Country Economic Memorandum

Serbia’s New Growth Agenda

Labor market for growth
Acknowledgments

This note, written by Trang Nguyen and Gonzalo Reyes, is part of the Serbia Country Economic Memorandum (CEM), prepared under the leadership of Ekaterina Vostroknutova, Trang Nguyen, and Lazar Sestovic. The note draws on work on productivity led by Elwyn Davies and on skills led by Katia Herrera. Trinidad Saavedra provided research support related to the labor force survey data. Valuable comments from Johannes Koettl and Maria Davalos are greatly appreciated. All names are from the World Bank. The team would like to thank all public and private-sector counterparts in Serbia for their collaboration, discussions, and the feedback provided during preparation of the note.

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Executive Summary

Though in the last few years Serbia has been creating jobs, more are needed if it is to catch up and accelerate growth. Between 2014 and 2018 Serbia created about 240,000 jobs and reduced unemployment from 19.9 to 13.3 percent. Many of the new jobs have been formal private sector, full-time wage jobs. Recent labor market improvements have also benefited vulnerable groups like women, older workers, and youth. Yet if by 2025 it is to match employment rates in the small transition economies of Central and Eastern Europe (CEE), Serbia will need to create 500,000 jobs—100,000 a year.

To spur growth and job creation, it is critical that Serbia address its labor market challenges. Among them are too few formal, private-sector jobs; underutilization of the full workforce, such as youth, women, and the Roma population; and stagnant labor productivity and real wages. Robust increases in employment will require the country to work through a comprehensive agenda: boosting private-sector job creation on the demand side; reducing barriers and disincentives to work and improving worker skills on the supply side; and ensuring that labor market intermediation and institutions facilitate employer-employee matches.

In particular, improving skills and reforming labor market policies can help increase both employment and productivity. According to the 2015–16 STEP Employer Survey, the top labor-related constraints on business identified by Serbian employers are labor taxes and lack of experienced workers. This note analyzes skills shortages and labor taxation, regulation, and intermediation in order to formulate specific policy recommendations in support of Serbia’s New Growth Agenda. Tackling these issues will not only enhance Serbia’s human capital and productivity for higher growth but also boost people’s incomes, reduce poverty, and strengthen the middle class.

Skills gaps are becoming an obstacle to doing business in Serbia. In 2017, 29.3 percent of companies indicated problems with finding new workers, mostly due to skill shortages, up from 13.7 percent in 2014, according to National Employment Services (NES) employer survey data. More innovative firms have more difficulty. Serbia’s education and training system needs reforms to build the skills valued by today’s labor market. That will require the country to:

- **Give priority to modernizing general education**: Upgrade the curriculum and focus on quality in upper primary and secondary education, emphasizing socioemotional as well as technical development; and where feasible, optimize the school network to raise efficiency, working with the municipalities. Modernizing general education would help rebalance educational achievement away from over-enrollment in vocational education.

- **Keep vocational education and training (VET) profiles current**: There is a continuing need to assess the market relevance of VET profiles and update them, through coordination between the Ministry of Education, Science and Technological Development (MoESTD), Chambers of Commerce, Ministry of Labor, Employment, Veteran and Social Affairs (MoLEVSA), the NES, and other labor market actors.

- **Enhance accountability and the strategic relevance of higher education**: Draft a higher education diagnostic to help set the strategic direction and identify opportunities to introduce quality assurance mechanisms.

- **Increase equitable access to preschool education**: Remove the flat 20 percent preschool co-payment for the poorest families.
Labor market regulation and taxation can better support employment creation. Despite great progress since the 2014 labor law reform in making the labor market more flexible, persisting challenges and new forms of work underscore the need to again modernize the laws. The labor laws could be updated to facilitate participation in the labor force by women (e.g., by amending family leave policies); adapt to new forms of work (e.g., by updating worker classifications and ensuring enforcement); and reduce the costs of collective dismissals while carefully balancing protection of workers and labor market flexibility.

Labor taxes in Serbia are characterized by high social security contributions and low progressivity, and their structure inhibits formal employment. From an international perspective, the labor tax wedge is high in Serbia, particularly for low-income workers. Lack of a family allowance further deters the participation of low-wage earners with dependents. A more progressive income tax, tax-exempt brackets for workers with children, and subsidizing social security contributions for low-income workers would make labor markets more inclusive and encourage low-wage earners to move into the formal sector.

Serbia spends relatively little on active labor market policies (ALMPs), but before considering an expansion of such initiatives, monitoring and evaluation should be strengthened to ensure that programs are as effective and efficient as they can be. The government issues an annual National Employment action plan and the NES is the main institution in charge of implementing ALMPs. NES is well-established and fulfills its role effectively, but it apparently lacks the flexibility to adapt its programs and interventions to changes in demand, either by region or over time. A formal M&E strategy, supported by the institutional capacity to adapt programs to the results of evaluations, such as an impact evaluation of pilots and active programs, could considerably improve the effectiveness of ALMPs.

