



Western Balkans Labor Market Trends 2017

Western Balkans Labor Market Report 2017 highlights:

- Western Balkan countries have increased employment by creating roughly 300,000 jobs since 2010, from an estimated 5.5 million in 2010 to 5.8 million in 2016. However, this rate of job creation is not enough to address the many challenges confronting Western Balkan labor markets.
- Unemployment declined during this period by an estimated 200,000 people, from 23 to 21 percent, but inactivity remains high, especially among women, the low-educated, and youth. In addition, informal employment and long-term unemployment remain a significant challenge in the region.
- The winners among the recent employment recovery are workers aged 55 and older as well as the highly educated. The losers, on the other hand, are the low-educated, especially low-educated youth. Overall, youth unemployment levels remain critically high.
- No significant impact of economic growth on employment growth is currently observed in the
 aftermath of the financial crisis in the Western Balkans, and the impact of growth on
 unemployment is small. Therefore, the Western Balkan countries are not yet in a situation
 whereby the current levels of economic growth guarantee a return to job growth; the transition
 to modern market economies is not yet complete, and many structural issues remain to be
 addressed.



This report and the accompanying database is available on the website of the Jobs Gateway in South Eastern Europe (SEE Jobs Gateway). The SEE Jobs Gateway is a Community of Practice for labor market policies in the Western Balkans. It brings together policy makers, academics, and experts from international organizations who regularly meet—either online or in person—to exchange ideas and learn from the experience of other countries with regard to labor market policies. Most members are from or have an interest in the Western Balkan region, comprising Albania, Bosnia and Herzegovina, FYR Macedonia, Kosovo, Montenegro and Serbia.

All information on these events, including recordings of events, related material, blogs, and other material are available at: http://SEEJobsGateway.net.

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Abbreviations, country classification, and country codes

Abbreviations

ALMPs Active labor market programs

CPI Consumer price index EU European Union

GDP Gross domestic product

ILO International Labor Organization

ISCED International Standard Classification of Education

LFS Labor force survey

PES Public employment service
PPP Purchasing power parity
SEE South Eastern Europe

UN United Nations

Country classification

EU-CEE countries Bulgaria, Croatia, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland,

Romania, Slovakia, Slovenia

EU peer countries Austria, Bulgaria, Croatia, Hungary

Western Balkans-6 Albania, Bosnia and Herzegovina, FYR Macedonia, Kosovo, Montenegro,

Serbia

Country codes

AL Albania AT Austria

BA Bosnia and Herzegovina

BG Bulgaria
HR Croatia
HU Hungary
ME Montenegro
MK FYR Macedonia

RO Romania RS Serbia SI Slovenia XK Kosovo









1. Introduction

Labor markets in the Western Balkan countries—comprising Albania, Bosnia and Herzegovina, Kosovo, FYR Macedonia, Montenegro and Serbia—are characterized by low employment rates and high unemployment. High and persistent long-term unemployment has become a salient feature of the labor markets of the region. Substantial informal sector activities are another prominent feature of these economies. International migration plays an important role in cushioning the problem of unemployment and has become an important source of income. In addition, almost the entire region is facing an aging and shrinking population due to low birth rates and high emigration. Given these unfavorable demographic and labor market conditions, interest in labor market data and analysis features highly on the agenda of regional policy makers.

In this report, labor market developments in the Western Balkan countries in the period 2010-2016 are presented and compared with selected member states of the European Union (EU). All Western Balkan countries aspire to become EU members in the near future. So, as comparators, the report uses four countries that joined the EU at different times over the last 25 years, namely Austria (1995), Hungary (2004), Bulgaria (2007), and Croatia (2013). Each of these comparator countries, representing their respective accession "wave", is geographically close and similar in population size to the Western Balkan countries. Therefore, this group of countries, arguably, most closely resembles a possible path of future development for the six Western Balkan countries, with Croatia as the most recent country to join the EU being just one step ahead of Western Balkan countries, and Bulgaria, Hungary, and Austria arguably representing one further step each.

The report is based on a new regionally comparable database on labor market indicators. The database uses labor force survey (LFS) data provided by the Statistical Offices of the individual Western Balkan countries and by Eurostat for the EU comparator countries and is available online at the South-East Europe Jobs Gateway (http://SEEJobsGateway.net). The objective of this report is to showcase these data and present a few insights on how labor markets in the Western Balkans have developed over the last six years to a general, non-technical audience.

The report finds that the Western Balkan countries have increased employment by roughly 300,000 jobs since 2010, from an estimated 5.5 million in 2010 to 5.8 million in 2016. However, this rate of job creation is not enough to address the many challenges in the Western Balkan labor markets: unemployment declined by an estimated 200,000 people—or from 23 to 21 percent of the labor force—and inactivity remains high, especially among women, the low-educated, and youth.

The unexpected winners among the recent employment recovery are—even if not by much—adults who are close to retirement, but also—less surprisingly—the highly educated. This is partially explained by the fact that the 55-64 age group is growing considerably overall. Fortunately, employment rates in this group have also increased significantly, suggesting a genuine structural improvement. Higher education is, more than ever, a pathway into the labor markets and stable

A detailed description of the database, including data sources, methodology, definitions, limitations, and so on can be found in the statistical annex.





Only Albania and Kosovo are still characterized by a high share of young people, but United Nations (UN) population projections, suggest that the aging of populations will persist in all six Western Balkan countries in the medium and long-term. See https://esa.un.org/unpd/wpp/Download/Standard/Population/

employment, including for young people. The proportion of women in employment has also increased during the recent economic recovery, although progress toward decreasing the gender gap in employment is slow.

The losers, on the other hand, are clearly the low-educated, especially low-educated youth. Overall, youth unemployment levels remain critically high—for example, the unemployment rate is 57 percent in Kosovo—although the relationship between overall unemployment and youth unemployment seems to be in line with other countries. This suggests that youth are not necessarily at a particular disadvantage in the Western Balkan labor markets; rather, the high levels of youth unemployment are driven by the overall challenging situation of Western Balkan labor markets. Nevertheless, because youth employment represents a more flexible segment of the labor market, with a higher share of temporary contracts and informal employment, reforming labor regulations and labor taxation could have a positive impact on youth employment. In addition, there are also other important constraints, like skills mismatches, low levels of entrepreneurship skills and access to productive inputs as well as social norms and attitudes, particularly regarding care responsibilities. On a positive note, youth unemployment rates fell faster than the overall unemployment rate in some Western Balkan countries in recent years. However, the share of longterm unemployed in the labor force is highest among the youth cohort, which indicates that there are significant risks of skills degradation of young people and subsequent labor market challenges later in their careers.

Informal employment remains a significant challenge, although data are scarce. In those countries where data are available, such as Albania, FRY Macedonia, and Serbia, a decrease in informal employment was observed between 2010 and 2016. However, in Serbia, where informal employment is measured comprehensively, roughly half of the new jobs created recently have been in the informal sector, suggesting a strong pro-cyclical relationship between growth and informal employment.

Overall, the evidence suggests that the jobs challenge in the Western Balkans is structural, and growth alone will not be sufficient to create the number and types of jobs needed in the labor market. No significant impact of growth on employment has been observed in the aftermath of the financial crisis in the Western Balkans, and the impact of growth on unemployment is small. This is in stark contrast to central European EU countries, where a significant positive relationship between growth and employment also prevailed after the Great Recession. This suggests that the Western Balkan countries are not yet in a situation where current economic growth will guarantee a return to jobs growth; the transition to modern market economies is not yet complete, and many structural issues remain to be addressed.

This report focuses on the key labor market trends (activity, employment, unemployment) between 2010 and 2016, with a special focus on the link between economic growth and labor markets. The report starts by discussing recent economic developments (Section 2), which is followed by an overview of demographic developments and levels of activity and inactivity in the population (Section 3). Sections 4 and 5 discuss employment and unemployment respectively. Section 6 highlights the link between economic growth and labor market developments, and Section 7 presents a summary of the report's findings. An extensive statistical annex on key labor market indicators for each of the countries can be found at the back of this report.





2. Economic environment

Following a decline in 2009 as a consequence of the financial and economic crisis, GDP growth in the six Western Balkan countries started to recover in 2010, declined again in 2012, only to rebound steadily thereafter. In 2015, GDP grew by 2.2 percent, thanks to rising investments and an improved external environment. As illustrated in Figure 1, developments differed across countries: Albania and Kosovo reported GDP growth over the entire 2010-2015 period; all other countries recorded a decline in 2012, with Serbia also registering a downturn in 2014. In three EU peer countries—Austria, Bulgaria and Hungary—GDP increased throughout the period under review, whereas Croatia faced six years of recession and only returned to growth in 2015. In terms of employment, FYR Macedonia and Montenegro experienced employment growth throughout the entire period, while job creation in the other countries picked up at different points in time (for example, in Serbia in 2013 or in Albania in 2014). Kosovo experienced a significant reduction in employment in 2014 and 2015.

Labor productivity³ developments varied across the Western Balkans. A remarkable increase in labor productivity took place in Kosovo as well as in Bosnia and Herzegovina and FYR Macedonia, albeit at a lower rate. Productivity growth advanced unevenly in Montenegro and Serbia, with alternating increases and decreases, while in Albania there was a reversal of the positive trend in 2015.

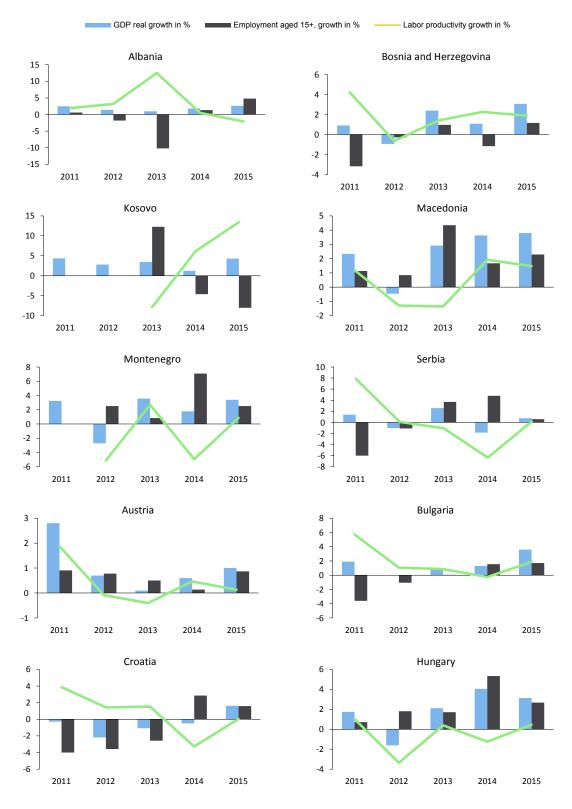
What has been driving those productivity trends? Labor productivity growth in Bosnia and Herzegovina and Kosovo has been driven by shrinking employment combined with a higher GDP growth, while in FYR Macedonia and Montenegro it has been driven by higher GDP than employment growth, which has also been the case for Bulgaria and Croatia (see Figure 1).

Labor productivity is measured as GDP in real terms per person employed, according to LFS statistics. This measure has however some limitations such as not accounting for hours worked and changes in the structure of employment by type and sector.





Figure 1 / Selected economic indicators



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





3. Population

Almost the entire region is facing either a demographic contraction or stagnation, driven by high outward migration and declining birth rates. Since 2010, the population of the Western Balkan countries has declined by about 246,000 persons, standing at 18.2 million in 2015. The only country to report a significant population increase was Kosovo (+8.2 percent), while Serbia recorded the largest decline (-3.2 percent). The population also decreased in the EU peer countries, except for Austria. These declines were most pronounced in the under 25 age group, while the number of those aged 55-64 and over 65 increased significantly (Figure 2). Despite the resulting changes in the population structure, the share of the younger population in the Western Balkans is still higher and the share of those over 65 is lower than in the EU peer countries (Figure 3).

60 **<**15 **15-24** 25-54 **55-64** 65+ ◆ Total 50 40 30 20 10 00 -10 -20 -30 -40 MK ME RS XK ΑТ BG HR ΗU

Figure 2 / Population by age groups, 2010-2015, change in %

Note: Kosovo change 2011-2016. Source: Eurostat and Index Mundi.

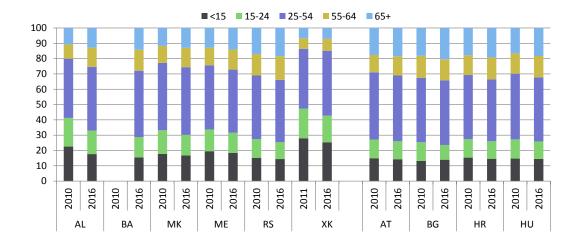


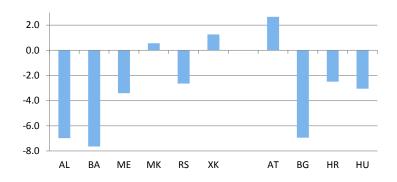
Figure 3 / Population structure by age groups, 2010 and 2016, share in %

Note: Data for BA refer to Census 2013; data for XK refer to Index Mundi. Source: Eurostat and Index Mundi.





Figure 4 / Working age population (15-64) 2010-2016, change in %



Note: Data for 2016 refer to the first two quarters. Data for Kosovo refer to 2012 and -2015 respectively. For country specific methodologies, see the Statistical Annex of the respective country.

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

With the exception of FYR Macedonia and Kosovo the working age population fell in all Western Balkan countries. Between 2010 and 2016 the strongest declines were reported for Bosnia and Herzegovina and Albania, while Montenegro and Serbia followed a similar pattern to Croatia and Hungary (Figure 4). Positive developments were seen in Kosovo and Macedonia and particularly in Austria—mainly due to a net inflow of migrants. The shrinking of the working age population could imply lower GDP growth in the future if not compensated by higher corresponding productivity growth. Furthermore, the continuous rise of the dependency ratio in the coming years will have implications on the fiscal system as well as placing a burden on social welfare systems.

ACTIVITY RATES

In 2016, activity rates (15-64) surpassed the 2010 level or remained at least stagnant in all Western Balkan countries, except for Kosovo. Activity rates also increased in the EU peer countries, particularly in Hungary. While the activity rate was 60 percent in 2015 in the Western Balkans-6, there were significant differences between countries. Levels were low in Kosovo (38.4 percent) and Bosnia and Herzegovina (54.2 percent), while reaching about 65 percent in Albania, the FYR Macedonia and Serbia, which compare well with Croatia, but are far less than Austria (Figure 5).

Activity rates in the Western Balkans are suppressed because of low female labor market participation. Male activity rates in Albania, FYR Macedonia and Serbia compare well with those of the EU peer countries, while female participation in the labor market is significantly lower across the region. Differences are particularly noticeable in Kosovo, where less than 20 percent of women are active in the labor market and in Bosnia and Herzegovina, where the figure stands at 42 percent (Figure 5). Indeed, the gender gap in activity rates—that is, the difference between lale and female activity—is high, reaching 38.6 percentage points in Kosovo, 5 25.5 percentage points in FYR Macedonia and 23.3 percentage points in Bosnia and Herzegovina in 2016. Montenegro has the narrowest gender gap in activity rates (11.3 percentage points). By comparison, the gap varies in the EU peer countries between 7.8 percentage points in Bulgaria and 13.1 percentage points in Hungary.

Data for Kosovo refer to 2015.

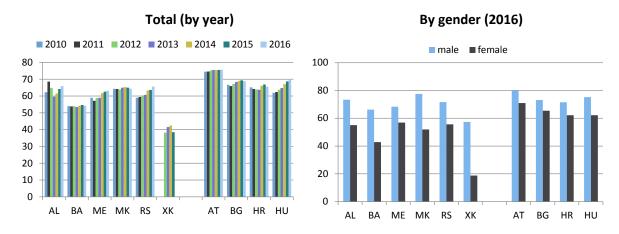




Data for Western Balkans-6 refer to annual data (latest available: 2015). Data for 2016 refer to the average of the first two quarters. There are no quarterly data available for Bosnia and Herzegovina and Kosovo.

Gender inequality with regard to labor market participation in the Western Balkans may reflect cultural or religious factors, patriarchal family structures or challenges in the career development of women. Furthermore, the prospect of (much) lower salaries for women with low levels of educational attainment compared to men with a similar educational background, may discourage women from entering the labor force (Reva, 2012). However, between 2010 and 2016 the gender activity gap diminished gradually in most Western Balkan countries, but widened in FRY Macedonia and Kosovo—as was the case in Hungary. Box 1 elaborates further on gender differences in labor market outcomes across the Western Balkans.

Figure 5 / Activity rates (15-64) 2010-2016, in %



Note: Data for 2016 refer to the first two quarters. Data for Kosovo refer to 2012 and 2015 respectively. For country specific methodologies, see Statistical Annex of the respective country.

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

Box 1 / Gender differences in labor market outcomes

Labor market outcomes of women are weak in the Western Balkan countries. Women face lower activity and employment rates than men and are consequently more likely to be inactive. In three out of six Western Balkan countries (Bosnia and Herzegovina, Kosovo and Serbia), the incidence of unemployment is higher for women than for men. Explanations for these disparities are manifold and can be attributed factors that include the following: religious and cultural reasons; and traditional roles assigned to women, such as staying at home to take care of children and other family members, especially in a region with larger gender gaps in relation to wages and with limited availability of care facilities. In addition, the reliance on remittances and the widespread informal economy are considered to decrease employment incentives, resulting in low labor force participation, especially among women (UNDP, 2016; EC, 2016a; Petreski et al. 2017). Furthermore, labor taxation and the social benefit system are seen as one of the causes of inactivity, due to the potential disincentive effects for many of those seeking employment (Koettl, 2012). For example, in Montenegro the introduction of life-long benefits for mothers of at least three children in 2016 resulted in more than 15,000 women applying for this benefit, 'effectively pushing many of them out of the labor market' (EC, 2016b).

See, http://ec.europa.eu/eurostat/statistics-explained/index.php/Enlargement countries - labour market statistics



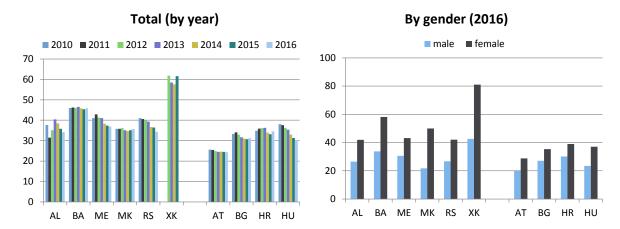


INACTIVITY RATES

Inactivity is primarily a phenomenon of women, young people and people with low education.

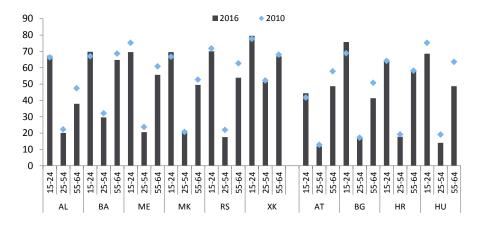
Despite declining in most countries—with the sharpest drops in Montenegro and Serbia—the inactivity rate in the Western Balkans-6 was 40 percent in 2015 and thus considerably higher than in the EU peer countries (25-35 percent). The share of people outside the labor market was highest in Kosovo (61.8 percent) and Bosnia and Herzegovina (45.4 percent) and lowest in FYR Macedonia and in Albania, where it was close to 36 percent in each country (Figure 6). In some countries (FYR Macedonia, Kosovo and Bosnia and Herzegovina), female inactivity is twice as high as the male rate. The incidence of inactivity in the peer countries is also higher for women than for men, although the differences are much smaller. Inactivity rates fell for both sexes in most countries of the region during the period covered by this report.

Figure 6 / Inactivity rates (15-64), in %



Note: Data for 2016 refer to the first two quarters. For country specific methodologies, see Statistical Annex of the respective country. Source: SEE Jobs Gateway Database, based on data provided by national statistical offices and Eurostat.

Figure 7 / Inactivity by age groups, 2010 and 2016, in %



Note: Data for 2016 refer to the first two quarters. Data for Kosovo refer to 2012 and 2015 respectively. For country specific methodologies, see Statistical Annex of the respective country.

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





Across the Western Balkans-6, the lack of participation in the labor market is most acute among young people (15-24 years), with this age group reporting an inactivity rate of 71 percent in 2015. Young women are more likely to be inactive than men (78 percent versus 64 percent respectively), partly because young women's participation in education tends to be higher in the Western Balkans. Inactivity is lowest for the prime age group (25-54 years) in all countries of the region (Figure 7), where almost 20 percent were outside the labor market in 2016, representing a higher proportion than in the EU peer countries. People aged 55 to 64 years are less inactive in the labor market than the younger age groups. Despite declining, inactivity in all Western Balkan countries among this age group is well above the rates of the comparator countries.

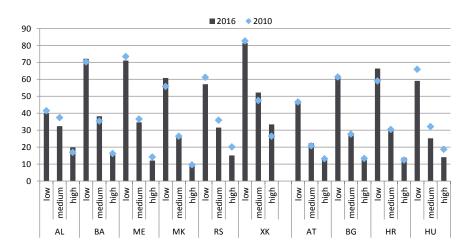


Figure 8 / Inactivity by educational attainment (15-64), 2010 and 2016, in %

Note: Data for 2016 refer to the first two quarters. Data for Kosovo refer to 2012 and 2015 respectively. For country specific methodologies, see Statistical Annex of the respective country.

