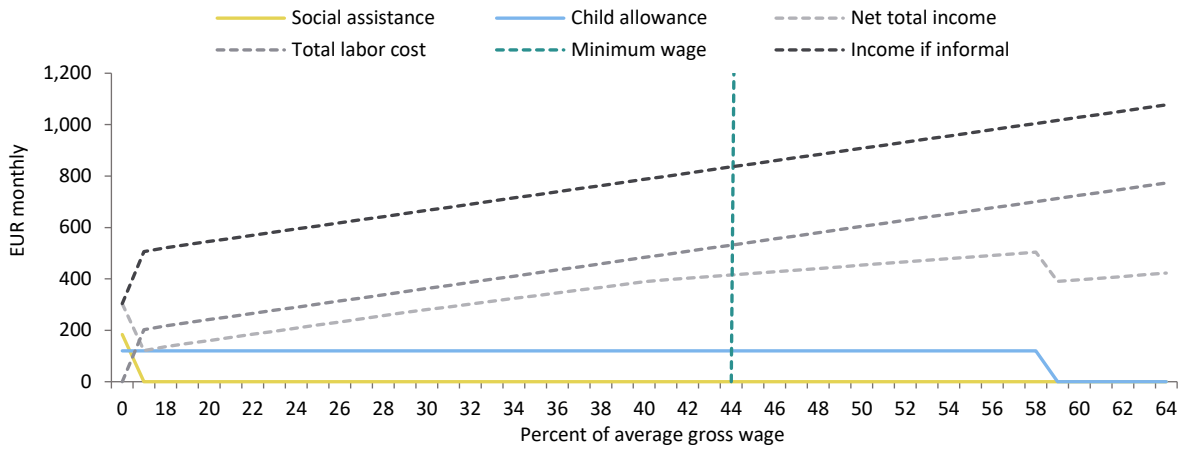
11 Starting in September 2024, children with malignant diseases or disabilities requiring high levels of care are eligible for the allowance regardless of their family's socioeconomic status. This represents a departure from the previously strict means-testing rules.

Analysis of the potential impact of the existing social benefits and taxes on household income in the Federation of BiH

Figure 34 illustrates how income and benefit levels change as earnings of a typical household in the Federation of BiH increase. The levels of various forms of income and benefits are calculated and displayed for different levels of gross wage. The figure includes the Federation of BiH's two social assistance programs, indicated by solid lines: (i) social assistance (orange), and (ii) the child allowance (blue). The dashed lines illustrate different levels of income: (i) the net total income of the household, consisting of the relevant social assistance benefits and the net wage (light-grey); (ii) the total labor cost, consisting of the net wage plus the labor taxes (medium-grey); and (iii) the "income if informal," consisting of the net wage, labor taxes, and applicable social assistance benefits (dark-grey). Additionally, the minimum wage in the entity is shown as a vertical dashed line, serving as a reference point for the segment of the wage distribution to which the analysis refers (EUR 316 net per month).

The analysis shows two declines ("kinks") in net total income as earnings increase. The first occurs with the first euro of formal labor income owing to the immediate loss of social assistance. This means that the household's formal wage is not sufficient to offset the loss in net total income caused by the withdrawal of social benefits. As social assistance eligibility is restricted to households without employment, the analyzed household receives EUR 184 per month when it has zero formal income, but this support is lost entirely as soon as any formal earnings are registered. The second kink in net total income occurs when the child allowance is withdrawn, which happens once household income reaches EUR 505.

Figure 34 / Income and social benefits at different levels of gross wage for a household with two adults and two pre-school children in the Federation of BiH



Note: The total labor cost jumps from 0% of the average gross wage to 17% because of the floor on social contributions, (i.e., since social contributions cannot be lower than EUR 201, the total labor cost for the employer is EUR 202, or 17% of the average gross wage, even for net labor income of EUR 1).
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

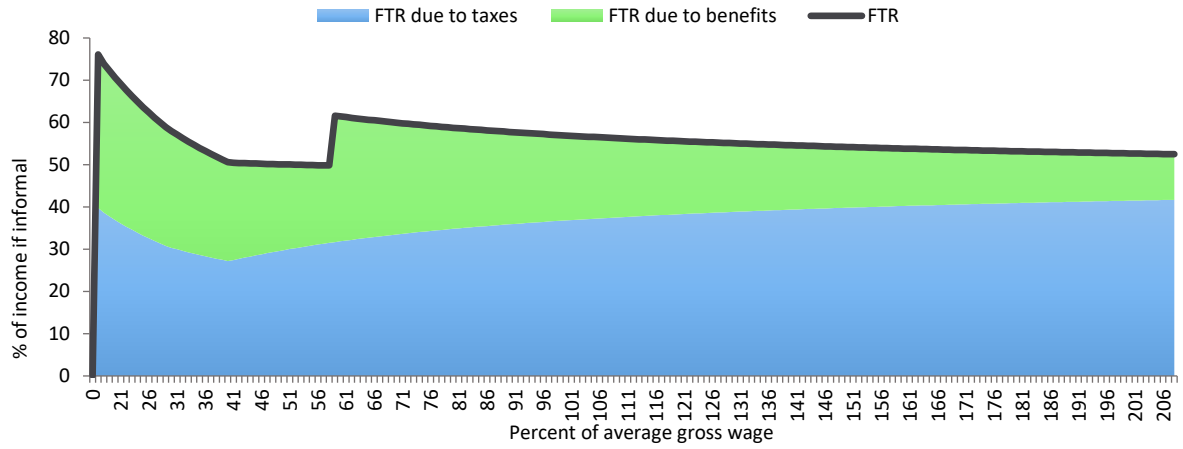
In addition, the high minimum SSC base causes a sharp increase in labor costs at low income levels, which is visible in the figure as a sudden rise in total labor cost once the wage moves above zero. Part-time work (e.g., "mini," "midi," or "gig" jobs) is subject to disproportionately high labor costs, as at least EUR 201 per month in SSCs must be paid regardless of the employee's earnings. For example, a worker in a 50% part-time minimum wage job would earn approximately EUR 160 net. Despite the

low wage, EUR 201 in contributions still has to be paid, more than doubling the total labor cost compared to the net wage.

The disincentives created by the tax and benefit system can also be observed through the FTR. The FTR, measured as the percentage of income lost when a worker transitions from informal to formal employment, jumps immediately to 76% as soon as a household member starts working formally (Figure 35). This occurs due to the loss of social assistance and the high SSCs. For example, if no one in the household is working formally, its total income amounts to EUR 304 (i.e., EUR 184 from social assistance and EUR 120 from the child allowance). If a household member starts working formally and earns a net wage of as little as EUR 16 per month, the household will lose social assistance entirely, leaving it with a total household income of just EUR 136 (i.e., EUR 16 in net wages plus EUR 120 in child allowance). However, if the household member were instead to work informally without being registered as formally employed, the total income would amount to EUR 521, consisting of EUR 16 in net wages, EUR 201 in SSCs, EUR 184 in social assistance, and EUR 120 in child allowance. Hence, by registering as formally employed, the household would lose EUR 385 (i.e., the difference between EUR 521 and EUR 136), resulting in an FTR of 74%.

After this initial spike, the FTR starts to decline, but it rises again, from 50% to 63%, at an average gross wage of around 50% of the national average. This occurs due to the withdrawal of the child allowance. Beyond this point, the FTR begins to decline, and once the gross wage exceeds the national average, it converges to around 52%, which is its steady state. This is the highest steady state FTR in the region owing to the fact that the Federation of BiH has the highest total SSC rate, of 41.5%.

Figure 35 / The FTR at different levels of gross wage for a household with two adults and two pre-school children in the Federation of BiH



Note: The average gross wage scale on the horizontal axis jumps from 0% to 17% because of the floor on social contributions.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

The social benefits in the Federation of BiH are lower than the minimum wage, as elsewhere in the region. In 2024, the minimum wage stood at EUR 316 per month in net terms, which was higher than the total of EUR 304 in social benefits received by the analyzed household (though admittedly not by as much as in the other countries in the region). Still, as the minimum wage is above the social benefits, it is hard to argue that the benefits in the Federation of BiH are discouraging people from working entirely. Instead, the disincentives they create are more likely to relate to formal employment, as they encourage people to work informally in order to retain social benefits alongside their earnings. It also

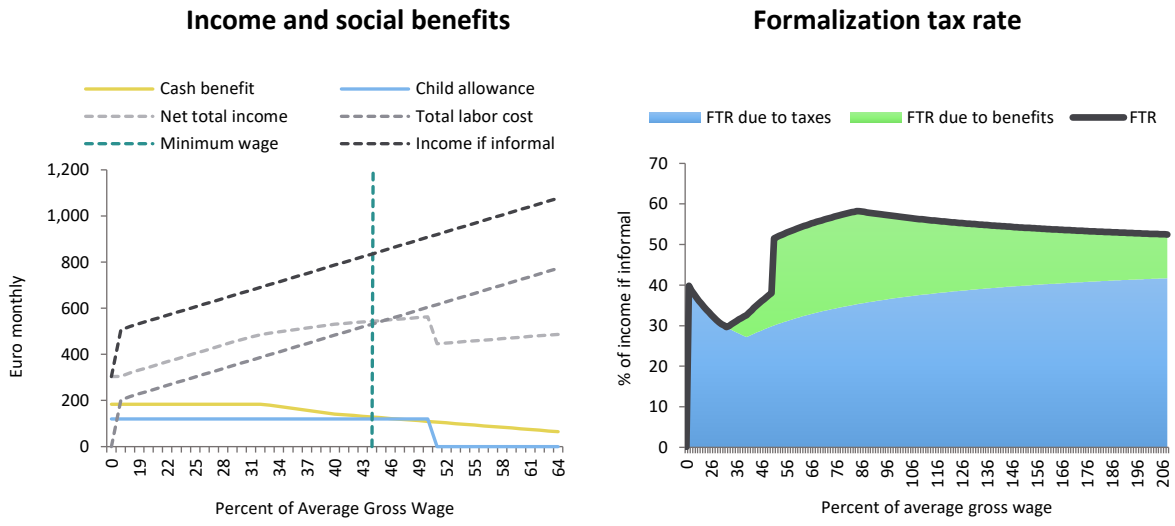
has to be said that the minimum wage has been significantly increased in 2025, to EUR 510 net (KM 1,000), which places it far above the level of social benefits, which have remained largely unchanged. This further weakens the argument that social benefits discourage work in general.

Issues with the tax and benefits system in the Federation of BiH and potential solutions

The analysis presented so far shows that there are two issues in the Federation of BiH that create disincentives to formal work at low income levels. The first is the immediate withdrawal of social benefits once someone starts working, and the second is the high minimum base at which SSCs are calculated. This section assesses potential solutions to these issue: a gradual reduction of social assistance and a lowering of the minimum SSC base.

For the gradual reduction of social assistance, the model tested on a pilot basis in the SAS program in Kosovo is considered. It is elaborated in greater details in the Kosovo section and, in essence, it assumes that if the household has formal labor income below the baseline social assistance amount, it continues receiving the entire amount of the benefit, while if it has a formal labor income above the baseline amount, the benefit is reduced gradually, depending on the income level. Specifically, if the household has formal labor income below the baseline social assistance amount of EUR 184, then it continues receiving the entire amount of social assistance; if it has a formal labor income above EUR 184, the amount of social assistance it receives is calculated as: 184 – [household income – 184]/2.

Figure 36 / Income, social benefits, and the FTR at different levels of gross wage in the Federation of BiH, with social assistance income disregard according to the model piloted in Kosovo's SAS

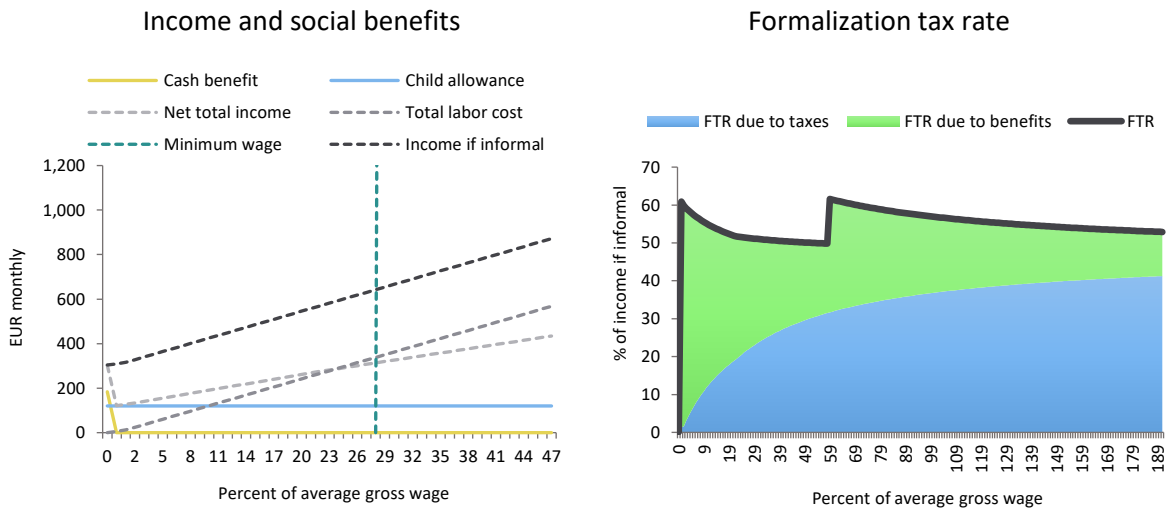


Note: The average gross wage scale on the horizontal axis jumps from 0% to 17% because of the floor on social contributions.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

Figure 36 illustrates income, social benefits, and the FTR under this scenario. The left-hand panel shows that, in this case, the decline in social assistance is very gradual and occurs only after net labor income reaches a certain level. The FTR (shown in the right-hand panel) also differs significantly from the previous scenario, starting at a much lower level. Instead of spiking to 76% when a household member starts working, it now only rises to 40%. Also, at lower wage levels, the FTR consists solely of SSCs now. It then declines to around 30% as the relative magnitude of SSCs decreases and begins to rise only mildly once social assistance starts to be reduced. The FTR jumps to above 50% when the child allowance is withdrawn and reaches a maximum of 58% when social assistance is fully withdrawn. After that, it starts to decline, converging to a similar steady-state level as before. Overall, the FTR in this scenario is significantly lower than in the current system, with much smaller fluctuations, making the transition to formal employment smoother.

Figure 37 illustrates the scenario of a reduction in the minimum SSC base. Looking at the FTR in the right-hand panel, this scenario appears qualitatively very similar to the current situation in the Federation of BiH, as the overall dynamics of the FTR remain the same: A spike occurs when a household member starts working due to the withdrawal of social assistance, followed by a decline, another spike when child allowance is withdrawn and, finally, convergence to the steady state. The key difference from the current situation, however, lies in the magnitude. While the pattern remains unchanged, the FTR levels are consistently lower. The highest FTR now reaches 62%, compared to 76% previously.

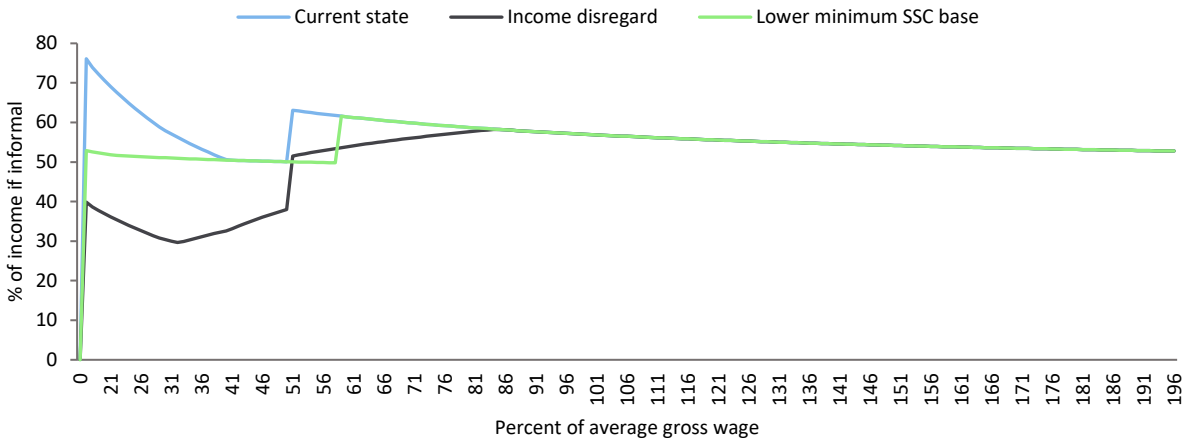
Figure 37 / Income, social benefits, and the FTR at different levels of gross wage in the Federation of BiH, with minimum base for SSC reduced to EUR 10



Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

Figure 38 shows the FTR under all three scenarios. It is evident that the income-disregard option results in the lowest FTR at lower income levels. The option with a lower minimum SSC base leads to a lower FTR compared to the current system, but only up to a gross wage of around 40% of the national average. As the gross wage approaches the average, the three scenarios converge. This suggests that a gradual reduction of social assistance in line with income earned is likely to be the most effective option for the Federation of BiH for reducing disincentives to formal work at low wage levels.

Figure 38 / Comparison of the FTR under the different analyzed options for the Federation of BiH



Note: "Current state" refers to the FTR as it currently is. "Income disregard" refers to the reduction of the amount of social assistance in line with income earned, following the pilot program implemented in Kosovo. "Lower minimum SSC base" refers to the FTR according to the proposal for lowering the minimum base for SSCs. The average gross wage scale on the horizontal axis jumps from 0% to 17% because of the floor on social contributions.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

Summary of main findings for the Federation of BiH

- **Social assistance and other social benefits:** Social assistance provides EUR 184 per month to a typical household of two adults and two pre-school children, but it is withdrawn entirely once any household member starts working formally, creating a sharp income loss at the point of formalization. The child allowance (EUR 120 for two children) is also abruptly withdrawn once household income per capita exceeds 40% of the minimum net wage, again creating sharp income loss at this point.
- **High formalization tax rate (FTR):** The first euro of formal labor income results in an immediate FTR jump to 76%, primarily due to the loss of social assistance and the high SSC burden from the minimum SSC base. The FTR then declines but spikes again to 63% when the child allowance is withdrawn before eventually converging to around 52% at higher wage levels. This 52% level is the highest in the region owing to the fact that the Federation of BiH has the highest total SSC rate, of 41.5%.
- **High social security contribution (SSC) burden at low wages:** The Federation of BiH has a minimum SSC base set at the minimum gross wage (EUR 485 in 2024), requiring a minimum SSC payment of EUR 201 per month, even for workers earning far less. This disproportionately impacts part-time and low-wage workers, making formalization costly.
- **Stronger disincentives to formal work, but not to work in general:** The benefits system does not necessarily discourage employment but may incentivize informal work to retain social benefits while also earning labor income. The minimum wage in the Federation of BiH in 2024 was EUR 316 net per month, which is higher than the combined EUR 304 received through social assistance and the child allowance. The minimum wage was significantly increased in 2025, to EUR 511 net (KM 1,000), placing it far above social benefits. This suggests that benefits are too low to sustain a livelihood and discourage people from working altogether, but high enough to encourage informality when combined with high SSCs at low income levels.

- **Income disregard of benefits and a lower SSC base would improve incentives:** A gradual reduction of social assistance in line with income earned would result in a lower and more gradual FTR, making the transition to formal employment smoother and less financially penalizing for low-income households. Similarly, reducing the minimum base at which SSCs are calculated would lower the FTR at low income levels, though its effect would diminish as wages rise.

5.2.2 Republika Srpska

Short description of the main social benefits and the tax system in Republika Srpska

The key means-tested social protection programs in Republika Srpska include social assistance and a child allowance. Social assistance forms the core of Republika Srpska's social protection framework, providing monetary support to individuals (and households) with no significant income or assets, who are *unable to work*, and who have no legally responsible family members capable of providing support. The amount of assistance is determined by household size and calculated as a percentage of the average net salary in Republika Srpska. In 2024, a four-member household received KM 421 per month (EUR 215). Since the program is intended for people who are unable to work, a household loses the benefit entirely once a member starts working formally.

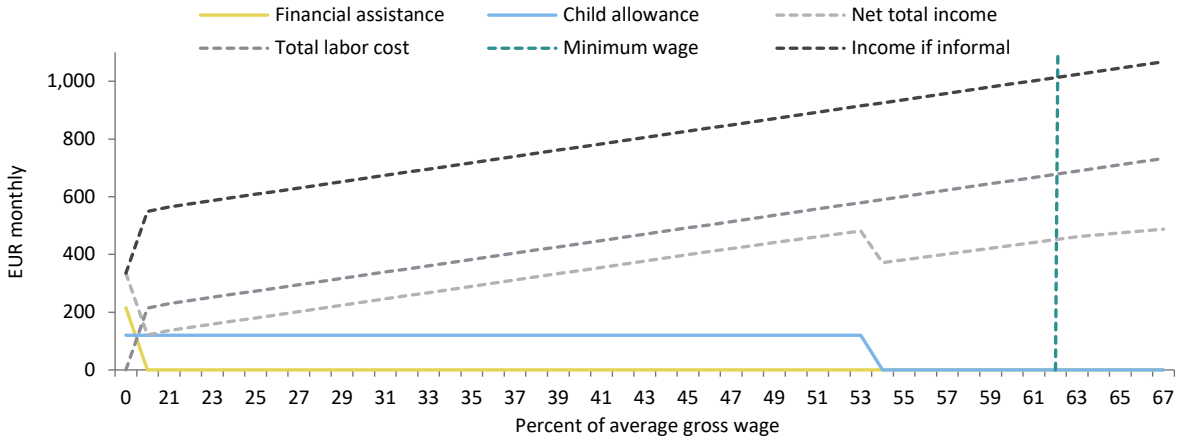
The child allowance in Republika Srpska is granted to the mother or another eligible guardian in accordance with the law. It is available for the first, second, third, and fourth child in a family and its level depends on the family's financial situation as well as the birth order and age of the child(ren). The allowance is provided until a child reaches the age of 15, provided they are in full-time education. In 2024, the child allowance was set at KM 117 per month for the first, second, and fourth child, and at KM 169 for the third. For a household with two children, this amounts to approximately EUR 120 per month. Eligibility is means-tested, with the child allowance being withdrawn entirely once per-member household income exceeds 20% of the minimum wage (KM 900). This threshold corresponds to KM 180 per family member or a total household income of EUR 368 for the four-person household analyzed here.

The labor tax system in Republika Srpska consists of personal income tax (PIT) and the SSCs. It was described and analyzed in detail in the *Western Balkans Labor Market Brief 2022* (Jovanović et al. 2024). Since then, there have not been any major changes. The entity applies a flat PIT at a rate of 8%. However, personal tax allowances introduce a degree of effective progressivity to the system. The allowance is set at KM 1,000 (approximately EUR 510), meaning that the first EUR 510 of labor income is exempt from taxation. In terms of SSCs, employees contribute a total of 31% of the gross wage. Republika Srpska has a minimum base for SSC calculations set at the minimum gross wage, which was EUR 686 (KM 900 net) in 2024. This means that the lowest possible SSC payment is EUR 213 per month. There is no maximum cap on SSCs. Owing to these features, the labor tax system in Republika Srpska is regressive at low income levels due to the SSC floor, but it becomes progressive at higher income levels.

Analysis of the potential impact of the existing social benefits and taxes on household income in Republika Srpska

Figure 39 illustrates how income and benefit levels change as earnings of a typical household in Republika Srpska increase. The levels of various forms of income and benefits are calculated and displayed for different levels of gross wage. The figure includes Republika Srpska's two social assistance programs, indicated by solid lines: (i) social assistance (orange), and (ii) the child allowance (blue). The dashed lines illustrate different types of income: (i) the net total income of the household, consisting of the relevant social assistance benefits and the net wage (light-grey); (ii) the total labor cost, consisting of the net wage plus the labor taxes (medium-grey); and (iii) the "income if informal," consisting of the net wage, labor taxes, and applicable social assistance benefits (dark-grey). Additionally, the minimum wage in the entity is shown as a vertical dashed line, serving as a reference point for the segment of the wage distribution to which the analysis refers (EUR 460 net per month in 2024).

Figure 39 / Income and social benefits at different levels of gross wage for a household with two adults and two pre-school children in Republika Srpska



Note: The total labor cost jumps from 0% of the average gross wage to 20% because of the floor on social contributions (i.e., since social contributions cannot be lower than EUR 213, the total labor cost for the employer is EUR 214, or 20% of the average gross wage, even for net labor income of EUR 1).
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

The analysis shows two declines ("kinks") in net total income as earnings increase. The first occurs with the first euro of formal labor income due to the immediate loss of social assistance and the high SSCs resulting from the minimum SSC base. This means that the household's formal wage is not sufficient to offset the loss in net total income caused by the withdrawal of social benefits. As social assistance eligibility is restricted to households without employment, the analyzed household receives EUR 215 per month when it has EUR 0 in formal income, but this support is lost entirely as soon as any formal earnings are registered. The second kink in net total income occurs when the child allowance is withdrawn, which happens once household income reaches approximately EUR 368.

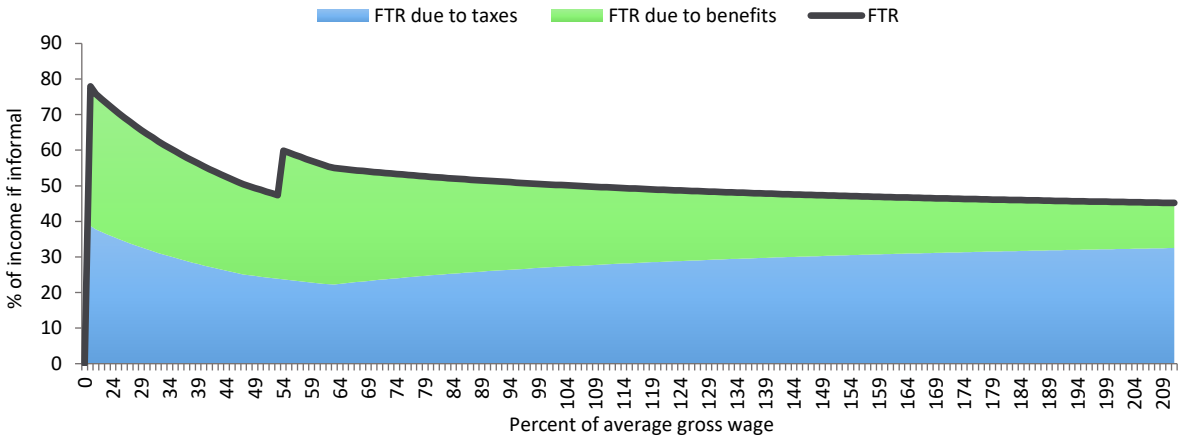
Republika Srpska's high minimum SSC base also causes a sharp increase in labor costs at low income levels below the minimum wage. Part-time work (e.g. "mini," "midi," or "gig" jobs) is subject to disproportionately high labor costs, as at least EUR 213 per month in SSCs must be paid, even if the employee earns less than that amount. For example, a worker in a 40% part-time minimum wage job

would earn approximately EUR 185 net. Despite the low wage, EUR 213 in contributions still has to be paid, more than doubling the total labor cost compared to the net wage.

The disincentives created by the tax and benefit system can also be observed through the FTR. In Republika Srpska, the FTR, measured as the percentage of income lost when a worker transitions from informal to formal employment, jumps immediately to 78% as soon as a household member starts working formally (Figure 40). This occurs due to the loss of social assistance and the high SSCs. For example, if no one in the household is working formally, its total income amounts to EUR 335 (EUR 215 from social assistance and EUR 120 from the child allowance). If a household member starts working formally and earns a net wage of as little as EUR 17 per month, the household will lose social assistance entirely, leaving it with a total household income of just EUR 137 (EUR 17 in net wages plus EUR 120 in child allowance). However, if the household member were instead to work informally without being registered as formally employed, the total income would amount to EUR 565, consisting of the EUR 17 in net wages, EUR 213 in SSCs, EUR 215 in social assistance, and EUR 120 in child allowance. In other words, by registering as formally employed, the household would lose EUR 428 (EUR 565 minus EUR 137), resulting in an FTR of 76%.

After this initial spike, the FTR starts to decline, but it rises again, from 47% to 60%, at an average gross wage of around 50% of the national average. This occurs due to the withdrawal of the child allowance. Beyond this point, the FTR begins to decline, and once the gross wage exceeds the national average, it converges to around 45%, which is its steady state.

Figure 40 / The FTR at different levels of gross wage for a household with two adults and two pre-school children in Republika Srpska



Note: The average gross wage scale on the horizontal axis jumps from 0% to 20% because of the floor on social contributions.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

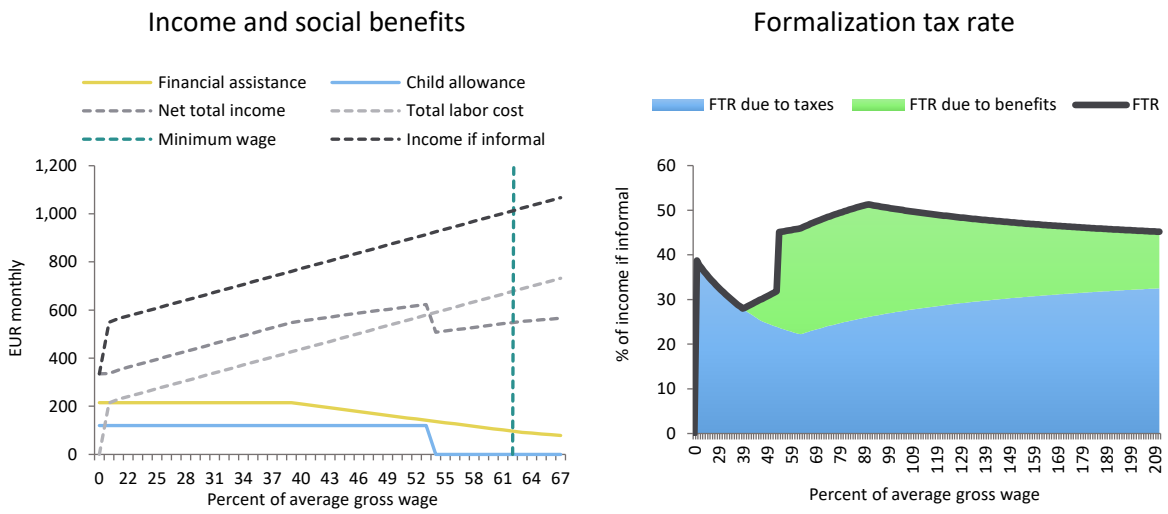
Comparing social benefits in Republika Srpska with the entity's minimum wage, it is clear that the latter is significantly higher. In 2024, the minimum wage was EUR 460 per month in net terms – far above the total social benefits received by the household analyzed here, which amount to EUR 335 (EUR 215 in social assistance and EUR 120 in child allowance). Thus, it would be difficult to argue that social benefits in Republika Srpska are high enough to discourage work entirely, as they are simply too low to sustain a livelihood without additional labor income. Instead, the disincentives they create relate specifically to formal employment, as they may encourage people to work informally in order to retain social benefits alongside their earnings.

Issues with the tax and benefits system in Republika Srpska and potential solutions

The analysis presented so far shows that there are two issues in Republika Srpska that create disincentives to formal work at low income levels. The first is the immediate withdrawal of social benefits once someone starts working, while the second is the high minimum SSC base. This section assesses potential solutions to these issue: an income-disregard model, where social assistance is gradually reduced in line with income earned, following the model of the pilot SAS program currently being tested in Kosovo; and a reduction in the minimum SSC base.

Figure 41 illustrates income, social benefits, and the FTR under the scenario of income disregard.[12] The left-hand panel shows that, in this case, the decline in social assistance is very gradual and occurs only after net labor income reaches a certain level. The FTR (shown in the right-hand panel) also differs significantly from the previous scenario, starting at a much lower level. Instead of spiking to 78% when a household member starts working, it now only rises to 40%. Also, at lower wage levels, the FTR consists solely of SSCs now. It then declines to below 30% as the relative magnitude of SSCs decreases and begins to rise only mildly once social assistance starts to be reduced. The FTR jumps to 45% when the child allowance is withdrawn and reaches a maximum of 51% when social assistance is fully withdrawn. After that, it starts to decline, converging to a similar steady-state level as before. Overall, the FTR in this scenario is significantly lower than in the current system, with much smaller fluctuations, making the transition to formal employment smoother.

Figure 41 / Income, social benefits, and the FTR at different levels of gross wage in Republika Srpska, with income-disregard model

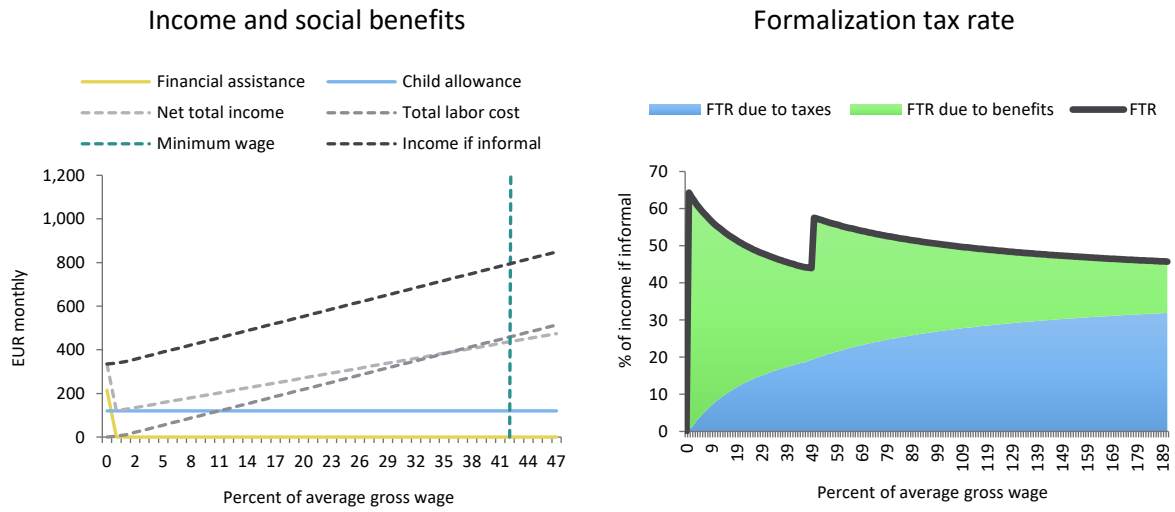


Note: The average gross wage scale on the horizontal axis jumps from 0% to 20% because of the floor on social contributions.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

12 If the household has formal labor income below the baseline social assistance amount of EUR 215, then it continues receiving the entire amount of social assistance. If it has a formal labor income above EUR 215, the amount of social assistance it receives is calculated as: 215 – [household income – 215]/2.

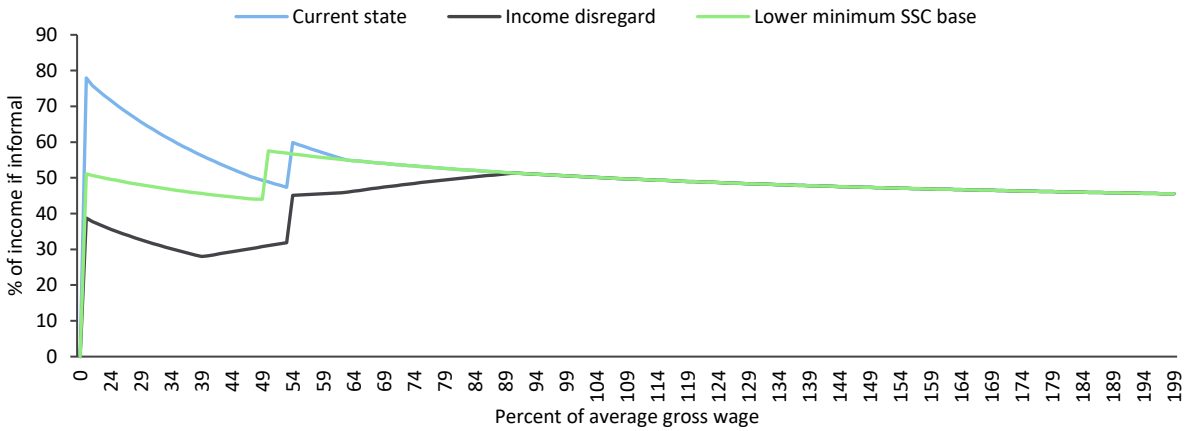
Figure 42 illustrates the scenario of a reduction in the minimum SSC base. Looking at the FTR in the right-hand panel, this scenario appears qualitatively very similar to the current situation in Republika Srpska, as the overall dynamics of the FTR remain the same: A spike occurs when a household member starts working due to the withdrawal of social assistance, followed by a decline, another spike when the child allowance is withdrawn and, finally, convergence to the steady state. The key difference from the current situation, however, lies in the magnitude. While the pattern remains unchanged, the FTR levels are consistently lower. The highest FTR now reaches 64%, compared to 78% previously.

Figure 42 / Income, social benefits, and the FTR at different levels of gross wage in Republika Srpska, with minimum base for SSC reduced to EUR 10



Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

Figure 43 / Comparison of the FTR under the different analyzed options for Republika Srpska



Note: "Current state" refers to the FTR as it currently is. "Income disregard" refers to the reduction of the amount of social assistance in line with income earned, following the pilot program implemented in Kosovo. "Lower minimum SSC base" refers to the FTR according to the proposal for lowering the minimum base for the SSCs. The average gross wage scale on the horizontal axis jumps from 0% to 20% because of the floor on social contributions.

Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

Figure 43 shows the FTR under all three scenarios. It is evident that the income-disregard option results in the lowest FTR at lower income levels. The option with a lower minimum SSC base leads to a lower FTR compared to the current system, but only up to a gross wage of around one third of the national average. As the gross wage approaches the entity's average, the three scenarios converge. This suggests that a gradual reduction of social assistance in line with income earned is likely the most effective option for Republika Srpska for reducing disincentives to formal work at low wage levels.

Summary of main findings for Republika Srpska

- **Social assistance and other social benefits:** Social assistance provides EUR 215 per month to a typical household but is withdrawn entirely once any household member starts working formally, creating a sharp income loss at the point of formalization. The child allowance (EUR 120 for two children) is also reduced once household income exceeds 20% of the minimum wage, resulting in another income drop.
- **High formalization tax rate (FTR):** The first euro of formal labor income results in an immediate FTR jump to 78%, primarily due to the loss of social assistance and the high SSC burden from the minimum SSC base. The FTR then declines but spikes again, from 47% to 60%, when the child allowance is withdrawn, before eventually converging to around 45% at higher wage levels.
- **High social security contributions (SSC) burden at low wages:** Republika Srpska has a minimum SSC base set at the minimum gross wage (EUR 686 in 2024), requiring a minimum SSC payment of EUR 213 per month, even for workers earning far less. This disproportionately impacts part-time and low-wage workers, making formalization costly.
- **Stronger disincentives to formal work, but not to work in general:** The benefits system does not necessarily discourage employment but incentivizes informal work to retain social benefits while earning labor income. The minimum wage in Republika Srpska in 2024 was EUR 460 net per month, which is significantly higher than the combined EUR 335 received through social assistance and the child allowance. This suggests that benefits are too low to sustain a livelihood but high enough to encourage informality when combined with high SSCs.
- **A gradual reduction of benefits and a lower minimum SSC base would improve incentives:** A gradual reduction of social assistance in line with income earned would result in a lower and more gradual FTR, making the transition to formal employment smoother and less financially penalizing for low-income households. Similarly, reducing the minimum SSC base would lower the FTR at low income levels, though its effect diminishes as wages rise.

5.3. KOSOVO

Short description of the main social benefits and the tax system in Kosovo

The key means-tested social protection programs in Kosovo include the social assistance scheme (SAS) and the energy subsidy. Eligibility for the SAS is also linked to a number of other services and supports[13] for households whose income falls below the established minimum threshold**.** For the typical household analyzed here, consisting of two adults and two pre-school children, it amounts to EUR 130 per month. It is withdrawn once a member of the household starts working formally. The energy subsidy is a benefit provided to poor households to help them mitigate the burden of electricity consumption during the colder six months of the year. It is calculated according to a formula, and for the type of household analyzed here, amounts to EUR 21 per month if net monthly income is below EUR 200 , EUR 14 if net income is between EUR 200 and EUR 400, and EUR 7 if net income is between EUR 400 and EUR 600. Kosovo also has a child allowance, which is not means-tested (i.e., it is available to all households with children under 16 years of age and is granted upon application). To ensure comparability across countries, the child allowance is included in the analysis despite being universal. Households receive EUR 20 per child per month if they have one or two children, and EUR 30 per child if they have three or more children.