Introduction

Addressing Serbia’s labor market problems is critical to enhancing growth and job creation. Low labor force participation, relatively high unemployment, particularly among youth and other disadvantaged groups, and rising skills gaps currently impede efficient use of human capital and the prospects for sustained economic growth and welfare improvements. Although there has been progress, more jobs are needed if Serbia is to catch up with neighboring countries in the European Union (EU). Robust growth in employment will require a comprehensive agenda: boosting private sector job creation on the demand side; reducing barriers and disincentives to work and improving worker skills on the supply side; and ensuring that labor market intermediation and institutions facilitate employer-employee matches.

This note focuses on current labor market performance and on skills and labor market policies to support inclusive growth. Employment in Serbia’s formal private sector is low; the full workforce potential is underutilized; and labor productivity and real wages have been relatively flat. Improving skills and reforming labor market policies can boost both employment and productivity. This note’s focus on skills and labor taxation, regulation, and intermediation allows it to discuss specific policy actions to support Serbia’s New Growth Agenda. Tackling these issues will not only enhance Serbia’s human capital and productivity for higher growth but will also boost people’s incomes, reduce poverty, and grow the middle class.
Labor Market Overview

Progress, but not yet enough

1. **Serbia has been creating jobs and consistently improving labor market outcomes in recent years.** As the economy grew, Serbia created about 200,000 jobs in 2014-17 (Figure 1), and another 40,000 jobs in 2018. In 2014–17, employment of people aged 15–64 grew by 8.3 percent, with a notable jump in 2016. Meanwhile the labor force participation rate rose from 63.3 to 66.7 percent, and employment for those aged 15–64 went up from 50.7 to 57.3 percent. Labor market improvements have also benefited vulnerable groups like women, older workers, and youth. Labor force participation and the employment rate increased more for women than men. Participation of youth aged 15–24 rose by 2.2 percentage points (pp)—much more than for the rest.

![Figure 1: Growth of employment, particularly formal private employment, people aged 15–64 (thousands), 2014–17](image1)

![Figure 2: Unemployment and long-term unemployment,2014–17](image2)

![Figure 3: Employment rate by gender, 2014–17](image3)

![Figure 4: Employment rate by age group, years 2014–17](image4)

*Source: Labor Force Survey data, World Bank staff calculations.*

*Note: For people aged 15–64, earlier years not shown since the frequency of LFS data collection changed with the 2014 LFS. The graph shows the long-term unemployed as a share of the labor force.*
2. **Many of the new jobs are formal private-sector, full-time wage positions.** Between 2014 and 2017 most of the job rise was attributable to the formal private sector, which saw a steep 17.7 percent jump in the number of workers. In line with government fiscal consolidation efforts, the number of workers in the public sector dropped by 4 percent. The share of formal private employment went up from 49 to 54 percent and that of public employment went down from 31 to 28 percent. Full-time employment increased by 8.4 percent, slightly more than the increase in part-time employment, and salaried employment grew by 10.6 percent. Self-employment also rose, and unpaid family employment fell.

3. **Unemployment has been trending down,** dropping from 19.9 to 14.1 percent between 2014 and 2017 (Figure 2), and to 13.3 percent in 2018. Unemployment decreased faster among women (down 6.2 pp) than among men (7.1 pp) and faster among younger cohorts—down 15.6 among those aged 15–24 and 7.1 pp among those aged 25–35. Long-term unemployment—unemployment lasting more than one year—as a share of the labor force also decreased, by 4.8 pp, from 13.3 to 8.5 percent.

4. **The labor market continued to improve in 2018, though employment growth fell.** At 58.8 percent in 2018, employment of Serbians aged 15–64 hit a new high, with growth in both the formal private and the informal sector (mainly because agricultural growth went up); meanwhile, public employment fell. Year-on-year employment growth was just 1.4 percent in 2018, down from 2.7 percent in 2017. A third of those who were unemployed in Q1 2017 had obtained a job, formal or informal, by Q1 2018. However, the fall in unemployment in 2018 was partly due to unemployed Serbians leaving the labor force: 26.5 percent of those unemployed in Q1 2017 became inactive in 2018. Table 1 shows the transition in Q1 labor market status for those two years; Q2 results are similar. Informal employment seems to be the more flexible segment of the labor market; slightly more than half of those informally employed kept the same status, some others found formal employment, and some became inactive. On the other hand, almost all of those employed in the formal sector stayed there. The data do not allow for measuring exact job turnover, but among those who remained in formal employment, very few switched between the public and private sectors. Similarly, less than 10 percent switched between agriculture, industry, and services or small, medium, and large firms.

Table 1: Changes in labor market status, 2017Q1 to 2018Q1, percent staying or changing status

<table>
<thead>
<tr>
<th>Labor market status in 2017Q1</th>
<th>2018Q1</th>
<th>2018Q1</th>
<th>2018Q1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employed Formal</td>
<td>Employed Informal</td>
<td>Unemployed</td>
</tr>
<tr>
<td>Employed formal</td>
<td>91.4</td>
<td>2.4</td>
<td>2.6</td>
</tr>
<tr>
<td>Employed informal</td>
<td>16.5</td>
<td>58.9</td>
<td>5.9</td>
</tr>
<tr>
<td>Unemployed</td>
<td>23.3</td>
<td>11.7</td>
<td>38.6</td>
</tr>
<tr>
<td>Inactive</td>
<td>6.6</td>
<td>6.8</td>
<td>8.5</td>
</tr>
</tbody>
</table>

Source: LFS panel data, World Bank staff calculations.
Note: Results are based on cross-sectional weights, the only weights available.