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

Inactivity is more likely for the low educated both in the Western Balkans-6 and in the EU peer countries. FYR Macedonia and Serbia compare well with Bulgaria and Hungary, with inactivity rates among the low educated reaching around 60 percent (Figure 8). Inactivity in this educational group is high in Kosovo (over 80 percent), followed by Bosnia and Herzegovina and Montenegro where it has remained almost unchanged over recent years. With the exception of FYR Macedonia, inactivity among people with medium education exceeds those in the peer countries. Only Montenegro and FYR Macedonia have recorded inactivity rates similar to the peer countries with respect to the highly educated.

There are several explanations for high inactivity, which relate to subdued growth, social benefits, taxation, early retirement but also higher educational attainment and migration. Generally, lower economic growth as compared to the EU-Central and Eastern Europe (CEE) countries combined with no or poor job creation have caused inactivity. Yet, there are also several specific reasons. For example, these include: (i) a high number of war veterans in Bosnia and Herzegovina; (ii) more generally, people who are either disheartened or discouraged from seeking employment, 9 such as

See also, Economic Reform Programme of Kosovo (2016), p. 36 and Economic and Social Reform Programme of Serbia 2016, p. 13.





For comparison, in the EU-28 more than 50% both of men and women aged 15-24 years were inactive in 2015. http://ec.europa.eu/eurostat/statistics-explained/index.php/People outside the labour market

⁸ Kosovo is an outlier: in 2015 more than half of the prime age group (25-64 years) were out of labor force.

older workers who lost their jobs during the process of privatization and restructuring; and (iii) those who found 'loopholes in the system and entered early retirement as beneficiaries of disability pension schemes' (Arandarenko et al., 2012; Sanfey et al., 2016). In addition, rising enrolment rates in universities could indicate that young people stay longer in education. Another cause of inactivity, as already mentioned above, is the joint effect of labor taxation and the social benefit system is also considered to be one of the causes of inactivity, since (formal) work would not pay off well enough for many of those inactive (Koettl, 2012). With regard to women, those who are inactive tend to be young, low educated, or take care of children and other family members. Further, remittances are considered to be one of the major reasons of (female) inactivity, particularly in Kosovo (UNDP, 2016) and FYR Macedonia (Petreski et al. 2017).

4. Employment

The economic rebound in recent years has translated into rising employment from 2014, more for women than men. In 2016 an estimated 5.8 million people were employed in the Western Balkan countries—roughly 300,000 more than in 2010¹⁰—representing an increase of about 5 percent. Over that period the number of newly created jobs for women was higher than for men. Employment grew in all countries with two exceptions: Albania¹¹ and Bosnia and Herzegovina (Table 1). In absolute numbers, employment increased most in Serbia and in FYR Macedonia. Among the peer countries employment fell in Bulgaria and in Croatia—the latter suffering from a deep and long-lasting recession—while employment gains were reported for Austria and Hungary.¹²

Somewhat surprisingly, employment increased significantly for older workers aged 55 to 64 in all Western Balkan countries. Employment in this age group increased by more than 20 percent in most countries, and by 67 percent in Albania. Part of this increase is explained by a cohort effect, as this particular age group has seen a considerable population growth (see Figure 3)—but employment growth has been even higher. As will be discussed later (Figure 11), there was also a structural change because employment rates have also been increasing among that age group. In the prime age group (25-54 years), employment has also been increasing (except in Bosnia and Herzegovina) but there have been no employment increases for young people, especially in Albania, but also in Bosnia and Herzegovina and FYR Macedonia. However, this can also be partially explained by a cohort effect (fewer young people overall), and partially by the fact that young people stay longer in education—which is a positive trend as youth unemployment and inactivity is concentrated among low educated youth.

In Hungary the introduction of a public works programme in 2011 has contributed significantly to the strong employment increase/unemployment decrease over recent years. In the final quarter of 2016, public works accounted for slightly more than 5% of total employment. https://www.ksh.hu/docs/eng/xftp/gyor/fog/efog1612.html





Employment data for Kosovo are estimated for 2010 and 2016 respectively.

However, in 2015 and in 2016 Albania reported high employment growth (4.8% and 6.8% respectively), mainly as a result of the national campaign fighting the informal economy.

Table 1 / Employment growth between 2010 and 2016, in %

		Gender			Age			Education	
	Total	Male	Female	15-24	25-54	55-64	Low	Medium	High
Albania	-2.4	-4.9	0.9	-36.4	-9.5	67.1	-12.9	0.2	34.0
Bosnia and Herzegovina	-5.0	-3.4	-7.6	-13.2	-10.1	32.4	-23.2	-2.8	10.1
Kosovo	-1.5	-4.2	6.4	-16.9	-2.4	20.6	-12.8	-5.0	20.2
Montenegro	6.2	1.6	12.2	24.6	0.7	24.0	4.9	-7.0	45.1
Macedonia	12.5	11.4	14.3	-14.1	10.6	39.8	-9.6	11.6	40.4
Serbia	11.2	9.7	13.3	5.0	11.8	10.9	-11.7	11.9	34.8
Austria	4.0	2.6	5.5	-6.1	1.6	35.6	-15.4	-14.5	80.6
Bulgaria	-2.3	-2.6	-2.0	-36.8	-2.9	11.4	-19.8	-6.7	15.3
Croatia	-5.9	-7.6	-3.9	-3.4	-6.5	1.4	-42.4	-5.1	19.7
Hungary	15.3	17.3	13.0	33.8	9.5	44.0	18.5	10.8	25.7

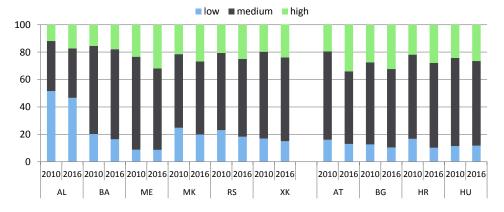
Note: Data for 2016 refer to the average of the first two quarters. Data for Kosovo refer to 2012 and 2015 respectively. For country specific methodologies, see Statistical Annex of the respective country.

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

In terms of education, in all Western Balkan countries—except Montenegro—the low skilled were most affected by decreases in employment levels. The decline in employment among the low skilled ranged from 23 percent in Bosnia and Herzegovina to 9.6 percent in FYR Macedonia. In Austria, Bulgaria and particularly in Croatia, employment also fell sharply among the low educated, but increased quite considerably (18.5 percent) in Hungary. The number of medium skilled persons dropped in most of the Western Balkan countries, with the main exceptions being FYR Macedonia and Serbia. Among the peer countries only Hungary reported employment increases among this educational group. By contrast, the number of high skilled workers rose in the entire region and in all peer countries.

The share of the highly educated among the employed increased in the entire region between 2010 and 2016, but remained below the proportions reported in Austria and Bulgaria. Only Montenegro compares well with these two peer countries (Figure 9). FYR Macedonia and Serbia reported shares of the highly educated among the workforce that are comparable with Croatia and Hungary. Albania is a special case, exhibiting the highest share of low skilled (46.7 percent) and the lowest share of high skilled people in the Western Balkans.

Figure 9 / Educational structure of employment 2010 and 2016, in %



Note: Data for 2016 refer to the average for the first two quarters. Data for Kosovo refer to 2012 and 2015 respectively. For country specific methodologies, see Statistical Annex of the respective country.

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





EMPLOYMENT RATES

Increasing the employment rate is one of the major goals of the South East Europe (SEE) 2020 Strategy. In 2015 the employment rate based on the working age population (15+), which was used as the main labor market indicator in the strategy document, stood at 39.9 percent—which is still far below the target rate of 44.4 percent. With respect to individual countries, Serbia and FYR Macedonia are closest to the country targets set in the strategy, while others, like Albania and Kosovo, are lagging far behind.

Employment rates based on the working age population of 15-64 years increased in all Western Balkan countries and exceeded the 2010 level in 2016, but were still lagging far behind those of the EU peer countries. This increase resulted from both rising employment and a shrinking of the working age population. In 2015 the Western Balkans-6 employment rate stood at 46.9 but there were substantial variations across countries, ranging from 25.8 percent in Kosovo to 55.1 percent in Albania. By comparison, in 2016 the employment rate was 71 percent in Austria and 65.7 percent in Hungary (Figure 10). Employment rates increased for both sexes, with the highest gains being reported in the oldest age group (55-64 years).

Figure 10 / Employment rates (15-64 years), 2010-2016

Total (by year) in % Gender Employment Gap in percentage points **■** 2010 **■** 2011 **■** 2012 **■** 2013 **■** 2014 **■** 2015 **■** 2016 2010 ■ 2016 20 10 60 0 40 -10 20 -20 0 -30 AL BA ME MK RS XK AT BG HR HU ME MK RS XK AT BG HR HU ΑL

Note: Data for 2016 refer to the average for the first two quarters. Data for Kosovo refer to 2012-2015. For country specific methodologies, see Statistical Annex of the respective country.

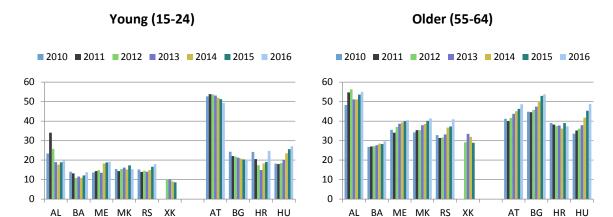
Source: SEE Jobs Gateway Database, based on data provided by national statistical offices and Eurostat.

Despite increasing, female employment rates remain low compared with EU peer countries. They are particularly low in Kosovo (11.9 percent) and in Bosnia and Herzegovina (29.5 percent), 'leaving an ample amount of human potential unused, misused or underused' (UNDP, 2016). In Kosovo, this employment rate is lowest for young women (15-24 years), at 3.8 percent, while it is highest for the prime age group (25-54 years), at 16 percent. In terms of education, women with low education face the lowest employment rate at 3.8 percent, whereas it stands at 43.2 percent for highly educated women. Similar patterns with respect to female employment rates are observed in Bosnia and Herzegovina.





Figure 11 / Employment rates by age groups, in %

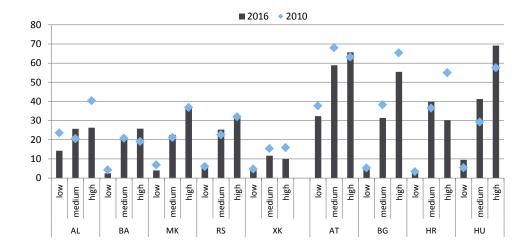


Note: Data for 2016 refer to the average for the first two quarters. Data for Kosovo refer to 2012-2015. For country specific methodologies, see Statistical Annex of the respective country.

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

With the exception of Bosnia and Herzegovina and FYR Macedonia, the gender employment gap has narrowed between 2010 and 2016, but there are variations between countries. The biggest differences were reported for Kosovo and Bosnia and Herzegovina, where the gender gap was as high as 27.5 and 22.1 percentage points respectively (Figure 12). Differences between male and female employment rates are much lower in the peer countries (about 7 percentage points on average) where they have declined, the only exception being Hungary (12.7 percentage points).

Figure 12 / Youth employment rates by educational attainment, 2010 and 2016, in %



Note: Data for 2016 refer to the average for the first two quarters. Data for Kosovo refer to 2012 and 2015 respectively. For country specific methodologies, see Statistical Annex of the respective country.

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





Employment rates increased for all age groups, with the largest gains among the older followed by the prime age group, while the employment rate for young people grew only marginally. Employment rates among the older (55-64 years) grew most in Serbia, FYR Macedonia and in Montenegro, which could be as a result of pension reforms. Regulations on early retirement in Serbia have been restricted gradually since 2011 and became even more restrictive from 2015. The retirement age of women in Serbia has also been extended. The low employment rates of the young might be driven by more education and training, similar to EU countries (Figure 11).

Employment rates of the medium and highly skilled youth remain well below those of the peer countries. A more detailed look at youth employment rates by educational attainment, as illustrated in Figure 12, shows that the employment rates of highly skilled young people increased in Bosnia and Herzegovina and in Serbia between 2010 and 2016. Employment rates among the low skilled within this age group fell in all countries, with the exception of Serbia, comparing well with the peer countries. Austria is an exception here, where youth employment rates among the low skilled exceed the employment rates for the high skilled in the Western Balkan countries, with the exception of FYR Macedonia. The employment rate for the medium skilled increased between 2010 and 2016, particularly in Albania and Serbia, but also in FYR Macedonia; in Bosnia and Herzegovina, the rate remained stagnant. In general, youth employment rates of the medium and high skilled are well below those in the peer countries.

INFORMAL EMPLOYMENT

Informal sector employment is another important feature of the Western Balkan labor markets. Informal employment is only covered regularly by labor force surveys in Albania, FYR Macedonia and Serbia. However, only Serbia and FYR Macedonia use the comprehensive International Labour Organization (ILO) definition of informal employment.¹⁴

In Serbia the share of informal employment fell between 2010 and 2012 in accordance with total employment and increased quite significantly over the two following years, while the proportion decreased continuously in Albania and Macedonia during the entire period. Between 2012 and 2014 more than half of the total employment increase in Serbia was due to a rise in informal employment, with its share in total employment rising from 17.5 percent in 2012 to 21.2 percent in 2014. In 2015, a reversal in the trend was observed, with a decline in informal sector employment, both in the level and the share in total employment, suggesting an improvement in the quality of jobs (Arandarenko, 2016). In FYR Macedonia informal sector employment fell from 25 percent in 2011 to 22.5 percent in 2012, remaining at that level for three years and subsequently dropping to 19.9 percent in 2015. In Albania, informal employment also decreased from 51.3 percent in 2014 to 46.8 percent in 2015.

¹⁴ Accordingly, informal employment covers (1) workers in unregistered firms, (2) workers in registered firms but with no written contract and with no health or pension insurance paid and (3) unpaid family workers.





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60 50 40 30 20 10 0 15-24 55-64 15-24 15-24 25-54 25-54 female 25-54 55-64 total total total ΑI MK RS

Figure 13 / Informal employment in % of total employment of the respective gender and age group, 2015

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

Young people, women and the older age group are most affected by informal employment. Overall, men are more affected by informal employment than women in FYR Macedonia, while the reverse is the case in Albania and Serbia. With respect to age, young people (15-24 years) account for the highest share of informal employment (young men in particular) in all three countries where information is available; the same applies for the prime age group. By contrast, among the older, women are more likely than men to accept informal sector employment in all three countries. More detailed information from the Serbian LFS shows that in 2015, most (42 percent) of the informally employed were unpaid family workers, about one third were self-employed without employees, and about one quarter were employees. The majority (27.2 percent) of informal workers lived in Sumadija and Western Serbia, followed by South-Eastern Serbia (24.7 percent), Vojvodina (17 percent), while only about 8 percent resided in Belgrade (Figure 13).

Apart from complex tax and social security systems and strict labor market institutions, remittances are considered as one of the drivers of informality. Using a large survey from six transition economies (including Serbia and FYR Macedonia), Ivlevs (2014) found that people receiving remittances are more likely to work informally than people with similar characteristics but who do not receive remittances. Accordingly, 'remittances provide the household with a capital to start a new business or become self-employed—a type of employment which is often informal—and remittances represent a safety net encouraging remittance-receivers to choose less secure, but more lucrative, informal work'.





5. Unemployment

Unemployment fell by about 200,000 people, from an estimated 1.7 million in 2010 to 1.5 million in 2016, corresponding to a decline in the unemployment rate from 23 percent to 21 percent. ¹⁵ Unemployment rates are on the decrease in the entire region, except in Albania (Figure 14). In 2016 the unemployment rate varied between 25.4 percent in Bosnia and Herzegovina and 17.1 percent in Serbia. Depending on the country, recovery started from 2013/2014 onwards. In Albania and Croatia this process only began in 2015. In Bulgaria and particularly in Hungary, a noticeable downward trend in unemployment was also observed. It was only in Austria, starting from a comparatively low level, that the unemployment rate increased slowly but steadily to 6.2 percent in 2016. Croatia reported the highest unemployment rate among the peer countries (14.1 percent in 2016).

Total Youth ΑL MF MK MF ΑI MK AT ---- HR 35 60 30 50 25 40 20 30 15 20 10 10 5 0 00 2015 Q3 2 8 2016 Q1 2 2014 Q1 2014 Q3 2015 Q1 2016 Q1 2015 Q1 2012

Figure 14 / Unemployment rates for selected Western Balkan countries, in %, quarterly

Note: There are no quarterly data available for Bosnia and Herzegovina and Kosovo. Source: SEE Jobs Gateway Database, based on data provided by national statistical offices and Eurostat.

Gender differences in unemployment rates are much less evident than in employment rates. However, there are large differences across the countries covered in this report. In 2015 the gender gap in the unemployment rate was most pronounced in Bosnia and Herzegovina and in Kosovo (4.9 percentage points each). The incidence of unemployment was also higher for women than men (by 2, 1.3 and 0.4 percentage points; respectively) in Serbia, Croatia and Hungary. In all other countries the male unemployment rate exceeded the female rate. Gender differences in unemployment are likely the result of more women being outside the labor force, probably due to traditional roles, as already mentioned, such as mothers staying at home because of care duties, especially in a region with larger gender gaps in relation to wages and with limited childcare facilities available (OECD, 2015).

¹⁵ Unemployment data for Kosovo are estimated for 2010 and 2016 respectively.





Unemployment rates fell for the low and medium skilled, while the decline was notably smaller for the highly skilled (Figure 15). However, these developments differed substantially between countries. Between 2010 and 2016 unemployment rates increased in all three educational groups (that is, low, medium and highly educated) in Albania, Kosovo and Austria. By contrast, declines in unemployment were registered in all categories in Montenegro, FYR Macedonia and Hungary. All other countries reported a combination of both. For example, Serbia and Bosnia and Herzegovina reported increases in unemployment for the highly educated and a decline for the low and medium educated while in Bulgaria, it rose for the low educated and fell for the medium and high educated. In 2016 the unemployment of the low and medium educated ranged between 13.6 percent (17.8 percent) in Albania and 46.6 percent (32.6 percent) in Kosovo. Rates for the highly educated varied between 11 percent in Montenegro and 20.3 percent in Bosnia and Herzegovina.

■ 2016 • 2010 50 40 30 20 10 high high high ٥ high medium high ٥ high ò medium <u></u> <u>8</u> medium ٥ high <u>o</u> medium ò high ٥ medium medium medium medium medium medium RS ΑT BG HU ΑI BΑ MF MK ХK HR

Figure 15 / Unemployment rates by educational attainment, 2010 and 2016, in %

Note: Data for 2016 refer to the average for the first two quarters. Data for Kosovo refer to 2012 and 2015 respectively. For country specific methodologies, see Statistical Annex of the respective country.

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

YOUTH UNEMPLOYMENT

In most Western Balkan countries the unemployment rate for people under 25 years shows a similar pattern as in the EU peer countries, at levels about twice as high as overall unemployment rates. However, whereas the relative gap is the same, in absolute levels young people in the Western Balkans are at a much greater disadvantage since the unemployment rate itself is much higher than in the peer countries. Across the Western Balkans the youth unemployment rate fell on average from 50.8 percent in 2010 to 47.7 percent in 2015. Data for the first two quarters of 2016 point to a further decline, but unemployment among the young remains stubbornly high by European standards and is subject to major fluctuations (Figure 16).

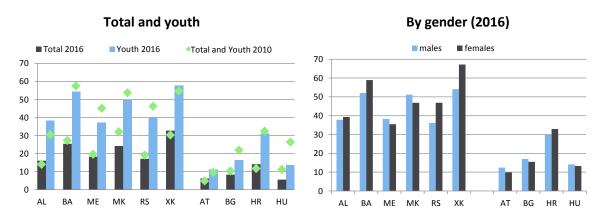
Youth unemployment rates fell faster than the overall unemployment rate in some Western Balkan countries (Figure 16). In both Albania and Austria the reverse was the case, with youth unemployment rising more than unemployment for all ages. This would suggest that youth unemployment is more responsive to the business cycle (see World Bank 2016a). In addition, the youth lack work experience or their skills do not match with employers' requirements (see Box 2 for a summary of policy challenges on youth employment in the Western Balkans). The high rates of 57.6 percent in Kosovo, 54.3 percent in Bosnia and Herzegovina, and close to 50 percent in





Macedonia indicate that young people are faced with a fairly critical situation in the Western Balkan labor markets.

Figure 16 / Youth unemployment rates, 2010 and 2016, in %



Note: Data for 2016 refer to the average for the first two quarters. Data for Kosovo refer to 2012 and 2015. For country specific methodologies, see Statistical Annex of the respective country.

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

Gender differences in youth unemployment are apparent, but differ across countries. Historically, the incidence of unemployment has been higher for young women than for men in Serbia, Bosnia and Herzegovina and in Kosovo, a pattern which was also evident in Croatia and Albania from 2013 and 2015 respectively (Figure 16). Unemployment rates for young women were below the rates for men during most of the 2010-2016 period in Montenegro, FYR Macedonia as well as the peer countries.