In addition to these schemes, Kosovo also has a wide range of social assistance programs not directly targeting the poor. Some of these are financial support to war veterans (many of whom are still of working age), universal old-age pensions, and various disability measures. As these are sizeable and cover a large part of the working-age population, they may affect the decision to work formally or not. However, these schemes are not included in the analysis, as they refer to specific groups of people and are not explicitly means-tested (i.e., they do not depend on the level of household income). That said, such programs may nevertheless have important influences on whether individuals participate in employment through other channels. Some of these programs are summarized in Box 2.

The labor tax system in Kosovo consists of the personal income tax (PIT) and, unlike those of most WB6 countries, the pension contributions are mildly progressive. The PIT is nominally progressive, though only a little, with four rates ranging between 0% and 10%. Mandatory pension insurance contributions amount to 10% of the gross wage, with a possibility for an additional voluntary pension contribution. There is a minimum base for the contributions, which is equal to the minimum wage in the country (EUR 170 per month in 2024), resulting in a relatively low minimum amount of pension contributions (EUR 17) compared to the other countries in the region. There is no maximum base level for contributing to the pension system.

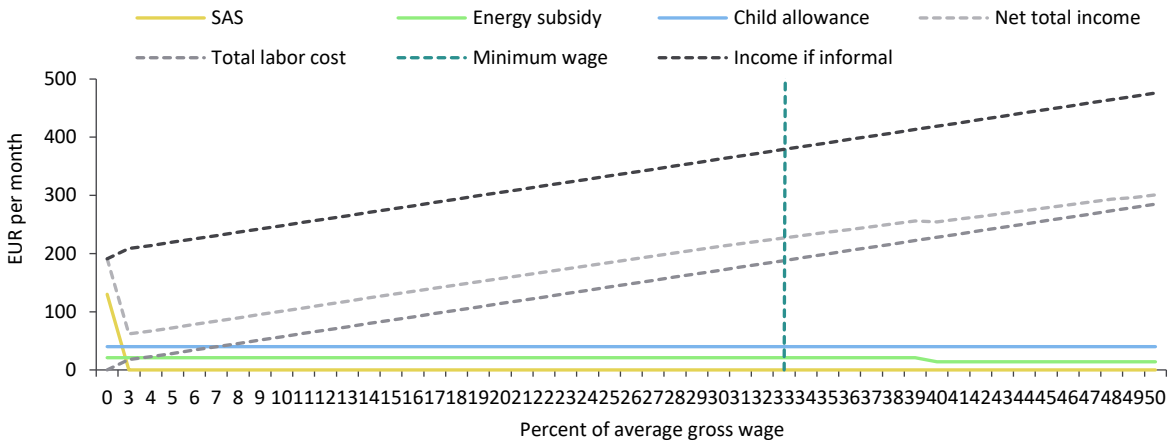
13 The SAS benefits include, for example, exempted from paying for primary and secondary health care services, receive free books for primary and secondary education, or are exempted from paying tuition fees for tertiary students (World Bank 2019).

Analysis of the potential impact of the existing social benefits and taxes on household income in Kosovo

Figure 44 illustrates how income and benefit amounts change as the earnings of a typical household in Kosovo increase. Various types of income and benefit levels are calculated for different income levels and displayed as a percentage of average gross wage. The figure includes three social assistance programs, which are indicated by solid lines: (i) the SAS (orange), (ii) the energy subsidy (blue), and the child allowance (grey). The dashed grey lines illustrate different types of income: (i) the net total income of the household, consisting of the relevant social assistance benefits and the net wage (light-grey); (ii) the total labor cost, consisting of the net wage plus the labor taxes (medium-grey); and (iii) the "income if informal," consisting of the net wage, labor taxes, and applicable social assistance benefits (dark-grey). Additionally, the minimum wage in the country is shown as a vertical dashed line, serving as a reference point for the segment of the wage distribution to which the analysis refers (around EUR 170 net per month).

The analysis visually indicates that there are two significant declines ("kinks") in net total income as earnings increase. The first kink occurs as a result of the immediate loss of the SAS when earning any type of formal income. In other words, the household's formal wage is not able to offset the loss in net total income induced by the loss of the SAS benefit. As SAS eligibility is restricted to households without formal earnings, the SAS benefit amounts to around EUR 130 per month for households with EUR 0 in formal income and is lost entirely as soon as any formal earnings are registered. The second, smaller kink occurs at a net income of around EUR 260, when the energy subsidy is reduced. These two kinks display two forms of disincentives: a disincentive to enter or formalize employment and a disincentive to increase the amount worked around the eligibility threshold of the energy subsidy.

Figure 44 / Income and social benefits at different levels of gross wage for a household with two adults and two pre-school children in Kosovo



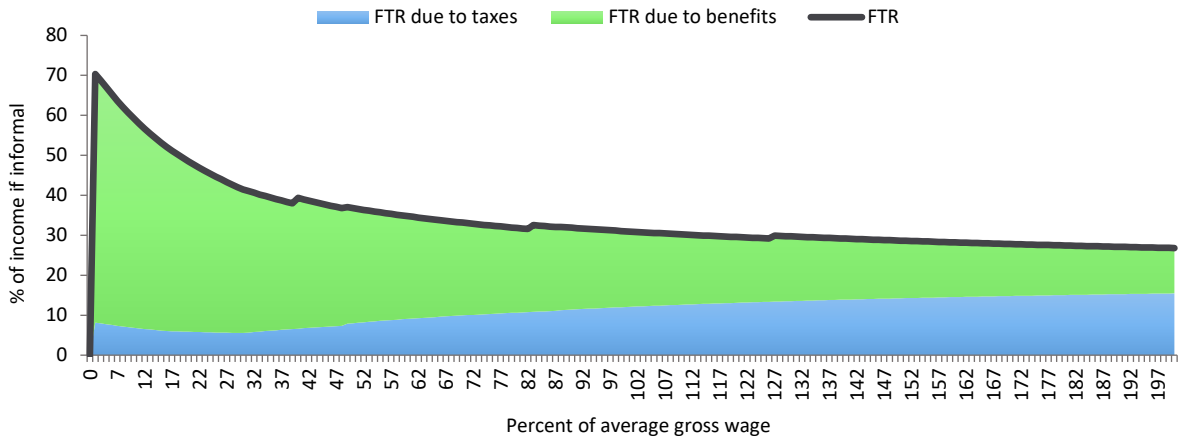
Note: The total labor cost increases from 0% of the average gross wage to 3% because of the floor on social contributions (i.e., since social contributions cannot be lower than EUR 17, the total labor cost for the employer is EUR 18, or 3% of the average gross wage, even for net labor income of EUR 1).
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

Total labor cost increases much more gradually in Kosovo than in Albania or Bosnia and Herzegovina. As net labor income increases from EUR 0 to just EUR 1, total labor cost increases to EUR 18 due to the floor on the SSCs, which is EUR 17 in Kosovo. This is much lower than in most of the other WB6 countries.

"Income if informal" also increases smoothly. At zero earnings, it is equal to the net total income, as it consists entirely of social benefits. However, as formal employment begins, the two diverge: net total income falls due to the SSCs and the lost benefits, whereas "income if informal" rises continuously. This divergence highlights the disincentives to formal employment, as the tax-benefit system creates a financial gap between formal and informal work.

To illustrate the disincentives created by the tax and benefit system, the FTR is analyzed (Figure 45). The FTR, measured as the percentage of income that is lost when a worker transitions from informal to formal employment, jumps immediately to 70% with the first euro of formal labor income. This is owed to the withdrawal of the SAS benefit and, to a smaller extent, to the SSCs. The FTR then declines gradually, with occasional small spikes, due to the reduction in the energy subsidy and the kick-in of the progressive PIT rates. It converges to below 30% after the level of the average wage. In the beginning, most of the FTR is owed to the lost SAS, but the SSCs and the PIT slightly overtake the SAS benefit toward the end.

Figure 45 / The FTR at different levels of gross wage for a household with two adults and two pre-school children in Kosovo



Note: The average gross wage scale on the horizontal axis increases from 0% to 3% because of the floor on social contributions.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

It is also useful to compare social benefits with the minimum wage in Kosovo. In 2024, the net minimum wage in Kosovo was EUR 170 per month, while a household with no employed members received a total of EUR 130 in SAS. This means that social benefits are lower than the minimum wage and insufficient to sustain a household without additional labor income. As a result, rather than discouraging work altogether, one could say that the benefits primarily create disincentives to formal employment, as individuals may opt for informal work to retain their benefits while earning a wage. Moreover, the minimum wage in Kosovo was raised to EUR 350 (gross) in 2025, making the SAS benefit even smaller in relative terms.

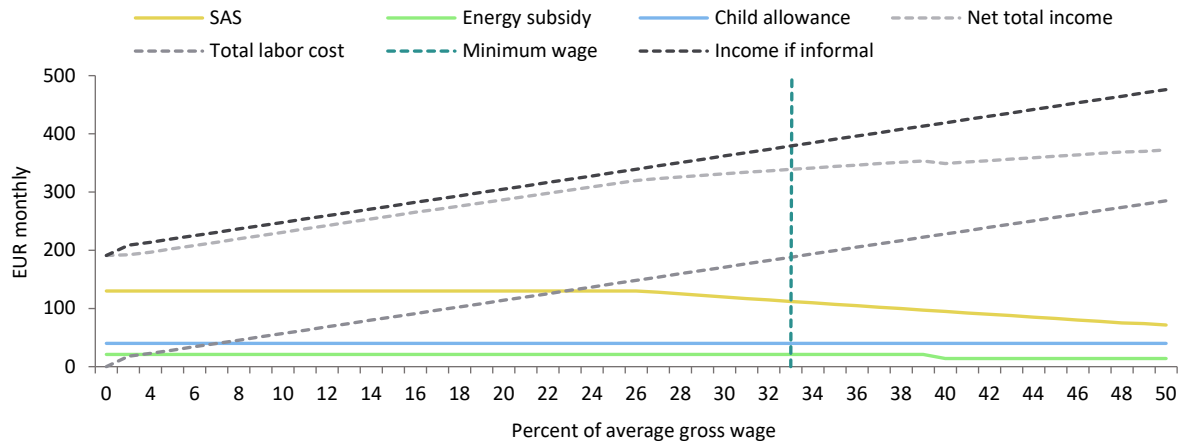
Analysis of the new pilot SAS in Kosovo

In 2024, Kosovo's government introduced a pilot SAS program that aims to inform a revised SAS benefit under a new social protection law. Among the major changes in the piloted SAS are that (i) the eligibility criteria are changed to make the program more accessible to poor households,[14] (ii) the benefit is withdrawn only gradually when labor income is earned, and (iii) the benefit formula is adjusted to provide high benefits to households of four or more members. For the household assessed as part of this analysis, the base benefit amount for the pilot SAS remains EUR 130 per month, as under the existing SAS.

Most importantly for this analysis, the pilot SAS introduces an income-disregard mechanism, applied as follows: Households that pass the new eligibility assessment and have an average income (over the past three months) below the base SAS amount of EUR 130 (for the model household of this analysis) receive the full base benefit of EUR 130. If a household's income exceeds EUR 130, the SAS benefit is gradually reduced according to the formula: 130 – [household income – 130]/2. For example, if a household has an income of EUR 150, it will receive EUR 120 in SAS [130 – (150 – 130)/2)].

Figure 46 shows the various income and benefits in this case, and one can see that the schedules are different than they were before. Notably, the net total income never experiences a sharp decline, as the new SAS benefit decreases only gradually. In fact, the only instance where the net total income declines – albeit mildly – is when the energy subsidy is reduced.

Figure 46 / Income and social benefits at different levels of gross wage for a household with two adults and two pre-school children for the pilot SAS in Kosovo



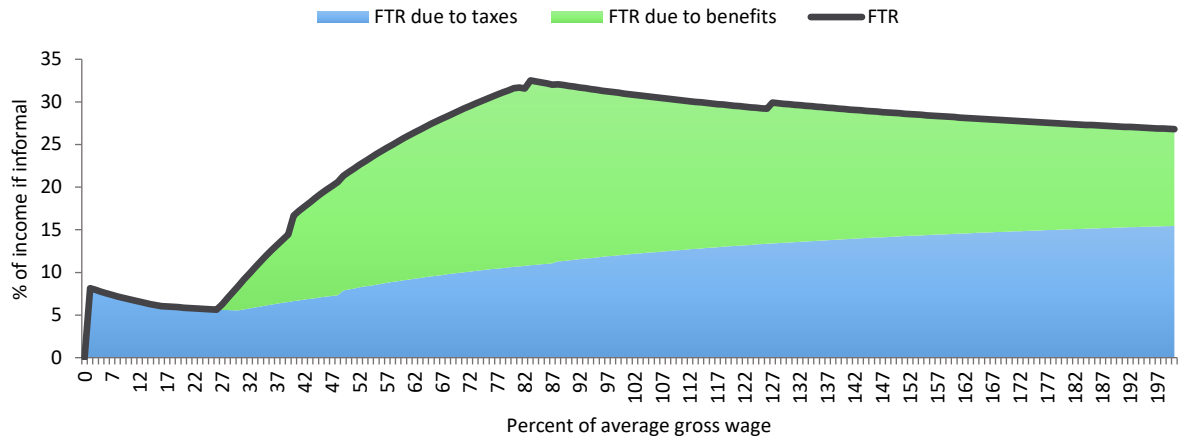
Note: The average gross wage scale on the horizontal axis increases from 0% to 3% because of the floor on social contributions.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

This is reflected in the FTR, as well, which is lower than under the current SAS (Figure 47). In the beginning, it is below 10%. Then the FTR starts rising as the new SAS benefit begins to decline, but the increase is only gradual. It reaches a peak of 32% when the SAS is completely withdrawn, which is much lower than a peak of 70% with the existing SAS benefit. The FTR then starts to decline, converging to around 27%, which is the same as the current SAS. But the lower initial FTR and the

14 The pilot introduces a new eligibility test that includes a formal income means test, an asset test, and a PMT based on some observable variables on the household's overall welfare and living conditions.

lower peak indicate that the new pilot SAS creates much smaller disincentives to work formally than the current model does.

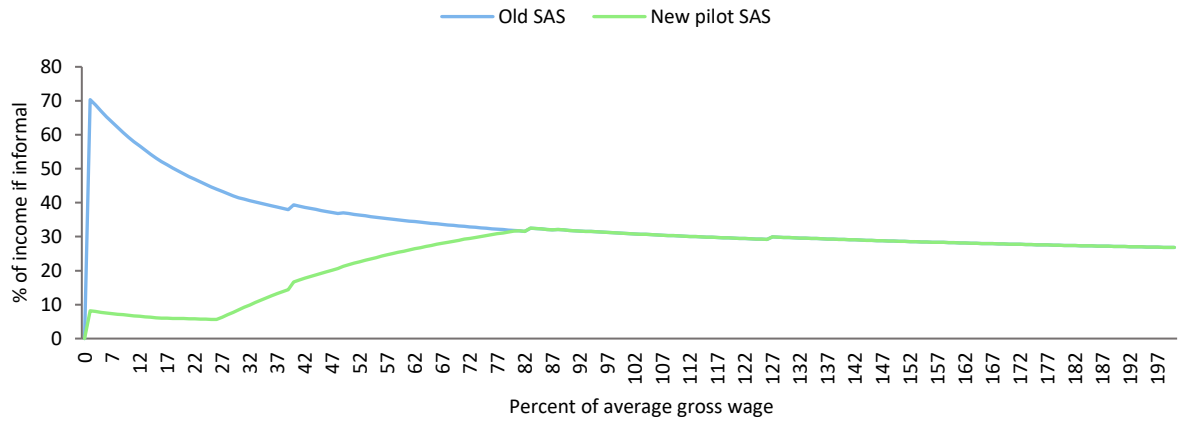
Figure 47 / The FTR at different levels of gross wage for a household with two adults and two pre-school children in Kosovo



Note: The average gross wage scale on the horizontal axis increases from 0% to 3% because of the floor on social contributions.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

Figure 48 shows the FTR under the old SAS and the new pilot SAS. It is clear that the gradual phasing-out under the new pilot SAS results in a significantly lower FTR at lower income levels. Under this scenario, the FTR remains below 10% for wages up to 30% of the average, whereas it consistently exceeds 40% under the current SAS. This indicates much smaller disincentives to formal work under the pilot SAS. However, as the gross wage approaches the entity's average, the two lines converge, meaning that the disincentives to formalization become similar under both systems at higher wage levels. This suggests that while the pilot SAS is highly effective at reducing disincentives at lower incomes, its potential impact diminishes as wages increase.

Figure 48 / Comparison of the FTR under the different analyzed options for Kosovo



Note: The average gross wage scale on the horizontal axis increases from 0% to 3% because of the floor on social contributions.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

Summary of main findings for Kosovo

- **Social assistance scheme (SAS) amount and conditions:** The SAS provides EUR 130 per month to a typical household of two adults and two children, with the benefit being withdrawn entirely once any household member starts working formally. This creates a sharp income loss at the point of formalization, discouraging formal employment.
- **High formalization tax rate (FTR):** The first euro of formal labor income results in an immediate FTR jump to 70%, primarily due to the loss of the SAS benefit and, to a lesser extent, the SSCs. The FTR gradually declines with wage growth, stabilizing below 30% at the average wage level.
- **Limited role of social security contributions (SSCs) in disincentives:** Unlike in some other WB6 countries, the minimum base for SSCs in Kosovo is relatively low. The minimum base is set at the minimum wage (EUR 170 in 2024), resulting in a minimum SSC payment of just EUR 17 per month, which is far lower than in most of the other WB6 countries. As a result, the disincentives arising from SSCs are not as pronounced as they are in countries where the contributions are significantly higher.
- **Stronger disincentives to formal work, but not to work in general:** The benefits system does not necessarily discourage employment but mainly encourages people not to register once they start working in order to retain benefits while earning an income. Kosovo's minimum wage in 2024 was EUR 170 per month, which is higher than the EUR 130 provided through the SAS benefit. This suggests that the SAS benefit is not high enough to make people avoid work entirely but may encourage informality. The minimum wage was raised to EUR 350 (gross) in 2025, making the SAS benefit even smaller in relative terms.
- **Potential impact of the new pilot SAS:** The 2024 pilot SAS introduces a gradual withdrawal rather than an immediate cut-off of benefits when households engage in formal work. This significantly reduces disincentives to formalization, lowering the peak FTR from 70% (under the current SAS) to 32%. The gradual reduction of benefits prevents sharp income drops, making formal work more financially attractive. The design of this phased withdrawal should be retained, as it represents a major improvement in work incentives.
- **Potential policy solution:** The gradual phase-out of the SAS benefit in the pilot scheme can serve as a benchmark for other countries in the region. Adopting this model more broadly would help smooth the transition into formal employment. Further adjustments, such as aligning SSCs with income levels more effectively, could further ease the shift to formal work.

5.4. MONTENEGRO

Short description of the main social benefits and the tax system in Montenegro

The key means-tested social protection programs in Montenegro include material support and a child allowance. Material support is the main targeted social assistance program, providing financial aid to individuals and households experiencing economic hardship. Eligibility depends on work ability, household income, and property ownership, with strict conditions to ensure fairness and efficiency in resource allocation. Individuals qualify if they are unable to work due to disability, illness, or old age. Hence, once a person starts working formally, they lose the right to material support. The amount of support a household receives is specified based on household size, with a household of four members – as in the case of this analysis – receiving EUR 153 per month.

A child allowance is granted for eligible children up to the age of 18. Eligibility covers several groups: children from families receiving material support, children without parental care, children receiving personal disability benefits, and children whose parents or guardians have started working under social reintegration agreements after previously receiving material support. The monthly amount varies depending on the situation. For example, it is EUR 30 per child under standard eligibility and EUR 57 per child for families receiving material support. In this example, a household with two parents and two pre-school children would receive a total of EUR 114 per month in child allowance while they are also receiving material support. If they lose their eligibility for material support, the child allowance would drop to EUR 60 per month.

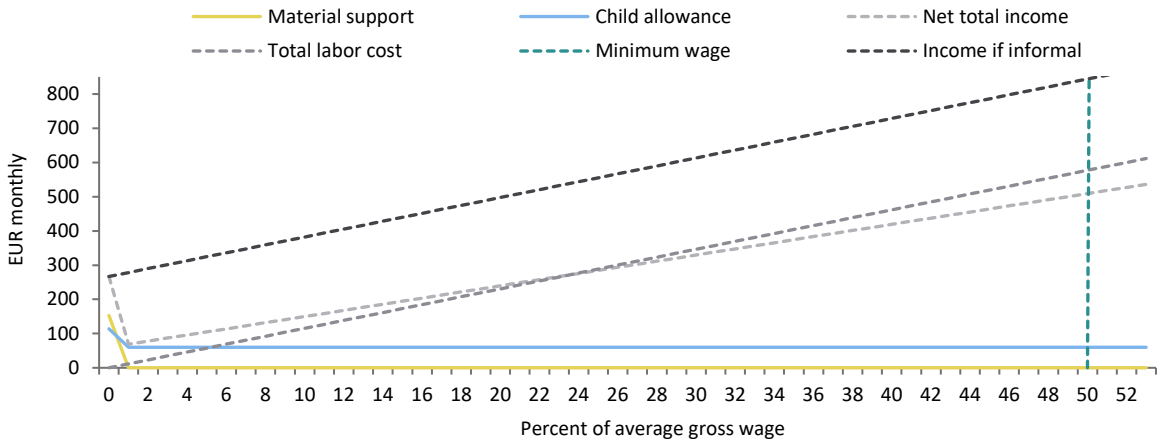
The labor tax system in Montenegro consists of a personal income tax (PIT) and the SSCs. The system was described and analyzed in detail in *Western Balkans Labor Market Brief 2022* (Jovanović et al. 2024). Since then, there have not been any major changes. The PIT is progressive, with three rates: 0% for annual incomes below EUR 700 per month, 9% for annual incomes between EUR 700 and EUR 1,000 per month, and 15% for annual incomes exceeding EUR 1,000 per month. The SSCs are composed of employer and employee contributions and total 22.17% of the gross wage. Unlike some other WB6 countries, Montenegro does not have a minimum base for calculating SSCs, but it does have a maximum base, which is set at EUR 4,604 per month. Owing to these features, the labor tax system in Montenegro is progressive until the maximum base and then becomes regressive at high levels of income.

Analysis of the Potential impact of the existing social benefits and taxes on household income in Montenegro

Figure 49 illustrates how income and benefit levels change as earnings of a typical household in Montenegro increase. The levels of various forms of income and benefits are calculated and displayed for different levels of gross wage. The figure includes Montenegro's two social assistance programs, which are indicated by solid lines: (i) material support (orange), and (ii) the child allowance (blue). The dashed lines illustrate different types of income: (i) the net total income of the household, consisting of the relevant social assistance benefits and the net wage (light-grey); (ii) the total labor cost, consisting of the net wage plus the labor taxes (medium-grey); and (iii) the "income if informal," consisting of the net wage, labor taxes, and applicable social assistance benefits (dark-grey).

Additionally, the minimum wage in the country is shown as a vertical dashed line, serving as a reference point for the segment of the wage distribution to which the analysis refers (450 EUR net per month).

Figure 49 / Income and social benefits at different levels of gross wage for a household with two adults and two pre-school children in Montenegro



Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

The figure shows a decline in net total income as soon as a household member starts earning a formal wage. This comes from the immediate loss of material support and the simultaneous reduction in the child allowance. Material support, amounting to around EUR 153 per month for the analyzed household if it has zero formal income, is fully withdrawn as soon as any formal earnings are registered, as eligibility is limited to households without employment. At the same time, the child allowance is reduced from EUR 114 to EUR 60, as a higher amount is only granted to households receiving material support. Altogether, the household loses EUR 207 with the first euro of formal income. Since the wage that the household starts receiving is much lower, the net total income drops.

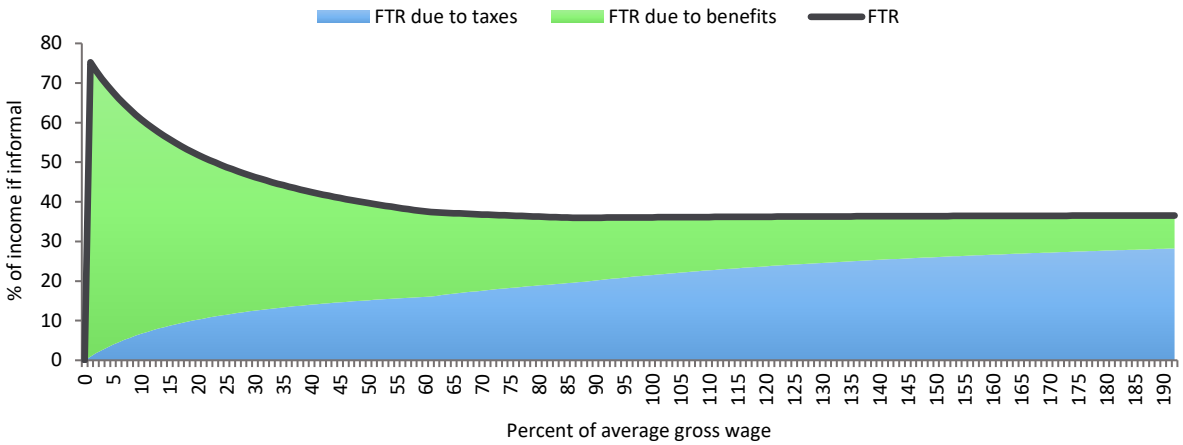
Unlike most other countries in the region, Montenegro does not have a minimum SSC base. As a result, "income if informal" does not jump with the first euro of formal income, as it does in most other countries in the region, but instead increases gradually.

Comparing social benefits in Montenegro with the country's minimum wage, it is clear that the latter is significantly higher. In 2024, the minimum wage was set at EUR 450 per month in net terms – almost double the total social benefits received by the analyzed household, which amount to EUR 267 (i.e., EUR 153 in material support and EUR 114 in child allowance). Thus, it would be difficult to argue that social benefits in Montenegro are high enough to discourage work entirely, as they are simply too low to sustain a livelihood without additional labor income. Instead, the disincentives they create relate specifically to formal employment, as they encourage people to work informally in order to retain social benefits alongside their earnings.

The disincentives created by the tax and benefit system can also be observed through the FTR. The FTR in Montenegro, measured as the percentage of income lost when a worker transitions from informal to formal employment, jumps immediately to 75% as soon as a household member starts working formally (Figure 50). This occurs due to the loss of material support and the reduction in the child allowance. For example, if no one in the household is working formally, its total income amounts

to EUR 267 (i.e., EUR 153 in material support and EUR 114 in child allowance). If a household member starts working formally and earns as little as EUR 10 per month, the household will lose material support entirely and its child allowance will drop to just EUR 60. This means that, in this case, the household's total income would be only EUR 70 per month, translating to an FTR of 75%. That said, as labor income increases, the FTR begins to decline, and once the gross wage exceeds half of the national average, it converges to around 37%, which is its steady state. Around this point, the FTR component resulting from labor taxes (i.e., PIT and SSCs) becomes dominant, overtaking the FTR component driven by the loss of social benefits.

Figure 50 / The FTR at different levels of gross wage for a household with two adults and two pre-school children in Montenegro



Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

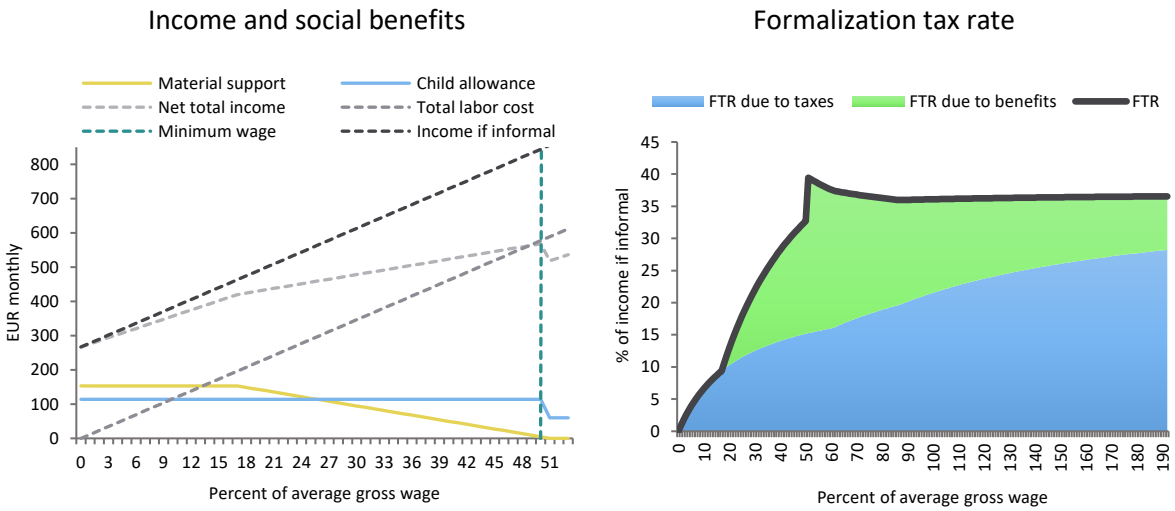
Issues with the tax and benefits system in Montenegro and potential solutions

The analysis presented so far shows that the key issue in Montenegro, which creates disincentives to formal work at low income levels, is the immediate withdrawal of social benefits once someone starts working. This section assesses one potential solution to this issue: a gradual withdrawal of material support, following the model of the pilot social assistance scheme (SAS) program currently being implemented in Kosovo (as explained in the Kosovo section).[15]

15 If the household has formal labor income below the baseline material support amount of EUR 153, then it continues receiving the entire amount of material support. If it has a formal labor income above EUR 153, the amount of material support it receives is calculated as: 153 – [household income – 153]/2.

Figure 51 **illustrates income, social benefits, and the FTR under this scenario of gradual reduction of social benefits.** The left-hand panel shows that the decline in material support is very gradual in this case and occurs only after net labor income reaches a certain level. Consequently, the FTR (shown in the right-hand panel) increases only mildly, gradually reaching 33% when the gross wage reaches 50% of the average. It peaks at 39% when material support is fully withdrawn and the child allowance is reduced, after which it starts declining to its steady-state level of 36-37%.

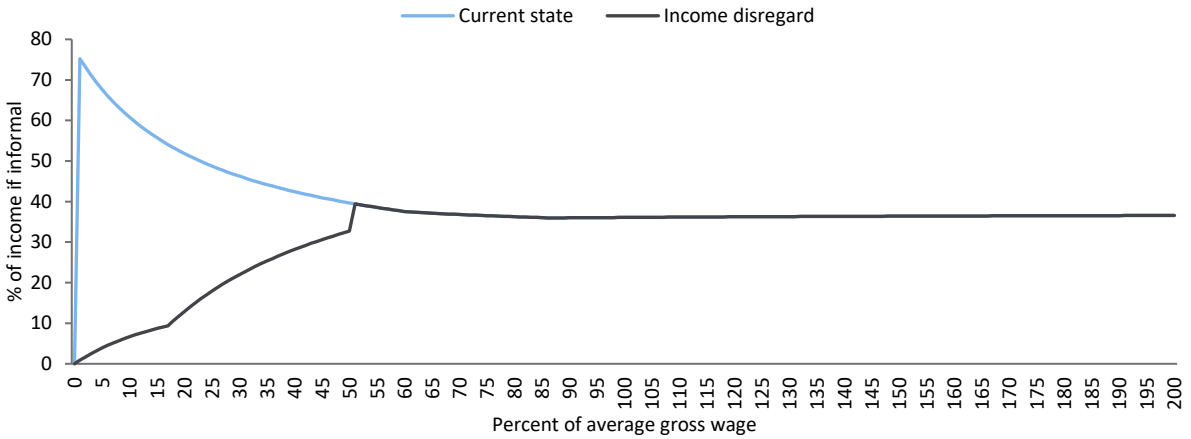
Figure 51 / Income, social benefits, and the FTR at different levels of gross wage in Montenegro, with material support reduction according to the model piloted in Kosovo's SAS



Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

Thus, it is clear that the FTR is much lower in the scenario for a gradual reduction than under the current system, particularly at lower income levels. This can be also seen in Figure 52, which compares the FTR according to the two options discussed so far. Under the income-disregard scenario, the highest level reaches 39% instead of the current 75%. This means that disincentives to formal work at low income levels would be significantly smaller than they are now. As soon as the wage reaches one half of the average, the two options converge and yield the same result, showing that the income disregard only has implications for lower incomes, which are associated with part-time and gig jobs.

Figure 52 / Comparison of the FTR under the different analyzed options for Montenegro



Note: "Current state" to the FTR as it currently is. "Income disregard" refers to the reduction of the amount of material support in line with income earned, following the pilot program implemented in Kosovo.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

Summary of main findings for Montenegro

- **Material support and other social benefits:** Material support provides EUR 153 per month to a typical household analyzed here, but it is withdrawn entirely once any household member starts working formally, creating a sharp income loss at the point of formalization. The child allowance (EUR 114 for two children) is also reduced to EUR 60 at the same moment, further deepening the income drop.
- **High formalization tax rate (FTR):** The first euro of formal labor income results in an immediate FTR jump to 75% due to the loss of material support and the reduction in the child allowance. As income rises, the FTR gradually declines, converging to around 37% at higher wage levels.
- **No minimum social security contribution (SSC) base:** Unlike other countries in the region, Montenegro does not have a minimum SSC base, meaning that SSCs are always proportional to actual wages. As a result, differently from the other WB6 countries, there are no disincentives in Montenegro to formal work at low levels of wages stemming from the SSC base.
- **Stronger disincentives to formal work, but not to work in general:** The benefits system does not necessarily discourage employment but may incentivize informal work to retain social benefits while earning labor income. The minimum wage in Montenegro in 2024 was EUR 450 net per month, which is significantly higher than the combined EUR 267 received through material support and the child allowance. This suggests that benefits are too low to sustain a livelihood but high enough to encourage informality when combined with rigid eligibility criteria.
- **A gradual reduction of benefits would reduce disincentives:** Gradually reducing material support in line with income earned, as seen in Kosovo's pilot SAS program, would result in a lower and more gradual FTR, making the transition to formal employment smoother and less financially penalizing for low-income households.

5.5. NORTH MACEDONIA

Short description of the main social benefits and the tax system in North Macedonia

The key means-tested social protection programs in North Macedonia include the guaranteed minimum assistance (GMA), the energy allowance, and the child allowance. The GMA forms the foundation of North Macedonia's social protection framework, providing financial support to households whose income falls below the minimum level established as sufficient to meet basic living needs. For the typical household analyzed here, consisting of two adults and two pre-school children, this minimum level amounts to EUR 145 per month. The amount of support the household eventually receives is calculated as the difference between this minimum level and the household's total income from other sources, excluding social benefits. However, if a household member works formally, even part-time, the household loses eligibility for GMA. The energy allowance is a supplemental financial benefit provided to households receiving GMA, helping them to mitigate the financial burden of energy consumption during the colder months (October to March). It amounts to EUR 21 per month for the typical household. The child allowance is available to households with income below a certain level to assist with raising children. The level in the case of this analysis is equal to EUR 254 per month, while the amount of child allowance for two pre-school children is equal to EUR 41 per month.

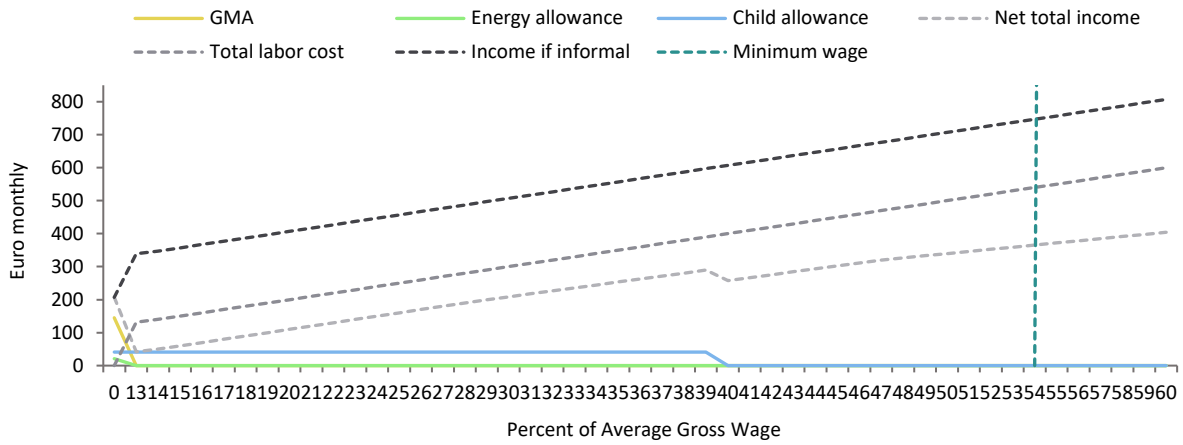
The labor tax system in North Macedonia, which consists of the personal income tax (PIT) and the SSCs, is known to be regressive, with higher effective tax rates for lower incomes. It was described and analyzed in detail in *Western Balkans Labor Market Brief 2022* (Jovanović et al. 2024). Since then, there have not been any major changes. The PIT is flat nominally, with a uniform rate of 10% for all income levels. It includes a personal tax allowance that was set at EUR 155 per month in 2024, meaning that the first EUR 155 of monthly wages are effectively exempt from PIT, ensuring some mild effective progressivity of the PIT at low incomes. The SSCs are composed of pension, health, and unemployment contributions and total 28% of the gross wage. There are both minimum and maximum bases for calculating SSCs. The minimum base is set at 50% of the average gross monthly salary, which for 2024 equaled EUR 468 per month. This means that the smallest amount of SSCs that has to be paid is EUR 131 (28% of EUR 468), even if the person makes less than that. The maximum base is 16 times the average gross monthly salary.

The minimum base for calculating SSCs has significant implications for low-wage earners. For example, if a person earns a net wage of only EUR 50 per month (e.g., by working part-time), their SSCs would be EUR 131. Since SSCs in the country are paid by the employer, this means that the worker will get the net wage of EUR 50, but the employer will have to pay EUR 181 in total (the PIT is zero at this level of income), resulting in an effective labor tax rate of 72%. This produces a regressivity in the effective labor tax rate at low wage levels, meaning that low-wage earners face a higher effective tax rate compared to higher-wage earners.

Analysis of the Potential impact of the existing social benefits and taxes on household income in North Macedonia

Figure 53 illustrates how income and benefit levels change as the formal wages of a typical household in North Macedonia increase. The levels of various forms of income and benefits are calculated for different percentages of the average gross wage. The figure includes three of North Macedonia's social assistance programs, which are indicated by solid lines: (i) the GMA (orange), an energy allowance (blue), and a child allowance (grey). The dashed lines illustrate different types of income: (i) the net total income of the household, consisting of the relevant social assistance benefits and the net wage (light-grey); (ii) the total labor cost, consisting of the net wage plus the labor taxes (medium-grey); and (iii) the "income if informal," consisting of the net wage, labor taxes, and applicable social assistance benefits (dark-grey). Additionally, the minimum wage in the country is shown as a vertical dashed line, serving as a reference point for the segment of the wage distribution to which the analysis refers (around EUR 370 net per month).