5. **Yet to catch up with EU neighbors, Serbia needs a stronger boost in employment creation, which can only come from a more dynamic private sector and by addressing persistent labor market challenges.** Serbia will need to create 500,000 jobs if it is to close the gap in employment for those aged
20–64 with the small transition economies of CEE\(^1\) by 2025—that is 100,000 jobs a year. To meet the EU’s employment target of 75 percent for people aged 20–64 by 2025, Serbia will need to create 628,000 jobs, or 126,000 jobs a year. In 2015–18 Serbia was able to create on average just 60,000 jobs a year, which was associated with about 2.8 percent annualized output growth; accelerating growth will likely help Serbia achieve faster job creation. Estimates for the six Western Balkan countries suggest that a 1 percentage point (pp) increase in GDP growth is associated with decreases of 0.29 pp in adult unemployment and 0.85 for youth (Vincelette et al. 2016).

6. **Structural challenges include low formal private-sector employment.** Serbia’s working-age population has been declining consistently due to population aging and outmigration: the number of people aged 15–64 fell by 4.2 percent in 2014–17. Only about 30 percent of Serbians aged 15–64 are employed in the formal private sector (Figure 5). Informal employment represented about 20 percent of Serbia’s total employment. The labor force participation and employment rates are far below those of neighboring EU countries (Figure 6). Based on time outside of employment in 2018 data, the average male worker in Serbia loses about 20 years of his potential productive lifetime (ages 15–64), and the average female worker 25 years.\(^2\) A large proportion of those unemployed had to wait more than a year to find a job. In 2014–17 long-term unemployment stayed relatively high and its share of the total unemployed ranged from 85 to 75 percent.

7. **In addition, Serbia is not yet drawing on the full potential of its workforce that includes youth, women, and the Roma population.** Addressing high youth unemployment and inactivity and lower employment among women and Roma people would not only improve economic inclusion but also the allocation of labor. Half of those aged 55–64 is inactive. Even though youth unemployment fell to 35 percent in 2018, that is still double the EU average but also diminishing their long-term employment prospects. More than 20 percent of those aged 15–24 were not in employment, education, or training (NEET)—high by international standards. Comparing the first half of 2017 and 2018 reveals that youth may be able to find jobs but seem to lose them more easily: workers aged 15–24 who had formal jobs were less likely to still have them a year later and more likely to move into unemployment or inactivity than the rest of the working-age population. During this period women working informally were less likely to move into formal jobs and more likely to become inactive than men. Underutilizing the full workforce potential has economic costs. In Serbia, gender gaps in access to work imply a loss of 16.2 percent of income per capita (Cuberes and Teigner 2015 [2010 data]). The employment rate among the Roma is half of that among their non-Roma neighbors. If the employment and earnings gaps between Roma and the general population in Serbia were closed, the total gains from increased productivity alone could range from 0.9 to 3.5 percent of GDP (World Bank 2015).

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\(^1\) The seven small transition economies of Europe (7STEE) are: Bulgaria, Estonia, Croatia, Latvia, Lithuania, Slovenia, and Slovak Republic. This calculation takes the desired employment rate for the relevant age group would imply in terms of number of employed people, or jobs; compares it to the current number of jobs in that age group; and deduces the needed job creation to close the gap.

\(^2\) Following method in Arias et al. *Europe and Central Asia: Back to Work*. 

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8. **Lack of robust gains in labor productivity and real earnings limits growth and welfare.** Labor productivity and real wage have not seen robust increases since the start of the decade (Figure 7). However, real wages started to grow again in the past few years. Between 2014 and 2017, salaries increased slightly. The proportion of salaried workers earning less than 25,000 RSD shrunk, and the proportion earning between 25,000 and 45,000 RSD increased. Labor productivity in Serbia lags behind all the other small transition economies in CEE. Gross Value Added per person employed is about 30 percent that of Slovenia and had the lowest annual growth rate throughout 2009–15 (World Bank 2018). Wages are often higher in more productive firms, but in general productivity in Serbia is low, limiting the potential for wage growth.
Where are the jobs?

9. **Industry and services saw considerable employment growth between 2014 and 2017, but employment in agriculture decreased.** In 2017 services provided 58 percent of jobs, industry 27 percent, and agriculture 15 percent. According to LFS data, in 2014–17, employment went up 10.5 percent in services and 11.7 percent in industry (Figures 8 and 9). However, jobs in agriculture shrank by 4 percent, dropping the share of agricultural employment from 17 to 15 percent. Since most jobs are in services, during this period they accounted for 72 percent of job creation. Data from Serbia’s Business Registry also show net job creation in manufacturing and different subsectors in services, particularly wholesale trade, administrative and support services, retail, and professional and technical services. Net job creation masks significant job creation and destruction. Around 80 percent of the net job creation was in new firms.