The Western Balkan countries exhibit youth unemployment ratios—the ratio of unemployed to all youth—that are almost four times higher than in Bulgaria and Hungary and twice as high as in Austria. FYR Macedonia had a similar youth unemployment ratio to Croatia. The youth unemployment ratio offers another insight into youth unemployment since it takes into account the share of young people still enrolled in education. In all Western Balkan countries, unemployment affects a relatively large share of the 15-24 age cohorts, with ratios of 16.4 percent and 14.6 percent recorded in Bosnia and Herzegovina and FYR Macedonia respectively. Ratios of 11-12 percent were observed in Albania, Montenegro, Serbia and Croatia.

Youth unemployment declined most for the highly skilled in Bosnia and Herzegovina, Serbia and Kosovo, while unemployment of the low educated either grew in Albania and Kosovo or remained stagnant in Bosnia and Herzegovina and in FYR Macedonia (Figure 17). Serbia was the only country to report a decline in the unemployment of low skilled young people. Developments among the medium skilled were mixed. Youth unemployment in the EU peer countries fell in all educational groups in Hungary and probably in Bulgaria, while the most striking increase was reported for the highly educated young people in Croatia.





Box 2 / The policy challenges of youth employment and unemployment in the Western Balkans

A recent report on youth employment in the Western Balkans (World Bank 2016a) finds that many young people are idle—that is, neither in employment nor in training—and that young women, in particular, have a weak attachment to the labor market. The labor market outcomes of youth are especially closely linked to the business cycle, leading to higher job losses during downturns, but which also benefit more during economic booms. This is partially explained by the fact that youth employment represents a more flexible segment of the labor market, with a higher share of temporary contracts and informal employment. Reforming labor regulations and labor taxation could have a positive impact on youth employment, but there are also other important constraints, like skills mismatches, low levels of entrepreneurship skills and access to productive inputs as well as social norms and attitudes, particularly regarding care responsibilities.

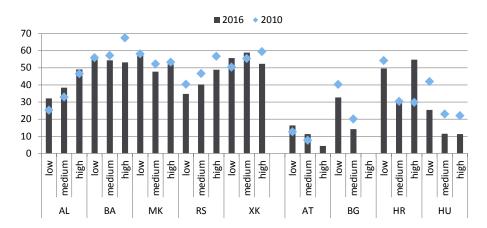


Figure 17 / Youth unemployment rates by educational attainment, 2010 and 2016, in %

Note: Data for 2016 refer to the average of the first two quarters. Data for Kosovo refer to 2012 and 2015 respectively. For country specific methodologies, see Statistical Annex of the respective country.

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

LONG-TERM UNEMPLOYMENT

In 2015 more than 70 percent of the unemployed in the Western Balkans-6 were out of work for more than a year on average. Long-term unemployment was highest and even increased in Bosnia and Herzegovina (85 percent), FYR Macedonia (84 percent) and Montenegro (78 percent). Serbia and Albania are the only countries in the region where the share of long-term unemployed fell between 2010 and 2016, but still accounted for about two-thirds of total unemployment. The proportion of long-term unemployed also decreased in Hungary and most noticeably in Croatia, but increased somewhat in Austria and Hungary. The proportion of long-term unemployed women was very close to that of men in Bosnia and Herzegovina, Montenegro and in Serbia, which was also the case in Hungary. In FYR Macedonia the share of men exceeded the share of women, which was also the case in Austria and Croatia, while the female share was higher in Kosovo, Albania and in Bulgaria.

In 2016 the long-term unemployment rate—measured as the share of long-term unemployed among the labor force—varied between 10 percent in Albania and Serbia and 21.6 percent in Bosnia and Herzegovina. Having started with high levels, long-term unemployment has gradually declined since 2014 in most Western Balkan countries. As shown in Figure 18 (based on quarterly data), in FYR Macedonia the decline had already started at the beginning of 2012, continuing





throughout the entire period under review, but was still high at 19.8 percent in the second quarter of 2016. In Albania and Serbia the rates fell to about 10 percent, while Montenegro observed an uneven development. In Bosnia and Herzegovina and in Kosovo, which do not provide quarterly data, the long-term unemployment rate also decreased in 2015/2016. These developments compare well with the peer countries (which reported much lower rates, however), with the exception of Austria, where the long-term unemployment rate increased slightly to 2.5 percent in the second quarter of 2016. The incidence of long-term unemployment was higher for women than for men throughout the reporting period in Serbia, Bosnia and Herzegovina and in Kosovo as well as in Croatia between 2013 and 2015. In all other countries men were more affected by long-term unemployment than women.

Figure 18 / Long-term unemployment rates, % of labor force, quarterly

Note: There are no quarterly data available for Bosnia and Herzegovina and Kosovo.

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

More than half of the total long-term unemployed in the Western Balkan countries (and in the EU peer countries) are men. Their share has been even increasing over recent years in the Western Balkans, except in Bosnia and Herzegovina and Serbia where it either fell or stagnated (Figure 19). In both the Western Balkans and in the EU peer countries, the proportion of older people in the total number of long-term unemployed increased since 2010, while the share of the young people was on the decline.

Long-term unemployment rates are highest for the young people and lowest for the older. This resembles the patterns for the EU peer countries: Bulgaria, Croatia and Hungary. It differs, however, to the situation in Austria, where the oldest age group is most affected by long-term unemployment. Among the young, long-term unemployment affects men more than women in Albania, Montenegro and FYR Macedonia, while the reverse applies in Serbia and particularly in Kosovo. In Bosnia and Herzegovina, which reports the highest long-term unemployment rates, both sexes are equally affected. With regard to the prime age group, the picture is somewhat different: long-term unemployment is more prevalent among women in Bosnia and Herzegovina, Serbia and Kosovo, while men are more affected in FYR Macedonia. In Albania and Montenegro there is no difference in the incidence of long-term unemployment between men and women. The oldest age group shows a uniform picture for all countries in the region, with men more likely to be affected.





Gender Age groups ■ 25-54 **15-24 55-64** 100 100 80 80 70 70 60 60 50 50 40 40 30 30 10 10 2010 2010 2010 2010 2016 2010 2016 2010 2010 2010 2010 2010 2016 2010 2016 ME MK RS XK AT HU ME MK RS XK BG HR

Figure 19 / Long-term unemployment in 2010 and 2016, shares in %

Note: Data for 2016 refer to the average for the first two quarters. Data for Kosovo refer to 2012 and 2015 respectively. For country specific methodologies, see Statistical Annex of the respective country.

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

High and persistent shares of long-term unemployment illustrate the structural nature of unemployment in the Western Balkans. Those affected run the risk of a degradation of skills, declining motivation to find a job, and possiblythe exiting the official labor market altoghether in the logn run. The problem of long-term unemployment is much more severe in the Western Balkans than in the peer countries, with the proportion of those affected far higher and of a long-term nature.

Special Spotlight: The impact of growth on labor markets

The relationship between economic growth, employment and unemployment dynamics is among the most challenging issues in the Western Balkan economies. The international financial crisis severely hit the economies of Western Balkan countries. The effect was so strong that the GDP growth rates of the Western Balkans contracted on average 16 by more than 6 percentage points: from an average real GDP growth rate of 5.3 percent prior to 2009, down to -1.5 percent in 2009. In parallel, unemployment rates increased on average by 4.7 percentage points and employment levels dropped by 2.7 percent. On average, the labor force participation rate dropped by 1 percentage point, down to 51% in 2009. Similarly, the EU-CEE economies were also hit hard by the international financial crisis, with the economies of this region contracting by 2.6 percent in 2009.

The post-recession period, 2011-2015, was shaped by GDP growth that recovered slowly and strengthened slightly from 2013. This protracted recession and the weak economic growth have been accompanied by particularly meagre effects on employment growth in the Western Balkans, though a rebound was observed from 2014. For the EU-CEE countries, performance in terms of growth and its effect on employment was low, with GDP growth rates ranging between -3 percent and +3.8 percent in the Western Balkans (like, for example, in FYR Macedonia) and between -3

¹⁶ The average GDP growth rate for the group of countries has been weighted using the nominal GDP in PPP.





percent and 5 percent in EU-CEE countries (like in Poland). The effects on employment were modest at 0.5 percent on average in the Western Balkans and 0.2 percent in EU-CEE.

In the following section, the relationship between employment, unemployment and GDP growth is examined in detail. In particular, it compares Western Balkan countries with EU-CEE countries which have undergone similar transitional transformations. Specifically, so-called 'employment elasticities' to changes in output are estimated for different sub-periods, indicating how strongly employment growth reacts to GDP growth (see Box 3 for a methodological explanation). Though this method has some limitations it allows an assessment of the quantitative response of employment to GDP growth. These limitations mostly arise: from measuring labor input in the LFS (that is, not properly capturing the movement of informal labor); or from the omission of other variables which might affect employment, volatility or fluctuations over time; or from a relatively small number of observations for different sub- periods (see also IMF, 2014).

For the Western Balkan countries, the employment-GDP growth relationship was only positive and significant for the period 2006-2010. During this time, employment growth reacted positively to GDP growth with an elasticity of 0.4 (that is, a one percentage point increase in GDP growth is related to a 0.4 percentage point increase in employment growth). However, for the subsequent period from 2011 to 2015, this positive relationship was no longer significant (see Table 4 and Figure 20). A positive and significant employment-GDP growth relationship is also confirmed for the EU-CEE countries, especially during the 2001 to 2005 period when it was exceptionally high at 0.61. The relationship was also strong in the other periods, with elasticities between 0.35 to 0.4. In principle, one would expect a stronger growth-employment relationship in the Western Balkans because the higher levels of unemployment should result in higher labor supply elasticities; however, in reality, no such relation has been observed after the crisis for the Western Balkan countries. Generally, the meagre recovery rate both in the Western Balkans and EU-CEE has been insufficient to generate new jobs. Instead, labor productivity growth might have benefited at the expense of employment growth, for example through investments in new technologies rather than creating new jobs.

Despite the positive link between growth and employment, a higher GDP growth was needed in the Western Balkans than in the EU-CEE to keep the employment levels constant. Usually, positive GDP growth rates combined with an employment elasticity below one but greater than zero tend to be associated with both employment and labor productivity growth, and at the same time higher employment than labor productivity growth. As argued by Kahn (2001), less developed economies need high employment elasticities of around 0.7 and GDP growth rates of 5 percent in order to be able to generate employment growth above labor force growth. Therefore, as the Western Balkans are labor abundant economies, a higher threshold GDP growth is required to ensure that employment levels remain constant.

The employment-GDP growth relationship was found to be insignificant also for 2001-2005 period but such results suffer from the small number of observations.





WB countries, 2000-2010 WB countries, 2011-2015 20 10 9 CEE countries, 2000-2010 CEE countries, 2011-2015 20 9 $R^2 = 20 \%$ $R^2 = 32\%$ 0 -10 -10 -5 0 5 10 -10 -5 0 5 10 Real GDP growth, annual in %

Figure 20 / Employment growth versus GDP growth, 2000-2015

Note: The outlier observation 2000-2010 is Montenegro in 2007.

Source: Own calculations, wiiw Annual Database, based on data provided by national statistical offices and Eurostat.

Table 2 / Employment elasticity of growth regressions¹⁸

	WB	WB	WB	WB	EU-CEE	EU-CEE	EU-CEE	EU-CEE
	2001-2010	2001-2005	2006-2010	2011-2015	2001-2010	2001-2005	2006-2010	2011-2015
	EMP_growth							
GDP growth	0.256	-0.919	0.414*	0.311	0.335***	0.610*	0.345***	0.390**
	(0.215)	(0.710)	(0.184)	(0.437)	(0.0585)	(0.262)	(0.0656)	(0.126)
Constant	-1.659	1.253	-1.651*	0.376	-0.724*	-2.325*	-0.393	-0.256
	(0.996)	(2.737)	(0.899)	(1.007)	(0.295)	(1.206)	(0.345)	(0.306)
N	33	12	21	28	78	38	40	48
R^2	0.050	0.173	0.253	0.023	0.322	0.157	0.472	0.197
Average GDP growth threshold*			3.98%		2.15%	3.8%		

Standard errors in parentheses * p < 0.10, ** p < 0.01, *** p < 0.001; country-fixed effects are included; the outlier observation for Montenegro in 2007 is not included in the regressions.

*Note: This is the average threshold GDP growth for the Western Balkans (WB) which is needed to maintain the employment level unchanged (see Box 3); for the period 2011-2015 the constant is insignificant.

Specifically in the Western Balkan countries, a threshold GDP growth rate of almost 4 percent might be needed to keep the employment level stable. This threshold growth rate is lower in the EU-CEE countries where a GDP growth of 2.2 percent has been sufficient to keep employment at a constant level. This indicates that the Western Balkan countries have needed much higher GDP growth rates to achieve positive employment growth.

The employment-GDP growth relationship is analyzed over the periods 2000-2010 and 2011-2015 separately for the Western Balkan countries (Kosovo is not included) and eight EU-CEE countries. The dependent variable is the growth rate in employment levels between time t and t-1. The independent variable corresponds to real GDP growth rate at time t. The employment elasticity of growth has been estimated running panel data regressions counting for country fixed effect.





WB countries, 2000-2010 WB countries, 2011-2015 2 ကု R ² = 21% -10 15 CEE countries, 2000-2010 CEE countries, 2011-2015 2 0 ιŅ $R^2 = 31\%$ $R^2 = 39\%$ 9 -15 -10 -5 0 5 10 -10 -5 0 5 10 Real GDP growth rate, annual

Figure 21 / Unemployment rate change versus GDP growth, 2000-2015

Note: The outlier observation in 2011-2015 is Kosovo.

Source: Own calculations, wiiw Annual Database, based on data provided by national statistical offices and Eurostat.

Table 3 / Unemployment rate and GDP growth relationship regressions¹⁹

	Western Balkans	Western Balkans	EU-CEE	EU-CEE
	2000-2010	2011-2015	2000-2010	2011-2015
	UNR_change	UNR_change	UNR_change	UNR_change
GDP_growth	-0.369**	-0.0381	-0.247***	-0.360***
	(0.129)	(0.184)	(0.0420)	(0.0809)
_cons	1.285*	-0.173	0.765***	0.412*
	(0.663)	(0.413)	(0.208)	(0.183)
N	37	25	88	40
R^2	0.208	0.002	0.305	0.390
GDP growth threshold	3.3%		3.1%	

Standard errors in parentheses * p < 0.10, *** p < 0.01, *** p < 0.001; country-fixed effects are included; Kosovo is not included in the regressions.

Source: Own calculations, wiiw Annual Database, based on data provided by national statistical offices and Eurostat.

With regard to the relationship between the unemployment rate and GDP growth, an increase in the GDP growth rate of 1 percentage point was accompanied by a 0.37 percentage point decline in the unemployment rate in the Western Balkans and a 0.25 percentage point decline for the CEE countries for the 2001-2010 period. In the subsequent period, the relationship between the negative unemployment rate and GDP growth was confirmed for the EU-CEE but not for the Western Balkans. For the latter, the impact of a 1 percentage point increase in GDP growth was a 0.36 percentage points decrease in the unemployment rate (see Table 3 and Figure 21).

In conclusion, the positive relationship between employment and GDP growth, which was observed in both the EU-CEE and Western Balkans before and during the recession, seems to be less discernible during the recovery period. In particular, the impact of growth on employment, but

¹⁹ The dependent variable is the unemployment rate change between time t and t-1. The independent variable is corresponding real GDP growth rate at time t. We have been running panel data counting for country fixed effect.





also unemployment, remained inconclusive during the recovery period, which has been characterized by modest or jobless growth in the Western Balkans.

Box 3 / Estimating the employment and unemployment elasticity of growth

The relationship between the growth of output and employment is analyzed by estimating panel regressions including country fixed effects. This shows the employment elasticity of growth, i.e. the sensitivity of employment growth on output growth. Formally, the following specification is estimated:

$$EMPgrowth_{it} = \beta_0 + \beta_1 GDPgrowth_{it} + \mu_i + \varepsilon_{it}$$

where $EMPgrowth_{it}$ denotes the annual growth rates of employment and real GDP, respectively. The regression has been estimated for the two groups of countries separately. Based on the estimated coefficients, the (average) hypothetical threshold GDP growth, i.e. the GDP growth rate that would be required to keep employment unchanged, can be calculated by setting employment growth to zero and rearranging:

$$\label{eq:gdpgrowth_threshold} GDP growth_threshold_{it} = -\frac{\beta_0}{\beta_1}$$

The following specification is used to test the relationship between the change in the unemployment rates and GDP growth (known as Okun's law) for the Western Balkan countries in comparison with the EU-CEE:

$$UNRchange_{it} = \beta_0 + \beta_1 GDPgrowth_{it} + \mu_i + \epsilon_{it}$$

where GDPgrowth $_{it}$ denotes the growth rate of real GDP and UNRchange $_{it}$ is the change in the unemployment rates in percentage points. The regression is estimated by running fixed effect regressions for the two periods separately for the Western Balkans and CEE countries.

The (average) GDP growth rate that would be required to keep unemployment rate from rising can be calculated by setting unemployment rate change to zero and rearranging:

$$\label{eq:gdpgrowth_threshold} \text{GDPgrowth_threshold}_{it} = -\frac{\beta_0}{\beta_1}$$





7. Conclusions

This report shows that a few harmonized labor market indicators can contribute significantly to the understanding of labor market trends and main drivers of results. All the analyses in this report have been carried out using the harmonized indicators for the Western Balkans and selected EU countries, which are available at the SEE Jobs Gateway website (http://SEEJobsGateway.net). Most notably, it was possible to calculate from the database that roughly 300,000 jobs have been created in the Western Balkans since 2010. The analysis of the key labor market indicators also shows that unemployment declined slightly (from 23 to 21 percent), and that the winners of the recent recovery were adults close to retirement age and the highly educated, while the losers continued to be the low-educated, especially the low-educated youth.

The analysis of the impact of growth on employment indicates that the jobs challenge in the Western Balkans is structural, and growth alone—at least at current growth levels—will not be sufficient to create enough jobs. No significant impact of growth on employment was observed in the aftermath of the financial crisis in the Western Balkans, and the impact of growth on unemployment is small. The Western Balkan countries have not yet returned to a situation where economic growth will translate into significant jobs growth; the transition to modern market economies is not yet complete, and many structural issues remain to be addressed.

On the labor supply side, there is a need to strengthen employment policies and the effectiveness of intermediation in the labor market. All Western Balkan countries have embarked on a journey to model their public employment services (PES) and active labor market programs (ALMPs) after good practices in EU countries. The European Commission is committed to supporting the Western Balkan countries in these efforts, as outlined in various Economic Reform Programmes (see, for example, Government of the Republic of Kosovo, 2016). This means that active labor market programs—ranging from training to start-up support, wage subsidies, and public works—need to be better designed and targeted. This applies especially for the most vulnerable and the youth, as the latter represent a profitable investment from a fiscal perspective. The capacities of PES to implement these programs, but also to match employment seekers with job vacancies faster and more efficiently, needs to be further developed. Furthermore, the potential of private providers to intermediate and implement programs needs be tapped into.

On the labor demand side, there is a need to further strengthen competitiveness, while also enabling new segments in the labor market to flourish. Most countries have made great strides towards better investment climates, but more needs to be done to change the growth model of the Western Balkans from one that relies on domestic consumption to one that relies on exports and investments (World Bank 2014). However, the high level of informal employment, even outside agriculture, indicates that it is also necessary to unlock the potential of certain segments in the labor market that do not currently operate in the formal sector. This requires deregulation and tax reforms to foster a new labor market that also allows for flexible, low-paying part-time jobs—atypical and sometimes precarious jobs, but jobs that might be more accessible for the most vulnerable groups, such as the low-educated, as well as women seeking part-time opportunities (Koettl 2012).





Finally, this report has shown that an increase in the quantity and quality of the data is an important step towards strengthening our knowledge on the Western Balkans labor market—but better data and more research are still needed. The new regional database is a first attempt and comprises a limited, but important number of key labor market indicators to fill this knowledge gap. For the future, it will be important to maintain this database and ensure that it is up-to-date, as well as expanding it to include more data, like on informal employment, atypical employment, wages, economic sector, and occupation data. The data should be easily accessible not only to policy makers and academics, but also to the general public, including journalists and advocacy groups. Finally, the data should inspire more research on how the Western Balkan countries can overcome their many labor market challenges.





References

Arandarenko, M. (2016), Analysis of Serbia's labour market performance in light of labour legislation changes, Belgrade, June 28.

Arandarenko, M., Zarkovic-Rakic, J. and M. Vladisavljevic (2012), 'From Inactivity to Employment: analysis of public policy impacts and factors affecting inactivity—opportunities for activity and employment increase in Serbia, FREN, Belgrade.

Eurofound (2012), Young people not in employment, education or training: Characteristics, costs and policy responses in Europe, Dublin.