Figure 53 / Income and social benefits at different levels of gross wage for a household with two adults and two pre-school children in North Macedonia



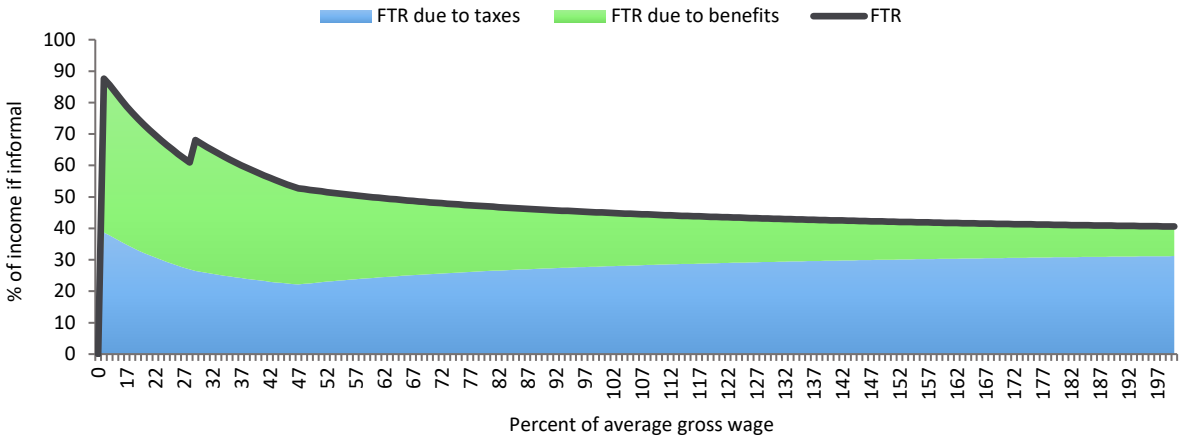
Note: The total labor cost jumps from 0% of the average gross wage to 13% because of the floor on social contributions (i.e., since social contributions cannot be lower than EUR 131, the total labor cost for the employer is EUR 132, or 13% of the average gross wage, even for net labor income of EUR 1).
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

The analysis shows two significant declines ("kinks") in net total income as earnings increase. The first kink occurs with the first euro of formal labor income owing to the immediate loss of GMA. As eligibility for GMA is restricted to households without formal employment, the analyzed household receives around EUR 145 per month when it has no formal income. This support is lost entirely as soon as any formal earnings are registered, meaning that the initial formal wage is not sufficient to offset the resulting loss in net total income. The second kink occurs at a net income of around EUR 290, when the child allowance is lost. Similar to in Kosovo, these two kinks create a disincentive to formal employment and a disincentive to increase the amount worked around the eligibility threshold of the child subsidy.

Similarly to other countries in the region, North Macedonia's high minimum SSC base also causes a sharp increase in labor costs at low income levels, particularly below the minimum wage. Due to the minimum SSC base, the lowest amount of SSCs that have to be paid in the country when working formally amounts to EUR 131 per month, even if the worker earns much less than that. For example, someone engaged in 30% part-time work at the minimum wage would earn approximately EUR 110 net. Despite the low wage, EUR 131 in contributions must still be paid, resulting in a total labor cost more than twice the net wage.

Comparing the social benefits with the minimum wage in the country, one can again see that the benefits are much lower. In 2024, the minimum wage in North Macedonia was EUR 370 net per month. Comparing this to the total of EUR 207 of GMA and the other social benefits that the household receives when no one works, one can see that the minimum wage is much higher, meaning that it would be hard to say that the social benefits in North Macedonia are high enough to discourage work entirely, as they are simply too low to allow people to live on them without the addition of labor income. Instead, the disincentives they create relate specifically to formal employment, as they may encourage people to work informally in order to retain social benefits alongside their earnings.

Figure 54 / The FTR at different levels of gross wage for a household with two adults and two pre-school children in North Macedonia



Note: The average gross wage scale on the horizontal axis jumps from 0% to 13% because of the floor on social contributions.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

The disincentives created by the tax and benefit system are also observed through the FTR. The FTR, measured as the percent of income that is lost when a worker transitions from informal to formal employment, jumps immediately to 88% as soon as a household member starts working formally (Figure 54). This occurs because of the loss of GMA and the energy subsidy as well as due to the high SSCs resulting from the minimum base for their calculation. For example, someone engaging in 50% part-time work at minimum wage would have a net total income of around EUR 230, consisting of the net wage and the child allowance. If that household member were to work informally, they would have a net income of EUR 530, consisting of the net wage, the labor taxes otherwise paid (i.e., SSCs) and all the social benefits. This exemplary household would hence lose 57% of its income as a result of the working member's transition from informality to formality. That said, as labor income increases, the FTR begins to decline, although another spike exists at the eligibility threshold of the child allowance. The FTR gradually converges to a steady state of around 40% as household income

increases. Above the average gross wage, most of the FTR is a result of labor taxes (i.e., PIT and SSCs) that have to be paid when working formally.

Issues with the tax and benefits system in North Macedonia and potential solutions

The analysis in Figure 53 and Figure 54 highlights two key findings. First, for very low-income earners, it does not pay to work in a formal job because of the complete loss of social benefits and the high labor taxes, owing to the minimum base for calculating SSCs. Second, as income grows, these disincentives start declining, with the impact of the minimum base for calculating SSCs becoming irrelevant around the minimum wage.

This section discusses two potential ways to address these seeming disincentives to formal work caused by the restrictions on social benefits for workers as well as the labor taxation rules. The first is by modifying the social benefits system so that households lose only a portion of their benefits when they start working, effectively raising social benefits for low-wage earners. The second is by reducing the minimum base for SSCs.

One proposed approach to phasing out the GMA is to gradually reduce it after a household member starts working. There are different ways of doing this. According to discussions with representatives of the Ministry of Social Policy, Demography and Youth in North Macedonia, one proposal currently under consideration is a stepwise reduction of GMA, which would make households receive 80% of the GMA amount in the first three months of employment, 70% from the fourth to the sixth month, 50% from the seventh to the ninth month, and 30% from the 10th to the 12th month. After 12 months, GMA would be withdrawn entirely. This approach would only apply to employment paying a salary below the national average; if the salary exceeds the average, GMA would be withdrawn immediately upon employment.

This phased reduction introduces an additional layer of complexity to the analysis by adding a time dimension.[16] To simplify this analysis, the average amount of GMA over the entire first year after a household member starts working is considered and compared to the situation before any member of the household is employed. That means that the amount of GMA that the household will receive after someone starts working will be equal to 57.5% of the initial amount (average of 80%, 70%, 50%, and 30%) up until the average salary, when it will drop to zero.

Figure 55 illustrates income, GMA,[17] and the FTR at different levels of labor income, incorporating the proposed phasing-out of GMA. The left-hand panel shows that GMA no longer drops to zero with the first euro of labor income; instead, it declines only gradually. As a result, the decline in net total income is smaller compared to the previous scenario.

16 The figures presented so far would vary depending on the time horizon under consideration. For example, comparing the current situation, in which no household member is employed, with the first month after employment would yield one set of figures, as GMA at that point would still be 80% of its original level. In contrast, comparing the 10th month after employment, when GMA is reduced to 30% of its initial amount, would yield a different set of figures.

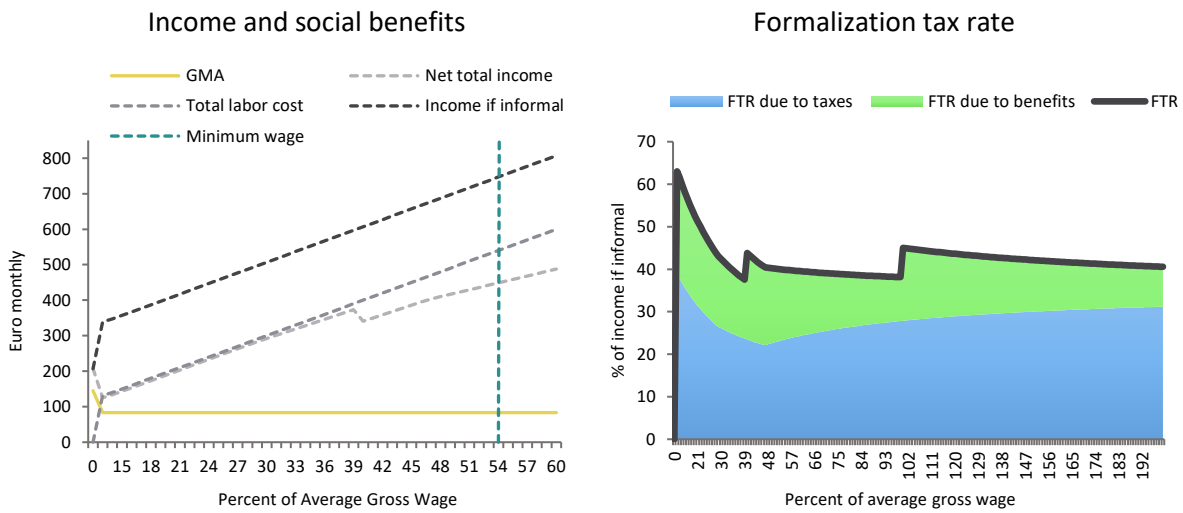
17 For clarity, the lines for child and energy allowances are dropped from the figure.

These changes are also evident in the FTR, shown in the right-hand panel of the figure. Although the FTR still increases significantly with the first euro of labor income, it no longer jumps to 90%, as before, but instead rises to approximately 60%. It then gradually decreases, to 40%, with two notable spikes: when the child benefit is withdrawn (at around 40% of the average gross wage) and when GMA is completely withdrawn (at the level of the average salary). However, the variation in the FTR is much smaller now, ranging between 40% and 60%.

The composition of the FTR has also changed. Most of it now originates from taxes, particularly the floor on SSCs, while the portion attributable to lost benefits is significantly smaller than before.

Thus, the analysis suggests that the proposed gradual phasing-out of GMA, as currently being considered by North Maceonia's Ministry of Social Policy, Demography and Youth, would indeed reduce disincentives to formal work. It would not eliminate them entirely, however, as part of the benefits would still be lost when starting a formal job, and the high SSCs at low levels of wages would remain.

Figure 55 / Income, social benefits, and the FTR at different levels of gross wage in North Macedonia, with GMA of 57.5% of the initial level once a member of the household starts working



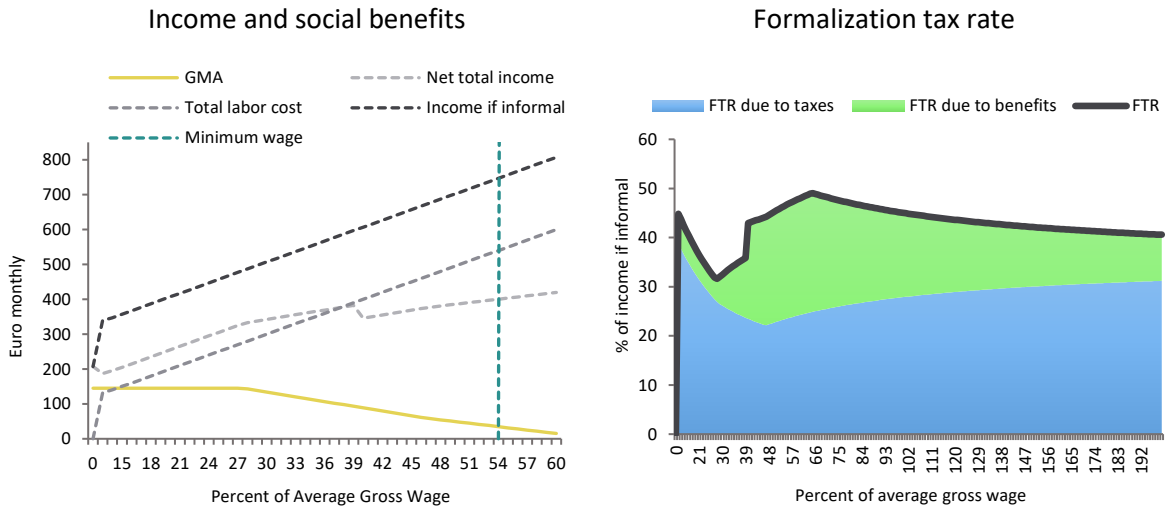
Note: The average gross wage scale on the horizontal axis jumps from 0% to 13% because of the floor on social contributions.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

Another way to design the phasing-out of GMA would be to follow the approach piloted in Kosovo for its social assistance scheme (SAS).[18] Figure 56 illustrates the income, social benefits, and FTR under this scenario. The left-hand panel shows that the decline in GMA is very gradual in this case and only occurs after net labor income reaches a certain level. Consequently, the FTR (shown in the right-hand panel) increases modestly, rising to 45% with the first euro of labor income, declines afterwards, starts rising again after some time, and finally starts converging to the steady-state level in the end. The variance in the FTR is much smaller in this case compared to the scenario with a percentage-based

18 If the household has formal labor income below the baseline GMA amount of EUR 145, then it continues receiving the entire amount of GMA. If it has a formal labor income above EUR 145, the amount of GMA it receives is calculated as: 145 – (household income – 145)/2.

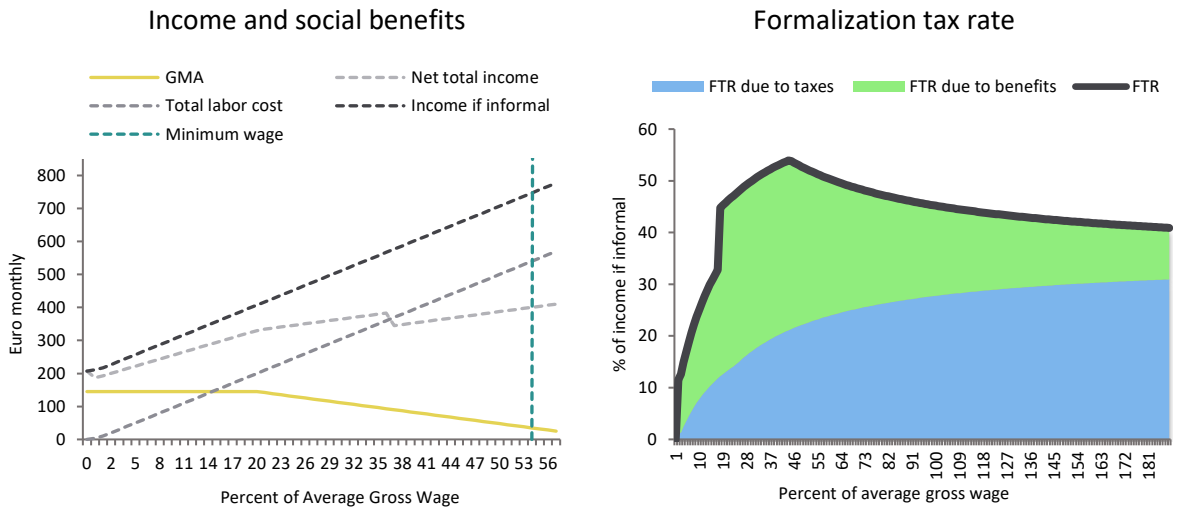
phasing-out of GMA, ranging between 30% and 50%. Thus, this approach appears to smoothen the transition to formal employment more effectively.

Figure 56 / Income, social benefits, and the FTR at different levels of gross wage in North Macedonia, with GMA phasing out according to the model piloted in Kosovo's SAS



Note: The average gross wage scale on the horizontal axis jumps from 0% to 13% because of the floor on social contributions.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

Figure 57 / Income, social benefits, and the FTR at different levels of gross wage in North Macedonia, with a minimum SSC base of 10 EUR and income disregard for GMA



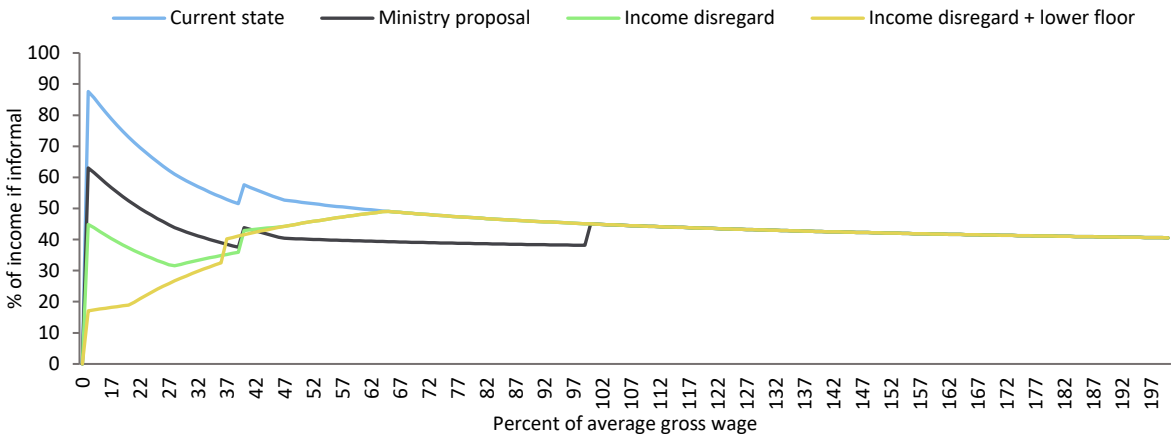
Note: The average gross wage scale on the horizontal axis jumps from 0% to 13% because of the floor on social contributions.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

The final option to consider is a reduction in the minimum base for calculating SSCs on top of the gradual phasing out of GMA. Concretely, instead of the current minimum base for SSCs of 468 EUR per month, a minimum base of 10 EUR per month is assumed. Additionally, the phasing-out of GMA

according to the model being piloted in Kosovo is assumed.[19] Figure 57 illustrates this scenario and shows that lowering the minimum base for SSCs would further benefit low-income earners. The FTR increases much more gradually when SSCs are reduced, without a sudden jump to 40%, highlighting the significant role that the minimum base for SSCs plays in shaping disincentives at low-income levels. However, the highest level of the FTR still approaches 55%, and the steady-state level remains around 40%. This suggests that while reducing the minimum base for SSCs has a notable potential impact at the initial stages of income growth, its influence diminishes at higher income levels. The minimum base is therefore more critical in addressing disincentives for low-wage earners than for those earning closer to the average wage.

Figure 58 compares FTR according to the four options discussed so far. It is apparent that for low levels of income (roughly up to 40% of the gross wage), the "income disregard + no floor" option yields the lowest FTR. The "income disregard" option has the second lowest peak FTR, while the current proposal of the Ministry of Social Policy, Demography and Youth has a higher peak FTR but is lower at higher income levels. At incomes between 40% and 100% of the gross wage, the "ministry proposal" yields the lowest FTR, although the differences between the various options are not that big in this segment, generally being below 10 pp. As soon as the wage reaches the average, all the options converge and yield the same result, which once again confirms that this analysis only has implications for lower incomes, which are associated with part-time and gig jobs.

Figure 58 / Comparison of the FTR under the different analyzed options for North Macedonia



Note: The average gross wage scale on the horizontal axis jumps from 0% to 20% because of the floor on social contributions. "Current state" to the FTR as it currently is. "Ministry proposal" refers to the FTR according to the proposal for gradual phasing-out of GMA, which is currently being assessed by North Macedonia's Ministry of Social Policy, Demography and Youth. "Income disregard" refers to the reduction of GMA in line with income earned, following the pilot program being implemented in Kosovo. "Income disregard + no floor" refers to the combination of this reduction of GMA in line with income earned, plus a reduction in the SSC floor to EUR 10 per month.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

19 While the lowering of the base may reduce revenue coming into the social insurance system in the short term, that effect could be offset in the longer term by having additional entrants into the formal labor force.

Summary of main findings for North Macedonia

- **Guaranteed minimum assistance (GMA) and other social benefits**: North Macedonia's GMA provides EUR 145 per month to a typical household analyzed here but is withdrawn entirely once any household member starts working formally, creating a sharp income loss at the point of formalization. The energy allowance (EUR 21) follows the same eligibility rules as GMA, while the child allowance (EUR 41 for two children) is phased out at a higher threshold.
- **High formalization tax rate (FTR):** The first euro of formal labor income results in an immediate FTR jump to 88%, primarily due to the loss of GMA and the energy allowance as well as high SSCs due to the minimum base of EUR 468 per month. The FTR gradually declines as income rises, converging to around 40% at higher wage levels.
- **Excessively high social security contributions (SSCs) for low-wage earners:** The minimum SSC base is set at 50% of the average gross salary (EUR 468 in 2024), leading to a minimum SSC payment of EUR 131 per month, even for workers earning far less, which results in a high effective labor tax wedge at low wage levels.
- **Stronger disincentives to formal work, but not to work in general:** The benefits system does not necessarily discourage employment but incentivizes people to work informally to keep the social benefits while earning labor income. The minimum wage in North Macedonia in 2024 was EUR 370 net per month, significantly higher than the EUR 207 received through GMA and other benefits. This suggests that benefits are too low to sustain a livelihood but high enough to encourage informality when combined with rigid eligibility criteria.
- **Potential impact of the proposed GMA reform:** A proposal under discussion suggests a stepwise reduction of GMA over 12 months instead of an immediate cut-off. This would reduce the FTR's peak from 88% to 60%, softening the transition into formal employment. However, the disincentives would remain rather strong due to the high SSC burden at low wage levels.
- **A gradual reduction of benefits in line with earned income is a better approach:** Gradually phasing out the GMA, as for example in the model that Kosovo currently has with its pilot social assistance scheme (SAS), would result in an even lower and more gradual FTR, making the transition to formal employment smoother and less financially penalizing for low-income households.
- **Lowering the SSC base could also help:** Lowering the minimum SSC base (e.g., from EUR 468 to EUR 10 EUR) would also significantly reduce the tax burden on low-income earners, making formal work more viable.

5.6. SERBIA

Short description of the main social benefits and the tax system in Serbia

The main poverty-targeted benefits in Serbia are financial social assistance (FSA) and the child allowance. FSA provides targeted support to individuals and families whose income – from work, property, or other sources – is below the legally defined level. As of 2024, the level is determined based on a base amount of RSD 11,674 and adjusted depending on the household composition using the modified OECD equivalence scale.[20] Thus, a household with two adults and two children is counted as having 2.1 adult equivalents, resulting in a benefit of RSD 24,515 per month, or approximately EUR 210.

FSA can be received by households that have formal labor income, but the amount a household receives depends on the level of income. If the household has no income from work, property, or other sources, it receives the full amount of EUR 210. If its income is below EUR 210 per month, FSA covers the difference between EUR 210 and the household income. If income exceeds EUR 210, the household loses eligibility for FSA, except in the case of seasonal work, which does not affect entitlement. The eligibility levels and FSA benefit amounts are adjusted biannually, and eligibility requires registration for work or education and acceptance of reasonable job offers.

The child allowance program provides RSD 4,215 per child, amounting to EUR 72 per month for a household with two children. Eligibility is determined by an income threshold of RSD 12,646 per family member, which equals EUR 432 per month for a four-member household. Households with income below this threshold receive the child allowance, while those exceeding it lose eligibility. There is an energy-vulnerable costumer (EVC) benefit in the country, but it is not received as a cash benefit; instead, it reduces monthly bills for electricity, natural gas, or thermal energy. For this reason, it is not included in this analysis.

The labor tax system in Serbia is nominally progressive but effectively regressive at low income levels. Like elsewhere in the region, it consists of the personal income tax (PIT) and the SSCs. No major changes have occurred since the publication of the *Western Balkans Labor Market Brief 2022* (Jovanović et al. 2024), which assessed the country's labor tax system in detail. The PIT has two components. The first is a flat-rate PIT of 10%, applied to income as it is earned regardless of income level. A monthly personal tax allowance of EUR 214 is deducted from taxable income. Additionally, there is an annual PIT applied to net incomes exceeding three times the average annual gross salary, but as this brief does not analyze such income levels, it is not explained here. Serbia has both employer and employee SSCs, both of which are paid by the employer. These cover pension contributions, health insurance, and unemployment insurance, with a total SSC rate of 35.05% of gross income. There are minimum and maximum bases for SSC calculations. The minimum base is set at 35% of the average monthly salary, while the maximum base is capped at five times the average monthly salary. In 2024, the minimum base was RSD 40,143 (EUR 343), meaning the lowest SSC payment an employer must make for a formally employed person was EUR 120.

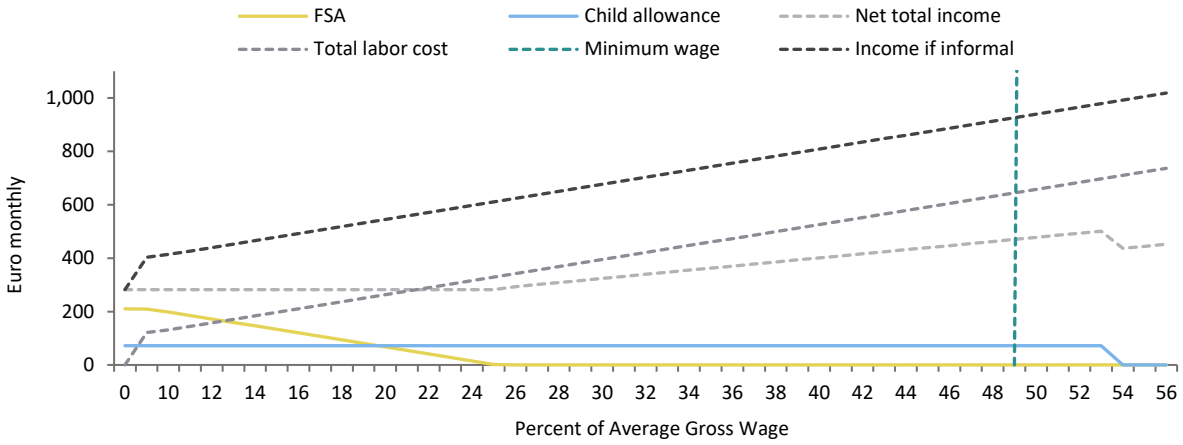
20 Equivalence scales are standardized tools to adjust income and benefit amounts of households to incorporate economies of scale. The OECD-modified scale assigns a weight of 1 for the first adult, 0.5 for each additional adult, and 0.3 for each child.

The minimum base for calculating SSCs has significant implications for low-wage earners in Serbia, as in most other countries in the region. For example, if a worker earns a net wage of only EUR 50 per month (e.g., by working part-time), SSCs still have to be paid at the minimum level of EUR 120. As SSCs are paid by the employer, the total labor cost would amount to EUR 170, while the worker would receive only EUR 50 net. This would result in an effective labor tax rate of 71% (PIT is zero at this income level). This produces a regressivity in the effective labor tax rate at low wage levels, meaning that low-wage earners face a higher effective tax rate than higher-wage earners.

Analysis of the potential impact of the existing social benefits and taxes on household income in Serbia

Figure 59 illustrates how income and benefit levels change as earnings of a typical household in Serbia increase. The levels of various forms of income and benefits are calculated and displayed for different levels of the average gross wage in the country. The figure includes two of Serbia's social assistance programs, which are indicated by solid lines: (i) FSA (orange) and (ii) the child allowance (blue). The dashed lines illustrate different forms of income: (i) the net total income of the household, consisting of the relevant social assistance benefits and the net wage (light-grey); (ii) the total labor cost, consisting of the net wage plus the labor taxes (medium-grey); and (iii) the "income if informal," consisting of the net wage, labor taxes, and applicable social assistance benefits (dark-grey). Additionally, the minimum wage in the country is shown as a vertical dashed line, serving as a reference point for the segment of the wage distribution to which the analysis refers (around EUR 404 net per month).

Figure 59 / Income and social benefits at different levels of gross wage for a household with two adults and two pre-school children in Serbia



Note: The total labor cost jumps from 0% of the average gross wage to 9% because of the floor on social contributions (i.e., since social contributions cannot be lower than EUR 120, the total labor cost for the employer is EUR 121, or 9% of the average gross wage, even for net labor income of EUR 1).
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

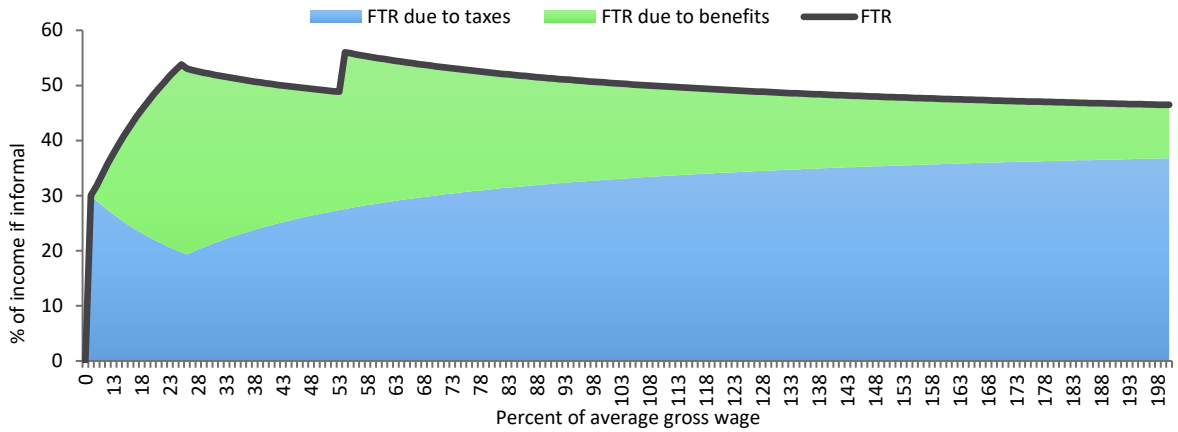
Unlike in some other countries, FSA in Serbia does not drop to zero when a household member starts working formally. Instead, it is only reduced by the amount of the increase in net labor income until net labor income reaches EUR 210, when FSA becomes zero. The child allowance is constant at EUR 72 until net labor income reaches EUR 432. At that level, it drops to zero.

The total labor cost jumps from EUR 0 to EUR 121 as net labor income grows from EUR 0 to EUR 1. This occurs due to the floor on SSCs, which cannot be lower than EUR 120 per month, as explained above. Even if a worker were to have just EUR 1 of net wage, the employer would pay a minimum of EUR 120 in SSCs, as in most of the other countries in the region.

Net total income is constant in the beginning until it reaches EUR 210, as FSA declines in line with the increase in the net labor income. At EUR 210, FSA becomes zero, and the net total income starts increasing as the labor income grows. It grows constantly until net labor income reached EUR 432, when the child allowance drops to zero and the net total income drops, as well, for the first and only time. After that, net total income starts growing again.

"Income if informal" grows continuously, with the difference between it and the net total income illustrating the disincentives to formal work generated by the tax and benefits system. At a gross wage of EUR 0 (i.e., when no one in the household has gainful employment), the "income if informal" and the net total income are identical, consisting exclusively of the social benefits. But if someone in the household starts working, the two start diverging because of the benefits that have to be paid when someone starts working formally. Afterwards, they diverge, including because of the reduction in FSA.

Figure 60 / The FTR at different levels of gross wage for a household with two adults and two pre-school children in Serbia



Note: The average gross wage scale on the horizontal axis jumps from 0% to 9% because of the floor on social contributions.
Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

An alternative way to illustrate the disincentives created by the tax and benefit system is through the FTR. The FTR, shown in Figure 60, jumps from 0% to 30% as soon as a household member transitions from informal to formal employment. This occurs because SSCs that have to be paid when working formally, which are high at low income levels due to the minimum base for their calculation. Thus, if a household member was working formally and had a new wage of EUR 1 , the net total income of the household would be EUR 282, consisting of the net wage, FSA, and the child allowance. But if the household member was working informally, the income of the household would be EUR 403, consisting of the net wage, the social benefits, and the labor taxes (i.e., SSCs), meaning that the household would lose 30% of its income when transitioning from informality to formality. As labor income increases, the FTR begins to rise in Serbia due to the gradual reduction of FSA. It comes to around 55% at the point when FSA drops to zero, and then the FTR starts declining. It again spikes to 55% when the child allowance is withdrawn, and then it gradually declines and converges to 46%,

which is the steady-state level. This level is slightly higher in Serbia than in most of the other WB6 countries due to the higher SSCs in Serbia.

It is important to bear in mind that the disincentives that were discussed here refer mainly to formal work, but not work in general. The social benefits in Serbia, like everywhere in the region, are too low to discourage work in general. FSA and the child allowance amount to EUR 282 in total per month, which is much lower than the minimum wage in the country, which is EUR 404.

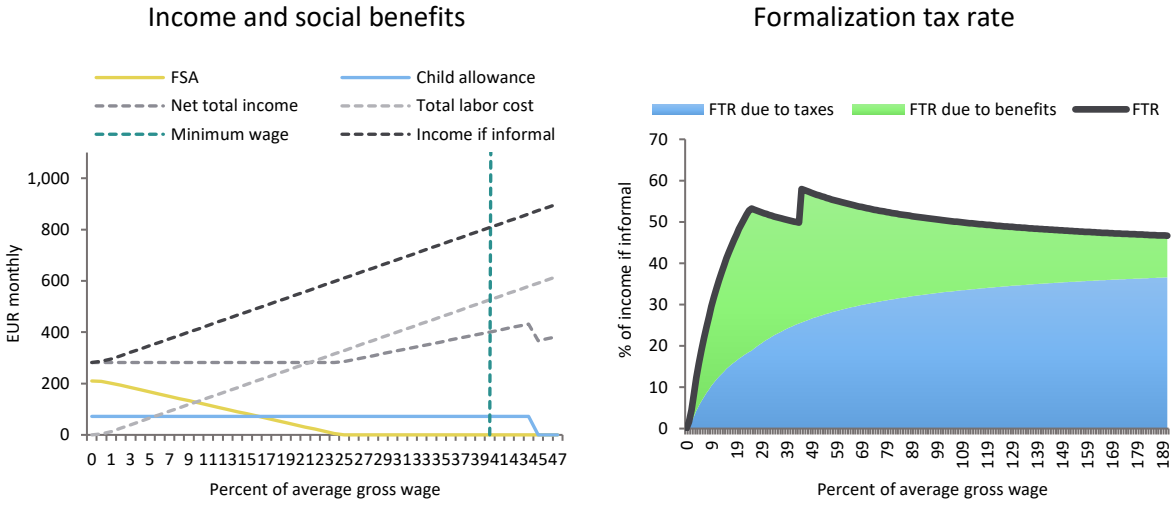
Issues with the tax and benefits system in Serbia and potential solutions

The analysis so far highlights that the main disincentives to formal work in Serbia stem from SSCs. For very low-income earners, formal employment is often unviable due to high labor taxes at low income levels, driven by the minimum SSC base. As a result, households may opt out of formal work or underreport income unless they can secure a steady, full-time job with earnings above the minimum wage.

This section examines whether lowering the minimum base for calculating SSCs would reduce disincentives to formal work. Specifically, this modeling illustrates the impact of reducing the minimum SSC base from the current EUR 343 per month to EUR 10 per month.

Figure 61 illustrates this scenario, showing no significant differences from the current situation. The FTR appears to increase more gradually, but this is due to the fact that the gross wage no longer jumps immediately to 10%, as before, but instead rises gradually because of the lower minimum SSC base. At any given gross wage level, the FTR remains unchanged compared to the previous figure. For instance, when the gross wage is 10% of the average, the FTR is 32%, just as before. At 20% of the average, the FTR is 48%, which is unchanged from the previous case. This is because Serbia's FSA is designed to compensate for variations in net labor income. When net labor income is lower, FSA is higher, and as labor income increases, FSA declines. As a result, reducing SSCs in Serbia leads to higher net labor income, which in turn reduces FSA, keeping net total income unchanged at EUR 282.

Figure 61 / Income, social benefits, and the FTR at different levels of gross wage in Serbia, with minimum SSC base of EUR 10



Source: Authors' calculations, using data from SEE Jobs Gateway and national tax and benefit legislation.

Summary of main findings for Serbia

- **Financial social assistance (FSA) and other benefits:** FSA provides targeted support based on household income, with a maximum benefit of EUR 210 per month for a household with two adults and two pre-school children. It gradually declines as income rises and is fully withdrawn when net labor income reaches EUR 210 . The child allowance of EUR 72 per month is constant until a net labor income of EUR 432 is reached by the household type analyzed here, when it is withdrawn fully.
- **Moderate formalization tax rate (FTR):** Unlike in some neighboring countries, FSA does not drop to zero immediately with the first euro of formal labor income but declines gradually. However, the FTR still jumps to 30% with the first euro of formal labor income, primarily owing to high SSCs resulting from the minimum base for their calculation. It then rises further as FSA is withdrawn, peaking at 55% when FSA ends and again at 55% when the child allowance is lost, before stabilizing at 46%.
- **High social security contributions (SSCs) are the main barrier to formalization:** The minimum SSC base is set at 35% of the average salary (EUR 343 in 2024), meaning that even for very low wages, the minimum SSC payment is EUR 120 per month. This results in high effective labor tax rates at low levels of income, making formal work unattractive at lower wage levels.
- **Stronger disincentives to formal work, but not to work in general**: The benefits system does not necessarily discourage employment in general but, instead, encourages people to work informally to keep the social benefits while earning labor income. The minimum wage in Serbia in 2024 was EUR 404 net per month, which is significantly higher than the EUR 282 received through FSA and the child allowance. This suggests that social benefits are not high enough to discourage work entirely but do contribute to informality.
- **Potential impact of lowering minimum bases for SSCs**: A reduction in the minimum SSC base from EUR 343 to EUR 10 was analyzed but did not significantly improve formalization incentives. This is because FSA automatically adjusts to compensate for net labor income changes, keeping total income stable at EUR 282.

6. Conclusions

This special topic examines the potential impact of tax and social benefit systems on work incentives in the six Western Balkan economies (WB6) through a modeling exercise. The central argument is that poorly designed tax and benefit policies may unintentionally discourage formal employment by reducing household income at low wage levels when individuals first enter the formal labor sector. This reduction can result from the immediate withdrawal of social benefits once a household member begins working as well as from high effective labor tax rates at the lower end of the income scale.

The findings presented in this report show that tax and social benefit systems across the WB6 do create disincentives to formal employment, especially at low income levels. Households often experience sharp drops in income upon entering formal employment due to the abrupt withdrawal of benefits. In addition, high minimum social security contribution (SSC) bases mean that workers earning low formal wages face disproportionately high contributions, significantly raising the cost of formal employment. These conditions strongly discourage formal job registration, particularly for part-time work (i.e., “mini,” “midi,” and “gig” jobs), which may be the entry point for some workers into more full-time work.

Overall, this formalization tax rate (FTR) – that is, the costs in labor taxes and lost benefits when transitioning to formal work – is higher in the WB6 than in OECD countries. The FTRs at low wage levels hover between 50% and 75% in the WB6, while they tend to range between 30% and 40% in OECD countries. Disincentives in Kosovo and Montenegro mainly stem from poorly designed social benefit program parameters, while the tax rate on households at the low wage levels largely comes from very high SSCs in Albania. In the other WB6 countries and entities (i.e. the Federation of BiH and Republika Srpska), the FTR is relatively evenly split between disincentives coming from both taxes and the benefit systems.

These disincentives are more likely to drive people into informal employment rather than deter work altogether. Benefit amounts across the WB6 economies generally remain below national minimum wages, making them insufficient to sustain livelihoods without additional income from other sources, such as informal work, remittances from family members abroad, or other targeted social schemes (e.g., for war veterans or persons with disabilities). As a result, rather than discouraging employment entirely, social benefit schemes in the region tend to incentivize informal work, allowing households to supplement their income while retaining eligibility for benefits.

The most affected groups are those most likely to engage in flexible or part-time work, including youth, some women (often those with care responsibilities), and workers in sectors like hospitality and retail. These segments tend to have income levels at the lower end of the wage spectrum and may therefore be negatively discouraged at a disproportionate level from engaging in formal work due to high marginal effective tax rates upon entering formal employment.

Effective policy options to mitigate these negative incentives include:

- **Allowing workers to receive benefits while working formally, but reducing their amount in line with the income earned:** Replacing the restriction of not having any labor income (being formally unemployed/inactive) with a system that allows households to keep receiving benefits while having formal income, but reduces the benefit amount as income increases, would reduce incentives for households to work informally in order to avoid losing social benefits. Linking social assistance beneficiaries who are able to work to employment services and active labor market programs and supports may also help encourage participation in the formal working world and strengthen future labor incomes.
- **Reducing minimum SSC bases (for low-income earners):** Lowering the minimum SSC bases at the lower end of the wage spectrum would reduce the initial cost of formal employment, particularly benefiting low-income or part-time workers. This would make formal employment more financially attractive to those earning low wages, who currently often choose informal work due to the disproportionately high SSCs. The conventional justification for maintaining these bases is that they discourage wage underreporting and help ensure higher pension entitlements upon retirement. However, if the minimum bases push workers into informality, the intended protections are lost entirely, as earnings are not reported and no pension rights are accrued. Any proposal to amend the SSC bases should be carefully balanced with adjustments to social insurance legislation so as to safeguard the entitlements of part-time workers and potentially strengthen labor and tax inspections.

The analysis shows that implementing these reforms would reduce the effective tax rates faced by households when they begin to earn labor income, thereby encouraging formal employment. This could, in turn, enhance economic inclusion, reduce informality, and improve labor market participation, particularly among vulnerable groups and women.