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3 This data set captures formal employment mainly in manufacturing and services, with only a few firms in agriculture.
10. **Jobs were created in both low-productivity and high-productivity firms.** In general, more employment is in firms in the higher productivity quintiles (Figure 10), but many jobs were also created in firms with relatively low productivity (Figure 11). Firms with the fastest productivity growth are not always the ones offering the most new jobs because productivity growth may require less labor. In 2016 fast-growing firms—by definition, fast expanding in employment—created 72 percent of jobs in Serbia, but in 2017 they constituted just 5 percent of formal firms and were not necessarily more productive (World Bank 2019). Employment in foreign firms has clearly grown, and more recently domestic firms have also been creating jobs.

Figure 10: More productive firms tend to employ more workers.

**Value added per worker quintile and employment**

Figure 11: Recent job creation in high- and low-productivity firms

**Value added per worker quintile and employment changes**

Source: CEM Productivity Note.

11. **However, labor is still not being allocated to the most productive firms.** As discussed in the CEM Productivity Note, dispersion in productivity across firms within the same sector is high. Productivity has been increasing in Serbia, driven by both within-firm increases in capabilities and between-firm allocation of labor and capital. Yet the between-firm component’s contribution to TFP growth in the manufacturing sector has fallen in recent years. The between-firm component has even negatively impacted services.

How can the labor market support faster growth?

12. **For a virtuous and effective cycle of growth and jobs, Serbia must address the long-standing challenges in its labor market.** Sustained increases in employment will require boosting private sector job creation; reducing barriers and disincentives to work and improving workers’ skills; and ensuring that labor market intermediation and institutions facilitate better employer-employee matches. Addressing the constraints to a dynamic private sector is critical for creating employment and earning opportunities. Signs of misallocation in the economy suggest that labor and human capital should also be used more efficiently. Reducing labor market frictions, together with other policies, can improve the allocation of labor, help productive firms grow, and boost economic growth.
13. **In particular, improving skills and reforming labor market policies would enhance employment and productivity.** What follows discusses two areas critical to productivity and growth in Serbia: the skills agenda and labor policies, specifically labor tax, regulation, and intermediation. According to the 2015–16 STEP Employer Survey, employers in Serbia consider the labor tax and the lack of workers with experience as the top labor-related constraints on business (Figure 12). Improving skills will not only enhance employability of workers but also facilitate upgrading of firm capabilities and raise productivity. Reforming labor market policies will facilitate employer-employee matches and improve the allocation of labor to more productive industries and firms. The focus on skills and labor taxation, regulation, and intermediation is intended to identify issues amenable to policy reforms in the short run to support Serbia’s New Growth Agenda.

**Figure 12: Finding experienced workers and labor taxes are significant obstacle to for businesses**

(percentage of firms citing area as major or severe obstacle to business)

<table>
<thead>
<tr>
<th>Finding workers with previous experience</th>
<th>Payroll taxes and social security contributions</th>
<th>Overall wage level</th>
<th>Labor availability</th>
<th>Technical and vocational education and training of workers</th>
<th>High job turnover</th>
<th>Employment protection legislation/labor code laws</th>
<th>General education of workers</th>
<th>Minimum wage</th>
</tr>
</thead>
<tbody>
<tr>
<td>40</td>
<td>35</td>
<td>20</td>
<td>15</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Source: Serbia STEP report, Estimates based on STEP Employer Survey.

14. **Other factors also act as disincentives to work and barriers to employment,** among them high reservation wages, preference for public sector employment, loss of social benefits when employment starts, and barriers to internal labor mobility. According to the 2018 Balkan Barometer, 74 percent of respondents prefer to work in the public sector, probably because contracts are more stable (86 percent of contracts are open-ended versus 72 percent in the private sector) and a likely public sector wage premium. Substantial spatial disparities in unemployment suggest inadequate movement of

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4. [https://www.rcc.int/seeds/results/2/balkan-public-barometer](https://www.rcc.int/seeds/results/2/balkan-public-barometer)

5. Public sector wages are higher on average, though lack of exact wage data for the full LFS sample limits careful analysis of the public wage premium. Using the LFS sample with exact wage data in 2017, public sector employees earned on average 27 percent more than private sector employees. The wage premium is 17 percent when controlling for sociodemographic characteristics (gender, age, educational attainment, work experience, and type of location) and sector of employment.
workers to areas in the country where labor markets are tighter. An underdeveloped housing market and liquidity constraints, among other factors, appear to be major barriers to worker movement.⁶

A skilled workforce for the labor market

15. Although job creation has picked up in the last few years, hiring problems have worsened. NES employer survey data⁷ show that Serbian employers are having increasing difficulty finding the right workers: 29.3 percent of companies surveyed in 2017 indicated such problems, up from 18.6 percent in 2016 and just 13.7 percent in 2014. The companies most often facing these problems were in manufacturing (38.6%), construction (37.7%), mining (33.3%), accommodation and food production (32.2%), information and communication (32.1%), and transport and storage (29.4%). Higher shares of large companies and of those in Vojvodina and Belgrade reported problems in finding qualified workers. In the 2015–16 STEP Employer survey, 69 percent of respondent firms that were hiring experienced difficulty across all occupations (Figure 13).