European Commission (2016a), Kosovo Report 2016, Commission Staff Working Document, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 2016 Communication on EU Enlargement Policy, {COM(2016) 715 final} Brussels, 9 November

----- (2016b), Montenegro Report 2016, Commission Staff Working Document, Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions, 2016 Communication on EU Enlargement Policy, {COM(2016) 715 final} Brussels, 9 November.

Government of the Republic of Serbia (2016), Employment and Social Reform Programme, Belgrade, May

Government of the Republic of Kosovo (2016), Economic Reform Programme 2016, Prishtina.

IMF (2014), Boosting Job Growth in the Western Balkans, IMF Working Paper, WP/14/16.

Ivlevs, A. (2014), 'Remittances and informal employment: evidence from transition economies', December 2014

Kahn A. (2001) "Employment policies for poverty reduction". Recovery and Reconstruction Department, Geneva, ILO.

Koettl, J. (2012) "Does Formal Work Pay in Serbia? The Role of Labor Taxes and Social Benefit Design in Providing Disincentives for Formal Work." In Caterina Ruggeri Laderchi and Sara Savastano (eds.) Poverty and Exclusion in the Western Balkans. New Directions in Measurement and Policy, Volume 8. Springer.

Kovtun, D., Mayer Cirkel, A., Murgasova, Z., Smith, D. and S. Tambunlertchai (2014), 'Boosting Job Growth in the Western Balkans', IMF Working Paper WP/14/16, January.

Numanović, A. in cooperation with Petreski, B., Polo, E. and Despina Tumanoska (2016), 'Weak Labour Markets, Weak Policy Responses, Active Labour Market Policies in Albania, Bosnia and Herzegovina and Macedonia', Sarajevo.

OECD (2015), Education at a Glance, Interim Report: Update of Employment and Educational Attainment Indicators, Paris, January.

Petreski, M., Petreski, B., Tumanoska, D., Narazani, E., Kazazi, F., Ognjanov, G., Jankovic, I., Mustafa, A. and T. Kochovska (2017), 'The size and effects of emigration and remittances in the Western-Balkans: Forecasting based on a Delphi process', MPRA Paper, No 75512 Munich.

Reva, A. (2012), 'Gender Inequality in the Labor Market in Serbia', Policy Research Working Paper 6008, The World Bank, Europe and Central Asia Region, Poverty Reduction and Economic Management Unit, March.

Sanfey, P., Milatović, J. and A. Krešić (2016), 'How the Western Balkans can catch up', EBRD Working Paper No. 186, London, January.

UNDP (2016), Making the Labour Market Work for Women and Youth, Kosovo Human Development Report 2016, Prishtina.





Vidovic, H. (2012), 'Trends in the Western Balkan labour markets', in Sternad, D. and T. Döring (ed.), Handbook of Doing Business in South East Europe, Palgrave Macmillan

World Bank (2014), Competitiveness Policy Note: Rebalancing Serbia's Economy: Improving Competitiveness, Strengthening the Private Sector, and Creating Jobs, Washington, DC.

----- (2016a), South East Europe Regular Economic Report, No 9S, Special Topic, Ten Messages about Youth Employment in South East Europe, 2016.

----- (2016b), South East Europe Regular Economic Report, No 10, Fall 2016.

World Bank, Agency for Statistics of Bosnia and Herzegovina, FBiH Institute for Statistics and RS Institute for Statistics World Bank (2015), Bosnia and Herzegovina: Gender Disparities in Endowments, Access to Economic Opportunities and Agency, May.





Statistical Annex

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 for the six Western Balkan countries and for four EU peer countries.

Disclaimer

All data presented in this report and online have been collected directly from national statistical offices of the six Western Balkan countries and Eurostat, with the objective of harmonizing data as much as possible across countries. The data have been collected in 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 http://SEEJobsGateway.net.

This database covers a unique and detailed set of labor market indicators based on LFS data for the Western Balkan countries. The dataset is harmonized across indicators, age groups and educational attainment. Overall, the database covers three parts: I. Key economic indicators, II. Labor market indicators, and III. Labor market data on a sub-national level.

The database contains both raw and derived statistics. The underlying basic employment data (in thousand persons) are provided by the statistical offices on a quarterly basis (raw data, 3 decimal places). All rates and shares on a quarterly basis have been calculated based on these raw data. Annual data (in thousand persons) provided in the database are calculated as the average of the available observations on a quarterly basis. All annual rates and shares provided are then calculated out of these annual averages. In case of missing quarters, annual data are partly estimated (and correspondingly flagged). Future updates of the database will seek to remedy this. Further flags in the database are used to symbolize if the data are less accurate or inaccurate and should allow for a careful interpretation of the data.

Major breaks in series:

The LFS in the Western Balkans have steadily improved and are harmonized with EU and ILO definitions, implying that breaks in the time series are unavoidable. Most of the breaks in the series occur for any of the following reasons: change in survey design, change in survey questionnaire, change survey frequency, revisions of the data series based on updated population census results for 2011, and reclassification of education attainment. Specifically, the following changes affect the comparability over time and across countries for the data series:

• Introduction of a continuous quarterly survey producing quarterly results: Albania from 2012 (before 2012 the survey was carried out once a year – 2010: Sept-Oct, 2011: July – Sept), 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 conducted).

Amendment: In Bosnia and Herzegovina the survey is still carried out once a year in April. In Kosovo the survey is already based on a continuous quarterly survey; so far the data are available on an annual basis only and start from 2012.

- Updated population census results 2011: Albania and Montenegro from 2011 (data 2010 are not fully comparable), Serbia from 2013 (low impact on growth rates in comparison to the previous year).
 - Amendment: In Bosnia and Herzegovina the 2013 census is not yet applied; in Macedonia the 2002 census is applied.
- Methodological change in survey: Serbia from 2014 (2014 is a recalculation of the changes initially introduced in 2015: enlarged sample size, continuous survey, new data collection system data are not comparable with the previous year).
- Ecucational attainment: Indicators showing the 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 skilled, medium skill and high skilled refer to ISCED 2011. Any deviations are described in the metadata.

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

Western Balkans-6 aggregate:

This country grouping is the sum of the six countries only when data for all these countries are available. Time series therefore start from 2012 (because data for Kosovo are not available prior to this). The methodological break in Serbia (2013/2014) is therefore reflected in the aggregate. The Western Balkan-6 aggregate data are only available on an annual basis.

Conventional signs:

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





Sources and definitions for macro-economic indicators:

Sources: SEE Jobs Gateway Database, based on data provided by national statistical offices and Eurostat. The source for GDP and inflation is World Bank 2016b.

Definitions:

GDP real: Gross domestic product at 2010 reference prices, real growth in %.

Labor productivity: GDP at 2010 reference prices per person employed (LFS), growth in %.

Inflation: Consumer prices index (harmonized CPI for EU peer countries), growth in %.

Sources and definitions for 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.

Definitions:

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

Population aged 15+: The ILO defines the working-age population as persons aged 15 years and over; and for the EU peer countries, persons aged 15-74.

Labor force: employed and unemployed persons.

Employment rate: employed persons in % of working-age population of the respective gender, age and education group.

Activity rate: labor force in % of working-age population of the respective gender and age group.

Unemployment rate: unemployed persons in % of labor force 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 in % of labor force.

Share of long-term unemployment: long-term unemployed in % of total unemployed.





Selected economic indicators

Albania	2010	2011	2012	2013	2014	2015
GDP, real growth in %	3.7	2.5	1.4	1.0	1.8	2.6
Employment aged 15+, growth in %	3.7	-0.6	-1.8	-10.2	1.3	4.8
Labor productivity, growth in %	•	3.2	3.2	12.5	0.5	-2.1
Inflation, growth in %	3.6	3.	2.0	1.9	1.6	1.9
Bosnia and Herzegovina	2010	2011	2012	2013	2014	2015
GDP, real growth in %	0.8	0.9	-0.9	2.4	1.1	3.0
Employment aged 15+, growth in %	0.8	-3.2	-0.3	1.0	-1.2	1.2
Labor productivity, growth in %		4.2	-0.6	1.4	2.3	1.9
Inflation, growth in %	2.1	3.7	2.0	-0.1	-0.9	-1.0
Kosovo	2010	2011	2012	2013	2014	2015
GDP, real growth in %	3.3	4.4	2.8	3.4	1.2	4.1
Employment aged 15+, growth in %	3.3		2.0	12.3	-4.6	-8.0
Labor productivity, growth in %				-7.9	6.1	13.4
Inflation, growth in %	3.5	7.3	2.5	1.8	0.4	-0.5
FYR Macedonia	2010	2011	2012	2013	2014	2015
GDP, real growth in %	3.4	2.3	-0.5	2.9	3.6	3.8
Employment aged 15+, growth in %		1.1	0.8	4.3	1.7	2.3
Labor productivity, growth in %	·	1.2	-1.3	-1.4	1.9	1.5
Inflation, growth in %	1.6	3.9	3.3	2.8	-0.3	-0.3
	2010	2011	2012	2013	2014	2015
Montenegro	2.5	3.2		3.5	1.8	3.4
GDP, real growth in % Employment aged 15+, growth in %			-2.7 2.5	0.8	7.1	2.5
Labor productivity, growth in %	•	•	-5.1	2.7	-4.9	0.9
Inflation, growth in %	0.5	3.1	4.1	2.7	-4.3	1.5
Serbia	2010	2011	2012	2013	2014	2015
GDP, real growth in %	0.6	1.4 -6.0	-1.0	2.6	-1.8	0.8
Employment aged 15+, growth in %	•		-1.1	3.7	4.8	0.6
Labor productivity, growth in %	6.1	7.9 11.1	0.1 7.3	-1.1 7.7	-6.3 2.1	0.2 1.9
Inflation, growth in %						
Western Balkans-6	2010	2011	2012	2013	2014	2015
GDP, real growth in %	1.7	1.9	-0.4	2.5	0.3	2.2
Employment aged 15+, growth in %	•	•	•	0.8	2.3	1.2
Labor productivity, growth in %	2.9	5.4	3.6	1.7 2.7	-2.0 0.4	1.0 0.6
Inflation, growth in %	2.9	5.4	3.0	2.7	0.4	0.0
EU peer countries						
Austria	2010	2011	2012	2013	2014	2015
GDP, real growth in %	1.9	2.8	0.7	0.1	0.6	1.0
Employment aged 15-74, growth in %		0.9	0.8	0.5	0.1	0.9
Labor productivity, growth in %		1.9	-0.1	-0.4	0.5	0.1
Inflation, growth in %	1.7	3.6	2.6	2.1	1.5	0.8
Bulgaria	2010	2011	2012	2013	2014	2015
GDP, real growth in %	1.3	1.9	0.0	0.9	1.3	3.6
Employment aged 15-74, growth in %		-3.6	-1.1	0.0	1.6	1.7
Labor productivity, growth in %		5.7	1.1	0.9	-0.3	1.9
Inflation, growth in %	3.0	3.4	2.4	0.4	-1.6	-1.1
Croatia	2010	2011	2012	2013	2014	2015
GDP, real growth in %	-1.7	-0.3	-2.2	-1.1	-0.5	1.6
Employment aged 15-74, growth in %		-4.0	-3.6	-2.6	2.9	1.6
Labor productivity, growth in %	·	3.9	1.4	1.5	-3.3	0.1
Inflation, growth in %	1.1	2.2	3.4	2.3	0.2	-0.3
Hungary	2010	2011	2012	2013	2014	2015
GDP, real growth in %	0.7	1.7	-1.6	2.1	4.0	3.1
Employment aged 15-74, growth in %		0.7	1.8	1.7	5.3	2.7
Labor productivity, growth in %		1.0	-3.4	0.4	-1.2	0.5
Inflation, growth in %	4.7	3.9	5.7	1.7	0.0	0.1

Notes: For country-specific methodological notes on employment see footnotes to the following tables. The figure for Albanian employment growth in 2011 disregards the break due to census 2011, however, the growth rate seems to be plausible. The Serbian employment growth in 2014 is comparable according to the previously applied methodology. Western Balkans-6: Employment data reflect the sum of the six countries only when data for all countries are available, break for Serbia in 2014 considered. GDP growth rates are weighted averages, inflation is a simple average.

Source: SEE Jobs Gateway Database, based on data provided by national statistical offices and Eurostat. The source for GDP and inflation is World Bank 2016b.





Albania: Labor market indicators

	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Total								
Total population (1,000)	2,913	2,905	2,900	2,897	2,894	2,889		
Population aged 15+ (1,000)	2,459	2,236	2,297	2,322	2,340	2,354	2,376	2,376
Employment aged 15+ (1,000)	1,167	1,160	1,140	1,024	1,037	1,087	1,129	1,150
Employment rate (% population aged 15+)	47.5	51.9	49.6	44.1	44.3	46.2	47.5	48.4
Employment rate (% population aged 15-64)	53.5	58.7	55.9	49.9	50.5	52.9	54.8	55.3
Employment rate (% population aged 15-24)	23.4	34.1	25.8	19.0	17.7	18.9	21.2	18.9
Employment rate (% population aged 25-54)	68.7	71.5	68.9	63.9	64.6	67.5	68.1	68.8
Employment rate (% population aged 55-64)	48.3	54.7	56.3	51.1	51.2	53.6	55.0	54.9
Employment rate for low skilled 15-64 (ISCED 0-2)	50.9	56.0	52.7	45.3	46.7	50.2	51.4	51.8
Employment rate for medium skilled 15-64 (ISCED 3-4)	52.7	60.0	57.3	50.6	49.9	51.8	55.5	55.6
Employment rate for high skilled 15-64 (ISCED 5-8)	71.7	68.1	67.1	67.1	66.5	64.4	64.4	66.2
Activity rate (% population aged 15+)	55.2	60.3	57.3	52.4	53.7	55.7	56.9	57.2
Activity rate (% population aged 15-64)	62.3	68.5	64.9	59.6	61.5	64.2	65.9	65.8
Activity rate (% population aged 15-24)	33.7	44.8	36.7	27.6	29.0	31.3	34.4	30.8
Activity rate (% population aged 25-54)	77.8	81.7	78.4	75.5	76.7	79.7	79.9	79.8
Activity rate (% population aged 55-64)	52.6	61.3	60.7	56.6	58.1	60.2	62.3	61.9
Unemployment aged 15+ (1,000)	191	189	176	194	220	224	224	210
Unemployment rate (% labor force 15+)	14.0	14.0	13.4	15.9	17.5	17.1	16.6	15.5
Youth unemployment rate (% labor force 15-24)	30.5	23.9	29.8	31.4	39.0	39.8	38.3	38.6
Long-term unemployment rate (% labor force 15+)	10.5	10.3	10.3	11.5	11.2	11.3	10.7	10.3
Share of long-term unemployment (% of total)	74.9	74.0	77.1	72.4	64.3	66.0	64.8	66.6
Unemployment rate for low skilled 15+ (ISCED 0-2)	12.9	12.9	11.7	14.1	14.5	13.5	14.4	12.8
Unemployment rate for medium skilled 15+ (ISCED 3-4)	15.7	15.0	14.8	18.9	21.3	20.4	18.1	17.5
Unemployment rate for high skilled 15+ (ISCED 5-8)	13.7	15.7	16.0	14.9	17.2	19.1	19.0	17.8
Male								
Total population (1,000)	1,458	1,455	1,456	1,458	1,460	1,463		
Population aged 15+ (1,000)	1,198	1,107	1,139	1,110	1,140	1,164	1,196	1,183
Employment aged 15+ (1,000)	670	649	637	563	586	621	635	639
Employment rate (% population aged 15+)	55.9	58.6	55.9	50.7	51.4	53.3	53.1	54.0
Employment rate (% population aged 15-64)	63.1	65.7	62.2	57.3	58.0	60.5	60.4	61.1
Employment rate (% population aged 15-24)	28.1	38.9	29.9	24.2	21.4	23.8	25.6	21.6
Employment rate (% population aged 25-54)	79.9	79.0	76.5	71.6	72.7	75.5	73.5	75.0
Employment rate (% population aged 55-64)	66.6	66.0	68.3	62.2	64.7	66.9	66.3	67.6
Employment rate for low skilled 15-64 (ISCED 0-2)	60.2	60.7	57.2	51.8	53.0	55.5	55.8	56.0
Employment rate for medium skilled 15-64 (ISCED 3-4)	64.4	69.8	66.2	60.3	60.0	62.4	63.7	64.0
Employment rate for high skilled 15-64 (ISCED 5-8)	74.9	74.1	71.7	70.6	70.6	71.4	66.6	69.3
Activity rate (% population aged 15+)	64.0	67.9	65.5	61.7	63.5	64.3	64.3	64.7
Activity rate (% population aged 15-64)	72.3	76.4	73.4	70.2	72.2	73.4	73.4	73.5
Activity rate (% population aged 15-24)	40.0	52.2	44.3	36.6	37.2	39.2	41.1	34.9
Activity rate (% population aged 25-54)	88.8	88.9	87.7	86.4	87.4	88.6	86.5	88.1
Activity rate (% population aged 55-64)	71.7	74.5	74.5	70.2	74.9	76.0	76.8	77.0
Unemployment aged 15+ (1,000)	97	102	109	122	139	128	133	125
Unemployment rate (% labor force 15+)	12.6	13.6	14.6	17.8	19.2	17.1	17.4	16.4
Youth unemployment rate (% labor force 15-24)	29.6	25.5	32.6	33.8	42.5	39.2	37.6	38.2
Long-term unemployment rate (% labor force 15+)	9.3	9.9	10.9	12.4	11.7	11.2	11.0	10.7
Share of long-term unemployment (% of total)	73.9	73.0	74.8	69.7	61.0	65.8	63.6	65.0
Unemployment rate for low skilled 15+ (ISCED 0-2)	12.0	14.6	14.3	17.3	17.8	15.4	16.4	15.3
Unemployment rate for medium skilled 15+ (ISCED 3-4)	13.3	12.7	15.6	19.8	21.6	19.0	17.7	17.2
Unemployment rate for high skilled 15+ (ISCED 5-8)	13.1	12.9	(12.4)	(13.5)	16.0	16.4	19.1	17.1





	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Female								
Total population (1,000)	1,455	1,450	1,444	1,438	1,433	1,426		
Population aged 15+ (1,000)	1,261	1,129	1,157	1,212	1,199	1,190	1,180	1,193
Employment aged 15+ (1,000)	497	512	503	461	451	466	494	510
Employment rate (% population aged 15+)	39.5	45.3	43.5	38.0	37.6	39.2	41.9	42.8
Employment rate (% population aged 15-64)	44.5	51.8	49.6	43.1	43.4	45.5	49.0	49.6
Employment rate (% population aged 15-24)	18.6	29.1	20.9	14.1	13.9	13.4	16.1	15.9
Employment rate (% population aged 25-54)	58.6	64.3	62.2	57.3	57.2	60.1	63.1	63.1
Employment rate (% population aged 55-64)	30.7	43.4	42.9	40.0	37.3	39.2	42.3	42.1
Employment rate for low skilled 15-64 (ISCED 0-2)	42.8	51.8	48.7	40.1	41.3	45.3	47.3	48.0
Employment rate for medium skilled 15-64 (ISCED 3-4)	39.9	48.3	46.5	39.4	37.9	38.8	44.7	44.8
Employment rate for high skilled 15-64 (ISCED 5-8)	69.1	62.7	62.9	64.2	63.1	58.9	62.6	63.8
Activity rate (% population aged 15+)	46.9	52.9	49.2	44.0	44.4	47.2	49.5	49.9
Activity rate (% population aged 15-64)	52.9	60.8	56.4	50.1	51.3	55.1	58.2	58.1
Activity rate (% population aged 15-24)	27.2	37.0	27.6	19.4	20.5	22.7	26.6	26.1
Activity rate (% population aged 25-54)	67.9	74.8	70.2	66.1	66.9	71.6	73.7	72.0
Activity rate (% population aged 55-64)	34.2	47.9	45.5	42.9	40.8	43.1	45.8	46.7
Unemployment aged 15+ (1,000)	94	86	67	72	81	96	91	85
Unemployment rate (% labor force 15+)	15.9	14.4	11.7	13.5	15.2	17.1	15.5	14.2
Youth unemployment rate (% labor force 15-24)	31.7	21.4	24.3	27.3	32.6	40.8	39.5	39.1
Long-term unemployment rate (% labor force 15+)	12.1	10.8	9.5	10.4	10.7	11.3	10.3	9.8
Share of long-term unemployment (% of total)	76.0	75.1	80.9	76.9	70.1	66.2	66.6	69.0
Unemployment rate for low skilled 15+ (ISCED 0-2)	14.1	11.0	8.6	10.5	10.4	11.2	12.0	10.0
Unemployment rate for medium skilled 15+ (ISCED 3-4)	19.7	18.7	13.3	17.2	20.7	23.0	18.8	18.0
Unemployment rate for high skilled 15+ (ISCED 5-8)	14.2	18.4	19.5	16.2	18.2	21.5	18.9	18.3

In 2010 and 2011 the labor force survey was carried out once a year (2010: Sept-Oct, 2011: July-Sept), continuous quarterly survey thereafter. Census 2011 is applied from 2011, data 2010 are therefore not fully comparable. Education groups refer to ISCED 1997.