Policymakers considering adjustments to SSC bases and/or rates should carefully weigh the trade-offs between different reform objectives. One key goal is to incentivize formal employment, and lowering the FTR may encourage more workers to enter the formal labor market. This would also bring additional benefits, such as access to health insurance, unemployment protection, and old-age pensions, which are financed through SSCs. At the same time, the level of SSCs should be assessed in relation to the quality of public services provided. When service quality is low, people are often reluctant to pay SSCs, as they feel they receive little in return. Another crucial consideration is fiscal sustainability – changes in SSCs can affect revenues in both positive and negative ways, and this must be taken into account when designing any reform. Reform efforts should also be accompanied by clear communication and engagement with workers, employers, and the broader public to ensure that the goals and implications are well understood.

The findings of this brief are broadly in line with the existing literature on this issue, surveyed earlier in this brief. Many of the studies reviewed – some dating back more than a decade – identify the same challenges and propose similar recommendations to those presented here. This raises an important question: Why has relatively little progress been made despite the fact that these issues are now well recognized and widely understood?

Some steps are indeed being made, but this is not enough, and more is needed. Kosovo is testing a pilot social assistance scheme (SAS) that includes an income disregard. North Macedonia is considering a similar reform. But most countries in the region still maintain relatively high SSC floors, making their tax systems regressive at very low income levels and reinforcing incentives to informality in low-wage and part-time employment. Further research is needed to understand the push and pull factors of formal and informal employment for both employees and employers. Empirical and budgetary analysis using household and labor force surveys, combined with costing data, could also be helpful when assessing the trade-offs between different policy options.

The slow pace of change may partly reflect concerns about potential fiscal implications. Introducing an income-disregard mechanism in poverty-alleviation benefits could either increase of decrease expenditures in the short run, although, in the long run, it is associated with generating net benefits by encouraging employment, preventing skills degradation, and stimulating social inclusion. Similarly, lowering minimum SSC bases could reduce fiscal revenues through the lower SSC rates, but it could also raise them, through the higher compliance. Further research is therefore needed to better understand the fiscal effects of these reforms while taking into account the interaction of minimum social contribution bases with health insurance as well as social and minimum pensions. Developing a stronger evidence base on the budgetary impacts could help policy makers to weigh the trade-offs more clearly and design reforms that promote both formalization and fiscal sustainability.

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Statistical Annex

- SEE Jobs Gateway
- Sources and definitions
- Key economic indicators

Tables per country:

- Labor market data
- Earnings and unit labor costs

The tables in the statistical annex provide data on key economic indicators, as well as labor market indicators, according to the labor force survey (LFS) methodology and data on earnings and unit labor costs for the six Western Balkan countries (Albania, Bosnia and Herzegovina, Montenegro, North Macedonia, Serbia, and Kosovo) and for four EU peer countries (Austria, Bulgaria, Croatia, and Hungary).

Disclaimer

All data presented in this report and online have been collected directly from the national statistical offices of the six Western Balkan countries and Eurostat, with the objective of harmonizing the data as far as possible across countries. The data have been collected within the framework of the SEE Jobs Gateway and, as such, are not official World Bank estimates.

SEE Jobs Gateway Database

All time series presented in the statistical annex are available in the SEE Jobs Gateway Database at https://wiiw.ac.at/seejobsgateway.html

This database covers a unique and detailed set of labor market indicators, based on LFS data for the Western Balkan countries and four EU peer countries. The dataset is harmonized across indicators, gender, age groups, and educational attainment. In addition, some wage-related indicators are included. Overall, the database covers four parts: (i) Key economic indicators, (ii) Labor market – LFS data, (iii) Labor market – administrative data, and (iv) Data on earnings and unit labor costs.

The database contains both raw and derived statistics. The underlying basic employment data (in thousand persons) are provided by the statistical offices on an annual and quarterly basis (raw data, to three decimal places). All corresponding rates and shares on an annual and quarterly basis have been calculated based on these raw data. Flags in the database are used as alerts, drawing attention to the fact that the data could be less accurate (or inaccurate) and should be interpreted with caution.

Major breaks in the LFS series

The LFS in the Western Balkans have steadily improved and are being harmonized with EU and ILO definitions, which means that breaks in the time series are unavoidable. Most of the breaks in the series occur for one or other of the following reasons: change in survey design; change in survey questionnaire; change in survey frequency; revision of the data series based on updated population census results for 2011 or 2021/2022; and reclassification of educational attainment. In addition, the EU LFS survey was changed as of 2021. The following changes affect the data series' comparability over time and across countries:

- *EU LFS survey changes:* From 2021, a new methodology started to be introduced, in line with the Integrated European Social Statistics (IESS) Regulation. This has resulted in some major changes, which are carefully defined at Eurostat. As of 2021, three Western Balkan countries – Bosnia and Herzegovina, Montenegro, and Serbia – and all four EU peer countries were already applying this new methodology. Any changes in comparison to previous years should be carefully interpreted. A mandatory back-calculation for some major indicators – including gender, age, and education – is required by Eurostat. In this SEE Jobs Gateway Database, no back-calculation is provided. When

calculating labor productivity and unit labor costs a comparable growth rate 2021 is applied for the respective countries, except for Bosnia and Herzegovina and Montenegro.

- *Introduction of a continuous quarterly survey producing quarterly results:* in Albania – from 2012 (previously, the survey was carried out once a year – in 2010, in September-October; in 2011, in July-September); in Bosnia and Herzegovina – from 2020 (until 2019, the survey was carried out once a year in April); in Serbia – from 2015 (in 2010-2013, the survey was carried out twice a year, in April and October; in 2014, a quarterly survey with a fixed reference week was introduced).
  Amendment: In Kosovo the survey was already based on a continuous quarterly survey; so far the data are only available on an annual basis between 2012 and 2015, and starting from 2016 on a quarterly basis.

- *Updated population census results:* Census 2011 has been applied in Albania and Montenegro from 2011 (data for 2010 are not fully comparable); in Serbia from 2013 (low impact on growth rates in comparison to the previous year). Census 2013 has been applied in Bosnia and Herzegovina from 2020 (due to this and other methodological changes, data are not comparable to previous years). In North Macedonia, the 2022 census is applied from 2022, census 2002 backward (growth rates 2022 are not comparable).

- *Educational attainment:* Indicators showing educational attainment are based on the International Standard Classification of Education (ISCED 1997 or ISCED 2011). In the following tables, as well as in the SEE Jobs Gateway Database, the definition of low-educated (level 0-2), medium-educated (level 3-4), and high-educated (level 5-8) refers to ISCED 2011. Any deviations (application of ISCED 1997) are described in the metadata.
  Detailed ISCED 2011 levels of education: 0 = early childhood education, 1 = primary education, 2 = lower secondary education, 3 = upper secondary education, 4 = post-secondary non-tertiary education, 5 = short-cycle tertiary education, 6 = bachelor's or equivalent, 7 = master's or equivalent, 8 = doctorate or equivalent). In comparison, ISCED 1997 includes only seven levels of education (tertiary education is less detailed). A correspondence table is available at Eurostat.

Regarding *average monthly wages* (gross and net), breaks may occur if the survey basis has changed, or the data are taken from a new or different source. This is the case in Albania (data from General Directorate of Taxation from 2014; before that, Structural Business Statistics data); in Croatia (from 2016, data are based on tax records; before that, survey data; from 2020, employees expressed in full-time equivalents); in Serbia (from 2018 tax administration data; before that, wage survey data supplemented by tax administration data); and in Hungary (enterprises with 5 and more employees based on survey data, from 2019 total economy based on tax administration data). The SEE Jobs Gateway database provides comparable growth rates. The comparability between annual and quarterly data may also be impaired by survey coverage (this is the case for Albania and Kosovo).

In the SEE Jobs Gateway Database, all methodological breaks in time series and definitions are defined in the metadata.

In this round of data collection, the existing dataset has been enlarged with new time series, namely Index 2020=100 for gross domestic product, labor productivity, consumer prices and unit labor costs.

Western Balkans-6 aggregate

This country grouping is the sum of the six countries only when data for all the countries are available. Time series therefore start from 2012 (because data for Kosovo are not available prior to this). If necessary, weighted averages have been calculated (GDP, consumer price index (CPI), labor productivity, wages, unit labor cost).

Conventional signs

.	Data not available
()	less accurate estimate
(())	inaccurate estimate

Sources and definitions

Macro-economic indicators

Sources

SEE Jobs Gateway Database, based on data provided by national statistical offices and Eurostat. The unit labor costs are calculations done by wiiw.

Definitions

GDP real: gross domestic product at 2015 reference prices, real growth in %.
Labor productivity: GDP at 2015 reference prices per person employed (LFS), growth in %.
Inflation: consumer price index (harmonized CPI for EU peer countries), growth in %.

Labor market indicators

Sources

Data for the Western Balkans are provided by the statistical offices of the respective country; data for the EU peer countries are taken from Eurostat (partly supplemented by data from national statistical offices).

Definitions

Indicators like **population**, **employment, unemployment,** etc. are presented in 1,000 persons and refer to averages.

Working-age population: for the Western Balkans population 15+ (ILO); for the EU peer countries population aged 15-74. From 2021, for those countries applying the new EU LFS regulation, the age group refers to 15-89.

Labor force: employed and unemployed persons.

Employment rate: employed persons as a percentage of the working-age population of the respective gender, age, and education group.

Share of self-employed: self-employed as a percentage of the total employment of the respective gender, age, and education group.

Share of part-time employment: part-time employed as a percentage of the total employment of the respective gender, age, and education group.

Share of temporary employment: temporary employees as a percentage of total employees of the respective gender, age, and education group.

Activity rate: labor force as a percentage of the working-age population of the respective gender, age, and education group.

Unemployment rate: unemployed persons as a percentage of the labor force of the respective gender, age, and education group.

NEET rate: young people neither in employment nor education and training (NEET) as a percentage of the young population of the respective gender, age, and education group.

Long-term unemployment: persons unemployed for 12 months or more.

Long-term unemployment rate: long-term unemployed as a percentage of the labor force.

Share of long-term unemployment: long-term unemployed as a percentage of total unemployed.

Data on earnings and unit labor costs

Sources

Data on average monthly gross and net wages and monthly gross minimum wages are provided by the statistical offices of the respective country. Unit labor costs are own calculations from existing time series.

Definitions

Average monthly wages: wages per employee per month (on a gross/net basis – before/after deduction of income tax and social security contributions). Gross wages comprise the basic wage and all kinds of additional payments (bonuses, overtime hours, night work, payments for statutory contractual or voluntarily granted leave, etc.).

Data are taken from administrative sources, except for Austria, where they refer to the National Accounts concept (gross wages per employee, domestic concept, divided by 12 months).

Wages are presented in national currency, in euro (converted using the average exchange rate) and in Purchasing Power Parities (PPPs) (using PPPs in EUR for total GDP).

Monthly gross minimum wages: data refer to national minimum wages as of 1 January of the respective year. The metadata indicate since when the minimum wage has been in effect.

The basic national minimum wage is fixed at an hourly, weekly, or monthly rate in net or gross terms; this minimum wage is enforced by law (the government), often after consultation with the social partners, or directly by national intersectoral agreement. Minimum wages are gross amounts – that is, before deduction of income tax and social security contributions.

In the database monthly gross minimum wages are reported.

Minimum wages are provided in national currency; they are then converted into euro by applying the exchange rate from the end of the previous month. To remove the effect of differences in price levels between the countries, the minimum wages are converted using PPPs for household final consumption expenditure in each country.

Nominal unit labor costs (ULC): average annual nominal gross wages per employee in NCU relative to real labor productivity (real GDP per employed person, LFS).

Nominal unit labor costs (ULC) exchange rate adjusted: average annual nominal gross wages per employee in EUR relative to real labor productivity (real GDP per employed person, LFS).

Real unit labor costs (ULC): average annual nominal gross wages per employee in NCU relative to nominal labor productivity (nominal GDP per employed person, LFS).

Real unit labor costs (ULC) exchange rate adjusted: average annual nominal gross wages per employee in EUR relative to nominal labor productivity (nominal GDP per employed person, LFS).

For all unit labor cost indicators, comparable growth rates have been applied for all breaks.

Growth rate (nominal/real) in %:
The annual rate is the growth rate in % of the previous year.
The quarterly rate is the growth rate in % of the corresponding quarter of the previous year.

Key economic indicators, annual growth in %

Albania	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP, real	1.8	2.2	3.3	3.8	4.0	2.1	-3.3	9.0	4.8	3.9
Employment aged 15+	1.3	4.8	6.5	3.3	3.0	2.8	-1.8	0.4	4.0	2.2
Labor productivity	0.5	-2.4	-3.0	0.5	1.0	-0.7	-1.6	8.5	0.8	1.7
Inflation	1.6	1.9	1.3	2.0	2.0	1.4	2.2	2.3	6.6	5.3
Monthly gross wages per employee, nominal	0.9	5.2	-0.8	3.0	3.3	3.5	2.4	6.6	8.2	14.0
Monthly gross wages per employee, real	-0.7	3.2	-2.0	1.0	1.3	2.1	0.9	4.4	1.4	8.8
Nominal unit labor cost, EUR adjusted	0.6	8.0	4.0	5.0	7.6	8.2	3.5	-0.7	10.5	22.5
Real unit labor cost, EUR adjusted	-0.9	7.4	4.7	3.5	6.0	7.1	3.4	-4.0	0.6	15.5

Bosnia and Herzegovina	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP, real	1.2	4.3	3.2	3.2	3.8	2.9	-3.0	7.4	4.2	2.1
Employment aged 15+	-1.2	1.2	-2.5	1.8	0.8	-2.4	-1.0	-1.9	1.0	2.9
Labor productivity	2.3	3.1	5.9	1.4	3.0	5.4	-2.0	9.5	3.2	-0.8
Inflation	-0.9	-1.0	-1.6	0.8	1.4	0.6	-1.1	2.0	14.0	6.1
Monthly gross wages per employee, nominal	-0.1	0.0	0.9	1.6	3.1	4.3	3.8	4.5	11.7	13.0
Monthly gross wages per employee, real	0.8	1.0	2.5	0.8	1.7	3.7	5.0	2.4	-2.0	6.5
Nominal unit labor cost, EUR adjusted	-2.4	-3.1	-4.7	0.2	0.1	-1.0	6.0	-4.6	8.3	13.9
Real unit labor cost, EUR adjusted	-3.4	-3.2	-6.0	-1.6	-2.6	-3.4	5.9	-9.1	-3.2	6.5

Kosovo	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP, real	3.4	5.9	5.6	4.8	3.4	4.8	-5.3	10.7	4.3	4.1
Employment aged 15+	-4.9	-8.2	11.8	7.8	-3.3	5.2	-4.2	10.3	5.4	5.6
Labor productivity	8.7	15.3	-5.6	-2.7	7.0	-0.4	-1.2	0.4	-1.1	-1.4
Inflation	0.4	-0.5	0.3	1.5	1.1	2.7	0.2	3.4	11.6	4.9
Monthly gross wages per employee, nominal	4.4	3.0	1.7	2.1	5.1	5.3	-2.3	3.9	7.6	9.4
Monthly gross wages per employee, real	4.0	3.5	1.4	0.6	4.0	2.5	-2.5	0.4	-3.5	4.3
Nominal unit labor cost, EUR adjusted	-3.9	-10.7	7.7	5.0	-1.7	5.7	-1.1	3.4	8.8	11.0
Real unit labor cost, EUR adjusted	-5.5	-11.2	6.9	4.5	-3.2	4.7	-2.5	-2.5	1.5	6.2

Montenegro	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP, real	1.8	3.4	2.9	4.7	5.1	4.1	-15.3	13.0	6.4	6.3
Employment aged 15+	7.1	2.5	1.1	2.3	3.5	2.7	-10.0	-3.1	18.1	10.8
Labor productivity	-5.0	0.9	1.8	2.4	1.5	1.3	-5.9	16.7	-9.9	-4.0
Inflation	-0.7	1.6	-0.3	2.4	2.6	0.4	-0.5	2.5	11.9	8.7
Monthly gross wages per employee, nominal	-0.4	0.3	3.6	1.9	0.1	0.9	1.3	1.3	11.3	11.8
Monthly gross wages per employee, real	0.3	-1.3	3.9	-0.5	-2.4	0.6	1.6	-1.1	-1.5	2.9
Nominal unit labor cost, EUR adjusted	4.8	-0.6	1.8	-0.5	-1.3	-0.4	7.6	-13.2	23.6	16.5
Real unit labor cost, EUR adjusted	3.7	-2.7	-3.2	-4.2	-4.4	-2.4	7.8	-17.1	10.0	5.4

North Macedonia	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP, real	3.6	3.9	2.8	1.1	2.9	3.9	-4.7	4.5	2.8	2.1
Employment aged 15+	1.7	2.3	2.5	2.4	2.5	5.1	-0.3	0.0	-0.2	-0.5
Labor productivity	1.9	1.5	0.4	-1.3	0.4	-1.1	-4.4	4.5	3.0	2.6
Inflation	-0.3	-0.3	-0.2	1.4	1.5	0.8	1.2	3.4	14.0	9.0
Monthly gross wages per employee, nominal	1.0	2.7	2.0	2.6	5.7	5.1	8.3	5.7	11.1	15.3
Monthly gross wages per employee, real	1.3	3.0	2.2	1.2	4.2	4.3	7.0	2.4	-2.7	5.4
Nominal unit labor cost, EUR adjusted	-1.0	1.2	1.7	4.0	5.5	6.3	13.0	1.2	7.9	12.4
Real unit labor cost, EUR adjusted	-2.4	-0.8	-1.7	1.1	1.5	5.4	11.4	-2.9	-0.9	4.3

Serbia	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP, real	-1.8	1.3	3.0	2.4	4.6	4.8	-1.0	7.9	2.6	3.8
Employment aged 15+	4.7	0.6	5.6	2.8	1.4	2.4	-0.2	2.2	2.3	0.8
Labor productivity	-6.2	0.7	-2.5	-0.4	3.2	2.3	-0.7	5.6	0.3	3.0
Inflation	2.1	1.4	1.1	3.0	2.0	1.7	1.8	4.0	11.7	12.1
Monthly gross wages per employee, nominal	1.2	-0.5	3.8	3.9	6.0	10.5	9.5	9.4	13.8	14.8
Monthly gross wages per employee, real	-1.7	-2.4	2.6	0.9	3.9	8.4	7.8	5.2	1.7	2.4
Nominal unit labor cost, EUR adjusted	4.1	-4.0	4.4	5.9	5.3	8.4	10.5	3.6	13.6	11.7
Real unit labor cost, EUR adjusted	1.1	-6.0	2.8	2.8	3.3	5.9	7.7	-2.0	2.8	-1.9

Western Balkans-6	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP, real	0.3	2.6	3.2	2.8	4.1	3.9	-2.9	8.0	3.5	3.5
Employment aged 15+	2.4	1.3	4.5	3.0	1.6	2.4	-1.2	1.2	2.9	2.0
Labor productivity	-2.0	1.3	-1.2	-0.1	2.5	1.5	-1.8	6.7	0.6	1.4
Inflation	1.0	0.7	0.4	2.2	1.8	1.4	1.1	3.3	11.7	9.1
Monthly gross wages per employee, nominal	1.0	1.3	2.2	3.1	4.8	7.0	6.1	7.0	11.6	13.9
Monthly gross wages per employee, real	-0.4	0.2	1.6	0.9	2.9	5.4	5.2	3.7	0.1	4.8
Monthly gross wages per employee, EUR nominal	-0.6	-0.5	1.1	4.0	5.5	7.6	7.7	6.7	12.3	15.4
Monthly gross wages per employee, EUR real	-1.9	-1.0	1.0	2.0	5.2	6.3	5.1	4.0	0.7	6.9
Nominal unit labor cost, EUR adjusted	1.4	-1.8	2.4	4.1	2.9	6.0	9.6	0.0	11.7	13.8
Real unit labor cost, EUR adjusted	-0.6	-3.2	0.8	1.6	0.5	4.0	8.0	-4.9	1.2	3.4

EU peer countries

Austria	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP, real	0.8	1.3	2.1	2.3	2.5	1.8	-6.3	4.8	5.3	-1.0
Employment aged 15-74	0.1	0.9	1.7	1.0	1.4	0.8	-1.3	1.3	3.1	0.9
Labor productivity	0.6	0.4	0.4	1.3	1.1	1.0	-5.1	3.5	2.1	-1.9
Inflation (harmonized CPI)	1.5	0.8	1.0	2.2	2.1	1.5	1.4	2.8	8.6	7.7
Monthly gross wages per employee, nominal	1.6	2.0	2.4	1.6	2.7	3.0	1.8	3.0	5.0	7.1
Monthly gross wages per employee, real	0.1	1.1	1.4	-0.4	0.8	1.5	0.4	0.2	-3.4	0.0
Nominal unit labor cost, EUR adjusted	1.0	1.6	2.0	0.3	1.6	2.0	7.2	-0.4	2.9	9.1
Real unit labor cost, EUR adjusted	-1.0	-0.7	0.1	-0.7	-0.2	0.5	4.5	-2.3	-1.8	2.3

Bulgaria	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP, real	0.9	3.4	3.0	2.7	2.5	3.8	-3.2	7.8	4.0	1.9
Employment aged 15-74	1.6	1.7	-0.5	4.4	0.1	2.6	-3.5	-0.6	2.3	-0.4
Labor productivity	-0.6	1.7	3.5	-1.6	2.5	1.2	0.3	8.4	1.7	2.3
Inflation (harmonized CPI)	-1.6	-1.1	-1.3	1.2	2.6	2.5	1.2	2.8	13.0	8.6
Monthly gross wages per employee, nominal	6.0	6.8	8.0	9.4	10.5	10.6	9.7	12.3	13.4	13.7
Monthly gross wages per employee, real	7.5	7.0	8.9	7.2	7.5	7.2	7.9	8.7	-1.7	3.9
Unit labor costs	6.6	5.1	4.3	11.1	7.8	9.3	9.4	3.6	11.6	11.2
Nominal unit labor cost, EUR adjusted	6.6	5.1	4.3	11.1	7.8	9.3	9.4	3.6	11.6	11.2
Real unit labor cost, EUR adjusted	5.2	2.1	1.0	6.0	3.4	3.8	4.9	-3.2	-3.8	2.9

Croatia	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP, real	-0.6	2.3	3.5	3.3	2.9	3.1	-8.3	12.6	7.3	3.3
Employment aged 15-74	2.9	1.3	0.3	2.2	1.7	1.5	-1.3	1.3	1.7	0.8
Labor productivity	-3.3	1.0	3.1	1.0	1.2	1.6	-7.1	11.2	5.5	2.5
Inflation (harmonized CPI)	0.2	-0.3	-0.6	1.3	1.6	0.8	0.0	2.7	10.7	8.4
Monthly gross wages per employee, nominal	0.2	1.3	1.9	3.9	4.9	3.8	2.5	4.2	8.3	14.8
Monthly gross wages per employee, real	0.4	1.8	3.0	2.8	3.3	3.0	2.4	1.6	-2.3	6.3
Nominal unit labor cost, EUR adjusted	2.9	0.5	-0.1	3.8	4.3	2.1	8.5	-6.2	2.6	12.0
Real unit labor cost, EUR adjusted	2.7	0.4	-0.1	2.6	2.2	0.1	7.6	-8.2	-5.0	0.2

Hungary	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP, real	4.3	3.7	2.4	4.1	5.6	5.1	-4.3	7.1	4.3	-0.9
Employment aged 15-74	5.3	2.7	3.4	1.6	1.1	1.0	-1.1	0.7	1.3	0.6
Labor productivity	-1.0	1.0	-0.9	2.5	4.5	4.1	-3.2	6.4	2.9	-1.5
Inflation (harmonized CPI)	0.0	0.1	0.4	2.4	2.9	3.4	3.4	5.2	15.3	17.0
Monthly gross wages per employee, nominal	3.0	4.3	6.1	12.9	11.3	11.4	9.8	8.9	17.4	14.2
Monthly gross wages per employee, real	3.2	4.4	5.7	10.3	8.3	7.6	6.3	3.6	2.5	-2.9
Nominal unit labor cost, EUR adjusted	0.0	2.9	6.6	10.9	3.3	4.9	5.1	0.3	4.5	18.9
Real unit labor cost, EUR adjusted	-3.5	0.1	5.2	6.6	-1.5	0.2	-1.3	-5.7	-8.5	3.8

European Union	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
GDP, real	1.6	2.3	1.9	2.8	2.1	1.9	-5.6	6.3	3.5	0.4
Employment aged 15+	1.2	1.1	1.5	1.6	1.1	1.2	-1.5	0.7	2.3	1.2
Labor productivity	0.4	1.2	0.4	1.2	1.0	0.7	-4.2	5.5	1.2	-0.7
Inflation	0.4	0.1	0.2	1.6	1.8	1.4	0.7	2.9	9.2	6.4
Monthly gross wages per employee, nominal	1.0	1.7	1.7	2.4	2.7	2.8	-0.4	4.6	5.1	6.2
Monthly gross wages per employee, real	0.6	1.6	1.5	0.7	0.9	1.4	-1.1	1.7	-3.8	-0.2
Monthly gross wages per employee, EUR nominal	1.0	1.7	1.7	2.4	2.7	2.8	-0.4	4.6	5.1	6.2
Monthly gross wages per employee, EUR real	0.6	1.6	1.5	0.7	0.9	1.4	-1.1	1.7	-3.8	-0.2
Nominal unit labor cost, EUR adjusted	0.6	0.5	1.3	1.1	1.7	2.2	4.0	-0.9	3.9	7.0
Real unit labor cost, EUR adjusted	-0.2	-0.9	0.5	-0.2	0.3	0.5	2.1	-3.3	-1.5	0.9

Notes: For country-specific methodological notes on employment and wages see footnotes to the following tables.
Western Balkans-6: Labor market data for the Western Balkans show the aggregate of six countries only when data are available for all of them. Growth rates for GDP, inflation and wages are weighted averages. European Union - 27 countries as from 2020.

Source: SEE Jobs Gateway, based on data provided by national statistical offices and Eurostat.

Albania: Labor market indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total										
Total population (1,000)	2,889	2,881	2,876	2,873	2,866	2,854	2,838	2,812	2,778	2,745
Working-age population aged 15+ (1,000)	2,340	2,354	2,374	2,376	2,363	2,369	2,367	2,362	2,337	2,319
Employment aged 15+ (1,000)	1,037	1,087	1,157	1,195	1,231	1,266	1,243	1,249	1,298	1,327
Employment rate (% population aged 15+)	44.3	46.2	48.7	50.3	52.1	53.4	52.5	52.9	55.5	57.2
Employment rate (% population aged 15-64)	50.5	52.9	55.9	57.4	59.5	61.2	60.6	60.9	65.0	67.2
Employment rate (% population aged 20-64)	56.6	59.3	62.1	63.9	65.6	67.1	66.3	66.3	70.4	72.7
Employment rate (% population aged 15-24)	17.7	18.9	20.2	21.6	25.7	26.7	26.3	26.4	29.0	29.2
Employment rate (% population aged 25-29)	53.2	55.5	59.0	59.4	63.9	68.3	67.7	67.7	69.4	69.4
Employment rate (% population aged 25-54)	64.6	67.5	69.7	71.1	73.7	75.0	73.6	73.6	76.5	78.8
Employment rate (% population aged 55-64)	51.2	53.6	54.8	55.5	58.2	60.4	60.3	60.0	67.4	70.2
Employment rate for low skilled 15-64 (ISCED 0-2)	46.7	50.2	52.5	53.0	56.9	58.3	55.9	54.7	59.5	59.9
Employment rate for medium skilled 15-64 (ISCED 3-4)	49.9	51.8	55.8	57.9	58.6	59.2	59.9	61.5	65.4	68.0
Employment rate for high skilled 15-64 (ISCED 5-8)	66.5	64.4	66.6	69.1	68.0	72.2	73.0	74.4	75.5	81.0
Self-employed (% of total employment)	26.0	29.2	34.9	35.8	34.0	32.3	33.3	31.9	31.4	29.7
Part-time employment (% of total employment)	27.5	26.6	24.3	20.7	18.3	17.1	17.9	17.9	16.3	14.7
Temporary employment (% of total employees)	13.7	11.8	12.4	12.3	9.6	7.9	6.7	5.8	5.0	5.6
Activity rate (% population aged 15+)	53.7	55.7	57.5	58.3	59.4	60.4	59.5	59.8	62.4	64.1
Activity rate (% population aged 15-64)	61.5	64.2	66.2	66.8	68.3	69.6	69.1	69.3	73.2	75.7
Activity rate (% population aged 15-24)	29.0	31.3	31.8	31.8	35.8	36.7	35.8	36.3	38.6	39.3
Activity rate (% population aged 25-54)	76.7	79.7	80.7	81.3	83.0	83.9	83.0	82.1	85.1	87.8
Activity rate (% population aged 55-64)	58.1	60.2	61.4	61.3	63.7	65.2	64.6	66.3	73.2	75.5
Unemployment aged 15+ (1,000)	220	224	208	190	173	165	165	163	160	159
Unemployment rate (% labor force 15+)	17.5	17.1	15.2	13.7	12.3	11.5	11.7	11.5	10.9	10.7
Youth unemployment rate (% labor force 15-24)	39.0	39.8	36.5	31.9	28.3	27.2	26.5	27.1	24.9	25.6
NEET rate (% population aged 15-24)	30.9	29.6	27.0	25.9	26.5	25.5	26.6	24.0	23.3	22.6
Long-term unemployment rate (% labor force 15+)	11.2	11.3	10.1	8.9	8.3	7.3	7.0	7.2	7.3	7.6
Share of long-term unemployed (% of total)	64.3	66.0	66.2	64.8	67.4	63.4	59.5	62.8	67.0	71.2
Unemployment rate, low educated 15+ (ISCED 0-2)	14.5	13.5	12.7	12.3	9.9	8.7	9.5	10.6	9.9	9.6
Unemployment rate, medium educated 15+ (ISCED 3-4)	21.3	20.4	17.5	15.5	14.3	14.4	13.6	13.2	12.4	12.7
Unemployment rate, high educated 15+ (ISCED 5-8)	17.2	19.1	16.9	13.7	14.0	12.3	12.6	10.5	10.5	9.2
Male										
Total population (1,000)	1,461	1,460	1,456	1,446	1,434	1,425	1,415	1,399	1,377	1,361
Working-age population aged 15+ (1,000)	1,140	1,164	1,189	1,190	1,170	1,169	1,166	1,164	1,145	1,137
Employment aged 15+ (1,000)	586	621	650	679	691	703	690	693	701	716
Employment rate (% population aged 15+)	51.4	53.3	54.7	57.1	59.0	60.1	59.2	59.5	61.2	63.0
Employment rate (% population aged 15-64)	58.0	60.5	61.9	64.3	66.7	68.2	67.8	68.2	71.3	72.9
Employment rate (% population aged 20-64)	65.2	68.1	69.4	72.1	73.9	74.7	74.0	74.6	77.4	79.2
Employment rate (% population aged 15-24)	21.4	23.8	23.1	24.9	30.6	31.2	31.4	30.6	33.1	33.4
Employment rate (% population aged 25-29)	59.6	63.7	65.4	69.6	73.4	74.6	74.2	73.0	72.9	71.3
Employment rate (% population aged 25-54)	72.7	75.5	76.3	79.0	80.7	80.9	79.9	80.1	81.8	83.7
Employment rate (% population aged 55-64)	64.7	66.9	67.1	69.1	71.4	73.7	73.2	73.2	79.4	80.3
Employment rate for low skilled 15-64 (ISCED 0-2)	53.0	55.5	57.2	58.7	62.7	64.4	62.6	59.7	63.6	63.7
Employment rate for medium skilled 15-64 (ISCED 3-4)	60.0	62.4	64.9	67.6	68.3	68.9	69.2	71.8	74.7	76.7
Employment rate for high skilled 15-64 (ISCED 5-8)	70.6	71.4	69.4	73.2	73.8	76.7	77.8	81.4	81.2	85.9
Self-employed (% of total employment)	32.8	37.8	42.0	42.6	41.6	39.6	39.3	39.0	38.1	36.1
Part-time employment (% of total employment)	21.3	22.0	21.0	17.0	14.8	13.5	14.4	13.4	12.1	11.1
Temporary employment (% of total employees)	18.0	14.8	15.5	15.8	12.8	10.0	8.3	7.2	6.1	5.9
Activity rate (% population aged 15+)	63.5	64.3	65.0	66.8	67.6	68.0	66.9	67.2	68.4	70.3
Activity rate (% population aged 15-64)	72.2	73.4	74.1	75.8	76.9	77.6	77.1	77.3	80.0	82.0
Activity rate (% population aged 15-24)	37.2	39.2	36.9	37.8	43.4	43.2	43.0	41.1	43.6	44.5
Activity rate (% population aged 25-54)	87.4	88.6	88.7	90.9	90.7	90.6	89.7	89.4	90.8	93.3
Activity rate (% population aged 55-64)	74.9	76.0	76.3	77.4	78.5	79.4	78.3	80.4	85.5	86.1
Unemployment aged 15+ (1,000)	139	128	123	116	100	92	90	89	83	84
Unemployment rate (% labor force 15+)	19.2	17.1	15.9	14.6	12.7	11.6	11.5	11.3	10.6	10.5
Youth unemployment rate (% labor force 15-24)	42.5	39.2	37.4	34.1	29.6	27.8	27.0	25.5	24.1	24.8
NEET rate (% population aged 15-24)	29.6	28.2	26.8	24.7	25.4	25.8	27.1	22.1	21.4	21.9
Long-term unemployment rate (% labor force 15+)	11.7	11.2	10.3	9.2	8.3	7.3	6.9	6.9	7.2	7.6
Share of long-term unemployed (% of total)	61.0	65.8	64.9	63.3	65.6	63.1	59.7	60.5	68.2	73.0
Unemployment rate, low educated 15+ (ISCED 0-2)	17.8	15.4	14.6	14.3	10.9	9.7	9.5	10.7	10.8	10.5
Unemployment rate, medium educated 15+ (ISCED 3-4)	21.6	19.0	17.1	15.3	14.6	13.8	13.6	12.9	10.7	11.8
Unemployment rate, high educated 15+ (ISCED 5-8)	16.0	16.4	16.2	13.5	11.9	10.5	10.6	8.8	9.7	7.0

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Female										
Total population (1,000)	1,428	1,421	1,420	1,427	1,432	1,429	1,423	1,413	1,401	1,384
Working-age population aged 15+ (1,000)	1,199	1,190	1,186	1,187	1,193	1,200	1,201	1,198	1,193	1,182
Employment aged 15+ (1,000)	451	466	507	516	540	563	554	555	598	611
Employment rate (% population aged 15+)	37.6	39.2	42.8	43.5	45.3	46.9	46.1	46.4	50.1	51.7
Employment rate (% population aged 15-64)	43.4	45.5	49.7	50.3	52.4	54.4	53.6	53.8	58.9	61.8
Employment rate (% population aged 20-64)	48.5	50.7	55.0	55.6	57.4	59.7	58.8	58.3	63.7	66.6
Employment rate (% population aged 15-24)	13.9	13.4	16.8	17.7	20.4	22.2	21.1	22.3	25.0	25.0
Employment rate (% population aged 25-29)	46.3	46.3	51.8	48.8	54.1	61.7	61.0	62.0	66.0	67.6
Employment rate (% population aged 25-54)	57.2	60.1	63.4	63.4	67.0	69.2	67.6	67.4	71.4	74.1
Employment rate (% population aged 55-64)	37.3	39.2	42.0	41.7	45.2	46.9	47.5	46.7	56.0	60.6
Employment rate for low skilled 15-64 (ISCED 0-2)	41.3	45.3	48.3	47.8	51.7	52.9	50.2	50.3	55.9	56.6
Employment rate for medium skilled 15-64 (ISCED 3-4)	37.9	38.8	44.3	45.4	46.0	46.5	47.2	47.8	53.2	56.3
Employment rate for high skilled 15-64 (ISCED 5-8)	63.1	58.9	64.4	65.8	63.9	69.0	69.6	69.5	71.6	78.0
Self-employed (% of total employment)	17.2	17.6	25.7	26.8	24.3	23.1	25.8	23.3	23.7	22.1
Part-time employment (% of total employment)	35.4	32.6	28.5	25.5	22.8	21.6	22.3	23.6	21.2	18.9
Temporary employment (% of total employees)	7.9	8.1	8.8	8.0	5.9	5.6	4.9	4.1	3.7	5.3
Activity rate (% population aged 15+)	44.4	47.2	49.9	49.8	51.4	53.0	52.3	52.6	56.5	58.1
Activity rate (% population aged 15-64)	51.3	55.1	58.3	57.7	59.7	61.6	61.2	61.4	66.7	69.6
Activity rate (% population aged 15-24)	20.5	22.7	25.8	24.5	27.6	30.2	28.5	31.5	33.8	34.1
Activity rate (% population aged 25-54)	66.9	71.6	73.1	72.2	75.6	77.4	76.6	75.1	79.7	82.5
Activity rate (% population aged 55-64)	40.8	43.1	45.8	45.2	49.1	50.8	51.1	52.2	61.5	65.5
Unemployment aged 15+ (1,000)	81	96	85	74	73	72	75	74	77	75
Unemployment rate (% labor force 15+)	15.2	17.1	14.4	12.6	11.9	11.4	11.9	11.8	11.4	10.9
Youth unemployment rate (% labor force 15-24)	32.6	40.8	34.9	27.7	26.0	26.3	25.9	29.2	25.9	26.6
NEET rate (% population aged 15-24)	32.2	31.1	27.1	27.3	27.6	25.3	26.2	25.9	25.2	23.3
Long-term unemployment rate (% labor force 15+)	10.7	11.3	9.8	8.4	8.3	7.3	7.1	7.7	7.5	7.6
Share of long-term unemployed (% of total)	70.1	66.2	68.2	67.1	69.8	63.7	59.1	65.5	65.7	69.3
Unemployment rate, low educated 15+ (ISCED 0-2)	10.4	11.2	10.5	9.9	8.8	7.6	9.5	10.4	8.9	8.6
Unemployment rate, medium educated 15+ (ISCED 3-4)	20.7	23.0	18.3	16.0	13.7	15.5	13.7	13.8	15.4	14.4
Unemployment rate, high educated 15+ (ISCED 5-8)	18.2	21.5	17.6	13.8	15.7	13.6	14.1	11.9	11.2	10.8

Albania: Earnings and unit labor costs

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Wages										
Average monthly gross wages, NCU	45,539	47,900	47,522	48,967	50,589	52,380	53,662	57,191	61,898	70,539
nominal annual growth in %	0.9	5.2	-0.8	3.0	3.3	3.5	2.4	6.6	8.2	14.0
real annual growth in % (CPI deflated)	-0.7	3.2	-2.0	1.0	1.3	2.1	0.9	4.4	1.4	8.8
Average monthly gross wages, EUR	325	343	346	365	396	426	434	467	520	648
Average monthly gross wages, EUR (PPP)	761	806	779	796	811	840	852	888	973	1,121
Average monthly net wages, NCU	.	.	.	.	.	.	.	.	.	.
nominal annual growth in %	.	.	.	.	.	.	.	.	.	.
real annual growth in % (CPI deflated)	.	.	.	.	.	.	.	.	.	.
Average monthly net wages, EUR	.	.	.	.	.	.	.	.	.	.
Average monthly net wages, EUR (PPP)	.	.	.	.	.	.	.	.	.	.
Minimum wages as of January 1st										
Monthly gross minimum wages, NCU	22,000	22,000	22,000	22,000	24,000	26,000	26,000	30,000	30,000	34,000
Monthly gross minimum wages, EUR (ER)	157	157	160	163	181	211	213	243	248	298
Monthly gross minimum wages, EUR (PPP)	314	326	313	313	336	363	353	401	411	472
Unit labor costs (ULC)										
Nominal ULC in EUR, annual growth in %	0.6	8.0	4.0	5.0	7.6	8.2	3.5	-0.7	10.5	22.5
Real ULC in EUR, annual growth in %	-0.9	7.4	4.7	3.5	6.0	7.1	3.4	-4.0	0.6	15.5

Notes: Data based on a continuous quarterly survey and on census 2011. The education groups are according to ISCED 1997.
Until 2018 the minimum wage data refer to the minimum wage in effect since 1 July of the respective previous year, from 2019 to 1 January of the respective year.

Source: SEE Jobs Gateway, based on data provided by national statistical offices and Eurostat.