Figure 13: Many hiring firms experience difficulties in hiring workers in all occupations, percent

![Bar chart showing the percentage of hiring firms experiencing difficulties in hiring workers in various occupations.](image)

Source: Serbia STEP report, Estimates based on STEP Employer Survey.

16. Firms consider skills gaps the main reason for hiring difficulties. The most common problems cited in the NES survey were worker lack of knowledge and skills, lack of work experience, and shortage of needed professionals. Similarly, respondents to the Serbia STEP most often said that lack of required

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⁷ Firms with 9 or more employees, excluding public administration, education, certain types of services; households as employers.
skills and work experience caused difficulty in filling vacancies—more than, e.g., candidates not accepting the wage offer or objecting to working conditions. Thus, hiring problems seem to be related more to skills gaps than to a tight labor market. Although the labor market is improving, unemployment is still above 13 percent. In recent years, firms have been paying more in aggregate, consistent with the increased hiring difficulty. Real wages in the private sector grew by more than 6 percent in 2014–17 and grew in 2018 by more than 4 percent. A causal link is difficult to establish, however, and wage data is not disaggregated by skill level.

17. While some lag in finding the right skills can be expected in any dynamic economy, gaps that are too wide or persistent can affect business and growth. It is not uncommon for employers to report skills gaps, but it is important to understand which are the gaps, how wide, and how persistent. When the education system and the existing labor force are slow to adjust to changing demand and when market failures (such as lack of information about skills in demand) distort people’s choices of which skills to invest in or firms’ choices of production technology, those frictions deserve policy attention because they could deter growth. A clear example is the gymnasium curriculum in Serbia, which had not been updated in over two decades until 2018, even though the economy has evolved. The STEP Employer Survey for Serbia makes it clear that skills gaps affect dynamic firms more: firms that have made a technology-related innovation in the past three years tend to have higher growth prospects and are more likely to hire, but more of them cite lack of skills among applicants as a problem. Skills shortages in Serbia will likely be aggravated by the demographic pressures of an aging population and outmigration. Achieving and sustaining higher economic growth will therefore require building a skilled workforce for the modern labor market in an increasingly integrated economy.

18. Skills gaps in Serbia are not necessarily caused by a shortage of educated workers; there can also be mismatches. Employers pay a wage premium for highly educated workers. Based on the Survey of Income and Living Conditions (SILC), in 2015, wages were estimated to be 7.9 percent higher for each year spent in higher education. But diplomas do not necessarily equate to the skills and know-how currently in demand; they depend in part on the quality and relevance of education and training. In fact, according to the 2018 LFS, even with the labor market recovering, the 22 percent of unemployed Serbians who have tertiary education still cannot find a job; 25 percent of workers consider themselves overqualified; and over half of those with tertiary education say their jobs do not require their level of education (STEP report).

19. In what kinds of skills is the economy running short? According to the STEP survey, employers value a combination of socio-emotional skills like teamwork, self-control, reliability, stress resistance, and resilience; advanced cognitive skills like problem-solving and critical thinking; and job-specific technical skills. In addition to the cognitive skills typically taught in traditional education, the need for socioemotional skills was emphasized. Some of the new-economy technical skills (such as ICT) and cognitive skills were also emphasized due to the rising platform economy in Serbia.

20. The education and training system must deal with several challenges to skill development at different stages, as diagnosed in the Education and Skills note. Early childhood care and education is the foundation for building cognitive and socio-emotional skills. While the Government of Serbia has already taken some concrete steps, access to preschool education for children aged 3–5 is still insufficient—the net enrollment rate in 2017 was 61 percent—and unequal. Serbia’s performance on international assessments is respectable but still trails other EU and OECD countries. While test performance in lower grades (2015 TIMMS 4th grade exam) is good, the results for older grades are less so (2011 TIMMS 8th grade exam or 2012 PISA for 15-year-old students). Roughly one third of Serbia’s
15-year-old students in the PISA assessments lack the basic proficiency in reading (Figure 15). The process of moving from primary to secondary in gymnasium or vocational education streams may exacerbate the shortage of basic skills, with a high concentration of low-proficiency students being sorted into VET. In Serbia, 74 percent of students, one of the highest shares anywhere, are in VET, yet many of whom eventually go on to higher education. While the general education curriculum has not really changed for a long time, vocational programs have expanded, generating high student preferences for VET. Higher education has little accountability and quality assurance. Enrollment in higher education has risen slowly but is still low compared to EU members.