Bosnia and Herzegovina: Labor market indicators

	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Total							-	
Total population (1,000)	3,843	3,840	3,836	3,832	3,827	3,819		
Population aged 15+ (1,000)	2,597	2,561	2,566	2,598	2,565	2,579		2,489
Employment aged 15+ (1,000)	843	816	814	822	812	822		801
Employment rate (% population aged 15+)	32.5	31.9	31.7	31.6	31.7	31.9		32.2
Employment rate (% population aged 15-64)	39.0	38.7	38.5	38.5	39.0	39.2		40.2
Employment rate (% population aged 15-24)	14.0	13.2	10.8	11.6	10.9	12.1		13.8
Employment rate (% population aged 25-54)	51.0	50.7	51.2	51.4	52.5	52.4		53.6
Employment rate (% population aged 55-64)	26.8	27.0	27.2	27.7	28.5	28.2		29.7
Employment rate for low skilled 15-64 (ISCED 0-2)	20.8	20.6	20.8	20.3	18.4	20.1		20.2
Employment rate for medium skilled 15-64 (ISCED 3-4)	45.6	44.6	44.4	43.8	45.5	44.4		45.3
Employment rate for high skilled 15-64 (ISCED 5-8)	70.5	72.4	69.2	69.8	68.0	68.6		66.7
Activity rate (% population aged 15+)	44.6	44.0	44.0	43.6	43.7	44.1		43.1
Activity rate (% population aged 15-64)	54.0	53.8	53.9	53.5	54.2	54.6		54.2
Activity rate (% population aged 15-24)	33.0	31.4	29.4	28.3	29.3	32.2		30.2
Activity rate (% population aged 25-54)	67.8	68.0	68.9	69.1	70.8	70.3		70.4
Activity rate (% population aged 55-64)	31.3	32.2	32.1	33.1	32.8	33.1		35.2
Unemployment aged 15+ (1,000)	315	311	317	311	308	315		273
Unemployment rate (% labor force 15+)	27.2	27.6	28.0	27.5	27.5	27.7		25.4
Youth unemployment rate (% labor force 15-24)	57.5	57.9	63.1	59.1	62.7	62.3		54.3
Long-term unemployment rate (% labor force 15+)	22.3	22.3	23.0	22.8	23.3	22.6		21.6
Share of long-term unemployment (% of total)	82.0	80.7	82.0	83.1	84.8	81.7		85.0
Unemployment rate for low skilled 15+ (ISCED 0-2)	28.0	29.2	26.9	28.2	30.2	27.3		25.6
Unemployment rate for medium skilled 15+ (ISCED 3-4)	29.3	29.9	30.6	30.0	28.9	30.0		26.6
Unemployment rate for high skilled 15+ (ISCED 5-8)	15.6	15.4	17.9	16.9	19.3	18.4		20.3
Male								
Total population (1,000)	1,878	1,876	1,874	1,872	1,870	1,866		
Population aged 15+ (1,000)	1,260	1,244	1,238	1,268	1,242	1,259		1,208
Employment aged 15+ (1,000)	531	513	514	515	511	515		514
Employment rate (% population aged 15+)	42.2	41.3	41.5	40.6	41.2	40.9		42.5
Employment rate (% population aged 15-64)	49.6	48.7	49.0	48.0	48.9	48.8		51.1
Employment rate (% population aged 15-24)	17.8	16.9	14.1	14.9	13.5	15.8		18.3
Employment rate (% population aged 25-54)	63.8	63.3	64.0	63.4	64.9	64.6		67.3
Employment rate (% population aged 55-64)	36.9	35.7	37.2	36.4	38.9	37.3		40.4
Employment rate for low skilled 15-64 (ISCED 0-2)	31.9	31.6	31.3	30.4	27.7	30.9	•	30.9
Employment rate for medium skilled 15-64 (ISCED 3-4)	53.6	52.2	53.0	51.4	53.8	52.2	•	54.8
Employment rate for high skilled 15-64 (ISCED 5-8)	74.0	73.4	72.6	72.1	70.2	70.1	•	71.0
Activity rate (% population aged 15+)	56.7	55.9	56.4	55.3	55.0	55.1		54.9
Activity rate (% population aged 15-64)	67.1	66.3	67.0	65.7	65.9	66.2		66.2
Activity rate (% population aged 15-24)	39.7	38.8	37.7	36.3	34.6	38.9		38.1
Activity rate (% population aged 25-54)	82.7	82.4	83.3	83.0	84.1	83.8	•	83.8
Activity rate (% population aged 55-64)	44.3	43.6	44.5	44.4	45.3	44.0	•	48.2
Unemployment aged 15+ (1,000)	183	181	184	186	172	179	•	149
Unemployment rate (% labor force 15+)	25.6	26.1	26.4	26.5	25.2	25.8	•	22.5
Youth unemployment rate (% labor force 15-24)	55.1	56.4	62.6	59.1	61.0	59.5	•	52.0
Long-term unemployment rate (% labor force 15+)	20.6	21.0	21.4	21.7	21.4	21.1	•	19.2
Share of long-term unemployment (% of total)	80.4	80.5	81.3	81.9	85.0	81.8	•	85.1
Unemployment rate for low skilled 15+ (ISCED 0-2)	28.6	29.0	27.9	29.0	27.9	27.0	•	24.1
Unemployment rate for medium skilled 15+ (ISCED 3-4)	26.7	27.6	27.9	28.3	26.3	27.2	•	23.6
Unemployment rate for high skilled 15+ (ISCED 5-8)	(13.0)	(13.8)	14.5	(14.3)	16.2	(15.9)	•	(14.8)





	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Female								
Total population (1,000)	1,966	1,964	1,962	1,960	1,958	1,953		
Population aged 15+ (1,000)	1,337	1,317	1,328	1,330	1,324	1,320		1,281
Employment aged 15+ (1,000)	311	303	300	307	301	307		288
Employment rate (% population aged 15+)	23.3	23.0	22.6	23.0	22.7	23.2		22.4
Employment rate (% population aged 15-64)	28.6	28.7	28.1	28.9	28.9	29.5		29.1
Employment rate (% population aged 15-24)	10.0	9.2	7.5	7.9	8.1	8.0		8.7
Employment rate (% population aged 25-54)	38.0	38.0	38.2	39.2	39.7	40.0		39.8
Employment rate (% population aged 55-64)	17.9	19.3	18.3	19.7	19.3	19.8		19.4
Employment rate for low skilled 15-64 (ISCED 0-2)	14.1	13.9	14.4	13.7	12.6	13.3		13.6
Employment rate for medium skilled 15-64 (ISCED 3-4)	34.9	34.3	32.9	33.7	34.3	34.0		32.8
Employment rate for high skilled 15-64 (ISCED 5-8)	67.1	71.3	66.0	67.4	65.9	67.3		62.7
Activity rate (% population aged 15+)	33.2	32.8	32.6	32.5	33.0	33.5		32.1
Activity rate (% population aged 15-64)	41.1	41.2	41.0	41.0	42.4	42.9		41.9
Activity rate (% population aged 15-24)	25.9	23.3	20.9	19.4	23.3	24.5		21.3
Activity rate (% population aged 25-54)	52.9	53.4	54.3	54.8	57.1	56.6		56.8
Activity rate (% population aged 55-64)	19.9	22.1	21.1	22.9	21.9	22.9		22.9
Unemployment aged 15+ (1,000)	133	129	133	125	136	136		124
Unemployment rate (% labor force 15+)	29.9	29.9	30.7	29.0	31.2	30.7		30.0
Youth unemployment rate (% labor force 15-24)	61.3	60.5	64.0	59.2	65.4	67.3		58.9
Long-term unemployment rate (% labor force 15+)	25.1	24.3	25.4	24.6	26.4	25.1		25.5
Share of long-term unemployment (% of total)	84.1	81.1	82.8	84.8	84.7	81.6		85.0
Unemployment rate for low skilled 15+ (ISCED 0-2)	27.4	29.4	25.5	27.0	33.1	27.8		27.5
Unemployment rate for medium skilled 15+ (ISCED 3-4)	34.1	34.2	35.8	33.2	33.9	35.0		32.6
Unemployment rate for high skilled 15+ (ISCED 5-8)	18.3	17.1	21.2	19.6	22.2	20.9		25.5

The labor force survey is conducted once a year in April, data are allocated to the second quarter of each year. Census 2013 is not yet applied. Education groups refer to ISCED 1997 until 2014, ISCED 2011 from 2015.





Kosovo: Labor market indicators

	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Total								
Total population (1,000)	1,775	1,796	1,807	1,818	1,813	1,788		
Population aged 15+ (1,000)			1,213	1,250	1,277	1,262		
Employment aged 15+ (1,000)			303	340	324	298		
Employment rate (% population aged 15+)			25.0	27.2	25.4	23.6		•
Employment rate (% population aged 15-64)			26.6	29.2	27.5	25.8		
Employment rate (% population aged 15-24)			10.1	10.2	9.1	8.7		
Employment rate (% population aged 25-54)			34.7	38.1	36.2	33.8		
Employment rate (% population aged 55-64)			29.1	33.5	31.9	28.9		
Employment rate for low skilled 15-64 (ISCED 0-2)			9.7	12.5	11.5	9.9		
Employment rate for medium skilled 15-64 (ISCED 3-4)			37.2	38.5	35.4	32.0		
Employment rate for high skilled 15-64 (ISCED 5-8)			60.6	64.9	58.9	53.7		
Activity rate (% population aged 15+)			35.8	38.6	39.1	35.1		
Activity rate (% population aged 15-64)			38.2	41.5	42.4	38.4		•
Activity rate (% population aged 15-24)			22.3	23.0	23.3	20.4		•
Activity rate (% population aged 25-54)			47.5	51.8	53.2	48.6		
Activity rate (% population aged 55-64)			32.0	37.3	37.6	33.1		
Unemployment aged 15+ (1,000)			132	142	175	145		
Unemployment rate (% labor force 15+)			30.3	29.5	35.1	32.7		
Youth unemployment rate (% labor force 15-24)			54.7	55.7	60.9	57.6		
Long-term unemployment rate (% labor force 15+)			18.4	20.1	25.1	23.8		
Share of long-term unemployment (% of total)			60.7	68.1	71.6	72.8		
Unemployment rate for low skilled 15+ (ISCED 0-2)			43.9	39.9	45.9	46.6		
Unemployment rate for medium skilled 15+ (ISCED 3-4)			29.1	29.1	35.4	32.6		
Unemployment rate for high skilled 15+ (ISCED 5-8)			17.6	16.8	20.6	19.9		
Male								
Total population (1,000)	900	906	914	917	909	892		
Population aged 15+ (1,000)			637	639	653	651		
Employment aged 15+ (1,000)			240	263	250	230		
Employment rate (% population aged 15+)			37.7	41.1	38.2	35.4		
Employment rate (% population aged 15-64)			40.7	44.6	41.9	39.2		
Employment rate (% population aged 15-24)			14.7	15.3	13.6	13.0		
Employment rate (% population aged 25-54)			53.9	59.0	56.0	51.5		
Employment rate (% population aged 55-64)			45.9	51.5	48.0	46.1		
Employment rate for low skilled 15-64 (ISCED 0-2)			21.5	26.0	24.7	21.0		
Employment rate for medium skilled 15-64 (ISCED 3-4)			46.7	50.3	46.3	42.9		
Employment rate for high skilled 15-64 (ISCED 5-8)			69.9	71.8	66.0	61.3		
Activity rate (% population aged 15+)			52.0	56.0	56.8	51.9		
Activity rate (% population aged 15-64)			56.2	60.9	62.4	57.4		
Activity rate (% population aged 15-24)			30.1	30.8	30.9	28.4	•	
Activity rate (% population aged 25-54)			71.3	77.6	80.4	73.5	•	
Activity rate (% population aged 55-64)	·		51.2	57.8	57.3	53.2	•	•
Unemployment aged 15+ (1,000)	•		91	95	122	106	•	•
Unemployment rate (% labor force 15+)	•		27.5	26.5	32.9	31.5	•	•
Youth unemployment rate (% labor force 15-24)	•		51.2	50.2	56.1	54.1	•	•
Long-term unemployment rate (% labor force 15+)	•		16.4	18.3	22.9	22.6	•	•
Share of long-term unemployment (% of total)	•		59.8	69.2	69.7	71.6	•	•
Unemployment rate for low skilled 15+ (ISCED 0-2)	•	•	39.8	37.2	44.9	48.5	•	•
Unemployment rate for medium skilled 15+ (ISCED 3-4)	•	•	26.8	25.5	32.4	30.6	•	•
Unemployment rate for high skilled 15+ (ISCED 5-4)	•	•	12.7	14.2	16.1	14.6	•	•
ottembrokittetir tare tot tilkit skillen 12+ (120ED 2-9)	•	•	12./	14.2	10.1	14.0	•	•





	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Female								
Total population (1,000)	875	891	893	902	904	896		
Population aged 15+ (1,000)			576	611	624	611		
Employment aged 15+ (1,000)			63	77	75	67		
Employment rate (% population aged 15+)			10.9	12.7	12.0	11.0		
Employment rate (% population aged 15-64)			11.4	13.4	12.9	11.9		
Employment rate (% population aged 15-24)			4.9	4.6	4.2	3.8		
Employment rate (% population aged 25-54)			14.9	17.6	16.8	16.0		
Employment rate (% population aged 55-64)			9.8	14.1	15.0	10.6		
Employment rate for low skilled 15-64 (ISCED 0-2)			2.6	4.7	4.1	3.7		
Employment rate for medium skilled 15-64 (ISCED 3-4)			20.1	19.2	17.4	14.3		
Employment rate for high skilled 15-64 (ISCED 5-8)			45.8	54.7	49.8	43.2		
Activity rate (% population aged 15+)			18.0	20.4	20.5	17.3		
Activity rate (% population aged 15-64)			18.9	21.8	22.0	18.7		
Activity rate (% population aged 15-24)			13.3	14.6	15.0	11.5		
Activity rate (% population aged 25-54)			23.0	26.4	26.4	23.5		
Activity rate (% population aged 55-64)			10.0	15.3	16.9	11.7		
Unemployment aged 15+ (1,000)			41	48	53	38		
Unemployment rate (% labor force 15+)			39.3	38.1	41.4	36.4		
Youth unemployment rate (% labor force 15-24)			63.5	68.4	71.7	67.2		
Long-term unemployment rate (% labor force 15+)			24.6	25.1	31.4	27.7		
Share of long-term unemployment (% of total)			62.7	65.9	75.9	76.1		
Unemployment rate for low skilled 15+ (ISCED 0-2)			57.8	47.1	49.0	39.3		
Unemployment rate for medium skilled 15+ (ISCED 3-4)			37.5	41.2	45.9	41.0		
Unemployment rate for high skilled 15+ (ISCED 5-8)			27.5	21.4	27.3	28.1		

Data are based on a continuous quarterly survey, but are available on an annual basis only. The dataset for Kosovo excludes persons without any school education and therefore slightly deviates from the officially published data in the LFS publications. Census 2011 is applied throughout. Education groups refer to ISCED 1997.





FYR Macedonia: Labor market indicators

	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Total								
Total population (1,000)	2,055	2,059	2,061	2,064	2,067	2,070	•	•
Population aged 15+ (1,000)	1,649	1,656	1,670	1,672	1,673	1,677	1,678	1,679
Employment aged 15+ (1,000)	638	645	651	679	690	706	714	721
Employment rate (% population aged 15+)	38.7	38.9	39.0	40.6	41.2	42.1	42.6	42.9
Employment rate (% population aged 15-64)	43.5	43.9	44.0	46.0	46.9	47.8	48.4	48.7
Employment rate (% population aged 15-24)	15.4	14.4	15.5	16.2	15.2	17.3	15.5	15.1
Employment rate (% population aged 25-54)	55.8	56.4	55.8	57.9	59.3	59.4	60.4	60.9
Employment rate (% population aged 55-64)	34.2	35.4	35.4	37.9	38.6	40.1	41.3	41.6
Employment rate for low skilled 15-64 (ISCED 0-2)	26.6	27.3	25.7	28.4	29.9	28.9	27.2	26.4
Employment rate for medium skilled 15-64 (ISCED 3-4)	49.9	49.4	50.1	52.4	52.5	53.6	54.7	56.4
Employment rate for high skilled 15-64 (ISCED 5-8)	70.7	68.6	68.1	67.5	69.1	72.0	73.5	70.9
Activity rate (% population aged 15+)	56.9	56.8	56.5	57.2	57.3	57.0	56.4	56.5
Activity rate (% population aged 15-64)	64.2	64.2	63.9	64.9	65.3	64.9	64.3	64.4
Activity rate (% population aged 15-24)	33.3	32.1	33.6	33.6	32.4	32.8	31.2	29.7
Activity rate (% population aged 25-54)	79.4	79.2	78.5	79.2	80.0	78.8	78.2	78.7
Activity rate (% population aged 55-64)	47.4	49.2	47.2	49.9	49.9	50.6	50.4	50.6
Unemployment aged 15+ (1,000)	300	295	293	277	269	249	231	228
Unemployment rate (% labor force 15+)	32.0	31.4	31.0	29.0	28.0	26.1	24.5	24.0
Youth unemployment rate (% labor force 15-24)	53.7	55.3	53.9	51.9	53.1	47.3	50.2	49.2
Long-term unemployment rate (% labor force 15+)	26.7	25.9	25.5	23.9	23.4	21.3	19.8	19.7
Share of long-term unemployment (% of total)	83.3	82.6	82.1	82.5	83.4	81.6	80.9	82.2
Unemployment rate for low skilled 15+ (ISCED 0-2)	38.9	37.5	37.7	34.2	32.1	29.7	30.3	31.1
Unemployment rate for medium skilled 15+ (ISCED 3-4)	32.1	31.6	31.4	28.7	28.3	26.6	24.9	22.8
Unemployment rate for high skilled 15+ (ISCED 5-8)	21.8	23.0	22.4	23.5	22.5	21.1	18.5	20.5
Male								
Total population (1,000)	1,030	1,031	1,033	1,034	1,036	1,037		
Population aged 15+ (1,000)	824	828	835	837	837	839	840	840
Employment aged 15+ (1,000)	392	389	393	408	420	424	429	444
Employment rate (% population aged 15+)	47.5	47.0	47.1	48.7	50.1	50.5	51.1	52.8
Employment rate (% population aged 15-64)	52.8	52.3	52.4	54.5	56.1	56.6	57.2	59.0
Employment rate (% population aged 15-24)	19.5	17.7	18.1	18.9	18.9	20.2	18.5	18.9
Employment rate (% population aged 25-54)	66.1	65.7	65.4	67.4	69.8	69.1	69.8	71.7
Employment rate (% population aged 55-64)	46.7	47.3	46.6	49.4	50.3	52.2	54.3	57.3
Employment rate for low skilled 15-64 (ISCED 0-2)	39.6	40.4	37.8	41.9	44.3	42.2	42.1	41.2
Employment rate for medium skilled 15-64 (ISCED 3-4)	55.6	54.3	55.4	57.3	58.6	59.7	59.9	64.0
Employment rate for high skilled 15-64 (ISCED 5-8)	74.0	71.5	72.1	71.4	72.8	74.8	76.1	74.0
Activity rate (% population aged 15+)	69.8	68.8	68.7	68.5	69.3	68.9	69.4	70.0
Activity rate (% population aged 15-64)	77.7	76.8	76.6	76.8	77.7	77.5	77.9	78.5
Activity rate (% population aged 15-24)	42.2	39.9	40.5	39.9	39.3	40.1	39.7	37.0
Activity rate (% population aged 25-54)	93.3	92.0	92.2	91.9	93.2	91.8	92.3	93.0
Activity rate (% population aged 55-64)	65.6	67.7	63.9	65.7	66.8	67.4	68.1	71.5
Unemployment aged 15+ (1,000)	183	181	180	166	160	155	153	144
Unemployment rate (% labor force 15+)	31.9	31.8	31.5	29.0	27.6	26.7	26.3	24.5
Youth unemployment rate (% labor force 15-24)	53.9	55.5	55.2	52.5	52.0	49.7	53.3	49.1
Long-term unemployment rate (% labor force 15+)	26.7	26.6	26.1	24.0	23.1	22.1	22.1	20.5
Share of long-term unemployment (% of total)	83.7	83.6	83.0	82.7	83.6	82.5	83.9	83.9
Unemployment rate for low skilled 15+ (ISCED 0-2)	40.0	39.4	40.6	35.3	32.8	31.2	32.2	33.2
Unemployment rate for medium skilled 15+ (ISCED 3-4)	31.3	31.5	31.0	28.6	27.4	27.0	26.6	22.8
Unemployment rate for high skilled 15+ (ISCED 5-8)	18.9	19.5	18.7	19.8	20.0	19.3	18.4	18.6





	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Female								
Total population (1,000)	1,025	1,027	1,029	1,030	1,032	1,033		
Population aged 15+ (1,000)	824	828	835	835	836	838	838	839
Employment aged 15+ (1,000)	246	256	257	271	271	282	285	277
Employment rate (% population aged 15+)	29.8	30.9	30.8	32.5	32.4	33.7	34.0	33.0
Employment rate (% population aged 15-64)	34.0	35.3	35.3	37.3	37.4	38.8	39.4	38.1
Employment rate (% population aged 15-24)	11.2	10.8	12.6	13.3	11.3	14.2	12.4	11.1
Employment rate (% population aged 25-54)	45.1	46.8	45.8	48.0	48.5	49.3	50.6	49.6
Employment rate (% population aged 55-64)	22.4	24.0	24.5	26.6	27.1	28.3	28.4	26.2
Employment rate for low skilled 15-64 (ISCED 0-2)	16.8	17.4	16.6	18.0	18.5	18.4	15.4	15.1
Employment rate for medium skilled 15-64 (ISCED 3-4)	42.4	43.0	43.1	45.8	44.4	45.3	47.7	46.3
Employment rate for high skilled 15-64 (ISCED 5-8)	67.2	65.8	64.2	64.1	66.0	69.6	71.3	68.0
Activity rate (% population aged 15+)	44.0	44.7	44.3	45.8	45.3	44.9	43.3	43.0
Activity rate (% population aged 15-64)	50.4	51.2	50.8	52.7	52.5	52.0	50.2	49.8
Activity rate (% population aged 15-24)	24.0	23.9	26.2	27.1	25.1	25.1	22.2	21.9
Activity rate (% population aged 25-54)	65.0	65.8	64.4	66.0	66.4	65.3	63.6	63.9
Activity rate (% population aged 55-64)	30.2	31.7	31.2	34.5	33.5	34.2	32.9	30.1
Unemployment aged 15+ (1,000)	117	114	112	111	108	94	78	84
Unemployment rate (% labor force 15+)	32.2	30.8	30.3	29.0	28.6	25.1	21.5	23.2
Youth unemployment rate (% labor force 15-24)	53.3	54.8	51.8	51.0	55.0	43.3	44.3	49.3
Long-term unemployment rate (% labor force 15+)	26.7	24.9	24.5	23.8	23.8	20.1	16.1	18.4
Share of long-term unemployment (% of total)	82.7	81.0	80.7	82.2	83.1	80.2	75.1	79.2
Unemployment rate for low skilled 15+ (ISCED 0-2)	36.7	33.9	32.2	32.1	30.9	26.8	25.8	26.5
Unemployment rate for medium skilled 15+ (ISCED 3-4)	33.4	31.8	31.9	28.9	29.8	25.9	21.9	22.7
Unemployment rate for high skilled 15+ (ISCED 5-8)	24.8	26.3	26.0	26.7	24.6	22.5	18.7	22.4

Data are based on a continuous quarterly survey. Census 2002 is applied throughout. Education groups refer to ISCED 2011.