Bosnia and Herzegovina: Labor market indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total										
Total population (1,000)	3,827	3,819	3,816	3,809	3,801	3,791	3,475	3,453	3,434	3,425
Working-age population aged 15+ (1,000)	2,565	2,579	2,489	2,407	2,396	2,262	2,926	2,904	2,887	2,878
Employment aged 15+ (1,000)	812	822	801	816	822	803	1,173	1,151	1,162	1,196
Employment rate (% population aged 15+)	31.7	31.9	32.2	33.9	34.3	35.5	40.1	39.6	40.2	41.5
Employment rate (% population aged 15-64)	39.0	39.2	40.2	43.0	44.0	46.4	48.8	48.8	50.0	51.8
Employment rate (% population aged 20-64)	43.2	43.2	44.2	46.6	47.7	49.7	52.5	52.6	53.9	55.9
Employment rate (% population aged 15-24)	10.9	12.1	13.8	17.6	19.7	23.4	21.0	19.8	18.3	17.5
Employment rate (% population aged 25-29)	45.1	45.5	45.6	50.9	54.8	52.3	55.5	54.8	55.5	58.3
Employment rate (% population aged 25-54)	52.5	52.4	53.6	56.4	57.8	59.4	61.7	61.6	63.4	65.5
Employment rate (% population aged 55-64)	28.5	28.2	29.7	32.5	32.6	36.2	35.4	35.6	36.3	38.6
Employment rate for low skilled 15-64 (ISCED 0-2)	18.4	20.1	20.2	22.5	20.7	23.1	21.4	18.2	17.2	17.7
Employment rate for medium skilled 15-64 (ISCED 3-4)	45.5	44.4	45.3	48.0	49.9	51.9	53.5	54.1	55.7	57.9
Employment rate for high skilled 15-64 (ISCED 5-8)	68.0	68.6	66.7	70.5	71.4	72.5	74.4	75.0	77.3	79.3
Self-employed (% of total employment)	19.1	20.7	21.1	20.6	17.6	21.9	15.0	13.1	11.7	11.7
Part-time employment (% of total employment)	7.8	7.2	6.8	9.1	7.0	8.7	4.9	3.2	3.2	3.1
Temporary employment (% of total employees)	14.9	16.1	16.8	18.4	17.5	16.1	12.3	12.7	13.0	12.2
Activity rate (% population aged 15+)	43.7	44.1	43.1	42.6	42.1	42.1	47.7	48.0	47.6	47.8
Activity rate (% population aged 15-64)	54.2	54.6	54.2	54.5	54.2	55.5	58.2	59.1	59.1	59.8
Activity rate (% population aged 15-24)	29.3	32.2	30.2	32.5	32.3	35.4	33.2	32.0	28.3	25.0
Activity rate (% population aged 25-54)	70.8	70.3	70.4	70.3	70.4	70.7	72.3	73.5	74.0	74.9
Activity rate (% population aged 55-64)	32.8	33.1	35.2	36.6	36.5	39.7	39.2	40.2	40.7	42.7
Unemployment aged 15+ (1,000)	308	315	273	211	185	149	221	242	211	181
Unemployment rate (% labor force 15+)	27.5	27.7	25.4	20.5	18.4	15.7	15.9	17.4	15.4	13.2
Youth unemployment rate (% labor force 15-24)	62.7	62.3	54.3	45.8	38.8	33.8	36.6	38.3	35.1	30.1
NEET rate (% population aged 15-24)	26.1	27.7	26.4	24.3	21.6	21.0	21.6	19.9	18.2	16.5
Long-term unemployment rate (% labor force 15+)	23.3	22.6	21.6	16.9	15.2	11.9	11.8	13.6	11.6	9.7
Share of long-term unemployed (% of total)	84.8	81.7	85.0	82.1	82.3	76.0	74.7	78.4	75.7	73.9
Unemployment rate, low educated 15+ (ISCED 0-2)	30.2	27.3	25.6	18.2	18.5	14.1	18.5	24.4	25.0	22.7
Unemployment rate, medium educated 15+ (ISCED 3-4)	28.9	30.0	26.6	22.3	19.2	16.9	16.5	17.9	15.4	13.1
Unemployment rate, high educated 15+ (ISCED 5-8)	19.3	18.4	20.3	15.5	15.1	12.0	12.1	12.0	10.8	9.2
Male										
Total population (1,000)	1,870	1,866	1,864	1,861	1,857	1,853	1,705	1,694	1,685	1,681
Working-age population aged 15+ (1,000)	1,242	1,259	1,208	1,177	1,169	1,109	1,422	1,417	1,408	1,404
Employment aged 15+ (1,000)	511	515	514	509	515	495	723	724	734	748
Employment rate (% population aged 15+)	41.2	40.9	42.5	43.2	44.1	44.6	50.9	51.1	52.1	53.3
Employment rate (% population aged 15-64)	48.9	48.8	51.1	53.3	54.7	57.0	60.2	61.1	62.7	64.4
Employment rate (% population aged 20-64)	54.6	53.9	56.4	58.1	59.5	61.6	64.9	66.0	67.7	69.5
Employment rate (% population aged 15-24)	13.5	15.8	18.3	22.8	26.1	27.4	26.0	25.4	24.0	23.1
Employment rate (% population aged 25-29)	51.3	52.3	54.4	58.6	64.4	62.4	65.4	65.3	66.9	71.1
Employment rate (% population aged 25-54)	64.9	64.6	67.3	69.3	70.7	72.7	75.1	75.7	77.5	79.7
Employment rate (% population aged 55-64)	38.9	37.3	40.4	42.2	42.3	47.3	46.2	47.9	50.3	51.3
Employment rate for low skilled 15-64 (ISCED 0-2)	27.7	30.9	30.9	32.8	32.1	34.2	32.6	29.6	29.6	29.3
Employment rate for medium skilled 15-64 (ISCED 3-4)	53.8	52.2	54.8	56.4	58.9	60.6	64.3	65.4	67.2	69.6
Employment rate for high skilled 15-64 (ISCED 5-8)	70.2	70.1	71.0	76.8	74.0	76.1	77.5	79.8	83.4	85.1
Self-employed (% of total employment)	21.8	23.9	23.6	22.6	19.6	22.8	16.4	14.5	13.8	14.2
Part-time employment (% of total employment)	7.0	6.6	5.7	8.4	6.0	7.7	4.5	3.0	3.2	3.0
Temporary employment (% of total employees)	15.9	16.3	17.9	19.7	18.6	16.5	11.5	11.6	12.0	11.5
Activity rate (% population aged 15+)	55.0	55.1	54.9	53.3	53.2	51.7	59.2	59.7	59.6	59.8
Activity rate (% population aged 15-64)	65.9	66.2	66.2	66.1	66.4	66.4	70.4	71.4	71.8	72.3
Activity rate (% population aged 15-24)	34.6	38.9	38.1	40.2	40.4	39.8	38.5	38.8	34.9	32.3
Activity rate (% population aged 25-54)	84.1	83.8	83.8	83.8	84.2	83.7	85.9	86.8	87.2	88.2
Activity rate (% population aged 55-64)	45.3	44.0	48.2	47.5	47.9	51.7	52.2	53.6	55.9	56.5
Unemployment aged 15+ (1,000)	172	179	149	118	107	78	119	122	106	91
Unemployment rate (% labor force 15+)	25.2	25.8	22.5	18.9	17.2	13.6	14.1	14.4	12.6	10.9
Youth unemployment rate (% labor force 15-24)	61.0	59.5	52.0	43.1	35.4	31.3	32.5	34.5	31.2	28.5
NEET rate (% population aged 15-24)	27.9	29.2	28.0	24.5	22.1	20.7	20.3	19.5	17.7	17.4
Long-term unemployment rate (% labor force 15+)	21.4	21.1	19.2	15.3	14.0	10.3	10.2	11.0	9.1	7.6
Share of long-term unemployed (% of total)	85.0	81.8	85.1	81.0	81.4	75.3	72.6	76.1	72.4	69.5
Unemployment rate, low educated 15+ (ISCED 0-2)	27.9	27.0	24.1	16.4	19.1	13.4	20.3	22.3	21.3	20.6
Unemployment rate, medium educated 15+ (ISCED 3-4)	26.3	27.2	23.6	20.8	17.5	14.5	14.0	14.6	12.5	10.6
Unemployment rate, high educated 15+ (ISCED 5-8)	16.2	15.9	14.8	11.0	13.4	9.2	9.9	8.3	7.4	6.6

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Female										
Total population (1,000)	1,958	1,953	1,952	1,948	1,944	1,938	1,770	1,759	1,749	1,744
Working-age population aged 15+ (1,000)	1,324	1,320	1,281	1,230	1,227	1,153	1,504	1,487	1,479	1,474
Employment aged 15+ (1,000)	301	307	288	307	307	308	450	427	428	447
Employment rate (% population aged 15+)	22.7	23.2	22.4	24.9	25.0	26.7	29.9	28.7	28.9	30.3
Employment rate (% population aged 15-64)	28.9	29.5	29.1	32.5	33.0	35.6	37.3	36.3	37.1	39.1
Employment rate (% population aged 20-64)	31.9	32.4	32.0	35.1	35.8	38.0	40.0	39.1	40.0	42.1
Employment rate (% population aged 15-24)	8.1	8.0	8.7	11.4	12.6	18.6	15.8	13.7	12.3	11.5
Employment rate (% population aged 25-29)	38.0	37.2	35.3	41.7	41.5	39.4	45.0	43.5	43.2	44.6
Employment rate (% population aged 25-54)	39.7	40.0	39.8	43.4	44.5	46.1	47.9	47.1	48.9	50.8
Employment rate (% population aged 55-64)	19.3	19.8	19.4	23.5	23.7	26.0	25.3	24.2	23.4	26.8
Employment rate for low skilled 15-64 (ISCED 0-2)	12.6	13.3	13.6	16.2	13.5	16.6	14.5	11.2	9.4	10.1
Employment rate for medium skilled 15-64 (ISCED 3-4)	34.3	34.0	32.8	37.0	38.2	40.7	39.9	39.5	41.2	43.2
Employment rate for high skilled 15-64 (ISCED 5-8)	65.9	67.3	62.7	64.7	69.0	69.1	71.9	71.0	72.5	74.6
Self-employed (% of total employment)	14.4	15.2	16.5	17.4	14.3	20.4	12.7	10.5	8.1	7.6
Part-time employment (% of total employment)	9.2	8.0	8.8	10.1	8.7	10.3	5.5	3.6	3.2	3.1
Temporary employment (% of total employees)	13.1	15.7	15.0	16.2	15.7	15.4	13.7	14.5	14.6	13.5
Activity rate (% population aged 15+)	33.0	33.5	32.1	32.4	31.4	32.9	36.7	36.8	36.1	36.4
Activity rate (% population aged 15-64)	42.4	42.9	41.9	42.7	41.8	44.4	46.1	46.7	46.3	47.0
Activity rate (% population aged 15-24)	23.3	24.5	21.3	23.4	23.1	29.9	27.6	24.8	21.2	17.2
Activity rate (% population aged 25-54)	57.1	56.6	56.8	56.5	56.1	57.6	58.3	59.8	60.4	61.1
Activity rate (% population aged 55-64)	21.9	22.9	22.9	26.5	25.9	28.7	27.3	27.8	26.6	29.9
Unemployment aged 15+ (1,000)	136	136	124	92	78	71	102	120	105	90
Unemployment rate (% labor force 15+)	31.2	30.7	30.0	23.1	20.3	18.8	18.5	22.0	19.8	16.7
Youth unemployment rate (% labor force 15-24)	65.4	67.3	58.9	51.4	45.5	37.9	42.8	44.5	42.1	33.2
NEET rate (% population aged 15-24)	24.0	26.0	24.7	24.0	21.1	21.4	23.0	20.4	18.6	15.5
Long-term unemployment rate (% labor force 15+)	26.4	25.1	25.5	19.3	17.0	14.4	14.3	17.7	15.6	13.1
Share of long-term unemployed (% of total)	84.7	81.6	85.0	83.6	83.6	76.8	77.1	80.8	79.0	78.3
Unemployment rate, low educated 15+ (ISCED 0-2)	33.1	27.8	27.5	20.3	17.5	15.0	15.9	27.3	31.3	26.6
Unemployment rate, medium educated 15+ (ISCED 3-4)	33.9	35.0	32.6	25.2	22.3	21.2	21.2	24.1	20.9	17.8
Unemployment rate, high educated 15+ (ISCED 5-8)	22.2	20.9	25.5	19.9	16.7	14.7	13.9	15.2	13.7	11.5

Bosnia and Herzegovina: Earnings and unit labor costs

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Wages										
Average monthly gross wages, NCU	1,290	1,289	1,301	1,321	1,363	1,421	1,476	1,542	1,723	1,947
nominal annual growth in %	-0.1	0.0	0.9	1.6	3.1	4.3	3.8	4.5	11.7	13.0
real annual growth in % (CPI deflated)	0.8	1.0	2.5	0.8	1.7	3.7	5.0	2.4	-2.0	6.5
Average monthly gross wages, EUR	659	659	665	676	697	727	755	788	881	995
Average monthly gross wages, EUR (PPP)	1,345	1,335	1,337	1,333	1,370	1,419	1,466	1,495	1,592	1,825
Average monthly net wages, NCU	831	830	838	851	879	921	956	998	1,122	1,263
nominal annual growth in %	0.4	0.0	0.9	1.6	3.3	4.8	3.8	4.4	12.4	12.6
real annual growth in % (CPI deflated)	1.3	1.0	2.6	0.7	1.9	4.2	4.9	2.4	-1.4	6.1
Average monthly net wages, EUR	425	425	428	435	449	471	489	510	574	646
Average monthly net wages, EUR (PPP)	866	860	861	859	883	920	949	967	1,037	1,184
Minimum wages as of January 1st										
Monthly gross minimum wages, NCU	.	.	.	.	.	.	.	.	.	.
Monthly gross minimum wages, EUR (ER)	.	.	.	.	.	.	.	.	.	.
Monthly gross minimum wages, EUR (PPP)	.	.	.	.	.	.	.	.	.	.
Unit labor costs (ULC)										
Nominal ULC in EUR, annual growth in %	-2.4	-3.1	-4.7	0.2	0.1	-1.0	6.0	-4.6	8.3	13.9
Real ULC in EUR, annual growth in %	-3.4	-3.2	-6.0	-1.6	-2.6	-3.4	5.9	-9.1	-3.2	6.5

Notes: Until 2019 the survey conducted once a year in April (data allocated to the 2nd quarter of each year) based on census 1991. From 2020 onwards, continuous quarterly survey, based on census 2013, with further adjustments according to EU + ILO guidelines. Data before and after 2020 are not comparable. From 2021, new methodology in line with the Integrated European Social Statistics Regulation (IESS); growth rates are not fully comparable before and after 2021. Education groups refer to ISCED 1997 until 2013, ISCED 2011 from 2014.
Minimum wages are available for the three entities separately but not for the whole territory.
ULC: Employment growth rate in 2020 estimated by wiiw based on administrative sources.

Source: SEE Jobs Gateway, based on data provided by national statistical offices and Eurostat.

Kosovo: Labor market indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total										
Total population (1,000)	1,813	1,788	1,778	1,791	1,797	1,789	1,790	1,786	1,768	1,775
Working-age population aged 15+ (1,000)	1,351	1,328	1,349	1,387	1,401	1,391	1,414	1,417	1,389	1,374
Employment aged 15+ (1,000)	325	299	334	360	348	366	351	387	408	431
Employment rate (% population aged 15+)	24.1	22.5	24.8	26.0	24.9	26.3	24.8	27.3	29.4	31.3
Employment rate (% population aged 15-64)	26.9	25.3	28.0	29.8	28.8	30.1	28.4	31.1	33.8	36.3
Employment rate (% population aged 20-64)	31.3	29.1	32.3	34.4	33.2	34.2	32.3	35.1	37.9	40.3
Employment rate (% population aged 15-24)	9.0	8.6	10.1	11.2	10.0	13.2	11.4	13.4	15.4	18.3
Employment rate (% population aged 25-29)	29.6	27.4	31.0	32.3	32.0	33.7	32.1	36.6	40.1	43.7
Employment rate (% population aged 25-54)	35.4	33.2	36.7	38.3	37.3	37.9	35.9	39.0	42.0	44.8
Employment rate (% population aged 55-64)	29.8	27.2	29.6	32.7	31.5	32.2	30.9	32.1	32.1	32.8
Employment rate for low skilled 15-64 (ISCED 0-2)	11.0	9.4	12.9	12.9	9.7	11.9	10.9	10.8	11.4	12.3
Employment rate for medium skilled 15-64 (ISCED 3-4)	35.4	32.0	33.8	37.0	35.9	35.9	33.1	35.5	38.6	41.2
Employment rate for high skilled 15-64 (ISCED 5-8)	58.9	53.3	56.3	56.3	65.8	61.6	60.0	62.7	64.8	67.8
Self-employed (% of total employment)	23.6	21.2	22.5	23.7	22.1	21.9	22.4	19.4	17.3	17.4
Part-time employment (% of total employment)	8.4	5.8	6.1	5.9	4.9	6.8	7.5	7.1	6.0	6.3
Temporary employment (% of total employees)	71.1	71.4	69.9	70.1	73.8	53.6	53.2	53.7	50.1	48.2
Activity rate (% population aged 15+)	37.2	33.5	34.2	37.3	35.2	35.3	33.4	34.4	33.6	35.1
Activity rate (% population aged 15-64)	41.6	37.7	38.7	42.9	40.9	40.5	38.4	39.3	38.6	40.7
Activity rate (% population aged 15-24)	23.1	20.2	21.3	23.8	22.5	26.0	22.4	21.6	19.6	22.1
Activity rate (% population aged 25-54)	52.3	47.8	48.6	53.7	51.3	49.1	47.0	48.5	48.0	50.2
Activity rate (% population aged 55-64)	35.2	31.1	33.7	36.8	34.9	34.8	34.3	34.8	33.8	34.7
Unemployment aged 15+ (1,000)	177	146	127	157	145	125	122	100	58	52
Unemployment rate (% labor force 15+)	35.2	32.8	27.5	30.3	29.4	25.5	25.7	20.6	12.5	10.8
Youth unemployment rate (% labor force 15-24)	61.0	57.7	52.4	52.8	55.4	49.4	49.1	38.0	21.4	17.3
NEET rate (% population aged 15-24)	30.2	31.4	30.1	27.4	30.1	32.7	33.6	32.1	33.0	33.4
Long-term unemployment rate (% labor force 15+)	24.9	23.7	18.0	21.7	17.2	16.2	18.5	14.6	8.1	7.7
Share of long-term unemployed (% of total)	70.7	72.3	65.5	71.5	58.4	63.6	71.7	70.7	65.2	71.2
Unemployment rate, low educated 15+ (ISCED 0-2)	46.3	47.0	32.4	35.0	40.0	32.2	34.2	30.3	21.4	22.6
Unemployment rate, medium educated 15+ (ISCED 3-4)	35.4	32.6	28.9	30.6	30.4	24.9	26.1	20.9	11.5	9.9
Unemployment rate, high educated 15+ (ISCED 5-8)	20.6	19.9	18.5	25.8	19.7	22.5	19.7	15.7	10.7	7.7
Male										
Total population (1,000)	912	895	885	889	885	875	874	875	873	876
Working-age population aged 15+ (1,000)	672	667	677	692	697	693	702	704	687	675
Employment aged 15+ (1,000)	250	232	259	284	274	283	264	285	296	312
Employment rate (% population aged 15+)	37.2	34.7	38.3	41.0	39.3	40.8	37.6	40.4	43.1	46.2
Employment rate (% population aged 15-64)	41.3	38.7	43.1	46.7	45.3	46.2	42.8	45.9	49.4	53.4
Employment rate (% population aged 20-64)	48.3	44.9	49.9	54.0	52.6	53.0	48.8	51.9	55.7	59.4
Employment rate (% population aged 15-24)	13.4	12.9	15.2	16.7	14.6	18.6	16.1	18.4	20.8	24.5
Employment rate (% population aged 25-29)	43.4	38.5	43.9	48.1	45.5	46.0	42.1	46.7	52.9	58.3
Employment rate (% population aged 25-54)	55.3	51.0	56.5	61.2	59.6	58.8	54.2	57.5	61.4	65.9
Employment rate (% population aged 55-64)	47.2	45.2	49.4	52.0	51.6	53.7	51.1	51.8	52.2	53.9
Employment rate for low skilled 15-64 (ISCED 0-2)	23.8	20.2	27.4	28.6	21.6	26.6	24.5	24.6	25.2	27.3
Employment rate for medium skilled 15-64 (ISCED 3-4)	46.2	42.9	45.9	51.0	50.2	49.0	44.2	47.7	52.6	56.6
Employment rate for high skilled 15-64 (ISCED 5-8)	66.0	61.3	64.5	65.1	75.1	72.8	71.2	72.4	73.3	76.5
Self-employed (% of total employment)	26.5	23.4	24.6	26.3	24.3	24.8	26.3	22.9	20.8	21.3
Part-time employment (% of total employment)	7.8	5.1	4.5	5.3	4.7	6.9	7.6	7.5	6.4	6.7
Temporary employment (% of total employees)	71.0	73.1	70.2	72.1	75.8	56.1	54.0	53.6	50.3	48.8
Activity rate (% population aged 15+)	55.5	50.8	51.9	57.4	54.9	52.6	49.0	49.8	48.4	50.0
Activity rate (% population aged 15-64)	61.8	56.8	58.3	65.4	63.3	59.7	56.0	56.7	55.5	57.8
Activity rate (% population aged 15-24)	30.6	28.1	28.9	32.4	30.1	33.3	29.4	27.8	25.5	28.6
Activity rate (% population aged 25-54)	79.8	72.9	74.4	84.3	81.7	73.8	69.2	70.6	69.1	71.2
Activity rate (% population aged 55-64)	56.4	52.2	57.0	59.2	57.9	58.6	57.2	56.3	54.4	55.7
Unemployment aged 15+ (1,000)	123	107	92	113	108	82	80	66	36	26
Unemployment rate (% labor force 15+)	33.1	31.7	26.2	28.5	28.3	22.4	23.3	18.9	10.9	7.6
Youth unemployment rate (% labor force 15-24)	56.2	54.2	47.2	48.4	51.5	44.1	45.2	33.7	18.6	14.4
NEET rate (% population aged 15-24)	26.6	28.3	26.5	23.8	30.1	31.4	34.0	31.8	32.2	32.9
Long-term unemployment rate (% labor force 15+)	22.8	22.5	17.2	20.7	17.3	13.9	16.8	13.5	7.6	5.6
Share of long-term unemployed (% of total)	69.0	71.1	65.7	72.5	61.2	61.8	72.1	71.1	69.3	73.6
Unemployment rate, low educated 15+ (ISCED 0-2)	45.4	48.9	34.5	37.4	41.8	32.3	34.0	28.8	18.1	12.1
Unemployment rate, medium educated 15+ (ISCED 3-4)	32.4	30.6	27.1	28.2	28.0	21.9	23.6	19.0	10.4	7.4
Unemployment rate, high educated 15+ (ISCED 5-8)	16.1	14.6	12.0	19.5	17.2	15.2	13.5	12.5	8.1	5.8

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Female										
Total population (1,000)	901	893	892	902	912	914	916	911	909	899
Working-age population aged 15+ (1,000)	679	661	672	695	704	699	712	712	702	699
Employment aged 15+ (1,000)	76	67	75	76	74	84	87	102	111	119
Employment rate (% population aged 15+)	11.1	10.2	11.1	10.9	10.5	12.0	12.2	14.4	15.9	17.0
Employment rate (% population aged 15-64)	12.5	11.5	12.7	12.7	12.3	13.9	14.1	16.5	18.4	19.8
Employment rate (% population aged 20-64)	14.5	13.2	14.6	14.6	14.1	15.6	16.0	18.5	20.5	22.0
Employment rate (% population aged 15-24)	4.2	3.7	4.4	5.2	5.0	7.1	6.4	8.0	9.7	11.9
Employment rate (% population aged 25-29)	14.3	14.5	15.5	14.0	16.4	19.5	21.0	25.3	26.2	28.3
Employment rate (% population aged 25-54)	16.3	15.6	17.2	16.2	15.7	17.5	18.2	21.0	23.1	25.0
Employment rate (% population aged 55-64)	13.5	9.6	10.0	12.4	11.8	11.6	11.8	13.5	13.7	12.7
Employment rate for low skilled 15-64 (ISCED 0-2)	4.0	3.5	4.8	4.2	3.2	4.0	3.7	3.4	3.9	4.6
Employment rate for medium skilled 15-64 (ISCED 3-4)	17.4	14.3	14.7	14.3	13.6	15.1	15.6	16.7	18.0	19.1
Employment rate for high skilled 15-64 (ISCED 5-8)	49.8	43.2	45.7	45.8	54.0	49.7	48.4	53.2	56.7	59.6
Self-employed (% of total employment)	13.9	13.9	15.1	14.2	13.9	12.1	10.4	9.4	8.2	7.1
Part-time employment (% of total employment)	10.4	8.4	11.8	8.4	5.7	6.2	7.3	5.9	5.2	5.2
Temporary employment (% of total employees)	71.2	66.3	69.0	63.6	67.2	46.3	51.3	53.9	49.6	46.9
Activity rate (% population aged 15+)	19.0	16.0	16.3	17.2	15.8	18.2	18.0	19.2	19.0	20.8
Activity rate (% population aged 15-64)	21.4	18.2	18.6	20.0	18.5	21.2	20.8	22.0	22.0	24.2
Activity rate (% population aged 15-24)	14.8	11.4	12.8	14.3	14.0	17.8	14.9	15.0	13.3	15.4
Activity rate (% population aged 25-54)	25.9	23.0	23.2	24.2	21.9	25.0	25.7	27.0	27.4	30.5
Activity rate (% population aged 55-64)	15.1	10.5	10.7	13.2	12.2	11.9	12.5	14.5	15.0	14.7
Unemployment aged 15+ (1,000)	54	39	35	44	37	44	41	34	22	26
Unemployment rate (% labor force 15+)	41.5	36.5	31.7	36.4	33.3	34.4	32.2	25.0	16.4	18.2
Youth unemployment rate (% labor force 15-24)	71.7	67.2	65.4	63.6	64.7	60.3	57.2	46.5	27.0	22.8
NEET rate (% population aged 15-24)	34.0	34.9	34.2	31.4	30.0	34.2	33.2	32.4	33.8	33.9
Long-term unemployment rate (% labor force 15+)	31.1	27.6	20.6	25.1	16.6	23.0	22.8	17.4	9.6	12.5
Share of long-term unemployed (% of total)	74.8	75.5	65.0	69.0	50.0	67.0	70.9	69.9	58.3	68.8
Unemployment rate, low educated 15+ (ISCED 0-2)	49.2	40.0	24.8	24.4	32.5	32.2	35.0	35.4	30.9	43.6
Unemployment rate, medium educated 15+ (ISCED 3-4)	45.9	41.0	36.7	41.8	41.4	37.6	35.7	28.3	15.6	18.9
Unemployment rate, high educated 15+ (ISCED 5-8)	27.3	28.1	28.3	34.7	23.6	31.8	27.7	19.8	13.8	9.8

Kosovo: Earnings and unit labor costs

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Wages										
Average monthly gross wages, NCU	403	415	422	431	453	477	466	484	521	570
nominal annual growth in %	4.4	3.0	1.7	2.1	5.1	5.3	-2.3	3.9	7.6	9.4
real annual growth in % (CPI deflated)	4.0	3.5	1.4	0.6	4.0	2.5	-2.5	0.4	-3.5	4.3
Average monthly gross wages, EUR	403	415	422	431	453	477	466	484	521	570
Average monthly gross wages, EUR (PPP)	806	819	790	782	829	854	829	847	896	975
Average monthly net wages, NCU	365	376	382	390	409	430	416	432	446	506
nominal annual growth in %	4.0	3.0	1.6	2.1	4.9	5.1	-3.3	3.8	3.2	13.5
real annual growth in % (CPI deflated)	3.6	3.5	1.3	0.6	3.7	2.4	-3.4	0.4	-7.5	8.2
Average monthly net wages, EUR	365	376	382	390	409	430	416	432	446	506
Average monthly net wages, EUR (PPP)	730	742	715	708	748	770	740	756	767	866
Minimum wages as of January 1st										
Monthly gross minimum wages, NCU	170	170	170	170	170	170	170	170	170	170
Monthly gross minimum wages, EUR (ER)	170	170	170	170	170	170	170	170	170	170
Monthly gross minimum wages, EUR (PPP)	319	322	321	317	311	301	312	299	292	291
Unit labor costs (ULC)										
Nominal ULC in EUR, annual growth in %	-3.9	-10.7	7.7	5.0	-1.7	5.7	-1.1	3.4	8.8	11.0
Real ULC in EUR, annual growth in %	-5.5	-11.2	6.9	4.5	-3.2	4.7	-2.5	-2.5	1.5	6.2

Notes: Data are based on a continuous quarterly survey and census 2011. Education groups refer to ISCED 1997.
Minimum wages refer to employees aged between 35 and 65. For employees up to the age of 35 minimum wage is EUR 130. These minimum wages are in effect since 1 January 2011.

Source: SEE Jobs Gateway, based on data provided by national statistical offices and Eurostat.

Montenegro: Labor market indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total										
Total population (1,000)	622	622	622	622	622	622	621	619	617	615
Working-age population aged 15+ (1,000)	501	501	500	500	500	500	501	499	498	499
Employment aged 15+ (1,000)	216	222	224	229	237	244	219	213	251	278
Employment rate (% population aged 15+)	43.2	44.3	44.9	45.9	47.5	48.7	43.8	42.6	50.4	55.7
Employment rate (% population aged 15-64)	50.4	51.4	52.0	53.1	54.7	56.0	50.3	49.3	57.5	62.1
Employment rate (% population aged 20-64)	55.6	56.7	57.1	58.2	59.8	60.8	55.2	54.2	62.5	66.5
Employment rate (% population aged 15-24)	18.8	18.8	21.0	21.3	23.2	27.3	19.8	18.7	27.3	33.7
Employment rate (% population aged 25-29)	58.4	59.8	61.5	61.1	59.7	62.5	52.0	49.9	63.1	67.1
Employment rate (% population aged 25-54)	64.6	65.6	65.4	66.3	67.4	67.1	61.9	61.8	68.0	70.9
Employment rate (% population aged 55-64)	38.7	40.0	41.2	43.7	46.6	50.1	44.2	41.1	55.1	60.2
Employment rate for low skilled 15-64 (ISCED 0-2)	16.6	19.4	22.2	24.4	25.4	23.5	18.1	17.0	20.4	24.9
Employment rate for medium skilled 15-64 (ISCED 3-4)	52.6	53.0	52.9	54.0	55.7	57.5	51.5	49.4	57.7	61.9
Employment rate for high skilled 15-64 (ISCED 5-8)	77.6	78.2	77.1	77.7	78.6	77.8	73.5	73.3	79.5	83.7
Self-employed (% of total employment)	16.8	18.4	19.2	19.1	19.2	18.0	19.1	16.9	17.0	16.3
Part-time employment (% of total employment)	6.3	6.0	4.9	5.9	5.4	4.9	4.1	2.7	2.8	2.3
Temporary employment (% of total employees)	27.4	30.2	33.8	30.3	32.6	33.4	30.6	30.7	30.1	29.6
Activity rate (% population aged 15+)	52.7	53.7	54.5	54.7	56.0	57.4	53.3	51.0	59.1	64.1
Activity rate (% population aged 15-64)	61.6	62.6	63.4	63.5	64.7	66.2	61.5	59.2	67.7	71.7
Activity rate (% population aged 15-24)	29.2	30.2	32.7	31.2	32.9	36.5	30.9	29.7	38.7	43.9
Activity rate (% population aged 25-54)	77.9	78.5	78.9	78.9	79.5	79.3	75.1	73.5	79.6	81.8
Activity rate (% population aged 55-64)	43.4	44.9	45.0	47.0	50.0	54.1	49.0	43.5	59.0	64.1
Unemployment aged 15+ (1,000)	47	47	48	44	42	43	48	42	43	42
Unemployment rate (% labor force 15+)	18.0	17.5	17.7	16.1	15.2	15.1	17.9	16.6	14.7	13.1
Youth unemployment rate (% labor force 15-24)	35.8	37.6	35.9	31.7	29.4	25.2	36.0	37.1	29.4	23.3
NEET rate (% population aged 15-24)	17.7	19.1	18.4	16.7	16.2	17.3	21.1	20.2	20.0	17.3
Long-term unemployment rate (% labor force 15+)	13.9	13.5	13.4	12.4	11.4	11.9	13.4	11.6	10.2	9.4
Share of long-term unemployed (% of total)	77.5	76.8	75.6	77.5	75.1	79.0	74.8	69.8	69.4	72.1
Unemployment rate, low educated 15+ (ISCED 0-2)	31.8	28.1	24.2	21.8	19.7	25.4	33.0	28.0	20.2	18.8
Unemployment rate, medium educated 15+ (ISCED 3-4)	19.7	19.2	19.5	17.5	16.6	15.4	18.0	17.4	16.0	15.1
Unemployment rate, high educated 15+ (ISCED 5-8)	9.9	10.3	11.9	10.9	10.3	11.3	13.2	12.3	11.1	8.2
Male										
Total population (1,000)	307	308	308	308	308	308	307	306	305	304
Working-age population aged 15+ (1,000)	244	244	244	244	244	245	245	244	244	246
Employment aged 15+ (1,000)	119	121	123	129	133	136	123	117	135	152
Employment rate (% population aged 15+)	48.9	49.4	50.5	52.6	54.5	55.7	50.0	47.9	55.4	61.9
Employment rate (% population aged 15-64)	55.5	56.0	57.3	59.4	61.0	62.3	56.1	54.2	61.6	67.3
Employment rate (% population aged 20-64)	61.4	61.9	63.0	65.2	66.7	67.5	61.7	59.8	66.8	72.0
Employment rate (% population aged 15-24)	21.5	19.9	22.6	23.9	25.6	30.9	24.2	20.7	29.7	38.6
Employment rate (% population aged 25-29)	60.0	61.9	64.5	62.6	64.4	67.9	54.2	53.9	63.0	70.9
Employment rate (% population aged 25-54)	69.5	70.5	71.3	73.5	74.5	73.6	67.6	67.0	72.7	76.2
Employment rate (% population aged 55-64)	48.3	48.2	49.6	52.8	55.8	59.8	53.5	49.3	60.6	66.7
Employment rate for low skilled 15-64 (ISCED 0-2)	22.4	24.5	29.1	33.6	34.7	32.6	24.6	22.9	25.3	31.6
Employment rate for medium skilled 15-64 (ISCED 3-4)	58.5	57.7	58.6	61.2	63.0	65.5	58.9	55.5	62.9	68.3
Employment rate for high skilled 15-64 (ISCED 5-8)	77.5	78.7	77.8	78.8	78.6	76.6	74.4	74.6	81.8	86.0
Self-employed (% of total employment)	21.3	23.5	24.6	25.0	26.3	24.5	25.2	22.6	22.6	22.5
Part-time employment (% of total employment)	6.7	5.7	5.4	5.9	5.7	5.1	4.5	2.3	2.6	2.2
Temporary employment (% of total employees)	28.6	28.9	35.4	31.6	34.5	36.2	33.3	32.4	33.1	32.0
Activity rate (% population aged 15+)	59.5	60.1	61.8	62.2	64.3	65.2	60.6	57.8	66.2	70.6
Activity rate (% population aged 15-64)	67.7	68.3	70.2	70.5	72.3	73.3	68.3	65.5	73.9	77.0
Activity rate (% population aged 15-24)	33.7	33.2	35.7	34.4	38.3	41.6	36.4	34.6	45.0	48.3
Activity rate (% population aged 25-54)	83.4	84.2	86.4	86.5	87.3	86.6	81.5	79.8	86.0	86.9
Activity rate (% population aged 55-64)	54.6	54.4	54.6	57.2	60.0	63.9	59.3	52.3	65.9	72.7
Unemployment aged 15+ (1,000)	26	26	28	23	24	23	26	24	26	21
Unemployment rate (% labor force 15+)	17.8	17.7	18.2	15.4	15.2	14.7	17.5	17.1	16.2	12.2
Youth unemployment rate (% labor force 15-24)	36.0	39.9	36.9	30.7	33.3	25.8	33.6	40.0	34.1	20.0
NEET rate (% population aged 15-24)	18.9	19.9	18.7	16.3	18.6	18.8	21.5	24.2	21.6	17.0
Long-term unemployment rate (% labor force 15+)	13.8	13.6	13.8	12.2	11.3	11.4	12.8	12.3	11.7	9.0
Share of long-term unemployed (% of total)	77.7	76.7	75.8	79.1	74.1	77.6	73.4	72.0	72.1	73.5
Unemployment rate, low educated 15+ (ISCED 0-2)	31.0	26.3	24.9	19.1	15.9	20.3	27.0	26.0	21.2	15.9
Unemployment rate, medium educated 15+ (ISCED 3-4)	18.8	19.4	19.4	16.4	16.5	14.4	17.8	17.7	17.8	14.4
Unemployment rate, high educated 15+ (ISCED 5-8)	10.0	9.8	12.4	10.5	11.0	13.2	13.1	13.2	11.0	6.7

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022
Female										
Total population (1,000)	314	315	315	315	315	314	314	313	312	311
Working-age population aged 15+ (1,000)	256	256	256	256	255	255	256	256	254	253
Employment aged 15+ (1,000)	97	101	101	101	104	107	97	96	116	126
Employment rate (% population aged 15+)	37.8	39.4	39.4	39.4	40.8	42.1	37.9	37.5	45.6	49.7
Employment rate (% population aged 15-64)	45.3	46.9	46.8	46.8	48.4	49.7	44.4	44.4	53.4	56.9
Employment rate (% population aged 20-64)	49.7	51.5	51.3	51.4	52.9	54.2	48.8	48.7	58.2	61.0
Employment rate (% population aged 15-24)	15.8	17.7	19.3	18.6	20.6	23.5	15.0	16.4	24.8	28.4
Employment rate (% population aged 25-29)	56.8	57.7	58.3	59.4	54.7	56.3	49.6	45.8	63.2	63.4
Employment rate (% population aged 25-54)	59.6	60.6	59.5	59.2	60.3	60.5	56.3	56.6	63.4	65.7
Employment rate (% population aged 55-64)	29.7	32.3	33.2	35.1	37.9	40.9	35.5	33.3	49.9	53.5
Employment rate for low skilled 15-64 (ISCED 0-2)	11.8	15.4	16.9	16.7	17.4	15.5	12.3	11.9	16.2	18.7
Employment rate for medium skilled 15-64 (ISCED 3-4)	46.1	47.5	46.2	45.6	47.2	48.4	43.1	42.6	51.5	54.6
Employment rate for high skilled 15-64 (ISCED 5-8)	77.7	77.8	76.5	76.9	78.6	78.8	72.7	72.3	77.9	81.8
Self-employed (% of total employment)	11.3	12.3	12.6	11.4	10.2	9.8	11.4	9.9	10.6	8.9
Part-time employment (% of total employment)	5.7	6.4	4.4	5.9	4.9	4.5	3.6	3.1	3.1	2.3
Temporary employment (% of total employees)	26.1	31.5	32.1	28.8	30.5	30.5	27.5	28.8	27.0	27.1
Activity rate (% population aged 15+)	46.2	47.6	47.6	47.5	48.1	49.9	46.4	44.5	52.3	57.9
Activity rate (% population aged 15-64)	55.4	56.9	56.6	56.5	57.2	59.1	54.7	52.9	61.4	66.3
Activity rate (% population aged 15-24)	24.4	27.0	29.5	27.8	27.0	31.1	24.8	24.5	31.9	39.2
Activity rate (% population aged 25-54)	72.4	72.8	71.4	71.3	71.7	72.1	68.6	67.2	73.3	76.8
Activity rate (% population aged 55-64)	32.9	35.9	35.9	37.5	40.6	44.9	39.2	35.4	52.5	55.3
Unemployment aged 15+ (1,000)	22	21	21	21	19	20	22	18	17	21
Unemployment rate (% labor force 15+)	18.2	17.3	17.1	16.9	15.1	15.7	18.4	15.9	12.8	14.0
Youth unemployment rate (% labor force 15-24)	35.4	34.5	34.6	33.1	23.6	24.3	39.7	32.8	22.3	27.7
NEET rate (% population aged 15-24)	16.4	18.3	18.0	17.1	13.6	15.8	20.6	15.9	18.2	17.6
Long-term unemployment rate (% labor force 15+)	14.1	13.3	12.8	12.8	11.5	12.7	14.0	10.6	8.4	9.9
Share of long-term unemployed (% of total)	77.3	76.9	75.2	75.5	76.5	80.7	76.3	66.8	65.3	70.7
Unemployment rate, low educated 15+ (ISCED 0-2)	33.0	30.0	23.3	25.7	24.9	32.9	40.8	30.8	18.9	22.7
Unemployment rate, medium educated 15+ (ISCED 3-4)	21.1	19.0	19.6	19.1	16.8	16.8	18.4	16.9	13.4	16.2
Unemployment rate, high educated 15+ (ISCED 5-8)	9.9	10.6	11.4	11.3	9.7	9.8	13.3	11.6	11.1	9.5

Montenegro: Earnings and unit labor costs

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2022
Wages										
Average monthly gross wages, NCU	723	725	751	765	766	773	783	793	883	987
nominal annual growth in %	-0.4	0.3	3.6	1.9	0.1	0.9	1.3	1.3	11.3	11.8
real annual growth in % (CPI deflated)	0.3	-1.3	3.9	-0.5	-2.4	0.6	1.6	-1.1	-1.5	2.9
Average monthly gross wages, EUR	723	725	751	765	766	773	783	793	883	987
Average monthly gross wages, EUR (PPP)	1,432	1,449	1,494	1,497	1,491	1,525	1,559	1,532	1,617	1,735
Average monthly net wages, NCU	477	480	499	510	511	515	524	532	712	792
nominal annual growth in %	-0.4	0.6	4.0	2.2	0.2	0.8	1.7	1.5	33.8	11.2
real annual growth in % (CPI deflated)	0.3	-0.9	4.2	-0.2	-2.3	0.4	2.1	-0.9	18.4	2.4
Average monthly net wages, EUR	477	480	499	510	511	515	524	532	712	792
Average monthly net wages, EUR (PPP)	945	959	993	998	995	1,016	1,044	1,028	1,304	1,392
Minimum wages as of January 1st										
Monthly gross minimum wages, NCU	288	288	288	288	288	288	331	331	533	533
Monthly gross minimum wages, EUR (ER)	288	288	288	288	288	288	331	331	533	533
Monthly gross minimum wages, EUR (PPP)	507	513	515	506	501	504	553	559	870	831
Unit labor costs (ULC)										
Nominal ULC in EUR, annual growth in %	4.8	-0.6	1.8	-0.5	-1.3	-0.4	7.6	-13.2	23.6	16.5
Real ULC in EUR, annual growth in %	3.7	-2.7	-3.2	-4.2	-4.4	-2.4	7.8	-17.1	10.0	5.4

Notes: Data are based on a continuous quarterly survey and census 2011. From 2021, new methodology in line with the Integrated European Social Statistics Regulation (IESS); growth rates are not fully comparable. Education groups refer to ISCED 2011.
From 2022 net wages excluding health insurance contributions and including an impact of personal income tax reform ('Europe now' reform package). The minimum wage in the country is fixed in net terms, the gross wage shown in the table is calculated. Until 2019, the minimum wage was in effect from 21 March of the respective previous year, from 2020 since 1 July of the previous year and from 2022 since 1 January of the respective year. Increase in minimum wages in 2022 due to the 'Europe now' reform package.