21. **The connection of education to the private sector could certainly be closer.** The 2015–16 STEP Employer Survey found that firms are unhappy with education outcomes (Figure 14). However, less than half of Serbian firms provide training, and firms are engaged with the education system only for training, recruitment, and internships, rather than at a strategic level for, e.g., curriculum development. Only 10 percent of VET students have the opportunity to participate in the dual system that connects them with employers (see CEM Skills note).

Figure 14: Education and training systems do not meet the skills needs of businesses.

\[
\begin{array}{c|c|c}
\text{Country} & \text{ALB} & \text{KOS} \\
\hline
\text{VET} & 14 & 19 \\
\text{General education system} & 37 & 44 \\
\end{array}
\]

Source: Education ASA, World Bank STEP surveys.

Figure 15: A third of Serbian students are functionally illiterate.

\[
\begin{array}{c|c|c|c|c|c|c|c|c|c}
\text{Country} & \text{Estonia} & \text{Slovenia} & \text{LV Average} & \text{Ukraine} & \text{Hungary} & \text{Serbia} & \text{Turkey} & \text{Montenegro} & \text{Albania} \\
\hline
\% of 15 year-olds scoring "below level 2" on PISA Reading Test (PISA 2015 and 2012) & 21.9 & 33.1 & 33.1 & 41.9 & 41.9 & 50.3 & 54.4 & 70.1 & 76.9 \\
\end{array}
\]

Source: Education GP, PISA 2012.

22. **Reforms to Serbia’s education and training system are necessary to build the skills valued by today’s labor market.** The recommendations in the Education and Skills note are summarized here:

- *Make it a priority to modernize general education.* Modernize the curriculum and focus on quality in upper primary and secondary education, including socioemotional development; and optimize the school network where feasible to raise efficiency in working with municipalities. Modernizing general education would help rebalance away from over-enrollment in vocational education.

- *Keep VET profiles up to date:* There is a constant need to assess the market relevance of VET profiles and update them through coordination between the MoESTD, Chambers of Commerce, MoLEVSA, NES and other labor market actors.
• **Enhance the accountability and strategic relevance of higher education**: Develop a higher education diagnostic to help set the strategic direction and find opportunities to introduce quality assurance mechanisms.

• **Increase equitable access to preschool education**: Remove the flat 20 percent co-payment for preschool for the poorest families.

**Labor taxes, regulation, and intermediation**

23. **Labor market institutions, regulations, and interventions illustrate a range of policies that can affect the performance of the labor market.** Labor regulations encompass traditional employment regulations related to, e.g., contracts, hours of work, working conditions, compensation, and minimum wages. These regulations are often consolidated in a Labor Code or Labor Law. However, the regulations that affect how the labor market operates are not limited to what is covered by traditional labor laws. Taxation of income, payroll taxes generally, and social security contributions (SSCs) also affect labor market performance and incentives to hire and work in formal jobs. Apart from regulation, labor market policies or interventions also affect how the labor market functions; among these are unemployment benefits and active labor market policies (ALMPs) such as intermediation and training programs.

24. Next we focus on three areas relevant to the performance of the labor market: labor regulations, taxation, and intermediation.

**Employment legislation**

25. **Labor regulations give workers certain minimum rights in their relationships with employers.** Regulations can also correct imperfections in labor markets resulting from inadequate information, uneven bargaining power, limited ability to enforce long-term commitments, or insufficient insurance against employment-related risks.

26. **However, excessive regulation can affect the market’s ability to assign workers to jobs** and the ability of employers to heighten productivity, generate jobs, and hire and fire workers in response to business needs. Well-functioning labor markets thus depend on laws that balance protection and incentives.

27. **The OECD has a methodology to measure the degree of flexibility in employment laws according to certain criteria,** such as employment protection for permanent workers, employment protection for temporary workers, and regulation of collective dismissals. Each employment protection legislation index is composed of different indicators that can take values from 0 to 6, where low values are associated with flexibility and high values with rigidity. Different indicators are then weighted according to the OECD methodology and allotted to three indexes.

28. **In 2014, Serbia undertook comprehensive reform of its labor regulation in, e.g., the areas of contracts, working conditions, and termination of employment.** This made its labor regulations more flexible, allowing the labor market to better allocate jobs. As a result, Serbia’s employment legislation is now generally in line with OECD member levels. However, its requirements for collective dismissals are still highly restrictive.
Figure 16: Serbia’s requirements for collective dismissals are very restrictive (OECD Employment Protection Index).

To facilitate the use of collective dismissals, the government of Serbia might consider changing its regulations. The simplest measure would be to modify the definition so that collective dismissal applies only when at least 20 employees are made redundant within a certain period of time. This would in practice facilitate hiring and firing at small firms since it would most likely apply only to larger firms. The legislation could also consider either eliminating the requirement to notify the NES of collective dismissals or retain it as an information step only, without asking for NES comments on the proposed collective dismissal. Finally, given well-regulated systems for severance payments and unemployment benefits, the possibility of a company voluntarily improving on the official severance package, and the services provided by the NES, the legislation could remove the requirement for the employer to establish a social plan involving compensatory salary or re-employment measures in cooperation with the NES. These changes would eliminate unnecessary burdens that make collective dismissals far more costly than regular dismissals in Serbia or collective dismissals in comparator countries.