Montenegro: Labor market indicators

	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Total								
Total population (1,000)	619	620	621	621	622	622		
Population aged 15+ (1,000)	520	501	501	501	501	501	500	500
Employment aged 15+ (1,000)	208	195	200	202	216	222	217	225
Employment rate (% population aged 15+)	40.0	39.0	40.0	40.3	43.2	44.3	43.5	44.9
Employment rate (% population aged 15-64)	47.3	45.8	46.8	47.4	50.5	51.4	50.6	52.3
Employment rate (% population aged 15-24)	13.6	14.4	14.8	13.5	18.3	18.8	18.0	20.4
Employment rate (% population aged 25-54)	62.5	59.8	60.4	61.2	64.4	65.6	64.7	65.9
Employment rate (% population aged 55-64)	35.6	34.1	37.0	38.7	39.3	40.0	38.8	42.1
Employment rate for low skilled 15-64 (ISCED 0-2)	18.9	16.9	15.6	14.0	16.6	19.4	19.8	22.7
Employment rate for medium skilled 15-64 (ISCED 3-4)	50.1	48.6	49.0	49.4	52.7	53.0	50.1	53.5
Employment rate for high skilled 15-64 (ISCED 5-8)	75.7	73.4	76.0	78.9	77.8	78.2	79.5	76.7
Activity rate (% population aged 15+)	49.8	48.5	50.0	50.1	52.7	53.7	53.7	54.5
Activity rate (% population aged 15-64)	59.0	57.2	58.7	58.9	61.7	62.6	62.7	63.6
Activity rate (% population aged 15-24)	24.8	22.9	25.4	23.2	28.4	30.2	29.3	31.5
Activity rate (% population aged 25-54)	76.3	74.0	75.0	75.5	77.8	78.5	79.4	79.2
Activity rate (% population aged 55-64)	39.1	38.6	40.8	43.3	44.3	44.9	42.6	46.1
Unemployment aged 15+ (1,000)	51	48	50	49	47	47	51	48
Unemployment rate (% labor force 15+)	19.7	19.7	20.0	19.5	18.0	17.5	19.1	17.5
Youth unemployment rate (% labor force 15-24)	45.1	37.0	41.7	41.6	35.6	37.6	38.8	35.5
Long-term unemployment rate (% labor force 15+)	15.3	15.6	15.9	16.0	13.9	13.5	15.0	13.2
Share of long-term unemployment (% of total)	77.7	79.4	79.3	82.3	77.5	76.8	78.7	75.7
Unemployment rate for low skilled 15+ (ISCED 0-2)	27.3	29.4	35.5	41.4	31.8	28.1	29.0	21.1
Unemployment rate for medium skilled 15+ (ISCED 3-4)	21.0	20.7	21.6	20.6	19.7	19.2	22.1	19.5
Unemployment rate for high skilled 15+ (ISCED 5-8)	11.8	13.2	10.4	9.8	9.9	10.3	10.0	11.9
Male								
Total population (1,000)	306	306	307	307	307	308		
Population aged 15+ (1,000)	253	244	244	244	244	244	244	244
Employment aged 15+ (1,000)	119	110	111	111	119	121	118	124
Employment rate (% population aged 15+)	47.0	45.1	45.3	45.4	48.9	49.4	48.2	50.8
Employment rate (% population aged 15-64)	54.2	51.4	51.9	51.9	55.6	56.0	54.6	57.9
Employment rate (% population aged 15-24)	16.3	17.4	15.0	14.8	21.0	19.9	19.5	22.6
Employment rate (% population aged 25-54)	70.0	65.0	65.3	65.7	69.4	70.5	69.4	71.9
Employment rate (% population aged 55-64)	47.3	45.4	49.3	48.5	48.9	48.2	44.6	50.6
Employment rate for low skilled 15-64 (ISCED 0-2)	26.8	26.2	21.0	18.7	22.4	24.5	24.6	27.1
Employment rate for medium skilled 15-64 (ISCED 3-4)	57.0	53.6	53.8	54.4	58.6	57.7	55.1	60.0
Employment rate for high skilled 15-64 (ISCED 5-8)	76.3	73.2	76.7	78.8	78.0	78.7	78.3	77.9
Activity rate (% population aged 15+)	57.9	55.8	56.6	56.8	59.5	60.1	60.1	61.8
Activity rate (% population aged 15-64)	66.9	63.9	64.9	65.1	67.8	68.3	68.3	70.6
Activity rate (% population aged 15-24)	28.4	26.9	28.0	26.3	32.9	33.2	33.5	34.7
Activity rate (% population aged 25-54)	84.6	80.3	80.4	81.5	83.3	84.2	85.3	87.0
Activity rate (% population aged 55-64)	52.9	51.5	54.7	54.6	55.5	54.4	49.7	55.8
Unemployment aged 15+ (1,000)	28	26	27	28	26	26	29	27
Unemployment rate (% labor force 15+)	18.8	19.3	19.8	20.0	17.8	17.7	19.8	17.9
Youth unemployment rate (% labor force 15-24)	42.5	35.6	46.4	43.8	36.2	39.9	41.7	34.8
Long-term unemployment rate (% labor force 15+)	14.5	14.9	15.5	16.8	13.8	13.6	15.6	13.6
Share of long-term unemployment (% of total)	77.4	77.2	78.4	84.0	77.7	76.7	79.0	76.2
Unemployment rate for low skilled 15+ (ISCED 0-2)	25.2	24.9	30.5	39.7	31.0	26.3	31.4	24.4
Unemployment rate for medium skilled 15+ (ISCED 3-4)	20.0	20.5	21.7	20.8	18.8	19.4	21.9	18.6
Unemployment rate for high skilled 15+ (ISCED 5-8)	10.6	12.7	10.1	10.3	10.0	9.8	10.1	13.3





	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Female								
Total population (1,000)	314	314	314	314	314	315		
Population aged 15+ (1,000)	267	257	257	257	256	256	256	256
Employment aged 15+ (1,000)	89	85	89	91	97	101	100	101
Employment rate (% population aged 15+)	33.4	33.2	34.9	35.4	37.8	39.4	39.0	39.3
Employment rate (% population aged 15-64)	40.5	40.2	41.8	42.8	45.3	46.9	46.5	46.8
Employment rate (% population aged 15-24)	10.7	11.3	14.6	12.2	15.4	17.7	16.3	18.0
Employment rate (% population aged 25-54)	55.1	54.6	55.4	56.8	59.4	60.6	60.1	59.8
Employment rate (% population aged 55-64)	24.9	23.4	25.5	29.4	30.4	32.3	33.4	34.0
Employment rate for low skilled 15-64 (ISCED 0-2)	12.8	9.5	11.4	10.1	11.8	15.4	16.4	19.4
Employment rate for medium skilled 15-64 (ISCED 3-4)	42.7	43.2	43.9	44.1	46.1	47.5	44.2	45.7
Employment rate for high skilled 15-64 (ISCED 5-8)	75.1	73.6	75.2	79.0	77.6	77.8	80.6	75.7
Activity rate (% population aged 15+)	42.2	41.6	43.7	43.6	46.2	47.6	47.6	47.4
Activity rate (% population aged 15-64)	51.2	50.4	52.6	52.8	55.6	56.9	57.1	56.6
Activity rate (% population aged 15-24)	20.9	18.5	22.7	19.8	23.6	27.0	24.9	28.2
Activity rate (% population aged 25-54)	68.2	67.8	69.6	69.5	72.3	72.8	73.6	71.5
Activity rate (% population aged 55-64)	26.7	26.5	27.7	32.8	33.8	35.9	36.0	36.9
Unemployment aged 15+ (1,000)	23	21	23	21	22	21	22	21
Unemployment rate (% labor force 15+)	20.8	20.1	20.2	18.8	18.2	17.3	18.2	17.0
Youth unemployment rate (% labor force 15-24)	48.8	39.3	35.5	38.5	34.8	34.5	34.6	36.3
Long-term unemployment rate (% labor force 15+)	16.2	16.5	16.3	15.0	14.1	13.3	14.3	12.8
Share of long-term unemployment (% of total)	78.2	82.1	80.5	79.9	77.3	76.9	78.4	75.0
Unemployment rate for low skilled 15+ (ISCED 0-2)	30.7	37.6	41.8	43.8		30.0	26.2	17.5
Unemployment rate for medium skilled 15+ (ISCED 3-4)	22.4	21.0	21.5	20.4	21.1	19.0	22.4	20.9
Unemployment rate for high skilled 15+ (ISCED 5-8)		13.6	10.7	9.4	9.9	10.6	10.0	10.7

Data are based on a continuous quarterly survey. Census 2011 is applied from 2011, data 2010 are therefore not fully comparable. Education groups refer to ISCED 1997 until 2012, ISCED 2011 from 2013.





Serbia: Labor market indicators

	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Total								
Total population (1,000)	7,291	7,237	7,201	7,167	7,132	7,095		
Population aged 15+ (1,000)	6,322	6,298	6,278	6,124	6,099	6,060	6,031	6,022
Employment aged 15+ (1,000)	2,397	2,253	2,228	2,311	2,559	2,574	2,571	2,762
Employment rate (% population aged 15+)	37.9	35.8	35.5	37.7	42.0	42.5	42.6	45.9
Employment rate (% population aged 15-64)	47.2	45.4	45.3	47.5	50.7	52.0	52.1	55.8
Employment rate (% population aged 15-24)	15.2	14.0	14.5	14.5	14.9	16.6	16.2	19.7
Employment rate (% population aged 25-54)	63.4	61.8	61.4	63.0	65.9	67.1	66.5	70.2
Employment rate (% population aged 55-64)	32.9	31.4	31.6	34.3	36.7	37.3	39.2	42.7
Employment rate for low skilled 15-64 (ISCED 0-2)	31.7	30.1	30.0	32.0	32.9	33.9	33.4	37.9
Employment rate for medium skilled 15-64 (ISCED 3-4)	49.6	47.3	46.7	49.4	52.3	53.3	53.3	57.4
Employment rate for high skilled 15-64 (ISCED 5-8)	69.3	67.3	66.5	65.8	70.1	70.9	71.3	73.1
Activity rate (% population aged 15+)	46.9	46.4	46.7	48.4	51.9	51.6	52.6	54.1
Activity rate (% population aged 15-64)	59.0	59.4	60.1	61.6	63.3	63.6	64.9	66.3
Activity rate (% population aged 15-24)	28.2	28.4	29.6	28.7	28.5	29.2	29.1	30.9
Activity rate (% population aged 25-54)	78.0	79.7	80.0	80.8	81.1	81.0	81.9	82.9
Activity rate (% population aged 55-64)	37.3	36.9	38.1	40.5	41.9	42.1	44.8	47.3
Unemployment aged 15+ (1,000)	570	671	701	656	608	552	602	495
Unemployment rate (% labor force 15+)	19.2	23.0	23.9	22.1	19.2	17.7	19.0	15.2
Youth unemployment rate (% labor force 15-24)	46.3	50.9	51.1	49.4	47.5	43.2	44.2	36.1
Long-term unemployment rate (% labor force 15+)	13.3	16.9	18.6	16.8	12.8	11.3	12.2	10.2
Share of long-term unemployment (% of total)	69.2	73.7	77.9	76.0	66.9	64.0	64.3	67.0
Unemployment rate for low skilled 15+ (ISCED 0-2)	15.6	20.9	22.6	19.7	17.3	15.0	16.7	11.8
Unemployment rate for medium skilled 15+ (ISCED 3-4)	22.5	26.0	26.8	24.4	21.2	19.4	21.1	16.9
Unemployment rate for high skilled 15+ (ISCED 5-8)	13.1	15.9	17.0	18.3	15.4	15.3	15.7	13.7
Male								
Total population (1,000)	3,546	3,524	3,507	3,490	3,473	3,455		
Population aged 15+ (1,000)	3,034	3,026	3,022	2,949	2,941	2,922	2,909	2,904
Employment aged 15+ (1,000)	1,373	1,305	1,293	1,333	1,457	1,466	1,449	1,562
Employment rate (% population aged 15+)	45.3	43.1	42.8	45.2	49.5	50.2	49.8	53.8
Employment rate (% population aged 15-64)	54.4	52.4	52.4	54.9	57.7	59.1	58.4	63.0
Employment rate (% population aged 15-24)	18.5	18.6	19.1	18.9	19.0	21.2	20.9	25.5
Employment rate (% population aged 25-54)	70.5	67.8	67.8	70.3	72.4	73.3	71.6	76.4
Employment rate (% population aged 55-64)	44.0	42.7	42.4	45.0	47.7	48.9	50.4	53.9
Employment rate for low skilled 15-64 (ISCED 0-2)	41.1	39.4	38.8	40.2	41.7	42.3	39.8	45.3
Employment rate for medium skilled 15-64 (ISCED 3-4)	57.0	54.1	53.9	57.4	59.5	61.0	61.0	65.4
Employment rate for high skilled 15-64 (ISCED 5-8)	68.1	68.5	68.8	68.9	73.6	74.3	73.7	77.2
Activity rate (% population aged 15+)	55.5	55.6	55.7	57.1	60.7	60.3	61.1	62.7
Activity rate (% population aged 15-64)	67.3	68.1	68.8	70.1	71.3	71.6	72.5	74.1
Activity rate (% population aged 15-24)	34.0	35.4	36.6	34.0	35.3	35.4	35.4	37.2
Activity rate (% population aged 25-54)	85.2	86.5	87.0	88.1	87.4	87.3	87.5	89.1
Activity rate (% population aged 55-64)	50.7	51.0	52.0	54.3	55.2	55.9	58.6	60.1
Unemployment aged 15+ (1,000)	311	377	391	351	327	296	329	260
Unemployment rate (% labor force 15+)	18.4	22.4	23.2	20.8	18.3	16.8	18.5	14.3
Youth unemployment rate (% labor force 15-24)	45.5	47.6	47.9	44.6	46.1	40.1	40.9	31.4
Long-term unemployment rate (% labor force 15+)	12.6	16.4	17.9	15.7	12.0	10.6	11.9	9.4
Share of long-term unemployment (% of total)	68.0	73.0	77.2	75.5	65.7	63.0	64.4	65.8
Unemployment rate for low skilled 15+ (ISCED 0-2)	14.9	20.7	22.4	19.0	16.9	15.8	17.9	13.9
Unemployment rate for medium skilled 15+ (ISCED 3-4)	20.9	24.7	25.5	22.3	20.1	17.9	19.7	14.9
Unemployment rate for high skilled 15+ (ISCED 5-8)	13.4	15.9	16.0	17.7	13.7	14.1	15.3	12.5





	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Female								
Total population (1,000)	3,745	3,713	3,695	3,677	3,659	3,640		
Population aged 15+ (1,000)	3,288	3,271	3,255	3,175	3,158	3,138	3,122	3,118
Employment aged 15+ (1,000)	1,024	948	935	978	1,102	1,108	1,121	1,199
Employment rate (% population aged 15+)	31.1	29.0	28.7	30.8	34.9	35.3	35.9	38.5
Employment rate (% population aged 15-64)	40.1	38.3	38.1	40.1	43.7	44.9	45.7	48.6
Employment rate (% population aged 15-24)	11.5	8.9	9.4	9.7	10.6	11.7	11.3	13.5
Employment rate (% population aged 25-54)	56.4	55.7	54.9	55.8	59.5	60.9	61.4	64.1
Employment rate (% population aged 55-64)	22.6	20.9	21.6	24.7	26.6	26.6	28.8	32.5
Employment rate for low skilled 15-64 (ISCED 0-2)	24.2	22.8	22.9	25.2	25.8	26.7	27.9	31.6
Employment rate for medium skilled 15-64 (ISCED 3-4)	40.8	39.3	38.4	40.2	44.0	44.4	44.3	48.2
Employment rate for high skilled 15-64 (ISCED 5-8)	70.2	66.3	64.5	63.3	67.4	68.3	69.5	69.9
Activity rate (% population aged 15+)	39.0	38.0	38.3	40.4	43.8	43.5	44.7	46.0
Activity rate (% population aged 15-64)	50.8	50.7	51.2	53.2	55.3	55.6	57.3	58.6
Activity rate (% population aged 15-24)	21.9	20.7	21.8	22.7	21.3	22.6	22.4	24.1
Activity rate (% population aged 25-54)	71.0	72.8	72.9	73.6	74.8	74.6	76.3	76.6
Activity rate (% population aged 55-64)	25.0	23.8	25.2	27.9	29.6	29.5	32.2	35.6
Unemployment aged 15+ (1,000)	259	294	310	305	281	256	273	236
Unemployment rate (% labor force 15+)	20.2	23.7	24.9	23.8	20.3	18.8	19.6	16.4
Youth unemployment rate (% labor force 15-24)	47.5	57.1	57.0	57.5	50.0	48.2	49.7	43.9
Long-term unemployment rate (% labor force 15+)	14.2	17.7	19.6	18.2	13.9	12.2	12.6	11.2
Share of long-term unemployment (% of total)	70.5	74.6	78.8	76.6	68.2	65.2	64.1	68.3
Unemployment rate for low skilled 15+ (ISCED 0-2)	16.4	21.2	22.8	20.5	17.9	13.9	15.2	9.1
Unemployment rate for medium skilled 15+ (ISCED 3-4)	25.2	28.1	29.0	27.6	23.0	21.6	23.2	19.9
Unemployment rate for high skilled 15+ (ISCED 5-8)	12.9	16.0	17.9	18.7	16.8	16.4	16.0	14.7

Between 2010 and 2013 the labor force survey was carried out twice a year in April and October; 2014 data reflect an average of four quarters with a fixed reference week per quarter; from 2015 data based on a continuous quarterly survey. From 2014 further adjustments according to EU guidelines, data are not comparable with previous years. Census 2011 is applied from 2013 with low impact on growth rates in comparison to previous year. Education groups refer to ISCED 1997 until 2013, ISCED 2011 from 2014.