Source: SEE Jobs Gateway, based on data provided by national statistical offices and Eurostat.

North Macedonia: Labor market indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total										
Total population (1,000)	2,067	2,070	2,072	2,075	2,076	2,077	2,073	2,064	1,832	1,828
Working-age population aged 15+ (1,000)	1,673	1,677	1,679	1,680	1,683	1,685	1,686	1,683	1,465	1,515
Employment aged 15+ (1,000)	690	706	724	741	759	798	795	795	692	688
Employment rate (% population aged 15+)	41.2	42.1	43.1	44.1	45.1	47.3	47.2	47.2	47.2	45.4
Employment rate (% population aged 15-64)	46.9	47.8	49.1	50.5	51.7	54.7	54.7	55.1	56.7	56.8
Employment rate (% population aged 20-64)	51.3	51.9	53.3	54.8	56.1	59.2	59.1	59.5	61.7	61.7
Employment rate (% population aged 15-24)	15.2	17.3	16.2	17.5	17.4	20.7	19.8	17.9	19.1	19.0
Employment rate (% population aged 25-29)	48.2	47.3	49.6	51.5	53.4	56.7	55.7	58.6	62.4	60.6
Employment rate (% population aged 25-54)	59.3	59.4	61.2	62.7	63.9	66.8	66.6	67.8	69.9	69.7
Employment rate (% population aged 55-64)	38.6	40.1	40.7	41.4	42.7	45.1	45.7	44.9	48.9	50.1
Employment rate for low skilled 15-64 (ISCED 0-2)	29.9	28.9	27.3	28.4	29.2	30.6	29.3	27.4	27.4	31.9
Employment rate for medium skilled 15-64 (ISCED 3-4)	52.5	53.6	55.4	56.4	57.7	61.0	60.2	61.1	62.3	62.1
Employment rate for high skilled 15-64 (ISCED 5-8)	69.1	72.0	72.4	73.7	74.8	77.5	78.1	79.7	83.1	75.7
Self-employed (% of total employment)	14.0	13.9	13.2	12.9	13.3	11.9	10.0	9.2	9.3	7.6
Part-time employment (% of total employment)	5.9	4.4	5.0	4.2	3.6	4.4	4.0	3.5	3.8	2.8
Temporary employment (% of total employees)	15.4	12.6	13.6	14.0	15.0	16.7	17.8	17.8	16.9	16.7
Activity rate (% population aged 15+)	57.3	57.0	56.5	56.8	56.9	57.2	56.4	56.0	55.2	52.3
Activity rate (% population aged 15-64)	65.3	64.9	64.5	65.3	65.4	66.3	65.5	65.5	66.3	65.4
Activity rate (% population aged 15-24)	32.4	32.8	31.3	32.8	31.8	32.2	30.9	28.1	28.3	26.9
Activity rate (% population aged 25-54)	80.0	78.8	78.7	79.1	78.9	79.9	78.7	79.3	80.8	79.9
Activity rate (% population aged 55-64)	49.9	50.6	49.4	49.7	51.4	51.1	52.0	51.4	55.1	54.6
Unemployment aged 15+ (1,000)	269	249	225	214	199	166	156	148	116	103
Unemployment rate (% labor force 15+)	28.0	26.1	23.7	22.4	20.7	17.3	16.4	15.7	14.4	13.1
Youth unemployment rate (% labor force 15-24)	53.1	47.3	48.2	46.7	45.4	35.6	35.7	36.4	32.6	29.3
NEET rate (% population aged 15-24)	25.2	24.7	24.3	24.9	24.1	18.1	19.6	17.9	18.0	18.7
Long-term unemployment rate (% labor force 15+)	23.4	21.3	19.2	17.4	15.5	13.1	12.4	12.5	11.5	9.7
Share of long-term unemployed (% of total)	83.4	81.6	80.9	77.9	74.7	75.9	75.6	79.5	80.0	74.0
Unemployment rate, low educated 15+ (ISCED 0-2)	32.1	29.7	29.1	26.5	23.7	23.2	21.4	22.8	21.0	18.8
Unemployment rate, medium educated 15+ (ISCED 3-4)	28.3	26.6	23.7	22.6	21.0	16.6	16.1	15.6	15.0	13.3
Unemployment rate, high educated 15+ (ISCED 5-8)	22.5	21.1	19.4	18.7	17.8	14.3	13.7	11.7	9.6	8.9
Male										
Total population (1,000)	1,036	1,037	1,038	1,039	1,040	1,040	1,037	1,033	908	906
Working-age population aged 15+ (1,000)	837	839	840	841	842	843	844	842	725	745
Employment aged 15+ (1,000)	420	424	440	450	459	477	472	473	405	396
Employment rate (% population aged 15+)	50.1	50.5	52.3	53.6	54.4	56.6	55.9	56.2	55.9	53.2
Employment rate (% population aged 15-64)	56.1	56.6	58.6	60.5	61.4	64.4	63.7	64.3	65.8	65.0
Employment rate (% population aged 20-64)	61.6	61.5	63.7	65.6	66.6	69.7	68.9	69.5	71.7	70.7
Employment rate (% population aged 15-24)	18.9	20.2	20.4	22.6	21.7	25.4	25.1	23.0	25.3	24.7
Employment rate (% population aged 25-29)	57.1	53.8	56.7	61.1	61.9	65.1	62.4	64.9	67.3	66.5
Employment rate (% population aged 25-54)	69.8	69.1	71.2	73.2	74.0	76.5	75.1	76.4	78.4	77.3
Employment rate (% population aged 55-64)	50.3	52.2	55.0	54.5	56.8	60.1	60.3	60.3	62.9	62.8
Employment rate for low skilled 15-64 (ISCED 0-2)	44.3	42.2	42.6	43.3	44.7	47.9	45.4	42.7	43.3	45.1
Employment rate for medium skilled 15-64 (ISCED 3-4)	58.6	59.7	61.9	63.5	64.4	67.5	66.3	67.9	69.0	69.0
Employment rate for high skilled 15-64 (ISCED 5-8)	72.8	74.8	75.7	78.3	78.6	79.7	81.0	81.3	84.3	77.8
Self-employed (% of total employment)	19.4	18.9	17.2	17.3	17.6	15.5	12.8	12.0	12.4	10.1
Part-time employment (% of total employment)	6.5	4.3	4.6	4.1	3.5	4.3	3.7	3.0	3.6	2.8
Temporary employment (% of total employees)	16.9	13.8	14.8	15.2	16.5	18.1	19.7	18.4	18.1	18.7
Activity rate (% population aged 15+)	69.3	68.9	69.2	69.3	69.2	67.8	67.1	67.2	66.3	62.0
Activity rate (% population aged 15-64)	77.7	77.5	77.8	78.4	78.3	77.3	76.7	77.1	78.3	76.0
Activity rate (% population aged 15-24)	39.3	40.1	39.2	41.7	40.6	38.1	38.0	34.6	35.9	34.6
Activity rate (% population aged 25-54)	93.2	91.8	92.1	92.4	91.5	90.9	89.2	90.5	92.3	90.0
Activity rate (% population aged 55-64)	66.8	67.4	68.1	67.0	69.3	67.7	69.4	69.7	72.9	69.6
Unemployment aged 15+ (1,000)	160	155	142	133	124	94	95	93	75	66
Unemployment rate (% labor force 15+)	27.6	26.7	24.4	22.7	21.3	16.5	16.7	16.4	15.7	14.3
Youth unemployment rate (% labor force 15-24)	52.0	49.7	47.9	45.7	46.6	33.4	34.0	33.5	29.5	28.7
NEET rate (% population aged 15-24)	23.6	24.5	23.6	23.9	23.3	17.1	19.4	18.3	17.6	18.2
Long-term unemployment rate (% labor force 15+)	23.1	22.1	20.1	17.6	15.7	12.9	12.7	13.3	12.4	10.8
Share of long-term unemployed (% of total)	83.6	82.5	82.5	77.5	73.7	78.0	76.2	81.2	79.0	75.7
Unemployment rate, low educated 15+ (ISCED 0-2)	32.8	31.2	30.3	29.3	26.2	20.1	23.4	25.3	22.6	20.0
Unemployment rate, medium educated 15+ (ISCED 3-4)	27.4	27.0	24.2	22.7	21.5	16.3	16.1	15.3	15.7	13.9
Unemployment rate, high educated 15+ (ISCED 5-8)	20.0	19.3	17.6	15.4	15.2	13.4	12.2	12.1	10.4	10.6

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Female										
Total population (1,000)	1,032	1,033	1,034	1,036	1,036	1,037	1,035	1,031	924	922
Working-age population aged 15+ (1,000)	836	838	839	839	840	841	842	841	740	770
Employment aged 15+ (1,000)	271	282	284	290	301	320	323	322	287	292
Employment rate (% population aged 15+)	32.4	33.7	33.8	34.6	35.8	38.1	38.4	38.3	38.8	37.9
Employment rate (% population aged 15-64)	37.4	38.8	39.2	40.3	41.7	44.7	45.3	45.5	47.4	48.5
Employment rate (% population aged 20-64)	40.8	42.1	42.5	43.7	45.2	48.4	49.0	49.2	51.6	52.7
Employment rate (% population aged 15-24)	11.3	14.2	11.8	12.0	12.8	15.8	14.3	12.4	12.6	13.1
Employment rate (% population aged 25-29)	38.9	40.6	42.2	41.3	44.4	47.8	48.6	52.0	57.3	54.5
Employment rate (% population aged 25-54)	48.5	49.3	50.9	51.8	53.5	56.7	57.7	58.8	61.2	62.0
Employment rate (% population aged 55-64)	27.1	28.3	26.6	28.5	28.8	30.3	31.3	29.8	35.5	37.8
Employment rate for low skilled 15-64 (ISCED 0-2)	18.5	18.4	15.5	17.3	17.8	17.8	17.2	16.3	16.1	21.3
Employment rate for medium skilled 15-64 (ISCED 3-4)	44.4	45.3	46.6	46.6	48.5	52.4	52.2	51.8	53.3	54.0
Employment rate for high skilled 15-64 (ISCED 5-8)	66.0	69.6	69.6	69.9	71.7	75.7	75.7	78.3	82.1	73.8
Self-employed (% of total employment)	5.6	6.4	6.9	6.0	6.8	6.5	6.0	5.1	5.0	4.2
Part-time employment (% of total employment)	5.0	4.7	5.7	4.5	3.6	4.5	4.5	4.3	4.1	2.8
Temporary employment (% of total employees)	13.3	11.0	11.8	12.3	12.9	14.8	15.2	16.9	15.4	14.2
Activity rate (% population aged 15+)	45.3	44.9	43.8	44.3	44.6	46.6	45.7	44.8	44.3	42.8
Activity rate (% population aged 15-64)	52.5	52.0	50.8	51.7	52.2	54.8	54.0	53.4	54.3	54.7
Activity rate (% population aged 15-24)	25.1	25.1	23.0	23.4	22.5	25.8	23.3	21.2	20.4	18.8
Activity rate (% population aged 25-54)	66.4	65.3	64.8	65.3	65.8	68.6	67.9	67.7	69.2	69.7
Activity rate (% population aged 55-64)	33.5	34.2	31.0	32.6	33.8	34.7	34.8	33.4	38.1	40.2
Unemployment aged 15+ (1,000)	108	94	83	81	75	72	61	55	41	37
Unemployment rate (% labor force 15+)	28.6	25.1	22.7	21.8	19.9	18.4	15.9	14.6	12.5	11.3
Youth unemployment rate (% labor force 15-24)	55.0	43.3	48.8	48.6	43.2	38.9	38.6	41.3	38.2	30.6
NEET rate (% population aged 15-24)	26.8	24.9	25.1	25.9	25.1	19.2	19.8	17.6	18.4	19.3
Long-term unemployment rate (% labor force 15+)	23.8	20.1	17.8	17.2	15.2	13.5	11.9	11.2	10.2	8.1
Share of long-term unemployed (% of total)	83.1	80.2	78.2	78.6	76.4	73.2	74.8	76.6	81.9	71.0
Unemployment rate, low educated 15+ (ISCED 0-2)	30.9	26.8	26.3	20.7	18.7	28.8	17.3	17.4	17.9	16.7
Unemployment rate, medium educated 15+ (ISCED 3-4)	29.8	25.9	22.7	22.3	20.1	17.0	16.2	16.1	13.8	12.5
Unemployment rate, high educated 15+ (ISCED 5-8)	24.6	22.5	21.0	21.7	20.1	15.0	15.1	11.4	8.8	7.1

North Macedonia: Earnings and unit labor costs

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Wages										
Average monthly gross wages, NCU	31,325	32,173	32,822	33,688	35,625	37,446	40,566	42,887	47,637	54,916
nominal annual growth in %	1.0	2.7	2.0	2.6	5.7	5.1	8.3	5.7	11.1	15.3
real annual growth in % (CPI deflated)	1.3	3.0	2.2	1.2	4.2	4.3	7.0	2.4	-2.7	5.4
Average monthly gross wages, EUR	508	522	533	547	579	609	658	696	773	892
Average monthly gross wages, EUR (PPP)	1,182	1,190	1,202	1,220	1,275	1,334	1,435	1,524	1,631	1,842
Average monthly net wages, NCU	21,394	21,906	22,342	22,928	24,276	25,213	27,182	28,718	31,859	36,614
nominal annual growth in %	1.2	2.4	2.0	2.6	5.9	3.9	7.8	5.7	10.9	14.9
real annual growth in % (CPI deflated)	1.5	2.7	2.2	1.2	4.4	3.1	6.5	2.3	-2.9	5.1
Average monthly net wages, EUR	347	356	363	372	395	410	441	466	517	595
Average monthly net wages, EUR (PPP)	807	810	818	830	869	898	961	1,020	1,090	1,228
Minimum wages as of January 1st										
Monthly gross minimum wages, NCU	13,140	13,482	14,739	14,739	17,130	17,370	21,107	21,776	22,146	29,739
Monthly gross minimum wages, EUR (ER)	214	219	239	240	279	282	343	353	359	484
Monthly gross minimum wages, EUR (PPP)	441	455	499	491	558	567	669	720	700	936
Unit labor costs (ULC)										
Nominal ULC in EUR, annual growth in %	-1.0	1.2	1.7	4.0	5.5	6.3	13.0	1.2	7.9	12.4
Real ULC in EUR, annual growth in %	-2.4	-0.8	-1.7	1.1	1.5	5.4	11.4	-2.9	-0.9	4.3

Notes: Data are based on a continuous quarterly survey. Until 2021 the census 2002 applies, from 2022 the census 2021. From 2023, new methodology in line with the Integrated European Social Statistics Regulation (IESS); growth rates are not fully comparable. Education groups refer to ISCED 2011.

Until 2017 the minimum wage was in effect from 1 January of the respective year, in 2018 from 1 September of the previous year, in 2019 from 1 July of the previous year, in 2020 from 1 January, in 2021 from 1 July of the previous year, in 2022 from May of the previous year, in 2023 from 1 March.

Source: SEE Jobs Gateway, based on data provided by national statistical offices and Eurostat.

Serbia: Labor market indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total										
Total population (1,000)	7,132	7,095	7,058	7,021	6,983	6,945	6,899	6,740	6,664	6,623
Working-age population aged 15+ (1,000)	6,099	6,060	6,018	5,985	5,955	5,924	5,894	5,761	5,699	5,666
Employment aged 15+ (1,000)	2,559	2,574	2,719	2,795	2,833	2,901	2,895	2,755	2,818	2,842
Employment rate (% population aged 15+)	42.0	42.5	45.2	46.7	47.6	49.0	49.1	47.8	49.5	50.2
Employment rate (% population aged 15-64)	50.7	52.0	55.2	57.3	58.8	60.7	61.3	61.7	63.9	64.7
Employment rate (% population aged 20-64)	54.7	55.9	59.1	61.4	63.1	65.1	65.9	66.2	68.8	69.6
Employment rate (% population aged 15-24)	14.9	16.6	19.7	20.9	21.1	21.5	20.8	24.4	24.2	23.9
Employment rate (% population aged 25-29)	52.4	53.5	56.2	58.9	62.5	63.5	62.4	68.0	71.4	70.2
Employment rate (% population aged 25-54)	65.9	67.1	69.2	71.3	73.1	74.5	74.8	75.3	77.7	78.0
Employment rate (% population aged 55-64)	36.7	37.3	42.7	45.5	46.5	50.2	52.2	50.3	53.6	56.7
Employment rate for low skilled 15-64 (ISCED 0-2)	32.9	33.9	37.3	38.2	37.6	39.1	37.9	35.3	36.2	36.0
Employment rate for medium skilled 15-64 (ISCED 3-4)	52.3	53.3	56.5	58.7	60.4	62.1	63.4	64.0	65.8	66.6
Employment rate for high skilled 15-64 (ISCED 5-8)	70.1	70.9	72.5	75.7	77.8	79.8	79.2	81.4	84.4	84.5
Self-employed (% of total employment)	23.4	22.0	23.7	24.8	22.7	23.0	22.4	17.2	16.7	16.4
Part-time employment (% of total employment)	12.2	11.8	13.0	12.5	11.3	12.2	11.6	8.0	7.0	7.4
Temporary employment (% of total employees)	18.8	21.8	23.7	22.8	23.0	16.5	15.0	17.4	16.9	15.7
Activity rate (% population aged 15+)	51.9	51.6	53.3	54.0	54.5	54.6	54.0	53.8	54.7	55.4
Activity rate (% population aged 15-64)	63.3	63.6	65.6	66.7	67.8	68.1	67.7	69.7	70.9	71.7
Activity rate (% population aged 15-24)	28.5	29.2	30.3	30.6	30.0	29.6	28.3	33.0	32.0	31.9
Activity rate (% population aged 25-54)	81.1	81.0	82.0	82.5	83.8	83.2	82.2	84.5	85.4	85.7
Activity rate (% population aged 55-64)	41.9	42.1	46.9	49.5	51.0	53.7	55.1	54.3	57.8	60.9
Unemployment aged 15+ (1,000)	608	552	489	435	412	336	287	344	296	296
Unemployment rate (% labor force 15+)	19.2	17.7	15.3	13.5	12.7	10.4	9.0	11.1	9.5	9.4
Youth unemployment rate (% labor force 15-24)	47.5	43.2	34.9	31.9	29.7	27.5	26.7	26.0	24.3	25.0
NEET rate (% population aged 15-24)	20.4	19.9	17.7	17.2	16.5	15.3	15.9	17.0	13.3	12.4
Long-term unemployment rate (% labor force 15+)	12.8	11.3	9.9	8.2	7.5	6.0	4.9	5.5	4.4	4.2
Share of long-term unemployed (% of total)	66.9	64.0	65.1	60.5	59.4	58.3	54.8	49.9	46.0	44.8
Unemployment rate, low educated 15+ (ISCED 0-2)	17.3	15.0	12.4	11.0	12.1	10.7	8.6	13.8	12.4	12.7
Unemployment rate, medium educated 15+ (ISCED 3-4)	21.2	19.4	16.7	14.8	13.7	11.2	9.6	11.7	10.5	10.0
Unemployment rate, high educated 15+ (ISCED 5-8)	15.4	15.3	13.9	12.2	10.8	8.3	7.9	8.5	6.1	6.8
Male										
Total population (1,000)	3,473	3,455	3,438	3,420	3,402	3,384	3,360	3,280	3,241	3,221
Working-age population aged 15+ (1,000)	2,941	2,922	2,902	2,886	2,873	2,858	2,844	2,774	2,743	2,728
Employment aged 15+ (1,000)	1,457	1,466	1,532	1,565	1,590	1,617	1,609	1,539	1,562	1,556
Employment rate (% population aged 15+)	49.5	50.2	52.8	54.2	55.4	56.6	56.6	55.5	56.9	57.0
Employment rate (% population aged 15-64)	57.7	59.1	61.9	63.9	65.6	67.1	67.7	68.6	70.5	70.5
Employment rate (% population aged 20-64)	62.3	63.6	66.3	68.5	70.5	72.1	72.9	73.6	75.8	75.9
Employment rate (% population aged 15-24)	19.0	21.2	24.9	26.1	26.0	26.7	26.3	30.4	29.7	29.3
Employment rate (% population aged 25-29)	58.4	59.3	61.7	64.8	69.3	69.7	70.4	74.4	79.1	75.8
Employment rate (% population aged 25-54)	72.4	73.3	74.8	76.8	79.0	79.9	80.4	81.3	83.5	83.4
Employment rate (% population aged 55-64)	47.7	48.9	53.8	55.9	57.2	60.8	62.1	60.6	63.4	64.4
Employment rate for low skilled 15-64 (ISCED 0-2)	41.7	42.3	44.3	45.9	45.3	46.6	45.6	44.9	44.8	43.7
Employment rate for medium skilled 15-64 (ISCED 3-4)	59.5	61.0	64.2	65.8	68.0	69.7	70.7	71.6	73.3	73.3
Employment rate for high skilled 15-64 (ISCED 5-8)	73.6	74.3	75.8	79.0	81.4	82.2	82.3	84.6	87.5	87.4
Self-employed (% of total employment)	30.8	29.9	31.0	30.9	28.8	28.7	27.6	23.5	23.1	23.2
Part-time employment (% of total employment)	11.6	11.2	12.0	11.6	10.5	11.5	10.4	7.4	6.4	6.7
Temporary employment (% of total employees)	20.0	23.2	25.8	23.9	24.5	16.2	14.3	16.7	16.4	15.1
Activity rate (% population aged 15+)	60.7	60.3	61.8	62.2	62.9	62.7	62.0	61.8	62.6	62.7
Activity rate (% population aged 15-64)	71.3	71.6	73.1	73.8	75.1	74.9	74.6	76.8	77.8	77.8
Activity rate (% population aged 15-24)	35.3	35.4	36.8	36.8	36.3	36.2	35.1	40.1	38.7	38.5
Activity rate (% population aged 25-54)	87.4	87.3	87.7	88.1	89.5	88.5	87.7	90.2	91.2	90.8
Activity rate (% population aged 55-64)	55.2	55.9	59.6	61.4	63.0	65.0	65.9	65.5	68.3	69.7
Unemployment aged 15+ (1,000)	327	296	262	230	215	176	153	176	156	154
Unemployment rate (% labor force 15+)	18.3	16.8	14.6	12.8	11.9	9.8	8.7	10.3	9.1	9.0
Youth unemployment rate (% labor force 15-24)	46.1	40.1	32.2	29.2	28.3	26.1	25.0	24.2	23.3	23.8
NEET rate (% population aged 15-24)	21.0	20.2	17.2	17.1	16.0	14.8	17.0	17.1	13.4	12.7
Long-term unemployment rate (% labor force 15+)	12.0	10.6	9.5	7.9	7.2	5.8	4.7	5.0	3.9	3.8
Share of long-term unemployed (% of total)	65.7	63.0	65.1	61.4	60.4	58.9	54.7	48.4	42.7	42.2
Unemployment rate, low educated 15+ (ISCED 0-2)	16.9	15.8	13.6	11.1	12.3	11.0	9.0	12.9	12.2	13.2
Unemployment rate, medium educated 15+ (ISCED 3-4)	20.1	17.9	15.4	13.9	12.8	10.2	9.0	10.7	9.8	9.4
Unemployment rate, high educated 15+ (ISCED 5-8)	13.7	14.1	12.8	11.0	9.1	7.6	7.5	7.2	5.3	5.7

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Female										
Total population (1,000)	3,659	3,640	3,621	3,601	3,581	3,562	3,539	3,460	3,424	3,402
Working-age population aged 15+ (1,000)	3,158	3,138	3,115	3,098	3,083	3,066	3,050	2,987	2,956	2,938
Employment aged 15+ (1,000)	1,102	1,108	1,188	1,230	1,243	1,284	1,285	1,216	1,257	1,286
Employment rate (% population aged 15+)	34.9	35.3	38.1	39.7	40.3	41.9	42.1	40.7	42.5	43.8
Employment rate (% population aged 15-64)	43.7	44.9	48.4	50.8	52.0	54.3	54.8	54.8	57.4	58.9
Employment rate (% population aged 20-64)	47.1	48.2	51.9	54.4	55.8	58.2	58.9	58.9	61.8	63.4
Employment rate (% population aged 15-24)	10.6	11.7	14.2	15.3	15.9	15.9	14.9	18.2	18.5	18.2
Employment rate (% population aged 25-29)	46.1	47.5	50.4	52.7	55.3	57.1	54.0	61.2	63.3	64.4
Employment rate (% population aged 25-54)	59.5	60.9	63.6	65.7	67.1	69.1	69.1	69.1	71.9	72.6
Employment rate (% population aged 55-64)	26.6	26.6	32.5	36.0	36.7	40.5	43.2	40.9	44.7	49.7
Employment rate for low skilled 15-64 (ISCED 0-2)	25.8	26.7	31.4	31.7	31.0	32.5	31.0	27.0	28.3	29.1
Employment rate for medium skilled 15-64 (ISCED 3-4)	44.0	44.4	47.5	50.4	51.6	53.4	54.9	55.2	57.4	58.8
Employment rate for high skilled 15-64 (ISCED 5-8)	67.4	68.3	70.0	73.2	75.0	78.0	77.0	79.1	81.9	82.3
Self-employed (% of total employment)	13.7	11.6	14.1	17.0	14.9	15.8	15.8	9.1	8.7	8.2
Part-time employment (% of total employment)	13.0	12.7	14.2	13.6	12.2	13.1	13.0	8.8	7.8	8.1
Temporary employment (% of total employees)	17.4	20.2	21.4	21.6	21.3	16.8	15.9	18.3	17.5	16.4
Activity rate (% population aged 15+)	43.8	43.5	45.4	46.3	46.7	47.1	46.5	46.3	47.3	48.6
Activity rate (% population aged 15-64)	55.3	55.6	58.1	59.6	60.6	61.3	60.8	62.6	64.0	65.6
Activity rate (% population aged 15-24)	21.3	22.6	23.4	24.1	23.3	22.7	21.1	25.6	25.0	24.9
Activity rate (% population aged 25-54)	74.8	74.6	76.1	76.9	78.0	77.8	76.5	78.8	79.6	80.5
Activity rate (% population aged 55-64)	29.6	29.5	35.2	38.5	40.0	43.4	45.2	44.1	48.2	53.0
Unemployment aged 15+ (1,000)	281	256	228	205	197	160	134	168	140	141
Unemployment rate (% labor force 15+)	20.3	18.8	16.1	14.3	13.7	11.1	9.4	12.2	10.0	9.9
Youth unemployment rate (% labor force 15-24)	50.0	48.2	39.5	36.3	32.0	29.9	29.5	28.9	26.0	27.0
NEET rate (% population aged 15-24)	19.9	19.6	18.3	17.3	17.0	15.8	14.8	17.0	13.3	12.2
Long-term unemployment rate (% labor force 15+)	13.9	12.2	10.5	8.5	8.0	6.4	5.2	6.2	5.0	4.7
Share of long-term unemployed (% of total)	68.2	65.2	65.1	59.5	58.4	57.6	54.9	51.4	49.6	47.6
Unemployment rate, low educated 15+ (ISCED 0-2)	17.9	13.9	11.1	10.9	11.8	10.2	8.2	15.1	12.8	12.1
Unemployment rate, medium educated 15+ (ISCED 3-4)	23.0	21.6	18.6	16.0	15.1	12.7	10.5	13.2	11.5	10.9
Unemployment rate, high educated 15+ (ISCED 5-8)	16.8	16.4	14.8	13.3	12.3	8.9	8.3	9.5	6.7	7.7

Serbia: Earnings and unit labor costs

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Wages										
Average monthly gross wages, NCU	61,426	61,145	63,474	65,976	68,629	75,814	82,984	90,784	103,316	118,599
nominal annual growth in %	1.2	-0.5	3.8	3.9	6.0	10.5	9.5	9.4	13.8	14.8
real annual growth in % (CPI deflated)	-1.7	-2.4	2.6	0.9	3.9	8.4	7.8	5.2	1.7	2.4
Average monthly gross wages, EUR	524	506	516	544	580	643	706	772	880	1,011
Average monthly gross wages, EUR (PPP)	1,106	1,079	1,090	1,110	1,135	1,243	1,333	1,408	1,509	1,651
Average monthly net wages, NCU	44,530	44,432	46,097	47,893	49,650	54,919	60,073	65,864	74,933	86,007
nominal annual growth in %	1.4	-0.2	3.7	3.9	6.5	10.6	9.4	9.6	13.8	14.8
real annual growth in % (CPI deflated)	-1.5	-2.1	2.5	0.9	4.4	8.5	7.7	5.4	1.7	2.4
Average monthly net wages, EUR	380	368	374	395	420	466	511	560	638	734
Average monthly net wages, EUR (PPP)	802	784	791	806	821	901	965	1,022	1,094	1,197
Minimum wages as of January 1st										
Monthly gross minimum wages, NCU	26,976	28,431	28,403	30,613	33,813	36,408	40,502	43,044	47,193	53,993
Monthly gross minimum wages, EUR (ER)	235	235	234	248	285	308	344	366	401	460
Monthly gross minimum wages, EUR (PPP)	437	458	448	469	512	547	587	606	629	680
Unit labor costs (ULC)										
Nominal ULC in EUR, annual growth in %	4.1	-4.0	4.4	5.9	5.3	8.4	10.5	3.6	13.6	11.7
Real ULC in EUR, annual growth in %	1.1	-6.0	2.8	2.8	3.3	5.9	7.7	-2.0	2.8	-1.9

Notes: In 2014, the labor force survey was conducted quarterly in a fixed reference week, from 2015 based on a continuously quarterly survey. Until 2020 the census 2011 applies, from 2021 the census 2021. From 2021, new methodology in line with the Integrated European Social Statistics Regulation (IESS); growth rates are not fully comparable. Education groups refer to ISCED 2011.
From 2018, average monthly wages based on tax administration data and full-time equivalent (FTE) employees, before that survey data supplemented by tax administration data. The minimum wages are in effect since 1 January of the respective year.

Source: SEE Jobs Gateway, based on data provided by national statistical offices and Eurostat.

Western Balkans-6: Labor market indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total										
Total population (1,000)	18,350	18,276	18,223	18,191	18,146	18,078	17,696	17,474	17,093	17,011
Working-age population aged 15+ (1,000)	14,529	14,498	14,409	14,335	14,297	14,131	14,787	14,625	14,276	14,251
Employment aged 15+ (1,000)	5,640	5,709	5,960	6,135	6,231	6,377	6,676	6,549	6,630	6,762
Employment rate (% population aged 15+)	38.8	39.4	41.4	42.8	43.6	45.1	45.1	44.8	46.4	47.4
Employment rate (% population aged 15-64)	45.8	46.8	49.2	51.2	52.4	54.4	54.1	54.5	57.0	58.5
Employment rate (% population aged 20-64)	50.5	51.3	53.8	55.9	57.1	59.1	58.8	59.1	61.8	63.3
Employment rate (% population aged 15-24)	14.1	15.3	17.0	18.6	19.8	21.7	20.3	21.3	22.3	22.8
Employment rate (% population aged 25-29)	48.5	49.0	51.5	53.8	56.9	58.7	57.4	59.8	62.8	63.5
Employment rate (% population aged 25-54)	59.6	60.3	62.5	64.4	65.9	67.5	66.7	67.2	69.7	71.0
Employment rate (% population aged 55-64)	37.1	38.0	40.9	43.0	44.1	47.1	47.3	46.4	50.0	52.4
Employment rate for low skilled 15-64 (ISCED 0-2)	30.2	31.5	33.9	34.9	34.8	36.8	34.5	33.0	34.6	35.5
Employment rate for medium skilled 15-64 (ISCED 3-4)	49.3	49.5	51.9	54.1	55.4	57.0	57.0	57.6	59.9	61.4
Employment rate for high skilled 15-64 (ISCED 5-8)	68.8	68.8	70.0	72.4	74.2	75.9	75.6	77.1	79.7	80.7
Self-employed (% of total employment)	21.9	22.0	24.0	24.7	22.9	23.0	21.5	18.4	18.0	17.3
Part-time employment (% of total employment)	13.2	12.5	12.7	12.0	10.6	11.2	10.2	8.3	7.6	7.3
Temporary employment (% of total employees)	20.6	21.6	23.1	22.8	22.8	18.1	16.4	17.8	17.3	16.5
Activity rate (% population aged 15+)	50.0	49.9	50.9	51.5	51.7	52.1	51.9	51.9	52.6	53.3
Activity rate (% population aged 15-64)	59.5	59.7	60.9	62.0	62.5	63.2	62.5	63.4	64.8	66.0
Activity rate (% population aged 15-24)	28.4	29.3	29.4	30.4	30.7	31.9	30.1	31.0	30.6	30.5
Activity rate (% population aged 25-54)	75.6	75.4	76.1	77.0	77.6	77.5	76.2	77.2	78.5	79.4
Activity rate (% population aged 55-64)	43.1	43.7	46.2	47.8	49.0	51.1	51.1	51.1	54.5	56.6
Unemployment aged 15+ (1,000)	1,630	1,533	1,370	1,251	1,157	985	998	1,039	885	833
Unemployment rate (% labor force 15+)	22.4	21.2	18.7	16.9	15.7	13.4	13.0	13.7	11.8	11.0
Youth unemployment rate (% labor force 15-24)	50.2	47.7	42.1	38.6	35.6	32.1	32.6	31.4	27.1	25.4
NEET rate (% population aged 15-24)	25.4	25.4	23.6	22.5	22.3	21.4	22.3	21.4	19.8	19.0
Long-term unemployment rate (% labor force 15+)	16.4	15.2	13.5	11.8	10.5	8.9	8.6	9.0	7.5	6.9
Share of long-term unemployed (% of total)	73.4	72.0	72.2	69.7	67.4	66.4	66.2	65.6	63.7	62.8
Unemployment rate, low educated 15+ (ISCED 0-2)	22.0	19.8	17.1	15.5	14.7	13.0	13.1	15.5	13.8	13.5
Unemployment rate, medium educated 15+ (ISCED 3-4)	24.5	23.3	20.4	18.5	17.0	14.4	13.8	14.6	12.7	11.6
Unemployment rate, high educated 15+ (ISCED 5-8)	17.1	17.1	16.0	14.6	13.3	11.3	11.1	10.5	8.5	7.9
Male										
Total population (1,000)	9,059	9,020	8,989	8,962	8,925	8,884	8,699	8,587	8,389	8,349
Working-age population aged 15+ (1,000)	7,077	7,095	7,060	7,030	6,995	6,917	7,222	7,145	6,952	6,935
Employment aged 15+ (1,000)	3,342	3,378	3,518	3,616	3,662	3,710	3,880	3,831	3,833	3,880
Employment rate (% population aged 15+)	47.2	47.6	49.8	51.4	52.3	53.6	53.7	53.6	55.1	55.9
Employment rate (% population aged 15-64)	54.3	55.1	57.6	59.9	61.2	63.0	62.8	63.6	65.9	67.1
Employment rate (% population aged 20-64)	60.0	60.6	63.1	65.5	66.9	68.5	68.2	69.0	71.5	72.7
Employment rate (% population aged 15-24)	17.8	19.4	21.4	23.4	24.7	26.4	25.4	26.4	27.5	28.1
Employment rate (% population aged 25-29)	55.7	55.8	58.5	62.2	65.4	66.2	65.2	67.0	70.3	70.7
Employment rate (% population aged 25-54)	69.0	69.3	71.5	73.9	75.3	76.3	75.6	76.5	78.8	80.0
Employment rate (% population aged 55-64)	49.0	50.0	53.1	54.7	56.1	59.6	59.3	59.0	62.2	63.3
Employment rate for low skilled 15-64 (ISCED 0-2)	40.6	41.5	43.9	45.5	45.4	47.9	45.5	44.0	45.2	45.4
Employment rate for medium skilled 15-64 (ISCED 3-4)	57.0	57.3	60.1	62.2	63.8	65.2	65.3	66.5	68.9	70.4
Employment rate for high skilled 15-64 (ISCED 5-8)	72.2	72.5	73.3	76.4	78.3	79.2	79.3	81.3	83.8	84.5
Self-employed (% of total employment)	27.7	28.4	29.6	29.7	28.1	27.8	25.6	23.1	22.7	22.3
Part-time employment (% of total employment)	11.5	11.0	11.1	10.5	9.2	9.9	8.8	7.0	6.4	6.3
Temporary employment (% of total employees)	22.9	23.7	25.6	25.2	25.5	19.2	16.8	18.0	17.6	16.8
Activity rate (% population aged 15+)	60.6	60.2	61.1	61.9	62.0	61.5	61.5	61.6	62.1	62.3
Activity rate (% population aged 15-64)	70.2	70.1	71.1	72.5	73.1	72.7	72.3	73.3	74.5	75.0
Activity rate (% population aged 15-24)	35.3	36.2	36.1	37.4	38.1	38.1	36.7	37.3	36.9	37.0
Activity rate (% population aged 25-54)	86.7	86.0	86.5	88.1	88.3	87.0	85.9	87.1	88.0	88.5
Activity rate (% population aged 55-64)	57.8	58.1	60.7	61.5	62.8	64.6	64.6	64.8	67.9	68.5
Unemployment aged 15+ (1,000)	947	891	795	734	679	546	562	570	482	442
Unemployment rate (% labor force 15+)	22.1	20.9	18.4	16.9	15.6	12.8	12.7	12.9	11.2	10.2
Youth unemployment rate (% labor force 15-24)	49.5	46.3	40.8	37.4	35.1	30.7	30.8	29.2	25.6	24.0
NEET rate (% population aged 15-24)	25.0	25.1	23.1	21.6	22.0	21.0	22.5	21.2	19.2	18.9
Long-term unemployment rate (% labor force 15+)	16.0	15.0	13.3	11.8	10.6	8.5	8.4	8.4	7.0	6.3
Share of long-term unemployed (% of total)	72.3	71.9	72.4	70.0	67.5	66.5	66.2	65.2	62.8	62.0
Unemployment rate, low educated 15+ (ISCED 0-2)	23.4	21.8	19.1	17.4	16.4	13.6	14.4	15.8	14.3	13.7
Unemployment rate, medium educated 15+ (ISCED 3-4)	23.5	22.1	19.5	17.9	16.6	13.4	13.1	13.4	11.6	10.5
Unemployment rate, high educated 15+ (ISCED 5-8)	15.2	15.2	14.2	12.7	11.6	10.0	9.7	9.0	7.4	6.7