Given the persistent gender gap in labor market indicators, employment regulation could also help make it easier to bring women into the labor market. Previous analyses (see (World Bank 2017b) have found that the design of family leave provisions, especially maternity leave, increase employer disincentives to hire women. The generosity of Serbia’s family leave, measured as the wage replacement rate (100% in Serbia) and adjusted length of paid leave (135 calendar days), is one of the highest in the region. While government bears the full direct costs, employers likely bear indirect costs such as for hiring and training replacement workers. Moreover, fathers still do not have an equal right to take parental leave. Finally, it is important to ensure that the labor law firmly reduces the potential for discrimination. For instance, Serbian law does not explicitly mandate equal remuneration for work of equal value, as other countries in the region have done (World Bank 2017b).
An additional discussion relates to an emerging topic in Serbia and elsewhere: how to make employment regulation relevant to 21st century labor markets. Undoubtedly, much of modern employment legislation has been the result of a process to regulate labor conditions stemming from the Industrial Revolution. These conditions have been characterized by, e.g., concentration of labor in production units, relatively stable employment relationships, predictable working hours, and clear subordination of employee to employer. Serbian labor legislation also responds to the history of a planned economy under a socialist regime, which would require different labor regulation than a capitalist economy characterized by free markets and decentralized allocation of resources.

Technological change and a switch to services have made labor conditions much more fluid. The definitions of jobs now comprise many more types of work and engagements, with flexible hours, unclear subordination, and numerous transitions between employers, occupations, activities, and even careers. Because stable long-term service with the same employer is largely over, organization of labor in trade unions is much more difficult.

Of the many challenges that the new nature of work poses for labor regulation, two of the most relevant for Serbia are classification of workers and the extension of rights and social benefits to all workers, regardless of their working status. In Serbia, as in many other countries, the definition of workers and their categorization into dependent, self-employed, or other type of work determines a whole package of rights, benefits, and obligations that are attached to a given labor status. Dependent workers (dependent on a single employer for their source of income but without an employment contract) are covered by certain norms, and the regulation imposes SSCs on both workers and their employers. While all workers are subject to personal income tax (PIT), some self-employed and sole traders can opt for a taxation regime based on presumptive rather than actual income.

A recent OECD report (2019) gathers contemporary international experiences in dealing with misclassification of workers. Though practices vary, some recent efforts have been to

- Reverse the burden of proof, making it the responsibility of the employer to demonstrate that a labor relationship is not that of a dependent employee.
- Simplify enforcement procedures, either through Labor Courts or labor inspectors.
- Give amnesty to employers who reclassify and regularize informal employment.
- Target inspection efforts to sectors or geographical areas where false self-employment is known to be prevalent.
- Extend rights to workers in the “gray zone”—those workers who are genuinely difficult to classify as either self-employed or dependent.

An area where regulatory and enforcement practices are still not clear is in the classification of “platform workers,” such as Uber drivers. While some countries now require a formal employment relationship with the platform—Portugal’s “Uber Law” has been in force since November 2018—other jurisdictions treat workers as independent contractors, including several states in the U.S. Other countries simply apply existing laws, treating a platform worker as employee or self-employed case by case according to the specifics of the platform, the place where the work is carried out, and the obligations of the person carrying it out.

Classification of work status has tax implications and the structure of the Serbian tax system provides strong incentives for employers to misclassify workers in some cases. Figure 17 shows the tax burden (percent of gross income) for sole traders compared with employees at different levels of
income. For tax purposes, being classified as self-employed is always more advantageous than being an employee, and at high income levels being subject to presumptive taxation is much more convenient than being an employee. This strong incentive for misclassifying high-income work has potentially large tax revenue and social protection implications.

37. **Simplifying tax regimes and homogenizing the tax burden across categories of workers could provide better incentives to correctly label work and reduce tax avoidance.** The next section will explore in more detail the tax burden for employees.

**Figure 17. Tax burden for Serbian workers by category and gross income, percent.**

![Graph showing tax burden for Serbian workers by category and gross income.](image)


**Labor taxation in Serbia**

38. **The high tax burden imposed on labor is one of the institutional features that characterize labor markets in the former Yugoslav republics.** In Serbia, this feature has been repeatedly identified as a possible cause of poor labor market performance, in the form of low participation, low employment, and high informality.

39. **High labor taxes may discourage formalization if they impose a heavy burden on workers on the verge of formal jobs, in other words, low-skilled and young workers.** It is therefore highly relevant to analyze the tax burden at the low-wage pole of the distribution. The structure of income taxes and the existence of wage subsidies can also create distortions that have social and redistributive consequences.