Western Balkans-6: Labor market indicators

	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Total								
Total population (1,000)	18,497	18,456	18,427	18,398	18,355	18,284	•	
Population aged 15+ (1,000)			14,525	14,468	14,455	14,432	•	
Employment aged 15+ (1,000)			5,336	5,377	5,639	5,708		
Employment rate (% population aged 15+)			36.7	37.2	39.0	39.6		
Employment rate (% population aged 15-64)			44.0	44.3	45.9	46.9		
Employment rate (% population aged 15-24)			15.6	14.5	14.1	15.3		
Employment rate (% population aged 25-54)			57.4	57.9	59.7	60.4		
Employment rate (% population aged 55-64)			34.8	36.0	37.3	38.1		
Employment rate for low skilled 15-64 (ISCED 0-2)			30.8	30.1	30.5	31.8		
Employment rate for medium skilled 15-64 (ISCED 3-4)			47.2	47.8	49.3	49.5		
Employment rate for high skilled 15-64 (ISCED 5-8)			67.3	67.3	68.8	68.8		
Activity rate (% population aged 15+)			48.2	48.4	50.3	50.2		
Activity rate (% population aged 15-64)			58.1	58.2	59.6	59.8		
Activity rate (% population aged 15-24)			30.3	28.0	28.4	29.4		
Activity rate (% population aged 25-54)			74.2	74.6	75.7	75.5		
Activity rate (% population aged 55-64)			41.1	42.3	43.3	43.8		
Unemployment aged 15+ (1,000)			1,668	1,630	1,628	1,532		
Unemployment rate (% labor force 15+)			23.8	23.3	22.4	21.2		
Youth unemployment rate (% labor force 15-24)			48.3	48.2	50.2	47.7		
Long-term unemployment rate (% labor force 15+)			18.6	18.0	16.5	15.2		
Share of long-term unemployment (% of total)			78.0	77.5	73.5	72.0		
Unemployment rate for low skilled 15+ (ISCED 0-2)			22.3	22.3	21.9	19.8		
Unemployment rate for medium skilled 15+ (ISCED 3-4)			26.6	25.6	24.5	23.3		
Unemployment rate for high skilled 15+ (ISCED 5-8)			17.5	17.8	17.1	17.1		
Male								
Total population (1,000)	9,118	9,098	9,090	9,077	9,054	9,020		
Population aged 15+ (1,000)			7,116	7,048	7,058	7,079		
Employment aged 15+ (1,000)			3,188	3,192	3,342	3,377		
Employment rate (% population aged 15+)			44.8	45.3	47.4	47.7		
Employment rate (% population aged 15-64)			52.3	52.9	54.4	55.2		
Employment rate (% population aged 15-24)			19.6	18.6	17.8	19.5		
Employment rate (% population aged 25-54)			66.7	67.6	69.1	69.4		
Employment rate (% population aged 55-64)			46.3	47.0	49.1	50.0		
Employment rate for low skilled 15-64 (ISCED 0-2)			40.3	39.9	40.7	41.7		
Employment rate for medium skilled 15-64 (ISCED 3-4)			54.6	55.7	57.0	57.3		
Employment rate for high skilled 15-64 (ISCED 5-8)			70.7	70.7	72.2	72.5		
Activity rate (% population aged 15+)			58.6	58.7	60.8	60.3		
Activity rate (% population aged 15-64)			68.9	69.1	70.3	70.2		
Activity rate (% population aged 15-24)			37.6	34.9	35.3	36.3		
Activity rate (% population aged 25-54)			85.3	86.1	86.8	86.1		
Activity rate (% population aged 55-64)	·		55.5	56.3	57.9	58.2		
Unemployment aged 15+ (1,000)	·		983	948	946	890		
Unemployment rate (% labor force 15+)	•		23.6	22.9	22.1	20.9	•	•
Youth unemployment rate (% labor force 15-24)	•		47.8	46.8	49.5	46.3	•	•
Long-term unemployment rate (% labor force 15+)	•		18.2	17.6	16.0	15.0	•	•
Share of long-term unemployment (% of total)			77.2	76.9	72.4	72.0		•
Unemployment rate for low skilled 15+ (ISCED 0-2)			24.3	23.9	23.3	21.7		•
Unemployment rate for medium skilled 15+ (ISCED 3-4)	•		25.4	24.3	23.5	22.1	•	•
Unemployment rate for high skilled 15+ (ISCED 5-4)	•	•	15.2	(16.3)	15.2	(15.2)	•	•
Onemployment rate for high skilled 13+ (13CED 3-8)	•	•	13.2	(10.5)	13.2	(13.2)	•	•





	2010	2011	2012	2013	2014	2015	1Q 2016 2	Q 2016
Female								
Total population (1,000)	9,379	9,358	9,337	9,321	9,300	9,264		
Population aged 15+ (1,000)			7,409	7,420	7,397	7,353		
Employment aged 15+ (1,000)			2,148	2,185	2,297	2,331		
Employment rate (% population aged 15+)			29.0	29.4	31.1	31.7		
Employment rate (% population aged 15-64)			35.6	35.9	37.5	38.5		
Employment rate (% population aged 15-24)			11.2	10.2	10.2	10.9		
Employment rate (% population aged 25-54)			48.1	48.4	50.3	51.5		
Employment rate (% population aged 55-64)			23.8	25.7	26.3	26.7		
Employment rate for low skilled 15-64 (ISCED 0-2)			23.5	22.8	22.7	24.1		
Employment rate for medium skilled 15-64 (ISCED 3-4)			37.8	38.1	39.6	39.7		
Employment rate for high skilled 15-64 (ISCED 5-8)			64.1	64.4	65.9	65.8		
Activity rate (% population aged 15+)			38.2	38.6	40.3	40.4		
Activity rate (% population aged 15-64)			47.3	47.4	48.9	49.4		
Activity rate (% population aged 15-24)			22.2	20.7	21.1	21.8		
Activity rate (% population aged 25-54)			63.1	63.2	64.7	65.0		
Activity rate (% population aged 55-64)			27.2	29.3	29.6	30.0		
Unemployment aged 15+ (1,000)			685	682	681	642		
Unemployment rate (% labor force 15+)			24.2	23.8	22.9	21.6		
Youth unemployment rate (% labor force 15-24)			49.3	50.6	51.5	50.3		
Long-term unemployment rate (% labor force 15+)			19.1	18.7	17.2	15.6		
Share of long-term unemployment (% of total)			79.2	78.4	75.0	72.1		
Unemployment rate for low skilled 15+ (ISCED 0-2)			19.6	20.2		16.9		
Unemployment rate for medium skilled 15+ (ISCED 3-4)			28.7	28.0	26.4	25.3		
Unemployment rate for high skilled 15+ (ISCED 5-8)			19.8	19.3	18.8	18.8		

Labor market data for the Western Balkans is the sum of six countries only when data for all these countries are available. Time series therefore start from 2012 (because data for Kosovo are not available prior to this). The methodological break in Serbia in (2013/2014) is therefore reflected in this aggregate. The Western Balkan-6 aggregate data are only available on an annual basis.





Austria: Labor market indicators

	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Total								
Total population (1,000)	8,363	8,392	8,430	8,479	8,542	8,633	•	•
Population aged 15+ (1,000)	6,369	6,398	6,440	6,486	6,527	6,555	6,599	6,617
Employment aged 15+ (1,000)	4,004	4,040	4,071	4,092	4,098	4,133	4,128	4,196
Employment rate (% population aged 15+)	62.9	63.1	63.2	63.1	62.8	63.1	62.5	63.4
Employment rate (% population aged 15-64)	70.8	71.1	71.4	71.4	71.1	71.1	70.4	71.4
Employment rate (% population aged 15-24)	52.8	53.9	53.7	53.1	52.1	51.3	49.4	49.3
Employment rate (% population aged 25-54)	83.3	84.1	84.3	84.0	83.4	83.5	82.6	83.7
Employment rate (% population aged 55-64)	41.2	39.9	41.6	43.8	45.1	46.3	47.9	49.5
Employment rate for low skilled 15-64 (ISCED 0-2)	48.3	49.0	48.3	47.3	47.5	47.2	46.5	46.4
Employment rate for medium skilled 15-64 (ISCED 3-4)	75.7	75.7	75.8	76.2	73.8	73.5	71.9	73.7
Employment rate for high skilled 15-64 (ISCED 5-8)	84.6	85.3	86.2	85.3	83.3	83.3	84.3	84.5
Activity rate (% population aged 15+)	66.1	66.2	66.5	66.7	66.5	66.9	66.7	67.5
Activity rate (% population aged 15-64)	74.4	74.6	75.1	75.5	75.4	75.5	75.2	76.1
Activity rate (% population aged 15-24)	58.3	59.2	59.2	58.8	58.0	57.4	55.9	55.3
Activity rate (% population aged 25-54)	87.1	87.6	88.1	88.3	88.0	88.0	87.5	88.7
Activity rate (% population aged 55-64)	42.2	41.4	43.1	45.5	46.9	48.6	50.4	52.2
Unemployment aged 15+ (1,000)	203	194	209	231	245	252	275	273
Unemployment rate (% labor force 15+)	4.8	4.6	4.9	5.4	5.6	5.7	6.3	6.1
Youth unemployment rate (% labor force 15-24)	9.5	8.9	9.4	9.7	10.3	10.6	11.7	10.8
Long-term unemployment rate (% labor force 15+)	1.2	1.2	1.2	1.3	1.5	1.7	1.8	2.1
Share of long-term unemployment (% of total)	25.4	26.3	24.9	24.6	27.2	29.2	29.0	34.3
Unemployment rate for low skilled 15+ (ISCED 0-2)	9.2	9.1	9.8	10.4	11.4	11.2	12.0	12.6
Unemployment rate for medium skilled 15+ (ISCED 3-4)	4.4	4.0	4.4	4.7	5.0	5.4	6.5	6.0
Unemployment rate for high skilled 15+ (ISCED 5-8)	2.5	2.6	2.4	3.5	4.0	3.9	3.5	3.5
Male								
Total population (1,000)	4,073	4,089	4,111	4,140	4,175	4,230		
Population aged 15+ (1,000)	3,139	3,151	3,174	3,198	3,221	3,242	3,273	3,287
Employment aged 15+ (1,000)	2,139	2,154	2,163	2,171	2,164	2,183	2,165	2,224
Employment rate (% population aged 15+)	68.1	68.4	68.2	67.9	67.2	67.3	66.2	67.7
Employment rate (% population aged 15-64)	76.0	76.2	76.2	76.0	75.2	75.1	73.7	75.3
Employment rate (% population aged 15-24)	56.6	58.0	57.1	56.4	54.3	54.0	51.0	51.2
Employment rate (% population aged 25-54)	87.7	88.4	88.3	87.5	86.6	86.6	84.8	87.0
Employment rate (% population aged 55-64)	49.9	48.2	50.2	52.8	54.3	54.1	56.4	57.6
Employment rate for low skilled 15-64 (ISCED 0-2)	53.9	55.0	53.5	52.0	51.7	51.5	50.3	50.2
Employment rate for medium skilled 15-64 (ISCED 3-4)	79.2	79.3	79.2	79.7	77.5	76.7	74.7	77.3
Employment rate for high skilled 15-64 (ISCED 5-8)	88.4	88.5	89.4	88.1	85.4	85.8	86.1	86.7
Activity rate (% population aged 15+)	71.7	71.6	71.7	71.7	71.4	71.7	71.0	72.5
Activity rate (% population aged 15-64)	80.0	79.9	80.2	80.4	80.0	80.1	79.2	80.8
Activity rate (% population aged 15-24)	62.6	63.7	63.1	62.3	60.7	60.7	58.3	58.4
Activity rate (% population aged 25-54)	91.9	92.0	92.3	92.1	91.5	91.6	90.3	92.3
Activity rate (% population aged 55-64)	51.4	50.4	52.2	55.1	56.8	57.4	60.0	61.5
Unemployment aged 15+ (1,000)	113	103	113	124	135	142	159	158
Unemployment rate (% labor force 15+)	5.0	4.6	5.0	5.4	5.9	6.1	6.8	6.6
Youth unemployment rate (% labor force 15-24)	9.6	8.8	9.5	9.4	10.6	11.1	12.4	12.4
Long-term unemployment rate (% labor force 15+)	1.4	1.3	1.3	1.4	1.7	1.9	1.9	2.5
Share of long-term unemployment (% of total)	27.9	27.9	26.0	25.8	28.3	31.8	28.2	37.3
Unemployment rate for low skilled 15+ (ISCED 0-2)	10.7	9.9	10.9	11.6	13.0	12.9	13.8	14.7
Unemployment rate for medium skilled 15+ (ISCED 3-4)	4.6	4.1	4.6	4.9	5.3	5.8	6.9	6.6
Unemployment rate for high skilled 15+ (ISCED 5-8)	2.3	2.2	2.0	2.9	3.8	4.0	3.9	3.6





	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Female								
Total population (1,000)	4,291	4,303	4,319	4,340	4,366	4,403		
Population aged 15+ (1,000)	3,230	3,246	3,266	3,288	3,306	3,313	3,326	3,331
Employment aged 15+ (1,000)	1,864	1,886	1,909	1,921	1,934	1,950	1,962	1,973
Employment rate (% population aged 15+)	57.7	58.1	58.4	58.4	58.5	58.9	59.0	59.2
Employment rate (% population aged 15-64)	65.7	66.1	66.7	66.9	66.9	67.1	67.1	67.4
Employment rate (% population aged 15-24)	48.9	49.8	50.3	49.8	49.9	48.7	47.7	47.4
Employment rate (% population aged 25-54)	78.9	79.8	80.4	80.5	80.3	80.3	80.4	80.4
Employment rate (% population aged 55-64)	33.0	32.2	33.5	35.2	36.4	38.8	39.7	41.7
Employment rate for low skilled 15-64 (ISCED 0-2)	44.3	44.6	44.5	43.9	44.3	44.1	43.5	43.5
Employment rate for medium skilled 15-64 (ISCED 3-4)	71.9	71.9	72.2	72.6	69.8	69.9	68.8	69.7
Employment rate for high skilled 15-64 (ISCED 5-8)	80.1	81.4	82.5	82.2	81.3	80.7	82.4	82.2
Activity rate (% population aged 15+)	60.5	60.9	61.4	61.7	61.8	62.2	62.5	62.7
Activity rate (% population aged 15-64)	68.9	69.3	70.0	70.7	70.8	70.9	71.1	71.4
Activity rate (% population aged 15-24)	54.0	54.8	55.4	55.3	55.4	54.1	53.5	52.1
Activity rate (% population aged 25-54)	82.4	83.2	84.0	84.5	84.5	84.4	84.7	84.9
Activity rate (% population aged 55-64)	33.6	33.0	34.5	36.4	37.5	40.2	41.3	43.3
Unemployment aged 15+ (1,000)	91	91	96	108	110	110	117	115
Unemployment rate (% labor force 15+)	4.6	4.6	4.8	5.3	5.4	5.3	5.6	5.5
Youth unemployment rate (% labor force 15-24)	9.4	9.1	9.2	10.0	9.9	10.0	10.8	9.0
Long-term unemployment rate (% labor force 15+)	1.0	1.1	1.1	1.2	1.4	1.4	1.7	1.7
Share of long-term unemployment (% of total)	22.3	24.4	23.7	23.1	25.9	25.9	30.2	30.3
Unemployment rate for low skilled 15+ (ISCED 0-2)	8.0	8.2	8.8	9.2	10.0	9.7	10.3	10.6
Unemployment rate for medium skilled 15+ (ISCED 3-4)	4.1	3.9	4.2	4.5	4.7	5.0	5.9	5.4
Unemployment rate for high skilled 15+ (ISCED 5-8)	2.8	3.2	2.8	4.2	4.2	3.7	3.1	3.5

Data are based on a continuous quarterly survey. Population aged 15+ refers to population 15-74. Census 2011 (based on registration) is applied throughout. Education groups refer to ISCED 1997 until 2013, ISCED 2011 from 2014.





Bulgaria: Labor market indicators

	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Total								
Total population (1,000)	7,396	7,348	7,306	7,265	7,224	7,178		
Population aged 15+ (1,000)	5,827	5,766	5,698	5,649	5,609	5,563	5,525	5,516
Employment aged 15+ (1,000)	3,073	2,962	2,931	2,932	2,978	3,029	2,972	3,031
Employment rate (% population aged 15+)	52.7	51.4	51.4	51.9	53.1	54.4	53.8	54.9
Employment rate (% population aged 15-64)	59.8	58.4	58.8	59.5	61.0	62.9	62.3	63.7
Employment rate (% population aged 15-24)	24.3	22.1	21.9	21.2	20.7	20.3	19.4	21.2
Employment rate (% population aged 25-54)	75.1	73.3	73.1	73.3	74.5	76.1	75.2	76.2
Employment rate (% population aged 55-64)	44.9	44.6	45.7	47.4	50.0	53.0	52.8	54.8
Employment rate for low skilled 15-64 (ISCED 0-2)	29.7	27.5	27.4	27.8	29.7	29.6	27.6	30.6
Employment rate for medium skilled 15-64 (ISCED 3-4)	65.3	63.5	63.4	63.6	65.2	67.2	66.7	68.4
Employment rate for high skilled 15-64 (ISCED 5-8)	82.7	81.2	81.1	80.7	81.7	84.0	84.0	84.2
Activity rate (% population aged 15+)	58.8	57.9	58.6	59.6	59.9	59.9	58.9	59.8
Activity rate (% population aged 15-64)	66.7	65.9	67.1	68.4	69.0	69.3	68.3	69.4
Activity rate (% population aged 15-24)	31.2	29.5	30.4	29.6	27.2	26.0	23.8	24.8
Activity rate (% population aged 25-54)	82.9	81.9	82.3	83.1	83.3	83.2	81.9	82.7
Activity rate (% population aged 55-64)	49.3	48.9	51.1	54.1	56.6	58.0	57.7	59.5
Unemployment aged 15+ (1,000)	352	376	410	436	385	305	280	266
Unemployment rate (% labor force 15+)	10.3	11.3	12.3	13.0	11.4	9.2	8.6	8.1
Youth unemployment rate (% labor force 15-24)	21.9	25.0	28.1	28.4	23.8	21.6	18.4	14.4
Long-term unemployment rate (% labor force 15+)	4.7	6.3	6.8	7.4	6.9	5.6	4.8	4.9
Share of long-term unemployment (% of total)	46.1	55.7	55.2	57.3	60.4	61.2	56.1	60.6
Unemployment rate for low skilled 15+ (ISCED 0-2)	22.7	26.4	28.0	29.9	28.3	25.1	25.0	23.5
Unemployment rate for medium skilled 15+ (ISCED 3-4)	9.7	10.5	11.7	12.3	10.7	8.3	7.8	7.0
Unemployment rate for high skilled 15+ (ISCED 5-8)	4.6	5.1	5.8	6.4	5.1	4.0	3.7	3.4
Male								
Total population (1,000)	3,601	3,578	3,556	3,535	3,513	3,490		
Population aged 15+ (1,000)	2,869	2,842	2,808	2,785	2,766	2,743	2,723	2,720
Employment aged 15+ (1,000)	1,638	1,565	1,540	1,545	1,575	1,606	1,585	1,607
Employment rate (% population aged 15+)	57.1	55.1	54.8	55.5	56.9	58.5	58.2	59.1
Employment rate (% population aged 15-64)	63.3	61.2	61.3	62.1	63.9	65.9	65.7	66.7
Employment rate (% population aged 15-24)	27.2	25.1	24.9	24.0	24.0	24.0	22.9	25.2
Employment rate (% population aged 25-54)	77.6	74.7	74.3	75.0	76.4	78.5	78.2	78.5
Employment rate (% population aged 55-64)	51.3	50.5	50.8	51.9	54.5	56.8	56.6	58.8
Employment rate for low skilled 15-64 (ISCED 0-2)	34.5	31.6	31.2	31.7	34.3	34.6	33.3	35.9
Employment rate for medium skilled 15-64 (ISCED 3-4)	70.0	67.4	66.9	67.2	69.1	71.5	71.3	72.6
Employment rate for high skilled 15-64 (ISCED 5-8)	85.3	83.1	82.9	83.1	84.5	86.7	86.6	86.7
Activity rate (% population aged 15+)	64.1	62.8	63.4	64.4	64.9	64.9	64.2	64.8
Activity rate (% population aged 15-64)	71.1	69.9	71.0	72.2	72.9	73.2	72.5	73.3
Activity rate (% population aged 15-24)	35.5	33.9	35.3	34.3	31.5	30.5	28.2	29.8
Activity rate (% population aged 25-54)	86.1	84.5	84.8	85.7	86.2	86.4	85.7	85.9
Activity rate (% population aged 55-64)	56.6	55.8	57.3	59.9	62.5	62.7	62.5	64.4
Unemployment aged 15+ (1,000)	200	219	241	250	221	174	163	156
Unemployment rate (% labor force 15+)	10.9	12.3	13.5	13.9	12.3	9.8	9.3	8.8
Youth unemployment rate (% labor force 15-24)	23.2	26.0	29.5	30.2	23.8	21.2	18.7	15.3
Long-term unemployment rate (% labor force 15+)	5.0	7.0	7.7	8.1	7.7	6.1	5.1	5.3
Share of long-term unemployment (% of total)	46.0	56.9	56.7	58.3	62.4	62.4	54.7	60.4
Unemployment rate for low skilled 15+ (ISCED 0-2)	22.4	26.1	28.2	30.3	28.5	24.3	24.0	23.1
Unemployment rate for medium skilled 15+ (ISCED 3-4)	9.9	11.2	12.6	12.8	10.8	8.5	8.3	7.1
Unemployment rate for high skilled 15+ (ISCED 5-8)	4.6	5.4	6.3	6.5	5.5	4.0	3.6	4.2





	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Female								
Total population (1,000)	3,794	3,770	3,750	3,730	3,710	3,688		
Population aged 15+ (1,000)	2,958	2,925	2,890	2,865	2,843	2,820	2,801	2,797
Employment aged 15+ (1,000)	1,435	1,397	1,392	1,388	1,403	1,423	1,388	1,424
Employment rate (% population aged 15+)	48.5	47.8	48.2	48.4	49.4	50.5	49.5	50.9
Employment rate (% population aged 15-64)	56.2	55.6	56.3	56.8	58.2	59.8	59.0	60.7
Employment rate (% population aged 15-24)	21.2	19.0	18.7	18.4	17.3	16.5	15.7	17.0
Employment rate (% population aged 25-54)	72.5	71.9	71.8	71.5	72.5	73.6	72.1	73.8
Employment rate (% population aged 55-64)	39.2	39.4	41.3	43.4	46.0	49.5	49.5	51.2
Employment rate for low skilled 15-64 (ISCED 0-2)	24.8	23.2	23.6	23.6	24.8	24.2	21.5	24.8
Employment rate for medium skilled 15-64 (ISCED 3-4)	59.7	59.0	59.2	59.2	60.3	61.9	61.2	63.3
Employment rate for high skilled 15-64 (ISCED 5-8)	81.2	80.0	80.0	79.1	79.9	82.3	82.2	82.6
Activity rate (% population aged 15+)	53.7	53.2	54.0	54.9	55.1	55.1	53.7	54.9
Activity rate (% population aged 15-64)	62.2	61.9	63.2	64.5	65.0	65.4	64.0	65.4
Activity rate (% population aged 15-24)	26.6	24.8	25.3	24.7	22.6	21.2	19.2	19.5
Activity rate (% population aged 25-54)	79.6	79.3	79.8	80.3	80.2	79.8	77.8	79.4
Activity rate (% population aged 55-64)	42.9	42.8	45.5	49.0	51.4	53.8	53.4	55.1
Unemployment aged 15+ (1,000)	153	157	169	187	163	131	117	110
Unemployment rate (% labor force 15+)	9.6	10.1	10.8	11.8	10.4	8.4	7.8	7.2
Youth unemployment rate (% labor force 15-24)	20.1	23.6	26.0	25.7	23.8	22.2	(17.9)	(13.0)
Long-term unemployment rate (% labor force 15+)	4.4	5.5	5.8	6.6	6.0	5.0	4.5	4.4
Share of long-term unemployment (% of total)	46.2	54.1	53.0	55.9	57.6	59.6	57.9	60.9
Unemployment rate for low skilled 15+ (ISCED 0-2)	23.1	26.8	27.7	29.3	28.1	26.3	26.7	24.2
Unemployment rate for medium skilled 15+ (ISCED 3-4)	9.5	9.5	10.4	11.7	10.4	8.0	7.1	6.8
Unemployment rate for high skilled 15+ (ISCED 5-8)	4.5	5.0	5.5	6.4	4.8	3.9	3.8	2.9

Data are based on a continuous quarterly survey. Population aged 15+ refers to population 15-74. Census 2011 is applied throughout. Education groups refer to ISCED 1997 until 2013, ISCED 2011 from 2014.