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Female										
Total population (1,000)	9,291	9,255	9,234	9,229	9,220	9,194	8,997	8,888	8,718	8,662
Working-age population aged 15+ (1,000)	7,453	7,403	7,348	7,305	7,302	7,214	7,565	7,480	7,323	7,316
Employment aged 15+ (1,000)	2,298	2,331	2,442	2,520	2,569	2,667	2,796	2,718	2,797	2,882
Employment rate (% population aged 15+)	30.8	31.5	33.2	34.5	35.2	37.0	37.0	36.3	38.2	39.4
Employment rate (% population aged 15-64)	37.3	38.4	40.7	42.4	43.5	45.8	45.4	45.4	48.2	50.0
Employment rate (% population aged 20-64)	41.0	42.1	44.4	46.2	47.3	49.7	49.4	49.2	52.2	54.1
Employment rate (% population aged 15-24)	10.2	10.8	12.3	13.3	14.5	16.5	14.9	15.9	17.0	17.2
Employment rate (% population aged 25-29)	40.8	41.5	43.8	44.8	47.6	50.6	49.1	52.1	55.0	56.0
Employment rate (% population aged 25-54)	50.2	51.4	53.5	54.9	56.4	58.7	57.8	57.8	60.6	62.1
Employment rate (% population aged 55-64)	26.1	26.6	29.3	32.0	32.9	35.4	36.1	34.6	38.7	42.3
Employment rate for low skilled 15-64 (ISCED 0-2)	22.5	23.9	26.2	26.7	26.6	28.3	26.3	24.6	26.5	27.8
Employment rate for medium skilled 15-64 (ISCED 3-4)	39.6	39.7	41.5	43.8	44.7	46.7	46.5	46.4	48.8	50.5
Employment rate for high skilled 15-64 (ISCED 5-8)	65.9	65.8	67.2	69.1	70.9	73.3	72.7	73.8	76.4	77.7
Self-employed (% of total employment)	13.4	12.7	16.0	17.5	15.6	16.4	15.8	11.8	11.5	10.6
Part-time employment (% of total employment)	15.6	14.7	15.1	14.1	12.5	13.0	12.2	10.2	9.3	8.7
Temporary employment (% of total employees)	17.6	18.9	19.8	19.6	19.3	16.5	15.8	17.6	16.9	16.1
Activity rate (% population aged 15+)	40.0	40.2	41.1	41.6	41.7	43.1	42.7	42.6	43.7	44.7
Activity rate (% population aged 15-64)	48.7	49.3	50.5	51.4	51.9	53.7	52.8	53.4	55.3	57.0
Activity rate (% population aged 15-24)	21.1	21.8	22.1	22.6	22.8	25.2	23.2	24.5	24.1	23.8
Activity rate (% population aged 25-54)	64.6	64.8	65.7	66.0	66.7	68.1	66.5	67.3	69.0	70.4
Activity rate (% population aged 55-64)	29.3	29.9	32.4	34.8	36.1	38.3	38.5	38.1	42.1	45.6
Unemployment aged 15+ (1,000)	682	642	575	516	478	439	435	469	402	391
Unemployment rate (% labor force 15+)	22.9	21.6	19.1	17.0	15.7	14.1	13.5	14.7	12.6	11.9
Youth unemployment rate (% labor force 15-24)	51.5	50.3	44.6	40.9	36.5	34.3	35.7	34.9	29.6	27.7
NEET rate (% population aged 15-24)	25.9	25.7	24.2	23.5	22.6	21.9	22.1	21.7	20.3	19.0
Long-term unemployment rate (% labor force 15+)	17.1	15.6	13.7	11.8	10.5	9.4	8.9	9.7	8.1	7.6
Share of long-term unemployed (% of total)	74.9	72.0	72.1	69.3	67.1	66.3	66.2	66.0	64.8	63.7
Unemployment rate, low educated 15+ (ISCED 0-2)	20.0	17.0	14.5	13.0	12.4	12.3	11.5	14.9	13.3	13.2
Unemployment rate, medium educated 15+ (ISCED 3-4)	26.4	25.3	22.1	19.4	17.8	16.1	15.1	16.7	14.5	13.5
Unemployment rate, high educated 15+ (ISCED 5-8)	18.8	18.8	17.7	16.3	14.8	12.5	12.3	11.7	9.4	9.0

Western Balkans-6: Earnings and unit labor costs

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Wages										
Average monthly gross wages, NCU	.	.	.	.	.	.	.	.	.	.
nominal annual growth in %	1.0	1.3	2.2	3.1	4.8	7.0	6.1	7.0	11.6	13.9
real annual growth in % (CPI deflated)	-0.4	0.2	1.6	0.9	2.9	5.4	5.2	3.7	0.1	4.8
Average monthly gross wages, EUR	506	503	508	529	559	602	648	691	776	896
Average monthly gross wages, EUR (PPP)	1,081	1,078	1,075	1,087	1,115	1,185	1,260	1,309	1,398	1,558
Average monthly net wages, NCU	.	.	.	.	.	.	.	.	.	.
nominal annual growth in %	.	.	.	.	.	.	.	.	.	.
real annual growth in % (CPI deflated)	.	.	.	.	.	.	.	.	.	.
Average monthly net wages, EUR	.	.	.	.	.	.	.	.	.	.
Average monthly net wages, EUR (PPP)	.	.	.	.	.	.	.	.	.	.
Minimum wages as of January 1st										
Monthly gross minimum wages, NCU	.	.	.	.	.	.	.	.	.	.
Monthly gross minimum wages, EUR (ER)	.	.	.	.	.	.	.	.	.	.
Monthly gross minimum wages, EUR (PPP)	.	.	.	.	.	.	.	.	.	.
Unit labor costs (ULC)										
Nominal ULC in EUR, annual growth in %	1.4	-1.8	2.4	4.1	2.9	6.0	9.6	0.0	11.7	13.8
Real ULC in EUR, annual growth in %	-0.6	-3.2	0.8	1.6	0.5	4.0	8.0	-4.9	1.2	3.4

Notes: Labor market data for the Western Balkans show the aggregate of six countries only when data are available for all of them. Wage data for the Western Balkan are weighted averages with employment data from LFS.

Source: SEE Jobs Gateway, based on data provided by national statistical offices and Eurostat.

Austria: Labor market indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total										
Total population (1,000)	8,546	8,643	8,737	8,798	8,841	8,880	8,917	8,956	9,042	9,132
Working-age population aged 15+ (1,000)	6,527	6,555	6,612	6,615	6,630	6,645	6,677	6,719	6,780	6,840
Employment aged 15+ (1,000)	4,098	4,133	4,204	4,245	4,304	4,338	4,282	4,296	4,431	4,472
Employment rate (% population aged 15+)	62.8	63.1	63.6	64.2	64.9	65.3	64.1	63.9	65.4	65.4
Employment rate (% population aged 15-64)	71.1	71.1	71.5	72.2	73.0	73.6	72.4	72.4	74.0	74.1
Employment rate (% population aged 20-64)	74.2	74.3	74.8	75.4	76.2	76.8	75.5	75.6	77.3	77.2
Employment rate (% population aged 15-24)	52.1	51.4	51.0	50.6	51.3	51.6	50.2	50.1	51.9	53.1
Employment rate (% population aged 25-29)	79.2	80.2	80.9	80.4	80.7	81.8	79.4	81.2	82.6	82.0
Employment rate (% population aged 25-54)	83.4	83.5	83.6	84.1	84.5	85.3	83.9	83.8	85.7	85.4
Employment rate (% population aged 55-64)	45.1	46.3	49.2	51.3	54.0	54.5	54.7	55.4	56.4	57.3
Employment rate for low skilled 15-64 (ISCED 0-2)	47.5	47.2	47.3	46.9	48.2	48.2	47.5	47.6	48.2	49.1
Employment rate for medium skilled 15-64 (ISCED 3-4)	73.8	73.5	73.8	74.5	75.4	76.1	74.1	73.8	76.1	75.7
Employment rate for high skilled 15-64 (ISCED 5-8)	83.3	83.3	84.0	84.6	84.5	84.7	84.6	84.7	85.7	85.6
Self-employed (% of total employment)	11.2	11.3	11.1	10.9	10.7	11.0	10.9	10.4	10.8	10.9
Part-time employment (% of total employment)	27.7	28.0	28.5	28.6	28.0	27.8	27.8	29.3	30.4	30.8
Temporary employment (% of total employees)	9.1	9.1	9.0	9.2	9.1	8.7	8.2	8.8	8.8	9.0
Activity rate (% population aged 15+)	66.5	66.9	67.7	67.9	68.2	68.4	67.8	68.2	68.6	68.9
Activity rate (% population aged 15-64)	75.4	75.5	76.2	76.4	76.8	77.1	76.6	77.2	77.8	78.2
Activity rate (% population aged 15-24)	58.0	57.4	57.5	56.1	56.6	56.4	56.1	56.3	57.4	59.2
Activity rate (% population aged 25-54)	88.0	88.0	88.4	88.7	88.5	89.0	88.3	89.0	89.6	89.5
Activity rate (% population aged 55-64)	46.9	48.6	51.7	53.6	56.2	56.4	57.0	58.4	58.6	59.8
Unemployment aged 15+ (1,000)	245	252	270	248	220	205	244	284	221	241
Unemployment rate (% labor force 15+)	5.6	5.7	6.0	5.5	4.9	4.5	5.4	6.2	4.8	5.1
Youth unemployment rate (% labor force 15-24)	10.3	10.6	11.2	9.8	9.4	8.5	10.5	11.0	9.5	10.4
NEET rate (% population aged 15-24)	7.7	7.5	7.7	6.5	6.8	7.1	8.0	8.5	8.1	8.7
Long-term unemployment rate (% labor force 15+)	1.5	1.7	1.9	1.8	1.4	1.1	1.3	2.0	1.2	1.1
Share of long-term unemployed (% of total)	27.2	29.2	32.3	33.4	28.9	25.1	24.5	31.5	25.2	26.2
Unemployment rate, low educated 15+ (ISCED 0-2)	11.4	11.2	12.7	13.0	11.4	10.7	12.3	13.8	11.4	11.8
Unemployment rate, medium educated 15+ (ISCED 3-4)	5.0	5.4	5.8	5.1	4.2	4.0	5.0	5.8	4.1	4.7
Unemployment rate, high educated 15+ (ISCED 5-8)	4.0	3.9	3.6	3.2	3.2	3.0	3.4	4.0	3.2	3.3
Male										
Total population (1,000)	4,178	4,236	4,292	4,325	4,348	4,368	4,388	4,411	4,452	4,500
Working-age population aged 15+ (1,000)	3,221	3,242	3,282	3,279	3,285	3,293	3,311	3,335	3,364	3,396
Employment aged 15+ (1,000)	2,164	2,183	2,223	2,244	2,286	2,304	2,268	2,283	2,344	2,362
Employment rate (% population aged 15+)	67.2	67.3	67.7	68.4	69.6	70.0	68.5	68.4	69.7	69.6
Employment rate (% population aged 15-64)	75.3	75.1	75.4	76.2	77.4	78.0	76.5	76.7	78.0	77.9
Employment rate (% population aged 20-64)	78.3	78.4	78.7	79.4	80.7	81.2	79.5	79.9	81.2	81.1
Employment rate (% population aged 15-24)	54.3	54.0	52.9	52.1	53.9	54.8	52.7	54.6	55.6	56.3
Employment rate (% population aged 25-29)	81.3	81.6	82.1	81.5	84.0	85.3	81.6	83.7	84.5	83.5
Employment rate (% population aged 25-54)	86.6	86.6	86.6	87.2	87.8	88.5	86.9	86.9	88.5	87.8
Employment rate (% population aged 55-64)	54.3	54.1	57.6	60.1	63.5	63.1	62.7	62.7	63.9	65.4
Employment rate for low skilled 15-64 (ISCED 0-2)	51.7	51.5	51.7	51.2	52.9	53.4	52.6	53.2	54.7	54.5
Employment rate for medium skilled 15-64 (ISCED 3-4)	77.5	76.7	77.1	78.0	79.4	80.1	77.8	77.8	79.4	78.8
Employment rate for high skilled 15-64 (ISCED 5-8)	85.4	85.8	86.2	87.3	87.4	87.7	87.4	87.4	88.3	88.8
Self-employed (% of total employment)	13.7	13.7	13.6	13.3	13.0	13.4	13.3	12.7	13.1	13.2
Part-time employment (% of total employment)	10.6	10.8	11.5	11.6	10.9	10.4	10.5	11.5	12.4	13.2
Temporary employment (% of total employees)	9.2	9.1	8.9	9.2	8.8	8.6	8.3	9.0	8.9	9.3
Activity rate (% population aged 15+)	71.4	71.7	72.4	72.7	73.3	73.3	72.5	73.0	73.3	73.5
Activity rate (% population aged 15-64)	80.0	80.1	80.7	81.0	81.6	81.8	81.0	81.9	82.1	82.4
Activity rate (% population aged 15-24)	60.7	60.7	60.2	58.4	59.5	60.3	59.5	61.2	61.4	62.7
Activity rate (% population aged 25-54)	91.5	91.6	91.8	92.3	92.1	92.4	91.4	92.3	92.6	92.2
Activity rate (% population aged 55-64)	56.8	57.4	61.2	63.0	66.0	65.6	65.5	66.4	66.8	68.8
Unemployment aged 15+ (1,000)	135	142	153	142	121	112	132	152	122	133
Unemployment rate (% labor force 15+)	5.9	6.1	6.5	5.9	5.0	4.6	5.5	6.3	4.9	5.3
Youth unemployment rate (% labor force 15-24)	10.6	11.1	12.1	10.8	9.4	9.2	11.3	10.7	9.5	10.2
NEET rate (% population aged 15-24)	8.0	7.7	8.0	7.0	6.6	7.0	9.0	8.5	8.2	8.6
Long-term unemployment rate (% labor force 15+)	1.7	1.9	2.2	2.0	1.5	1.2	1.5	2.1	1.3	1.3
Share of long-term unemployed (% of total)	28.2	31.8	34.3	33.7	29.0	26.3	26.6	32.9	25.7	26.7
Unemployment rate, low educated 15+ (ISCED 0-2)	13.0	12.9	14.7	15.0	13.2	12.5	13.9	15.1	11.6	12.8
Unemployment rate, medium educated 15+ (ISCED 3-4)	5.3	5.8	6.1	5.5	4.3	4.0	5.1	5.6	4.4	5.1
Unemployment rate, high educated 15+ (ISCED 5-8)	3.8	4.0	3.8	3.1	3.1	2.7	3.0	4.0	3.2	3.0

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Female										
Total population (1,000)	4,368	4,406	4,444	4,472	4,493	4,512	4,529	4,545	4,590	4,631
Working-age population aged 15+ (1,000)	3,306	3,313	3,330	3,336	3,345	3,353	3,366	3,384	3,416	3,444
Employment aged 15+ (1,000)	1,934	1,950	1,981	2,001	2,018	2,035	2,014	2,013	2,087	2,110
Employment rate (% population aged 15+)	58.5	58.9	59.5	60.0	60.3	60.7	59.8	59.5	61.1	61.3
Employment rate (% population aged 15-64)	66.9	67.1	67.7	68.2	68.6	69.2	68.3	68.1	70.0	70.3
Employment rate (% population aged 20-64)	70.1	70.2	70.9	71.4	71.7	72.4	71.5	71.3	73.4	73.3
Employment rate (% population aged 15-24)	49.9	48.7	49.0	49.0	48.7	48.4	47.8	45.7	48.2	49.8
Employment rate (% population aged 25-29)	77.2	78.7	79.8	79.2	77.3	78.2	77.1	78.5	80.5	80.4
Employment rate (% population aged 25-54)	80.3	80.3	80.6	81.0	81.3	82.1	80.8	80.7	83.0	83.0
Employment rate (% population aged 55-64)	36.4	38.8	41.1	42.8	44.8	46.0	47.0	48.3	49.0	49.4
Employment rate for low skilled 15-64 (ISCED 0-2)	44.3	44.1	43.8	43.4	44.5	43.9	43.3	42.8	42.5	44.3
Employment rate for medium skilled 15-64 (ISCED 3-4)	69.8	69.9	70.1	70.6	71.1	71.8	70.1	69.3	72.6	72.4
Employment rate for high skilled 15-64 (ISCED 5-8)	81.3	80.7	81.8	82.0	81.6	81.7	81.7	82.0	83.0	82.5
Self-employed (% of total employment)	8.5	8.6	8.4	8.2	8.1	8.3	8.2	7.9	8.3	8.3
Part-time employment (% of total employment)	46.8	47.3	47.6	47.6	47.4	47.5	47.2	49.6	50.7	50.5
Temporary employment (% of total employees)	9.1	9.0	9.1	9.2	9.3	8.8	8.1	8.7	8.6	8.8
Activity rate (% population aged 15+)	61.8	62.2	63.0	63.2	63.3	63.5	63.1	63.4	64.0	64.4
Activity rate (% population aged 15-64)	70.8	70.9	71.7	71.8	72.0	72.3	72.1	72.6	73.4	73.9
Activity rate (% population aged 15-24)	55.4	54.1	54.6	53.7	53.8	52.5	52.8	51.5	53.2	55.7
Activity rate (% population aged 25-54)	84.5	84.4	84.9	85.0	84.8	85.7	85.1	85.6	86.6	86.8
Activity rate (% population aged 55-64)	37.5	40.2	42.7	44.5	46.6	47.4	48.8	50.7	50.5	50.9
Unemployment aged 15+ (1,000)	110	110	117	106	99	93	111	131	99	108
Unemployment rate (% labor force 15+)	5.4	5.3	5.6	5.0	4.7	4.4	5.2	6.1	4.5	4.9
Youth unemployment rate (% labor force 15-24)	9.9	10.0	10.2	8.7	9.4	7.8	9.5	11.2	9.5	10.7
NEET rate (% population aged 15-24)	7.4	7.3	7.4	6.0	7.1	7.3	6.9	8.5	7.9	8.8
Long-term unemployment rate (% labor force 15+)	1.4	1.4	1.6	1.7	1.3	1.0	1.2	1.8	1.1	1.0
Share of long-term unemployed (% of total)	25.9	25.9	29.7	33.1	28.7	23.7	22.0	29.9	24.7	25.7
Unemployment rate, low educated 15+ (ISCED 0-2)	10.0	9.6	10.9	11.1	9.6	8.8	10.6	12.6	11.2	10.7
Unemployment rate, medium educated 15+ (ISCED 3-4)	4.7	5.0	5.4	4.5	4.1	3.9	4.9	6.0	3.8	4.2
Unemployment rate, high educated 15+ (ISCED 5-8)	4.2	3.7	3.4	3.2	3.4	3.4	3.8	4.0	3.2	3.7

Austria: Earnings and unit labor costs

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Wages										
Average monthly gross wages, NCU	2,942	3,001	3,072	3,122	3,206	3,301	3,359	3,462	3,636	3,895
nominal annual growth in %	1.6	2.0	2.4	1.6	2.7	3.0	1.8	3.0	5.0	7.1
real annual growth in % (HICP deflated)	0.1	1.1	1.4	-0.4	0.8	1.5	0.4	0.2	-3.4	0.0
Average monthly gross wages, EUR	2,942	3,001	3,072	3,122	3,206	3,301	3,359	3,462	3,636	3,895
Average monthly gross wages, EUR (PPP)	2,639	2,701	2,747	2,766	2,840	2,907	2,944	3,059	3,238	3,439
Average monthly net wages, NCU	.	.	.	.	.	.	.	.	.	
nominal annual growth in %	.	.	.	.	.	.	.	.	.	
real annual growth in % (CPI deflated)	.	.	.	.	.	.	.	.	.	
Average monthly net wages, EUR	.	.	.	.	.	.	.	.	.	
Average monthly net wages, EUR (PPP)	.	.	.	.	.	.	.	.	.	
Minimum wages as of January 1st										
Monthly gross minimum wages, NCU	.	.	.	.	.	.	.	.	.	.
Monthly gross minimum wages, EUR (ER)	.	.	.	.	.	.	.	.	.	.
Monthly gross minimum wages, EUR (PPP)	.	.	.	.	.	.	.	.	.	.
Unit labor costs (ULC)										
Nominal ULC in EUR, annual growth in %	1.0	1.6	2.0	0.3	1.6	2.0	7.2	-0.4	2.9	9.1
Real ULC in EUR, annual growth in %	-1.0	-0.7	0.1	-0.7	-0.2	0.5	4.5	-2.3	-1.8	2.3

Notes: Data based on a continuous quarterly survey. Population aged 15+ refers to the population 15-74. The population data are based on registration data (a census is no longer carried out). From 2021, new methodology in line with the Integrated European Social Statistics Regulation (IESS); growth rates are not fully comparable. Education groups refer to ISCED 2011.
Average monthly gross wages refer to National Accounts (gross wages per employee, domestic concept, divided by 12 months).
In Austria 'minimum wages' are set by sectoral collective agreements (no national minimum wage).

Source: SEE Jobs Gateway, based on data provided by national statistical offices and Eurostat.

Bulgaria: Labor market indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total										
Total population (1,000)	7,224	7,178	7,128	7,076	7,025	6,976	6,934	6,878	6,465	6,447
Working-age population aged 15+ (1,000)	5,609	5,563	5,510	5,455	5,398	5,348	5,298	5,253	4,901	4,863
Employment aged 15+ (1,000)	2,978	3,029	3,014	3,146	3,148	3,229	3,117	3,073	2,935	2,924
Employment rate (% population aged 15+)	53.1	54.4	54.7	57.7	58.3	60.4	58.8	58.5	59.9	60.1
Employment rate (% population aged 15-64)	61.0	62.9	63.4	66.9	67.7	70.1	68.5	68.1	70.6	70.7
Employment rate (% population aged 20-64)	65.1	67.1	67.7	71.3	72.4	75.0	73.4	73.2	75.9	76.2
Employment rate (% population aged 15-24)	20.7	20.3	19.8	22.9	20.7	21.8	18.8	16.8	19.4	18.8
Employment rate (% population aged 25-29)	64.2	66.6	64.7	69.0	69.9	72.9	70.4	69.0	73.6	75.5
Employment rate (% population aged 25-54)	74.5	76.1	76.2	79.4	80.1	82.3	80.5	80.4	82.6	83.0
Employment rate (% population aged 55-64)	50.0	53.0	54.5	58.2	60.7	64.4	64.2	64.8	68.3	69.5
Employment rate for low skilled 15-64 (ISCED 0-2)	29.7	29.6	29.6	33.4	34.8	38.4	35.2	34.0	36.9	36.3
Employment rate for medium skilled 15-64 (ISCED 3-4)	65.2	67.2	67.8	71.7	72.4	74.6	72.7	71.5	73.5	72.9
Employment rate for high skilled 15-64 (ISCED 5-8)	81.7	84.0	84.2	85.5	86.1	88.5	87.6	88.7	89.8	90.2
Self-employed (% of total employment)	11.8	11.4	11.1	11.1	10.9	10.2	10.4	10.4	10.6	10.8
Part-time employment (% of total employment)	2.6	2.4	2.2	2.4	2.0	2.1	2.0	1.7	1.8	1.6
Temporary employment (% of total employees)	5.3	4.4	4.2	4.5	4.1	4.4	3.6	3.5	3.9	3.1
Activity rate (% population aged 15+)	59.9	59.9	59.2	61.5	61.5	63.0	62.0	61.8	62.5	62.8
Activity rate (% population aged 15-64)	69.0	69.3	68.7	71.3	71.5	73.2	72.2	72.0	73.7	73.9
Activity rate (% population aged 15-24)	27.2	26.0	23.9	26.3	23.7	23.9	21.9	20.0	21.7	21.4
Activity rate (% population aged 25-54)	83.3	83.2	82.0	84.3	84.3	85.8	84.7	84.7	86.1	86.6
Activity rate (% population aged 55-64)	56.6	58.0	58.8	61.8	63.7	66.9	67.1	67.9	70.8	72.1
Unemployment aged 15+ (1,000)	385	305	247	207	173	143	169	171	127	132
Unemployment rate (% labor force 15+)	11.4	9.2	7.6	6.2	5.2	4.2	5.1	5.3	4.2	4.3
Youth unemployment rate (% labor force 15-24)	23.8	21.7	17.2	12.9	12.7	8.9	14.2	15.9	10.7	12.1
NEET rate (% population aged 15-24)	20.2	19.3	18.2	15.3	15.0	13.7	14.4	14.0	12.3	11.4
Long-term unemployment rate (% labor force 15+)	6.9	5.6	4.5	3.4	3.1	2.4	2.3	2.6	2.2	2.3
Share of long-term unemployed (% of total)	60.5	61.3	59.2	55.1	58.8	57.1	45.4	49.4	54.0	52.0
Unemployment rate, low educated 15+ (ISCED 0-2)	28.3	25.1	22.2	18.1	15.5	13.1	13.9	16.0	12.7	13.0
Unemployment rate, medium educated 15+ (ISCED 3-4)	10.7	8.3	6.7	5.3	4.5	3.4	4.7	4.9	3.9	4.1
Unemployment rate, high educated 15+ (ISCED 5-8)	5.1	4.0	3.4	3.0	2.3	1.9	2.5	2.0	1.6	1.9
Male										
Total population (1,000)	3,513	3,490	3,464	3,436	3,409	3,383	3,360	3,331	3,109	3,099
Working-age population aged 15+ (1,000)	2,766	2,743	2,717	2,689	2,661	2,636	2,611	2,589	2,405	2,388
Employment aged 15+ (1,000)	1,575	1,606	1,606	1,680	1,683	1,730	1,673	1,647	1,559	1,550
Employment rate (% population aged 15+)	56.9	58.5	59.1	62.5	63.2	65.6	64.1	63.6	64.8	64.9
Employment rate (% population aged 15-64)	63.9	65.9	66.7	70.6	71.5	74.1	72.5	72.0	74.0	73.9
Employment rate (% population aged 20-64)	68.1	70.4	71.3	75.3	76.5	79.3	77.8	77.3	79.6	79.9
Employment rate (% population aged 15-24)	24.0	24.0	23.1	26.5	24.2	25.0	21.7	20.3	22.7	21.2
Employment rate (% population aged 25-29)	69.4	71.5	71.7	77.7	77.6	80.9	78.4	75.0	79.0	81.1
Employment rate (% population aged 25-54)	76.4	78.5	79.2	82.8	83.5	86.0	84.4	83.9	85.4	85.9
Employment rate (% population aged 55-64)	54.5	56.8	58.3	62.5	65.4	69.2	69.4	69.9	73.3	74.0
Employment rate for low skilled 15-64 (ISCED 0-2)	34.3	34.6	35.4	40.1	41.7	46.2	42.7	41.3	43.0	43.3
Employment rate for medium skilled 15-64 (ISCED 3-4)	69.1	71.5	72.3	76.2	77.0	78.9	77.7	76.4	78.2	77.1
Employment rate for high skilled 15-64 (ISCED 5-8)	84.5	86.7	86.7	87.9	89.1	91.7	89.9	90.7	91.4	92.2
Self-employed (% of total employment)	14.9	14.4	13.7	13.8	13.7	12.8	13.1	12.9	13.2	13.1
Part-time employment (% of total employment)	2.3	2.0	1.9	2.1	1.8	1.8	1.7	1.4	1.5	1.5
Temporary employment (% of total employees)	5.7	4.8	4.5	5.0	4.4	4.7	4.0	3.9	4.2	3.3
Activity rate (% population aged 15+)	64.9	64.9	64.3	66.7	67.1	68.7	67.8	67.3	67.8	67.9
Activity rate (% population aged 15-64)	72.9	73.2	72.7	75.4	75.9	77.6	76.8	76.2	77.4	77.3
Activity rate (% population aged 15-24)	31.5	30.5	28.0	30.5	27.9	27.6	25.3	24.2	25.5	24.3
Activity rate (% population aged 25-54)	86.2	86.4	85.7	88.0	88.3	90.0	89.1	88.4	89.1	89.7
Activity rate (% population aged 55-64)	62.5	62.7	63.4	66.8	69.1	72.0	72.6	73.5	76.2	76.8
Unemployment aged 15+ (1,000)	222	174	142	114	102	82	96	96	71	72
Unemployment rate (% labor force 15+)	12.3	9.8	8.1	6.4	5.7	4.5	5.4	5.5	4.3	4.4
Youth unemployment rate (% labor force 15-24)	23.8	21.2	17.4	13.3	13.2	9.4	14.6	16.1	10.9	12.8
NEET rate (% population aged 15-24)	19.2	18.6	17.1	13.6	13.3	12.7	13.7	12.7	11.5	11.3
Long-term unemployment rate (% labor force 15+)	7.7	6.1	4.8	3.6	3.4	2.6	2.6	2.7	2.4	2.4
Share of long-term unemployed (% of total)	62.6	62.4	59.2	56.7	60.4	57.9	47.7	50.1	55.6	53.5
Unemployment rate, low educated 15+ (ISCED 0-2)	28.5	24.3	21.4	16.4	15.0	12.2	12.6	14.6	11.8	11.0
Unemployment rate, medium educated 15+ (ISCED 3-4)	10.8	8.5	6.8	5.3	4.8	3.7	4.9	4.9	3.8	4.3
Unemployment rate, high educated 15+ (ISCED 5-8)	5.5	4.0	3.5	3.3	2.5	1.8	2.6	2.0	1.9	1.7

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Female										
Total population (1,000)	3,710	3,688	3,664	3,640	3,616	3,593	3,574	3,547	3,356	3,348
Working-age population aged 15+ (1,000)	2,843	2,820	2,794	2,766	2,738	2,712	2,687	2,664	2,496	2,475
Employment aged 15+ (1,000)	1,403	1,423	1,408	1,466	1,465	1,499	1,443	1,426	1,376	1,374
Employment rate (% population aged 15+)	49.4	50.5	50.4	53.0	53.5	55.3	53.7	53.5	55.1	55.5
Employment rate (% population aged 15-64)	58.2	59.8	60.0	63.1	63.9	66.0	64.3	64.2	67.2	67.4
Employment rate (% population aged 20-64)	62.0	63.8	64.0	67.3	68.3	70.7	68.9	68.9	72.1	72.6
Employment rate (% population aged 15-24)	17.3	16.5	16.3	19.1	17.0	18.4	15.7	13.1	15.9	16.1
Employment rate (% population aged 25-29)	58.8	61.4	57.2	59.9	61.7	64.4	62.1	62.6	67.9	69.8
Employment rate (% population aged 25-54)	72.5	73.6	73.0	75.8	76.5	78.3	76.4	76.7	79.6	79.9
Employment rate (% population aged 55-64)	46.0	49.5	51.0	54.3	56.4	59.9	59.4	60.1	63.6	65.3
Employment rate for low skilled 15-64 (ISCED 0-2)	24.8	24.2	23.4	26.2	27.3	30.1	27.2	26.5	30.5	28.7
Employment rate for medium skilled 15-64 (ISCED 3-4)	60.3	61.9	62.3	66.1	66.9	69.3	66.7	65.5	67.7	67.8
Employment rate for high skilled 15-64 (ISCED 5-8)	79.9	82.3	82.6	83.9	84.1	86.4	86.0	87.3	88.8	88.9
Self-employed (% of total employment)	8.3	7.9	8.1	7.9	7.6	7.2	7.3	7.5	7.8	8.2
Part-time employment (% of total employment)	3.0	2.8	2.5	2.7	2.3	2.4	2.4	2.1	2.0	1.8
Temporary employment (% of total employees)	4.9	4.1	3.7	4.0	3.8	4.0	3.2	3.0	3.5	3.0
Activity rate (% population aged 15+)	55.1	55.1	54.2	56.4	56.1	57.5	56.4	56.4	57.4	58.0
Activity rate (% population aged 15-64)	65.0	65.4	64.6	67.1	67.0	68.7	67.6	67.7	70.0	70.4
Activity rate (% population aged 15-24)	22.6	21.2	19.6	21.8	19.3	20.0	18.2	15.5	17.7	18.2
Activity rate (% population aged 25-54)	80.2	79.8	78.2	80.5	80.2	81.4	80.1	80.7	82.9	83.4
Activity rate (% population aged 55-64)	51.4	53.8	54.6	57.3	58.7	62.2	62.0	62.7	65.7	67.7
Unemployment aged 15+ (1,000)	163	131	106	93	72	61	72	76	57	61
Unemployment rate (% labor force 15+)	10.4	8.4	7.0	6.0	4.7	3.9	4.8	5.0	3.9	4.2
Youth unemployment rate (% labor force 15-24)	23.7	22.2	17.0	12.5	11.8	8.3	13.8	15.4	10.4	11.2
NEET rate (% population aged 15-24)	21.4	20.0	19.4	17.2	16.8	14.8	15.2	15.4	13.1	11.6
Long-term unemployment rate (% labor force 15+)	6.0	5.0	4.1	3.2	2.6	2.2	2.0	2.4	2.1	2.1
Share of long-term unemployed (% of total)	57.7	59.8	59.0	53.1	56.5	56.1	42.2	48.6	52.1	50.3
Unemployment rate, low educated 15+ (ISCED 0-2)	28.1	26.3	23.5	20.7	16.4	14.5	16.1	18.4	14.0	16.2
Unemployment rate, medium educated 15+ (ISCED 3-4)	10.4	8.0	6.6	5.3	4.1	3.0	4.4	4.9	4.1	4.0
Unemployment rate, high educated 15+ (ISCED 5-8)	4.8	3.9	3.3	2.9	2.2	1.9	2.4	1.9	1.3	2.0

Bulgaria: Earnings and unit labor costs

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Wages										
Average monthly gross wages, NCU	822	878	948	1,037	1,146	1,267	1,391	1,561	1,770	2,012
nominal annual growth in %	6.0	6.8	8.0	9.4	10.5	10.6	9.7	12.3	13.4	13.7
real annual growth in % (HICP deflated)	7.5	7.0	8.9	7.2	7.5	7.2	7.9	8.7	-1.7	3.9
Average monthly gross wages, EUR	420	449	485	530	586	648	711	798	905	1,029
Average monthly gross wages, EUR (PPP)	890	930	988	1,053	1,143	1,219	1,316	1,433	1,501	1,705
Average monthly net wages, NCU	.	.	.	.	.	.	.	.	.	.
nominal annual growth in %	.	.	.	.	.	.	.	.	.	.
real annual growth in % (CPI deflated)	.	.	.	.	.	.	.	.	.	.
Average monthly net wages, EUR	.	.	.	.	.	.	.	.	.	.
Average monthly net wages, EUR (PPP)	.	.	.	.	.	.	.	.	.	.
Minimum wages as of January 1st										
Monthly gross minimum wages, NCU	340	360	420	460	510	560	610	650	650	780
Monthly gross minimum wages, EUR (ER)	174	184	215	235	261	286	312	332	332	399
Monthly gross minimum wages, EUR (PPP)	352	370	432	459	503	534	565	595	568	668
Unit labor costs (ULC)										
Nominal ULC in EUR, annual growth in %	6.6	5.1	4.3	11.1	7.8	9.3	9.4	3.6	11.4	11.2
Real ULC in EUR, annual growth in %	5.2	2.1	1.0	6.0	3.4	3.8	4.9	-3.2	-3.9	2.9

Notes: Data based on a continuous quarterly survey. Population aged 15+ refers to the population 15-74. Until 2021 the census 2011 applies, from 2022 the census 2021. From 2021, new methodology in line with the Integrated European Social Statistics Regulation (IESS); growth rates are not fully comparable. Education groups refer to ISCED 2011.

Source: SEE Jobs Gateway, based on data provided by national statistical offices and Eurostat.