Croatia: Labor market indicators

	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Total								
Total population (1,000)	4,296	4,283	4,269	4,254	4,236	4,208	•	•
Population aged 15+ (1,000)	3,298	3,284	3,271	3,258	3,243	3,224	3,214	3,210
Employment aged 15+ (1,000)	1,683	1,616	1,558	1,518	1,562	1,586	1,551	1,616
Employment rate (% population aged 15+)	51.0	49.2	47.6	46.6	48.2	49.2	48.3	50.4
Employment rate (% population aged 15-64)	57.4	55.2	53.5	52.5	54.6	55.8	54.9	57.4
Employment rate (% population aged 15-24)	24.3	20.6	17.4	14.9	18.3	19.0	23.8	25.7
Employment rate (% population aged 25-54)	72.6	70.6	69.2	68.3	71.2	72.2	70.6	72.9
Employment rate (% population aged 55-64)	39.1	38.2	37.5	37.8	36.2	39.0	35.6	39.1
Employment rate for low skilled 15-64 (ISCED 0-2)	35.2	32.7	29.5	27.5	26.9	28.2	26.2	27.5
Employment rate for medium skilled 15-64 (ISCED 3-4)	60.9	59.0	56.7	55.5	57.0	58.0	57.9	60.0
Employment rate for high skilled 15-64 (ISCED 5-8)	80.2	77.4	76.5	75.7	78.4	78.6	77.4	81.6
Activity rate (% population aged 15+)	57.8	57.0	56.7	56.3	58.2	58.8	57.1	57.8
Activity rate (% population aged 15-64)	65.1	64.1	63.9	63.7	66.1	66.8	65.0	65.9
Activity rate (% population aged 15-24)	35.8	32.5	30.1	29.9	33.6	33.3	35.3	36.5
Activity rate (% population aged 25-54)	80.8	80.6	80.9	80.8	84.1	84.4	82.1	82.3
Activity rate (% population aged 55-64)	41.8	41.4	41.8	41.9	41.0	44.1	40.8	43.3
Unemployment aged 15+ (1,000)	223	257	297	318	327	309	282	237
Unemployment rate (% labor force 15+)	11.7	13.7	16.0	17.3	17.3	16.3	15.4	12.8
Youth unemployment rate (% labor force 15-24)	32.4	36.6	42.1	50.0	45.5	43.0	32.6	29.7
Long-term unemployment rate (% labor force 15+)	6.6	8.4	10.2	11.0	10.1	10.3	7.8	6.8
Share of long-term unemployment (% of total)	56.1	61.5	63.7	63.6	58.5	63.0	50.6	53.1
Unemployment rate for low skilled 15+ (ISCED 0-2)	13.0	17.4	18.6	21.5	25.6	21.8	20.6	(18.0)
Unemployment rate for medium skilled 15+ (ISCED 3-4)	12.4	14.2	17.3	18.7	18.7	18.1	17.1	14.4
Unemployment rate for high skilled 15+ (ISCED 5-8)	8.4	9.2	10.6	11.3	9.6	9.3	8.8	(6.8)
Male								
Total population (1,000)	2,072	2,066	2,059	2,053	2,044	2,031		
Population aged 15+ (1,000)	1,618	1,612	1,607	1,602	1,596	1,586	1,581	1,580
Employment aged 15+ (1,000)	916	888	852	818	847	857	828	866
Employment rate (% population aged 15+)	56.6	55.1	53.0	51.1	53.1	54.0	52.4	54.8
Employment rate (% population aged 15-64)	62.7	60.9	58.5	56.5	59.1	60.1	58.5	61.4
Employment rate (% population aged 15-24)	27.9	23.8	20.0	17.4	21.2	22.3	27.4	29.3
Employment rate (% population aged 25-54)	76.4	75.1	73.0	71.6	74.5	75.2	72.9	75.6
Employment rate (% population aged 55-64)	50.5	49.6	48.0	45.0	45.8	48.0	42.4	47.0
Employment rate for low skilled 15-64 (ISCED 0-2)	40.7	37.6	33.7	32.3	30.5	32.2	30.4	31.6
Employment rate for medium skilled 15-64 (ISCED 3-4)	66.4	65.0	62.1	59.5	62.5	63.1	62.2	64.4
Employment rate for high skilled 15-64 (ISCED 5-8)	80.2	77.6	77.3	76.5	78.4	78.8	77.5	81.9
Activity rate (% population aged 15+)	63.7	63.9	63.1	62.1	63.5	64.0	62.2	62.6
Activity rate (% population aged 15-64)	70.6	70.7	69.8	68.9	70.9	71.5	69.6	70.2
Activity rate (% population aged 15-24)	40.7	37.8	34.6	34.7	38.5	38.3	40.2	40.6
Activity rate (% population aged 25-54)	84.1	85.4	85.2	84.7	86.6	86.8	85.0	84.8
Activity rate (% population aged 55-64)	54.4	54.2	53.9	51.0	52.1	54.7	49.2	52.6
Unemployment aged 15+ (1,000)	114	141	162	176	167	159	155	123
Unemployment rate (% labor force 15+)	11.1	13.7	16.0	17.7	16.5	15.7	15.8	12.4
Youth unemployment rate (% labor force 15-24)	31.5	37.0	42.1	49.9	44.9	41.9	(31.8)	(27.8)
Long-term unemployment rate (% labor force 15+)	5.9	8.4	10.2	11.3	9.6	10.1	8.8	7.3
Share of long-term unemployment (% of total)	53.2	61.4	63.5	63.9	58.1	64.4	55.8	58.8
Unemployment rate for low skilled 15+ (ISCED 0-2)	15.1	19.3	19.7	22.8	24.9	21.8	(22.3)	(18.8)
Unemployment rate for medium skilled 15+ (ISCED 3-4)	11.0	13.7	16.8	18.8	17.3	16.7	17.1	13.3
Unemployment rate for high skilled 15+ (ISCED 5-8)	7.8	8.7	9.9	10.5	8.9	9.3	(7.9)	(6.7)





	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Female								
Total population (1,000)	2,225	2,217	2,210	2,201	2,192	2,177		
Population aged 15+ (1,000)	1,680	1,672	1,664	1,657	1,647	1,637	1,632	1,630
Employment aged 15+ (1,000)	767	728	706	700	715	730	723	750
Employment rate (% population aged 15+)	45.6	43.5	42.4	42.3	43.4	44.6	44.3	46.0
Employment rate (% population aged 15-64)	52.1	49.5	48.5	48.5	50.0	51.5	51.4	53.3
Employment rate (% population aged 15-24)	20.4	17.2	14.7	12.4	15.3	15.6	19.9	21.9
Employment rate (% population aged 25-54)	68.8	66.1	65.2	64.9	67.9	69.1	68.3	70.0
Employment rate (% population aged 55-64)	28.5	27.7	27.7	31.0	27.3	30.6	29.2	31.7
Employment rate for low skilled 15-64 (ISCED 0-2)	31.0	28.9	26.3	23.7	24.0	25.0	22.8	24.3
Employment rate for medium skilled 15-64 (ISCED 3-4)	54.5	51.9	50.5	50.9	50.6	51.9	52.9	54.8
Employment rate for high skilled 15-64 (ISCED 5-8)	80.2	77.3	75.9	75.1	78.3	78.5	77.3	81.3
Activity rate (% population aged 15+)	52.1	50.5	50.5	50.8	53.1	53.7	52.1	53.0
Activity rate (% population aged 15-64)	59.6	57.6	58.0	58.5	61.3	62.2	60.5	61.5
Activity rate (% population aged 15-24)	30.7	26.9	25.3	24.8	28.5	28.2	30.1	32.2
Activity rate (% population aged 25-54)	77.4	75.8	76.6	76.8	81.5	81.9	79.1	79.7
Activity rate (% population aged 55-64)	30.2	29.6	30.6	33.4	30.6	34.2	32.8	34.4
Unemployment aged 15+ (1,000)	108	116	135	141	160	149	127	114
Unemployment rate (% labor force 15+)	12.4	13.8	16.1	16.8	18.3	17.0	14.9	13.2
Youth unemployment rate (% labor force 15-24)	33.6	36.1	42.0	50.2	46.4	44.4	(33.7)	(32.2)
Long-term unemployment rate (% labor force 15+)	7.3	8.5	10.2	10.6	10.7	10.5	6.6	6.2
Share of long-term unemployment (% of total)	59.1	61.3	63.5	63.3	58.7	61.6	44.4	47.1
Unemployment rate for low skilled 15+ (ISCED 0-2)	10.8	15.5	17.4	19.9	26.2	21.7	(18.6)	(17.3)
Unemployment rate for medium skilled 15+ (ISCED 3-4)	14.4	14.9	17.9	18.4	20.6	20.1	17.2	15.8
Unemployment rate for high skilled 15+ (ISCED 5-8)	8.8	9.6	11.3	11.9	10.2	9.3	(9.4)	(7.0)

Data are based on a continuous quarterly survey. Population aged 15+ refers to population 15-74. Census 2011 is applied throughout. Education groups refer to ISCED 1997 until 2013, ISCED 2011 from 2014.





Hungary: Labor market indicators

	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Total								
Total population (1,000)	10,000	9,972	9,920	9,893	9,866	9,843		
Population aged 15+ (1,000)	7,663	7,649	7,636	7,610	7,573	7,538	7,516	7,508
Employment aged 15+ (1,000)	3,732	3,759	3,827	3,893	4,101	4,211	4,262	4,343
Employment rate (% population aged 15+)	48.7	49.1	50.1	51.2	54.1	55.9	56.7	57.8
Employment rate (% population aged 15-64)	54.9	55.4	56.7	58.1	61.8	63.9	65.1	66.4
Employment rate (% population aged 15-24)	18.3	18.0	18.4	20.1	23.5	25.7	26.8	27.4
Employment rate (% population aged 25-54)	72.5	73.0	74.6	75.7	79.2	80.6	81.0	82.3
Employment rate (% population aged 55-64)	33.6	35.3	36.1	37.9	41.8	45.3	47.9	49.8
Employment rate for low skilled 15-64 (ISCED 0-2)	25.4	25.5	26.0	26.9	31.5	33.9	34.1	36.0
Employment rate for medium skilled 15-64 (ISCED 3-4)	60.7	60.8	61.9	63.3	66.7	68.8	70.1	71.5
Employment rate for high skilled 15-64 (ISCED 5-8)	77.5	78.5	78.5	78.9	80.8	82.1	84.1	84.8
Activity rate (% population aged 15+)	54.8	55.2	56.3	57.0	58.7	59.9	60.3	61.0
Activity rate (% population aged 15-64)	61.9	62.4	63.7	64.7	67.0	68.6	69.2	70.0
Activity rate (% population aged 15-24)	24.8	24.3	25.7	27.4	29.5	31.0	31.2	31.6
Activity rate (% population aged 25-54)	80.9	81.3	82.9	83.3	85.0	85.8	85.6	86.2
Activity rate (% population aged 55-64)	36.5	38.8	39.5	41.2	44.6	48.1	50.7	52.0
Unemployment aged 15+ (1,000)	471	465	473	442	342	307	272	233
Unemployment rate (% labor force 15+)	11.2	11.0	11.0	10.2	7.7	6.8	6.0	5.1
Youth unemployment rate (% labor force 15-24)	26.4	26.0	28.2	26.6	20.4	17.3	14.2	13.3
Long-term unemployment rate (% labor force 15+)	5.5	5.2	5.0	4.9	3.7	3.1	2.8	2.5
Share of long-term unemployment (% of total)	48.8	47.6	45.3	48.5	47.6	45.7	46.6	48.3
Unemployment rate for low skilled 15+ (ISCED 0-2)	25.1	25.0	24.8	23.7	18.5	17.4	15.1	13.5
Unemployment rate for medium skilled 15+ (ISCED 3-4)	10.6	10.7	10.8	10.0	7.4	6.4	5.7	4.8
Unemployment rate for high skilled 15+ (ISCED 5-8)	4.6	4.3	4.5	3.9	3.1	2.4	2.2	1.5
Male								
Total population (1,000)	4,750	4,734	4,720	4,710	4,700	4,692		
Population aged 15+ (1,000)	3,674	3,672	3,676	3,668	3,654	3,641	3,634	3,631
Employment aged 15+ (1,000)	1,993	2,021	2,049	2,104	2,221	2,283	2,314	2,359
Employment rate (% population aged 15+)	54.2	55.0	55.7	57.4	60.8	62.7	63.7	65.0
Employment rate (% population aged 15-64)	59.9	60.7	61.6	63.7	67.8	70.3	71.5	72.9
Employment rate (% population aged 15-24)	19.9	19.7	19.8	23.0	26.4	28.1	29.7	31.4
Employment rate (% population aged 25-54)	78.0	79.5	80.2	81.4	85.3	86.8	87.0	88.3
Employment rate (% population aged 55-64)	38.6	39.3	41.4	44.8	49.6	54.4	57.8	59.2
Employment rate for low skilled 15-64 (ISCED 0-2)	28.1	29.0	30.0	30.8	36.3	39.9	39.8	42.3
Employment rate for medium skilled 15-64 (ISCED 3-4)	66.1	66.4	66.8	69.1	73.1	75.2	76.8	78.1
Employment rate for high skilled 15-64 (ISCED 5-8)	81.8	83.7	84.4	85.3	87.1	88.6	90.4	91.1
Activity rate (% population aged 15+)	61.4	61.9	62.9	63.9	65.7	67.2	67.7	68.6
Activity rate (% population aged 15-64)	67.8	68.4	69.6	71.0	73.4	75.3	76.0	77.0
Activity rate (% population aged 15-24)	27.5	27.0	27.9	31.0	33.0	34.4	35.1	36.1
Activity rate (% population aged 25-54)	87.3	88.2	89.4	89.5	91.2	92.0	91.8	92.6
Activity rate (% population aged 55-64)	42.2	43.7	45.4	49.0	53.2	57.8	61.0	62.0
Unemployment aged 15+ (1,000)	261	252	261	239	183	161	148	132
Unemployment rate (% labor force 15+)	11.6	11.1	11.3	10.2	7.6	6.6	6.0	5.3
Youth unemployment rate (% labor force 15-24)	27.8	27.0	29.1	25.6	20.0	18.3	15.3	13.0
Long-term unemployment rate (% labor force 15+)	5.7	5.2	5.2	5.0	3.6	3.1	2.8	2.5
Share of long-term unemployment (% of total)	49.4	47.2	45.7	48.7	47.8	47.3	47.4	47.0
Unemployment rate for low skilled 15+ (ISCED 0-2)	27.2	25.5	25.3	24.5	18.4	16.8	15.4	14.6
Unemployment rate for medium skilled 15+ (ISCED 3-4)	10.5	10.4	10.9	9.7	7.0	6.0	5.4	4.6
Unemployment rate for high skilled 15+ (ISCED 5-8)	4.9	4.1	4.2	3.4	2.8	2.2	2.1	1.5





	2010	2011	2012	2013	2014	2015	1Q 2016	2Q 2016
Female								
Total population (1,000)	5,250	5,234	5,200	5,183	5,167	5,151		
Population aged 15+ (1,000)	3,989	3,977	3,959	3,942	3,919	3,897	3,882	3,876
Employment aged 15+ (1,000)	1,740	1,738	1,778	1,789	1,880	1,927	1,948	1,984
Employment rate (% population aged 15+)	43.6	43.7	44.9	45.4	48.0	49.5	50.2	51.2
Employment rate (% population aged 15-64)	50.2	50.3	51.9	52.6	55.9	57.8	58.8	60.1
Employment rate (% population aged 15-24)	16.5	16.2	17.0	17.0	20.4	23.1	23.8	23.1
Employment rate (% population aged 25-54)	67.0	66.6	69.0	70.0	73.2	74.4	75.0	76.3
Employment rate (% population aged 55-64)	29.4	31.9	31.7	32.1	35.2	37.7	39.5	41.8
Employment rate for low skilled 15-64 (ISCED 0-2)	23.3	22.5	22.6	23.7	27.3	28.7	29.1	30.6
Employment rate for medium skilled 15-64 (ISCED 3-4)	54.7	54.7	56.5	56.8	59.6	61.6	62.7	64.1
Employment rate for high skilled 15-64 (ISCED 5-8)	74.3	74.6	74.3	74.2	76.1	77.3	79.4	80.1
Activity rate (% population aged 15+)	48.8	49.1	50.2	50.5	52.1	53.2	53.4	53.8
Activity rate (% population aged 15-64)	56.3	56.6	58.0	58.6	60.7	62.2	62.6	63.2
Activity rate (% population aged 15-24)	22.0	21.5	23.4	23.6	25.9	27.5	27.2	26.7
Activity rate (% population aged 25-54)	74.6	74.4	76.5	77.1	78.8	79.6	79.4	79.8
Activity rate (% population aged 55-64)	31.7	34.8	34.5	34.7	37.4	39.9	42.0	43.5
Unemployment aged 15+ (1,000)	208	215	211	201	161	145	127	102
Unemployment rate (% labor force 15+)	10.7	11.0	10.6	10.1	7.9	7.0	6.1	4.9
Youth unemployment rate (% labor force 15-24)	24.7	24.7	27.1	27.9	20.9	16.0	12.8	13.7
Long-term unemployment rate (% labor force 15+)	5.2	5.3	4.8	4.9	3.7	3.1	2.7	2.4
Share of long-term unemployment (% of total)	48.3	47.8	45.1	48.7	46.9	44.2	45.0	49.8
Unemployment rate for low skilled 15+ (ISCED 0-2)	22.8	24.5	24.4	22.7	18.7	18.1	14.7	12.2
Unemployment rate for medium skilled 15+ (ISCED 3-4)	10.6	11.0	10.5	10.4	7.8	6.9	6.2	5.1
Unemployment rate for high skilled 15+ (ISCED 5-8)	4.3	4.4	4.7	4.3	3.4	2.6	2.2	1.5

Data are based on a continuous quarterly survey. Population aged 15+ refers to population 15-74. Census 2011 is applied throughout. Education groups refer to ISCED 1997 until 2013, ISCED 2011 from 2014.













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