Croatia: Labor market indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total										
Total population (1,000)	4,236	4,208	4,172	4,130	4,091	4,067	4,047	4,015	4,003	3,856
Working-age population aged 15+ (1,000)	3,243	3,210	3,185	3,162	3,142	3,125	3,113	3,104	3,099	2,903
Employment aged 15+ (1,000)	1,562	1,582	1,587	1,623	1,651	1,675	1,652	1,675	1,703	1,600
Employment rate (% population aged 15+)	48.2	49.3	49.8	51.3	52.5	53.6	53.1	54.0	54.9	55.1
Employment rate (% population aged 15-64)	54.6	56.0	56.9	58.9	60.6	62.1	62.0	63.4	64.9	65.7
Employment rate (% population aged 20-64)	59.2	60.6	61.4	63.6	65.2	66.7	66.9	68.2	69.7	70.7
Employment rate (% population aged 15-24)	18.3	19.1	25.6	25.9	25.6	27.7	25.6	25.8	28.7	25.3
Employment rate (% population aged 25-29)	64.5	66.0	66.2	68.7	70.9	73.3	71.3	71.9	75.2	74.1
Employment rate (% population aged 25-54)	71.2	72.3	72.4	74.9	77.0	78.3	78.3	79.4	80.6	81.7
Employment rate (% population aged 55-64)	36.2	39.2	38.1	40.4	42.8	44.0	45.5	48.6	50.1	51.7
Employment rate for low skilled 15-64 (ISCED 0-2)	26.7	28.0	27.4	24.4	25.8	26.7	25.3	27.4	26.2	24.3
Employment rate for medium skilled 15-64 (ISCED 3-4)	57.0	58.0	59.5	62.6	63.9	65.5	64.9	66.1	68.0	67.7
Employment rate for high skilled 15-64 (ISCED 5-8)	78.4	78.7	79.7	81.5	81.5	81.8	83.4	84.1	84.7	86.5
Self-employed (% of total employment)	14.0	13.6	12.4	11.0	10.7	11.0	11.3	11.5	12.2	12.6
Part-time employment (% of total employment)	6.0	6.8	6.4	5.5	5.7	5.4	5.2	5.4	5.4	4.5
Temporary employment (% of total employees)	16.9	20.3	22.2	20.7	19.9	18.2	15.4	13.6	14.7	11.3
Activity rate (% population aged 15+)	58.2	58.8	57.4	57.8	57.4	57.4	57.4	58.4	59.1	58.7
Activity rate (% population aged 15-64)	66.1	66.9	65.6	66.4	66.3	66.5	67.1	68.7	69.9	70.1
Activity rate (% population aged 15-24)	33.6	33.2	37.2	35.7	33.5	33.2	32.5	33.0	35.0	31.2
Activity rate (% population aged 25-54)	84.1	84.5	82.0	83.3	83.4	83.6	83.9	85.3	86.0	86.4
Activity rate (% population aged 55-64)	41.0	44.3	42.2	43.6	44.8	45.5	47.8	50.8	52.7	54.1
Unemployment aged 15+ (1,000)	327	306	240	205	152	119	135	138	128	104
Unemployment rate (% labor force 15+)	17.3	16.2	13.1	11.2	8.5	6.6	7.5	7.6	7.0	6.1
Youth unemployment rate (% labor force 15-24)	45.5	42.3	31.3	27.4	23.7	16.6	21.1	21.9	18.0	18.9
NEET rate (% population aged 15-24)	19.3	18.1	16.9	15.4	13.6	11.8	12.2	12.7	11.9	9.8
Long-term unemployment rate (% labor force 15+)	10.1	10.3	6.8	4.7	3.5	2.5	2.2	2.8	2.5	2.2
Share of long-term unemployed (% of total)	58.4	63.6	51.5	42.1	41.6	37.2	28.9	37.0	35.8	35.3
Unemployment rate, low educated 15+ (ISCED 0-2)	25.7	21.5	17.4	19.8	11.6	9.3	10.2	10.6	11.9	12.1
Unemployment rate, medium educated 15+ (ISCED 3-4)	18.7	18.1	14.6	11.7	9.2	6.9	8.2	8.5	7.2	6.8
Unemployment rate, high educated 15+ (ISCED 5-8)	9.6	9.2	7.8	7.1	6.0	5.3	5.4	4.9	5.3	3.6
Male										
Total population (1,000)	2,044	2,031	2,014	1,994	1,977	1,972	1,968	1,934	1,932	1,868
Working-age population aged 15+ (1,000)	1,596	1,579	1,567	1,556	1,547	1,540	1,535	1,531	1,529	1,432
Employment aged 15+ (1,000)	847	854	858	880	891	905	897	905	915	850
Employment rate (% population aged 15+)	53.1	54.1	54.8	56.5	57.6	58.8	58.5	59.1	59.8	59.3
Employment rate (% population aged 15-64)	59.1	60.3	61.4	63.8	65.4	67.0	67.1	68.2	69.5	69.3
Employment rate (% population aged 20-64)	64.2	65.4	66.2	68.9	70.3	72.0	72.5	73.4	74.5	74.6
Employment rate (% population aged 15-24)	21.2	22.4	28.9	29.8	30.5	33.2	31.9	31.1	34.1	30.7
Employment rate (% population aged 25-29)	69.0	71.3	70.3	73.2	77.8	78.9	78.0	78.2	83.2	78.0
Employment rate (% population aged 25-54)	74.5	75.4	76.3	78.7	80.4	81.7	82.0	83.4	84.4	84.4
Employment rate (% population aged 55-64)	45.8	48.2	45.1	49.0	51.0	52.6	53.4	55.1	55.7	56.2
Employment rate for low skilled 15-64 (ISCED 0-2)	30.3	32.2	33.0	29.8	30.5	31.3	31.1	34.2	31.0	28.3
Employment rate for medium skilled 15-64 (ISCED 3-4)	62.5	63.1	64.2	68.1	69.8	71.3	70.7	72.1	74.2	73.0
Employment rate for high skilled 15-64 (ISCED 5-8)	78.4	79.0	81.0	82.9	82.2	83.3	85.7	84.1	85.0	87.5
Self-employed (% of total employment)	17.4	17.3	15.7	13.3	12.8	13.8	14.7	15.2	15.9	16.6
Part-time employment (% of total employment)	4.8	5.6	5.2	4.4	4.3	3.8	4.0	4.7	4.5	3.9
Temporary employment (% of total employees)	16.7	20.5	22.0	20.7	19.4	17.0	14.4	11.8	12.5	9.7
Activity rate (% population aged 15+)	63.5	64.0	62.6	63.2	62.4	62.7	63.2	63.8	63.8	62.9
Activity rate (% population aged 15-64)	70.9	71.6	70.3	71.5	70.9	71.5	72.6	73.6	74.1	73.5
Activity rate (% population aged 15-24)	38.5	38.2	41.9	40.9	37.9	38.8	39.2	38.4	40.0	37.0
Activity rate (% population aged 25-54)	86.6	86.9	85.2	86.7	86.4	86.9	88.1	89.3	89.5	88.7
Activity rate (% population aged 55-64)	52.1	54.9	50.7	52.8	53.4	54.2	55.7	57.4	58.3	58.4
Unemployment aged 15+ (1,000)	167	157	123	105	74	60	73	71	60	51
Unemployment rate (% labor force 15+)	16.5	15.6	12.5	10.6	7.7	6.2	7.5	7.3	6.2	5.6
Youth unemployment rate (% labor force 15-24)	44.9	41.4	31.3	27.1	19.6	14.6	18.7	18.9	14.8	17.2
NEET rate (% population aged 15-24)	21.9	20.5	19.0	15.4	13.2	11.4	12.2	12.1	12.2	10.1
Long-term unemployment rate (% labor force 15+)	11.2	12.9	9.3	5.0	4.0	3.0	3.6	3.8	2.7	2.3
Share of long-term unemployed (% of total)	68.0	82.9	73.9	46.7	52.5	48.1	47.5	52.7	43.4	40.1
Unemployment rate, low educated 15+ (ISCED 0-2)	24.9	21.4	17.0	19.5	11.8	10.8	10.0	9.5	10.1	11.7
Unemployment rate, medium educated 15+ (ISCED 3-4)	17.3	16.6	13.7	10.5	7.9	6.2	8.1	7.8	6.0	6.2
Unemployment rate, high educated 15+ (ISCED 5-8)	8.9	9.2	6.8	7.3	5.4	4.4	4.9	4.7	5.2	2.6

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Female										
Total population (1,000)	2,192	2,177	2,158	2,136	2,114	2,095	2,079	2,082	2,072	1,989
Working-age population aged 15+ (1,000)	1,647	1,631	1,618	1,605	1,594	1,585	1,578	1,573	1,570	1,470
Employment aged 15+ (1,000)	715	728	729	743	759	770	755	770	788	751
Employment rate (% population aged 15+)	43.4	44.6	45.0	46.3	47.6	48.5	47.8	48.9	50.2	51.0
Employment rate (% population aged 15-64)	50.0	51.6	52.4	54.0	55.9	57.1	56.9	58.6	60.4	62.1
Employment rate (% population aged 20-64)	54.2	55.9	56.6	58.3	60.1	61.5	61.3	62.9	65.0	66.8
Employment rate (% population aged 15-24)	15.3	15.7	22.2	21.8	20.3	21.9	19.0	20.0	23.0	19.5
Employment rate (% population aged 25-29)	59.8	60.5	62.0	64.2	63.8	67.5	64.3	65.5	66.8	69.7
Employment rate (% population aged 25-54)	67.9	69.3	68.5	71.1	73.5	74.9	74.5	75.4	76.6	78.9
Employment rate (% population aged 55-64)	27.3	30.7	31.6	32.3	35.2	35.9	38.2	42.7	45.0	47.6
Employment rate for low skilled 15-64 (ISCED 0-2)	23.8	24.8	22.9	19.9	21.7	22.9	20.4	21.2	21.8	20.5
Employment rate for medium skilled 15-64 (ISCED 3-4)	50.6	52.0	54.0	56.2	57.0	58.4	57.9	59.1	60.7	61.3
Employment rate for high skilled 15-64 (ISCED 5-8)	78.3	78.4	78.7	80.4	81.0	80.8	81.7	84.1	84.5	85.9
Self-employed (% of total employment)	9.9	9.3	8.4	8.3	8.2	7.7	7.3	7.0	8.0	8.0
Part-time employment (% of total employment)	7.5	8.2	7.9	6.7	7.3	7.4	6.7	6.2	6.5	5.2
Temporary employment (% of total employees)	17.2	20.1	22.5	20.8	20.6	19.5	16.5	15.5	17.1	12.9
Activity rate (% population aged 15+)	53.1	53.7	52.3	52.6	52.5	52.3	51.8	53.2	54.5	54.7
Activity rate (% population aged 15-64)	61.3	62.3	60.9	61.4	61.7	61.5	61.6	63.7	65.6	66.6
Activity rate (% population aged 15-24)	28.5	28.0	32.3	30.2	28.8	27.3	25.3	27.2	29.7	25.0
Activity rate (% population aged 25-54)	81.5	82.1	78.8	79.9	80.3	80.2	79.8	81.2	82.5	83.9
Activity rate (% population aged 55-64)	30.6	34.4	34.2	35.1	36.7	37.5	40.4	44.6	47.5	50.1
Unemployment aged 15+ (1,000)	160	149	117	101	78	59	62	67	68	53
Unemployment rate (% labor force 15+)	18.3	16.9	13.8	11.9	9.4	7.2	7.6	8.0	7.9	6.6
Youth unemployment rate (% labor force 15-24)	46.4	43.7	31.3	27.8	29.4	19.9	25.0	26.4	22.7	21.8
NEET rate (% population aged 15-24)	16.7	15.6	14.6	15.3	14.0	12.1	12.3	13.3	11.6	9.6
Long-term unemployment rate (% labor force 15+)	11.0	10.3	6.6	4.0	3.7	2.2	1.7	3.0	2.2	2.1
Share of long-term unemployed (% of total)	60.1	61.0	47.6	33.5	40.0	30.1	22.4	37.3	28.2	31.4
Unemployment rate, low educated 15+ (ISCED 0-2)	26.5	21.7	17.9	20.3	11.4	7.5	10.4	12.1	14.0	12.5
Unemployment rate, medium educated 15+ (ISCED 3-4)	20.6	20.0	15.9	13.4	10.8	7.9	8.5	9.4	8.8	7.7
Unemployment rate, high educated 15+ (ISCED 5-8)	10.2	9.3	8.6	7.0	6.5	5.9	5.7	5.0	5.4	4.3

Croatia: Earnings and unit labor costs

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Wages										
Average monthly gross wages, NCU	1,056	1,069	1,029	1,069	1,121	1,163	1,223	1,274	1,380	1,584
nominal annual growth in %	0.2	1.3	1.9	3.9	4.9	3.8	2.5	4.2	8.3	14.8
real annual growth in % (HICP deflated)	0.4	1.8	3.0	2.8	3.3	3.0	2.4	1.6	-2.3	6.3
Average monthly gross wages, EUR	1,042	1,058	1,029	1,079	1,139	1,182	1,223	1,275	1,380	1,584
Average monthly gross wages, EUR (PPP)	1,608	1,648	1,592	1,664	1,730	1,799	1,904	1,972	2,048	2,292
Average monthly net wages, NCU	734	758	755	794	828	857	898	946	1,016	1,148
nominal annual growth in %	0.3	3.2	1.6	5.3	4.3	3.4	2.7	5.4	7.4	13.0
real annual growth in % (CPI deflated)	0.5	3.7	2.7	4.2	2.8	2.6	2.6	2.7	-3.1	4.6
Average monthly net wages, EUR	725	750	755	802	841	870	897	947	1,016	1,148
Average monthly net wages, EUR (PPP)	1,119	1,169	1,168	1,236	1,278	1,325	1,397	1,464	1,508	1,661
Minimum wages as of January 1st										
Monthly gross minimum wages, NCU	401	402	414	435	457	498	539	564	622	700
Monthly gross minimum wages, EUR (ER)	396	396	408	434	463	506	546	563	624	700
Monthly gross minimum wages, EUR (PPP)	578	587	604	634	657	710	762	797	847	923
Unit labor costs (ULC)										
Nominal ULC in EUR, annual growth in %	2.9	0.5	-0.1	3.8	4.3	2.1	8.5	-6.2	2.6	12.0
Real ULC in EUR, annual growth in %	2.7	0.4	-0.1	2.6	2.2	0.1	7.6	-8.2	-5.0	0.2

Notes: Data based on a continuous quarterly survey. Population aged 15+ refers to the population 15-74. Until 2022 the census 2011 applies, from 2023 the census 2021. From 2021, new methodology in line with the Integrated European Social Statistics Regulation (IESS); growth rates are not fully comparable. Education groups refer to ISCED 2011.

From 2016 wage data based on tax administration data, survey data before. From 2020 wages earners are expressed in full-time equivalents (FTE), before that, employees receiving compensation, except those working less than 80 hours per month. In both cases growth rates comparable. Euro-introduction on 1 Jan 2023: Time series in HRK (NCU) have been divided by the conversion factor 7.5345 (HRK per EUR) to EUR-HRK.

Source: SEE Jobs Gateway, based on data provided by national statistical offices and Eurostat.

Hungary: Labor market indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total										
Total population (1,000)	9,866	9,843	9,814	9,788	9,776	9,771	9,750	9,710	9,699	9,684
Working-age population aged 15+ (1,000)	7,573	7,538	7,508	7,460	7,432	7,419	7,409	7,359	7,327	7,311
Employment aged 15+ (1,000)	4,101	4,211	4,352	4,421	4,470	4,512	4,461	4,635	4,696	4,724
Employment rate (% population aged 15+)	54.1	55.9	58.0	59.3	60.1	60.8	60.2	63.0	64.1	64.6
Employment rate (% population aged 15-64)	61.8	63.9	66.5	68.2	69.2	70.1	69.7	73.1	74.4	74.8
Employment rate (% population aged 20-64)	66.7	68.9	71.5	73.3	74.4	75.3	75.0	78.8	80.2	80.7
Employment rate (% population aged 15-24)	23.5	25.7	28.1	29.0	29.0	28.5	27.2	27.5	27.6	27.4
Employment rate (% population aged 25-29)	73.0	73.6	75.5	77.5	77.6	77.8	76.3	81.3	83.0	82.2
Employment rate (% population aged 25-54)	79.2	80.6	82.2	83.7	84.1	84.4	82.9	87.0	88.1	87.9
Employment rate (% population aged 55-64)	41.8	45.3	49.8	51.7	54.4	56.7	59.6	62.8	65.6	69.1
Employment rate for low skilled 15-64 (ISCED 0-2)	31.5	33.9	36.6	38.5	39.4	39.4	37.7	39.2	38.7	39.7
Employment rate for medium skilled 15-64 (ISCED 3-4)	66.7	68.8	71.5	73.1	73.7	74.8	74.3	77.1	78.6	78.6
Employment rate for high skilled 15-64 (ISCED 5-8)	80.8	82.1	84.4	84.3	85.1	85.2	85.2	89.9	91.4	91.4
Self-employed (% of total employment)	10.6	10.6	10.4	10.1	10.2	10.6	11.8	12.2	12.2	11.9
Part-time employment (% of total employment)	6.4	6.0	5.2	4.8	4.8	5.2	5.7	5.4	5.1	4.8
Temporary employment (% of total employees)	10.8	11.4	9.7	8.8	7.3	6.6	5.9	5.9	5.5	5.0
Activity rate (% population aged 15+)	58.7	59.9	61.1	61.8	62.5	63.0	62.9	65.6	66.5	67.4
Activity rate (% population aged 15-64)	67.0	68.6	70.1	71.2	71.9	72.6	72.8	76.2	77.2	78.0
Activity rate (% population aged 15-24)	29.5	31.0	32.3	32.4	32.3	32.2	31.2	31.8	30.8	31.4
Activity rate (% population aged 25-54)	85.0	85.8	86.1	86.9	87.0	87.0	86.2	90.1	91.1	91.3
Activity rate (% population aged 55-64)	44.6	48.1	52.1	53.6	55.8	58.0	61.4	64.7	67.7	71.4
Unemployment aged 15+ (1,000)	343	308	235	192	172	160	198	196	176	203
Unemployment rate (% labor force 15+)	7.7	6.8	5.1	4.2	3.7	3.4	4.3	4.1	3.6	4.1
Youth unemployment rate (% labor force 15-24)	20.4	17.3	12.9	10.7	10.2	11.4	12.7	13.5	10.6	12.8
NEET rate (% population aged 15-24)	13.6	11.6	11.0	11.0	10.7	11.0	11.7	10.6	9.9	9.8
Long-term unemployment rate (% labor force 15+)	3.7	3.1	2.4	1.7	1.4	1.1	1.1	1.3	1.2	1.4
Share of long-term unemployed (% of total)	47.5	45.6	46.5	40.4	38.5	31.9	26.2	31.2	34.2	34.9
Unemployment rate, low educated 15+ (ISCED 0-2)	18.5	17.4	13.2	11.1	10.3	9.7	10.9	11.0	11.6	12.9
Unemployment rate, medium educated 15+ (ISCED 3-4)	7.4	6.4	4.8	3.8	3.3	3.0	4.1	4.0	3.3	3.8
Unemployment rate, high educated 15+ (ISCED 5-8)	3.1	2.4	1.8	1.6	1.5	1.5	1.8	1.7	1.5	1.6
Male										
Total population (1,000)	4,700	4,692	4,682	4,673	4,674	4,678	4,672	4,654	4,651	4,649
Working-age population aged 15+ (1,000)	3,654	3,641	3,632	3,613	3,605	3,606	3,608	3,584	3,568	3,563
Employment aged 15+ (1,000)	2,221	2,284	2,363	2,417	2,446	2,480	2,461	2,472	2,492	2,506
Employment rate (% population aged 15+)	60.8	62.7	65.0	66.9	67.9	68.8	68.2	69.0	69.8	70.3
Employment rate (% population aged 15-64)	67.8	70.3	73.0	75.2	76.3	77.3	77.0	77.9	78.8	79.0
Employment rate (% population aged 20-64)	73.5	75.8	78.6	81.0	82.1	83.1	83.1	84.1	85.1	85.3
Employment rate (% population aged 15-24)	26.4	28.1	31.5	32.9	33.4	32.8	31.1	30.9	30.2	30.7
Employment rate (% population aged 25-29)	82.3	83.2	84.4	86.8	86.9	85.8	84.8	85.2	87.9	85.8
Employment rate (% population aged 25-54)	85.3	86.8	88.2	90.1	90.4	90.8	89.8	90.4	91.3	90.9
Employment rate (% population aged 55-64)	49.6	54.4	59.7	62.5	65.5	69.0	71.6	74.1	76.8	79.3
Employment rate for low skilled 15-64 (ISCED 0-2)	36.3	39.9	42.5	44.2	45.8	46.0	43.9	45.0	43.3	45.4
Employment rate for medium skilled 15-64 (ISCED 3-4)	73.1	75.2	78.2	80.2	81.0	82.3	81.9	82.6	84.0	83.7
Employment rate for high skilled 15-64 (ISCED 5-8)	87.1	88.6	90.5	91.6	91.9	93.1	93.5	93.8	94.9	94.3
Self-employed (% of total employment)	13.4	13.0	12.7	11.9	12.1	12.7	14.0	14.5	14.7	14.5
Part-time employment (% of total employment)	4.5	4.4	3.5	3.1	3.1	3.3	3.5	3.5	3.3	3.2
Temporary employment (% of total employees)	11.2	11.6	9.3	8.2	6.7	6.2	5.4	5.7	5.4	5.1
Activity rate (% population aged 15+)	65.7	67.2	68.6	69.6	70.3	71.1	71.1	71.8	72.5	73.3
Activity rate (% population aged 15-64)	73.4	75.3	76.9	78.2	79.1	80.0	80.3	81.1	81.9	82.4
Activity rate (% population aged 15-24)	33.0	34.4	36.1	36.5	37.1	37.3	35.3	35.1	34.0	35.5
Activity rate (% population aged 25-54)	91.2	92.0	92.4	93.3	93.3	93.4	93.1	93.6	94.3	94.2
Activity rate (% population aged 55-64)	53.2	57.8	62.4	64.5	67.1	70.6	74.0	76.6	79.4	82.0
Unemployment aged 15+ (1,000)	182	162	128	96	88	86	104	100	97	107
Unemployment rate (% labor force 15+)	7.6	6.6	5.1	3.8	3.5	3.4	4.1	3.9	3.7	4.1
Youth unemployment rate (% labor force 15-24)	20.0	18.3	12.9	9.7	9.8	12.0	11.9	12.0	11.3	13.4
NEET rate (% population aged 15-24)	12.0	10.4	8.9	7.9	7.6	8.9	9.5	8.2	8.5	8.6
Long-term unemployment rate (% labor force 15+)	3.6	3.1	2.3	1.5	1.4	1.1	1.1	1.2	1.3	1.5
Share of long-term unemployed (% of total)	48.0	47.1	45.8	40.6	40.6	32.1	27.5	31.6	33.7	36.5
Unemployment rate, low educated 15+ (ISCED 0-2)	18.4	16.8	13.7	11.0	10.1	9.4	10.7	10.6	11.8	12.1
Unemployment rate, medium educated 15+ (ISCED 3-4)	7.0	6.0	4.5	3.2	3.0	2.9	3.8	3.5	3.3	3.7
Unemployment rate, high educated 15+ (ISCED 5-8)	2.8	2.2	1.8	1.4	1.2	1.5	1.6	1.7	1.4	1.6

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Female										
Total population (1,000)	5,167	5,151	5,132	5,115	5,102	5,093	5,078	5,056	5,048	5,035
Working-age population aged 15+ (1,000)	3,919	3,897	3,876	3,848	3,827	3,813	3,800	3,775	3,759	3,748
Employment aged 15+ (1,000)	1,880	1,927	1,989	2,004	2,023	2,032	2,000	2,163	2,204	2,219
Employment rate (% population aged 15+)	48.0	49.5	51.3	52.1	52.9	53.3	52.6	57.3	58.6	59.2
Employment rate (% population aged 15-64)	55.9	57.8	60.2	61.3	62.3	63.0	62.3	68.2	69.9	70.5
Employment rate (% population aged 20-64)	60.2	62.1	64.6	65.7	66.8	67.6	67.0	73.5	75.3	76.1
Employment rate (% population aged 15-24)	20.5	23.1	24.6	24.8	24.3	24.0	23.1	23.9	24.8	23.9
Employment rate (% population aged 25-29)	63.3	63.5	66.1	67.6	67.7	69.3	67.2	77.3	77.9	78.5
Employment rate (% population aged 25-54)	73.2	74.4	76.2	77.2	77.7	78.0	75.9	83.4	84.9	84.9
Employment rate (% population aged 55-64)	35.2	37.7	41.5	42.4	44.9	46.2	49.2	52.9	55.7	60.1
Employment rate for low skilled 15-64 (ISCED 0-2)	27.3	28.7	31.5	33.7	33.7	33.4	32.0	33.7	34.3	34.1
Employment rate for medium skilled 15-64 (ISCED 3-4)	59.6	61.6	63.9	65.0	65.4	66.1	65.4	70.6	72.2	72.6
Employment rate for high skilled 15-64 (ISCED 5-8)	76.1	77.3	80.0	78.9	80.0	79.8	79.4	87.2	88.8	89.3
Self-employed (% of total employment)	7.4	7.7	7.8	7.8	7.8	8.1	9.2	9.4	9.4	8.9
Part-time employment (% of total employment)	8.6	8.0	7.3	6.9	6.9	7.5	8.2	7.7	7.1	6.7
Temporary employment (% of total employees)	10.3	11.1	10.2	9.5	8.0	7.2	6.5	6.2	5.7	5.0
Activity rate (% population aged 15+)	52.1	53.2	54.1	54.6	55.1	55.2	55.1	59.8	60.7	61.8
Activity rate (% population aged 15-64)	60.7	62.2	63.5	64.2	64.9	65.3	65.3	71.2	72.4	73.5
Activity rate (% population aged 15-24)	25.9	27.5	28.2	28.2	27.2	26.9	26.9	28.3	27.5	27.2
Activity rate (% population aged 25-54)	78.8	79.6	79.8	80.4	80.7	80.6	79.1	86.6	87.7	88.3
Activity rate (% population aged 55-64)	37.4	39.9	43.5	44.3	46.3	47.2	50.6	54.3	57.4	62.0
Unemployment aged 15+ (1,000)	162	146	107	96	84	74	94	96	80	96
Unemployment rate (% labor force 15+)	7.9	7.0	5.1	4.6	4.0	3.5	4.5	4.2	3.5	4.2
Youth unemployment rate (% labor force 15-24)	20.9	15.9	12.9	12.0	10.7	10.6	14.0	15.5	9.6	12.1
NEET rate (% population aged 15-24)	15.3	12.8	13.3	14.3	14.0	13.2	14.1	13.2	11.4	11.0
Long-term unemployment rate (% labor force 15+)	3.7	3.1	2.4	1.8	1.5	1.1	1.1	1.3	1.2	1.4
Share of long-term unemployed (% of total)	46.8	44.0	47.3	40.1	36.4	31.7	24.8	30.7	34.8	33.2
Unemployment rate, low educated 15+ (ISCED 0-2)	18.7	18.1	12.7	11.3	10.6	10.1	11.2	11.5	11.4	13.9
Unemployment rate, medium educated 15+ (ISCED 3-4)	7.9	6.9	5.1	4.4	3.8	3.2	4.6	4.5	3.4	4.1
Unemployment rate, high educated 15+ (ISCED 5-8)	3.4	2.6	1.8	1.8	1.7	1.6	2.1	1.8	1.5	1.6

Hungary: Earnings and unit labor costs

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Wages										
Average monthly gross wages, NCU th	238	248	263	297	330	356	391	426	500	571
nominal annual growth in %	3.0	4.3	6.1	12.9	11.3	11.4	9.8	8.9	17.4	14.2
real annual growth in % (HICP deflated)	3.2	4.4	5.7	10.3	8.3	7.6	6.3	3.6	2.5	-2.9
Average monthly gross wages, EUR	770	800	845	961	1,035	1,095	1,114	1,188	1,278	1,496
Average monthly gross wages, EUR (PPP)	1,316	1,344	1,384	1,499	1,608	1,669	1,762	1,826	1,977	2,099
Average monthly net wages, NCU th	156	162	175	198	219	237	260	283	332	380
nominal annual growth in %	3.0	4.3	7.8	12.9	11.3	11.3	9.8	8.9	17.4	14.2
real annual growth in % (CPI deflated)	3.2	4.4	7.4	10.3	8.3	7.6	6.3	3.6	2.5	-2.9
Average monthly net wages, EUR	504	524	562	639	688	728	741	790	850	995
Average monthly net wages, EUR (PPP)	862	881	921	997	1,070	1,110	1,172	1,214	1,315	1,396
Minimum wages as of January 1st										
Monthly gross minimum wages, NCU th	102	105	111	128	138	149	161	167	200	232
Monthly gross minimum wages, EUR (ER)	342	333	351	412	445	464	487	460	542	579
Monthly gross minimum wages, EUR (PPP)	546	552	571	625	656	680	692	684	755	802
Unit labor costs (ULC)										
Nominal ULC in EUR, annual growth in %	0.0	2.9	6.6	10.9	3.3	4.9	5.1	0.3	4.5	18.9
Real ULC in EUR, annual growth in %	-3.5	0.1	5.2	6.6	-1.5	0.2	-1.3	-5.7	-8.5	3.8

Notes: Data based on a continuous quarterly survey. Population aged 15+ refers to the population 15-74. Census 2011 is applied throughout. From 2021, new methodology in line with the Integrated European Social Statistics Regulation (IESS); growth rates are not fully comparable. Education groups refer to ISCED 2011.
Wage data refer to enterprises with 5 and more employees (survey data), from 2019 total economy (based on tax administration data).

Source: SEE Jobs Gateway, based on data provided by national statistical offices and Eurostat.

European Union: Labor market indicators

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Total										
Total population (1,000)	443,275	444,235	445,167	445,871	446,655	447,022	447,346	446,905	447,405	448,383
Working-age population aged 15+ (1,000)	331,686	331,787	332,029	332,066	331,617	332,420	333,053	332,741	333,218	334,066
Employment aged 15+ (1,000)	187,238	189,253	192,121	195,100	197,197	199,624	196,607	198,034	202,557	204,900
Employment rate (% population aged 15+)	56.5	57.0	57.9	58.8	59.5	60.1	59.0	59.5	60.8	61.3
Employment rate (% population aged 15-64)	63.8	64.6	65.6	66.7	67.7	68.4	67.5	68.3	69.8	70.4
Employment rate (% population aged 20-64)	68.2	69.0	70.1	71.3	72.3	73.1	72.2	73.0	74.6	75.3
Employment rate (% population aged 15-24)	29.9	30.3	31.0	32.0	32.8	33.4	31.4	32.7	34.8	35.2
Employment rate (% population aged 25-29)	70.0	70.7	71.8	72.8	73.7	74.7	72.8	74.3	76.3	77.1
Employment rate (% population aged 25-54)	76.7	77.4	78.1	79.0	79.9	80.6	79.6	80.3	81.7	82.2
Employment rate (% population aged 55-64)	50.5	52.1	54.2	56.1	57.8	59.1	59.6	60.4	62.2	63.9
Employment rate for low skilled 15-64 (ISCED 0-2)	42.0	42.4	43.0	43.9	44.6	45.1	44.0	44.1	45.9	46.4
Employment rate for medium skilled 15-64 (ISCED 3-4)	67.8	68.5	69.4	70.4	71.3	71.7	70.4	70.9	72.3	72.7
Employment rate for high skilled 15-64 (ISCED 5-8)	81.5	82.2	83.0	83.8	84.3	84.8	83.8	85.0	86.0	86.3
Self-employed (% of total employment)	15.0	14.8	14.6	14.3	14.1	14.0	14.1	13.7	13.7	13.6
Part-time employment (% of total employment)	19.3	19.3	19.2	19.1	19.0	19.0	18.9	18.4	18.3	18.6
Temporary employment (% of total employees)	15.2	15.4	15.6	15.7	15.5	15.0	13.5	14.1	14.1	13.5
Activity rate (% population aged 15+)	63.3	63.4	63.7	64.0	64.1	64.4	63.5	64.0	64.8	65.3
Activity rate (% population aged 15-64)	71.6	71.9	72.3	72.7	73.1	73.4	72.8	73.6	74.5	75.0
Activity rate (% population aged 15-24)	39.0	38.8	38.8	39.1	39.1	39.3	37.8	39.2	40.7	41.2
Activity rate (% population aged 25-54)	85.4	85.4	85.4	85.5	85.7	86.0	85.3	85.9	86.6	87.0
Activity rate (% population aged 55-64)	54.9	56.3	58.2	59.8	61.2	62.3	62.8	64.0	65.4	67.0
Unemployment aged 15+ (1,000)	22,844	21,160	19,328	17,329	15,478	14,333	14,996	15,058	13,362	13,200
Unemployment rate (% labor force 15+)	10.9	10.1	9.1	8.2	7.3	6.7	7.1	7.1	6.2	6.1
Youth unemployment rate (% labor force 15-24)	23.5	21.8	20.1	18.0	16.1	15.0	16.8	16.7	14.5	14.5
NEET rate (% population aged 15-24)	12.6	12.2	11.7	11.0	10.5	10.0	11.1	10.8	9.6	9.2
Long-term unemployment rate (% labor force 15+)	5.5	5.0	4.4	3.8	3.3	2.8	2.5	2.8	2.4	2.1
Share of long-term unemployed (% of total)	50.9	50.1	48.6	46.9	45.0	42.1	35.9	39.4	38.8	35.3
Unemployment rate, low educated 15+ (ISCED 0-2)	19.4	18.4	17.2	15.8	14.2	13.3	13.6	13.8	12.3	11.9
Unemployment rate, medium educated 15+ (ISCED 3-4)	9.7	9.0	8.2	7.2	6.4	5.9	6.4	6.5	5.7	5.6
Unemployment rate, high educated 15+ (ISCED 5-8)	6.7	6.2	5.5	4.9	4.5	4.2	4.7	4.5	3.8	3.8
Male										
Total population (1,000)	216,021	216,594	217,261	217,604	218,093	218,379	218,538	218,428	218,673	219,151
Working-age population aged 15+ (1,000)	163,815	163,929	164,209	164,277	164,008	164,397	164,711	164,588	164,766	165,267
Employment aged 15+ (1,000)	101,472	102,514	104,074	105,688	106,724	107,927	106,336	106,698	108,844	109,776
Employment rate (% population aged 15+)	61.9	62.5	63.4	64.3	65.1	65.6	64.6	64.8	66.1	66.4
Employment rate (% population aged 15-64)	69.1	69.9	70.9	72.1	73.1	73.8	72.8	73.3	74.7	75.1
Employment rate (% population aged 20-64)	74.0	74.9	75.9	77.2	78.2	79.0	78.0	78.5	79.9	80.4
Employment rate (% population aged 15-24)	31.9	32.4	33.0	34.0	35.0	35.7	33.7	35.0	37.1	37.3
Employment rate (% population aged 25-29)	74.4	75.1	76.6	77.7	78.6	79.4	77.4	78.2	80.3	81.3
Employment rate (% population aged 25-54)	82.4	83.1	83.9	84.9	85.7	86.4	85.4	85.6	86.9	87.2
Employment rate (% population aged 55-64)	57.6	59.0	61.0	62.9	64.7	66.0	66.2	67.0	68.7	70.1
Employment rate for low skilled 15-64 (ISCED 0-2)	49.2	49.9	50.7	51.8	52.7	53.4	52.2	52.2	54.1	54.4
Employment rate for medium skilled 15-64 (ISCED 3-4)	73.4	74.1	75.0	76.1	77.0	77.6	76.3	76.7	77.9	78.2
Employment rate for high skilled 15-64 (ISCED 5-8)	85.2	86.0	86.7	87.5	88.0	88.2	87.2	87.9	88.8	89.1
Self-employed (% of total employment)	19.0	18.6	18.2	17.9	17.7	17.6	17.5	17.2	17.1	17.0
Part-time employment (% of total employment)	9.2	9.3	9.3	9.3	9.2	9.3	9.3	9.1	9.2	9.4
Temporary employment (% of total employees)	14.8	15.1	15.1	15.2	15.0	14.5	12.9	13.4	13.4	12.7
Activity rate (% population aged 15+)	69.4	69.4	69.6	69.8	70.0	70.1	69.3	69.5	70.2	70.5
Activity rate (% population aged 15-64)	77.5	77.7	77.9	78.3	78.7	78.9	78.2	78.7	79.4	79.8
Activity rate (% population aged 15-24)	41.9	41.6	41.5	41.7	41.9	42.1	40.5	41.9	43.4	43.9
Activity rate (% population aged 25-54)	91.4	91.4	91.3	91.5	91.6	91.7	91.0	91.2	91.7	91.8
Activity rate (% population aged 55-64)	62.9	64.2	65.8	67.2	68.6	69.6	69.8	70.8	72.0	73.4
Unemployment aged 15+ (1,000)	12,174	11,285	10,184	9,055	8,044	7,395	7,788	7,763	6,797	6,738
Unemployment rate (% labor force 15+)	10.7	9.9	8.9	7.9	7.0	6.4	6.8	6.8	5.9	5.8
Youth unemployment rate (% labor force 15-24)	23.8	22.2	20.5	18.4	16.5	15.3	16.9	16.6	14.5	14.9
NEET rate (% population aged 15-24)	12.6	12.1	11.4	10.7	10.1	9.7	10.9	10.7	9.6	9.4
Long-term unemployment rate (% labor force 15+)	5.5	5.0	4.3	3.7	3.2	2.7	2.4	2.7	2.3	2.1
Share of long-term unemployed (% of total)	51.0	50.3	48.7	47.2	45.0	41.9	35.6	39.1	38.6	35.5
Unemployment rate, low educated 15+ (ISCED 0-2)	19.5	18.2	16.8	15.2	13.5	12.4	12.7	12.7	11.2	10.9
Unemployment rate, medium educated 15+ (ISCED 3-4)	9.3	8.6	7.7	6.8	6.0	5.5	6.0	6.0	5.2	5.2
Unemployment rate, high educated 15+ (ISCED 5-8)	6.0	5.5	4.9	4.3	4.0	3.8	4.3	4.2	3.5	3.4

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Female										
Total population (1,000)	227,254	227,641	227,907	228,267	228,562	228,643	228,809	228,476	228,732	229,232
Working-age population aged 15+ (1,000)	167,871	167,858	167,820	167,789	167,609	168,023	168,342	168,153	168,452	168,799
Employment aged 15+ (1,000)	85,765	86,739	88,047	89,412	90,473	91,697	90,271	91,336	93,713	95,124
Employment rate (% population aged 15+)	51.1	51.7	52.5	53.3	54.0	54.6	53.6	54.3	55.6	56.4
Employment rate (% population aged 15-64)	58.5	59.3	60.3	61.3	62.3	63.1	62.2	63.3	64.9	65.7
Employment rate (% population aged 20-64)	62.4	63.2	64.3	65.4	66.5	67.3	66.5	67.6	69.2	70.2
Employment rate (% population aged 15-24)	27.7	28.2	28.9	29.9	30.6	31.0	29.1	30.3	32.3	33.0
Employment rate (% population aged 25-29)	65.5	66.2	66.9	67.7	68.7	69.7	68.0	70.2	72.0	72.6
Employment rate (% population aged 25-54)	71.0	71.6	72.3	73.1	74.0	74.8	73.9	75.0	76.5	77.1
Employment rate (% population aged 55-64)	44.0	45.7	47.8	49.7	51.3	52.6	53.3	54.2	56.2	58.1
Employment rate for low skilled 15-64 (ISCED 0-2)	34.7	34.7	35.0	35.7	36.1	36.3	35.2	35.1	36.8	37.5
Employment rate for medium skilled 15-64 (ISCED 3-4)	61.9	62.6	63.5	64.4	65.1	65.5	64.0	64.7	66.2	66.8
Employment rate for high skilled 15-64 (ISCED 5-8)	78.3	79.0	79.9	80.6	81.2	81.9	80.9	82.5	83.6	84.0
Self-employed (% of total employment)	10.4	10.4	10.3	10.0	9.9	9.9	9.9	9.6	9.8	9.8
Part-time employment (% of total employment)	31.1	31.0	30.9	30.7	30.5	30.4	30.2	29.3	29.0	29.2
Temporary employment (% of total employees)	15.6	15.8	16.0	16.3	16.2	15.5	14.2	14.8	15.0	14.3
Activity rate (% population aged 15+)	57.4	57.6	57.9	58.2	58.4	58.7	57.9	58.7	59.5	60.2
Activity rate (% population aged 15-64)	65.8	66.1	66.6	67.1	67.5	67.9	67.3	68.4	69.5	70.2
Activity rate (% population aged 15-24)	36.0	35.8	35.9	36.3	36.2	36.4	34.9	36.4	37.8	38.4
Activity rate (% population aged 25-54)	79.4	79.4	79.5	79.6	79.9	80.2	79.5	80.6	81.4	82.0
Activity rate (% population aged 55-64)	47.4	49.0	51.0	52.8	54.2	55.4	56.2	57.4	59.1	60.9
Unemployment aged 15+ (1,000)	10,669	9,874	9,145	8,274	7,434	6,938	7,209	7,295	6,564	6,462
Unemployment rate (% labor force 15+)	11.1	10.2	9.4	8.5	7.6	7.0	7.4	7.4	6.5	6.4
Youth unemployment rate (% labor force 15-24)	23.2	21.3	19.6	17.5	15.6	14.7	16.7	16.8	14.5	14.0
NEET rate (% population aged 15-24)	12.6	12.3	11.9	11.3	10.8	10.4	11.2	10.8	9.7	9.1
Long-term unemployment rate (% labor force 15+)	5.6	5.1	4.6	4.0	3.4	3.0	2.7	2.9	2.6	2.2
Share of long-term unemployed (% of total)	50.7	49.8	48.6	46.7	45.1	42.2	36.3	39.8	39.0	35.1
Unemployment rate, low educated 15+ (ISCED 0-2)	19.4	18.6	17.9	16.7	15.3	14.5	14.9	15.4	13.9	13.4
Unemployment rate, medium educated 15+ (ISCED 3-4)	10.3	9.5	8.7	7.8	7.0	6.5	6.9	7.1	6.3	6.2
Unemployment rate, high educated 15+ (ISCED 5-8)	7.4	6.8	6.2	5.4	4.9	4.6	5.1	4.8	4.1	4.1

European Union: Earnings and unit labor costs

	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023
Wages										
Average monthly gross wages, NCU	.	.	.	.	.	.	.	.	.	.
nominal annual growth in %	1.0	1.7	1.7	2.4	2.7	2.8	-0.4	4.6	5.1	6.2
real annual growth in % (CPI deflated)	0.6	1.6	1.5	0.7	0.9	1.4	-1.1	1.7	-3.8	-0.2
Average monthly gross wages, EUR	2,217	2,254	2,292	2,346	2,410	2,478	2,469	2,584	2,715	2,884
Average monthly gross wages, EUR (PPP)	2,217	2,254	2,292	2,346	2,410	2,478	2,469	2,584	2,715	2,884
Average monthly net wages, NCU	.	.	.	.	.	.	.	.	.	.
nominal annual growth in %	.	.	.	.	.	.	.	.	.	.
real annual growth in % (CPI deflated)	.	.	.	.	.	.	.	.	.	.
Average monthly net wages, EUR	.	.	.	.	.	.	.	.	.	.
Average monthly net wages, EUR (PPP)	.	.	.	.	.	.	.	.	.	.
Minimum wages as of January 1st	.	.	.	.	.	.	.	.	.	.
Monthly gross minimum wages, NCU	.	.	.	.	.	.	.	.	.	.
Monthly gross minimum wages, EUR (ER)	.	.	.	.	.	.	.	.	.	.
Monthly gross minimum wages, EUR (PPP)	.	.	.	.	.	.	.	.	.	.
Unit labor costs (ULC)	.	.	.	.	.	.	.	.	.	.
Nominal ULC in EUR, annual growth in %	0.6	0.5	1.3	1.1	1.7	2.2	4.0	-0.9	3.9	7.0
Real ULC in EUR, annual growth in %	-0.2	-0.9	0.5	-0.2	0.3	0.5	2.1	-3.3	-1.5	0.9

Notes: The data are based on a continuous quarterly survey. The time of extraction of the LFS data was the end of September 2024, the data therefore show the revision status with regard to the new census application of the individual EU countries at this time. From 2021, new methodology in line with the Integrated European Social Statistics Regulation (IESS); growth rates are not fully comparable.

Source: SEE Jobs Gateway, based on data provided by national statistical offices and Eurostat.


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