40. **Numerous studies have been devoted to this topic.** The emphasis has been on the presumed negative effects of high labor-tax wedges on job creation and investment, especially in labor-intensive low-wage industries, and on disincentives for the formalization of informal employment (Arandarenko and Vukoevic 2008). Highlighting the interaction between labor taxation and the social benefit system, Koettl and Weber (2012) and Koettl (2012) found a very high formalization tax rate in the region. Koettl (2012) singled out the minimum social contribution base as an impediment to the growth of formal part-time jobs and to improvements in work-life balance, especially considering the wide gender
employment gap. Kovtun et al. (2014) cited labor taxation as one of the main factors affecting job
growth in their analysis. More recently, high inequalities in disposable income in the Western Balkans
have been explained as in part a consequence of the apparent failure of labor taxation systems to
reduce market income inequality (Arandarenko et al. 2017; Jusic 2018).

41. **The structure of income taxation in Serbia has evolved over time.** In 2001 Serbia introduced a
flat tax reform with a headline PIT rate of 14 percent and no tax-free allowance. A tax-free allowance
was introduced in 2007 to compensate for changes in the PIT and SSC rates. This allowance is adjusted
annually to either reflect real wage trends or rebalance the tax wedge to be revenue and distribution
neutral. For 2007–12 the PIT rate was 12 percent; since 2013 it has been 10 percent. In 2013, to
compensate for the lower PIT rate, the employee pension contribution rate was raised by 2 percentage
points (pp), raising total SSCs to 37.8 percent of gross wage. In 2014 the pension contribution rate was
raised by 2 pp but at the same time the health contribution rate came down by 2 pp, leaving the tax
burden unchanged. As of 2019, the employer portion of the unemployment insurance contribution has
been abolished, thus reducing the total SSC rate to 37.05 percent.

42. **Despite these changes, two characteristics of labor taxation in Serbia have endured: high
social security contributions and low progressivity.** Most revenue from labor taxation comes from
social security contributions; the PIT component has been at best modest or even marginal. The low
progressivity of labor taxation, as measured by the tax wedge differentials at various points along the
wage distribution is in large part a result of high reliance on proportional SSCs.

43. **The ratio of labor taxes to total labor costs is known as the “tax wedge.”** Thus, the tax wedge
measures the proportional difference between the cost of a worker to the employer and the employee’s
net (take-home) wage. It therefore measures both the incentive to work (supply-side) and to hire
employees (demand-side)—so the higher the tax wedge, the greater the disincentives for someone to
work and for an employer to take on a worker.

44. **Serbia’s tax wedge is one of the highest in the region and is even higher than the OECD
average.** To compare national tax wedges, we use the OECD methodology that computes the tax
wedges of representative workers at different wage levels or with different family compositions. As
Figure 18 shows, Serbia’s is high for the region at 39.6% of the average wage for a single worker without
dependents. This is close to the EU-23® average of 41.7 percent (the highest labor tax wedges worldwide
are in the European Union) and above the OECD average of 36.1 percent. Furthermore, whereas labor
taxes in Serbia are on par with the OECD average at higher wage levels, at lower wage levels they are
higher due to the low income-tax progressivity.

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8 EU-23 = the 23 EU Member States that are also OECD members: Austria, Belgium, Czech Republic, Denmark, Estonia, Finland, France,
Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Netherlands, Poland, Portugal, Slovak Republic, Slovenia, Spain,
Sweden, United Kingdom.
45. **Workers in Serbia see small increases in their average tax burden as they move up the wage scale**, largely as a result of low PIT rates. While the average increase in the tax wedge between 67 and 167 percent of the average wage is 8.4 pp in the EU-23 and 8.2 pp in the OECD, in Serbia the increase is only 1.4 pp.

46. **At low wages the existence of an absolute SSC floor makes the Serbian tax wedge actually regressive.** In addition to Serbia’s high SSC rates, which dominate over PIT, there is an absolute floor for SSCs at the level of the minimum wage. This implies that if a worker works part-time earning a monthly salary equivalent to half the minimum wage, the tax wedge at that level is 44.1%, compared with 36.7% at the minimum wage. This is a further disincentive for low-wage workers and those who would prefer to work part-time to join the formal labor market.

47. **The lack of tax-free family allowances means that the effective tax burden per employee is even higher than if only single workers without dependents are considered.** Figure 20 shows the
difference between the tax wedges for a single worker earning 100 percent of the average wage and for the same worker with a jobless spouse and two children. With the family tax wedge, in the figure Montenegro shifts its ranking from 7th place to the top; Serbia moves from 8th place to 4th; and so on. In other words, while the effective tax burden for a worker with a spouse and two children is much lower than for a single worker in most high tax-wedge countries, this is not true of Serbia and its Western Balkan neighbors.

48. Altogether, the analysis of labor taxation in Serbia shows that low-income, part-time workers and workers with dependents must deal with a particularly high tax burden, which affects their inclusion in the formal labor market and the competitiveness of Serbian businesses.

Figure 20: Tax wedges: Single worker (100%) and one-earner couple with two children (100+0%)

Note: FBiH – Federation of Bosnia and Herzegovina, RS – Republic of Srpska.

49. Clearly, labor market conditions could be significantly improved if labor taxation were made more progressive, to bring low-skilled, low-wage workers into formal jobs, and would incorporate a family allowance, to bring more workers with dependents into the labor market. To strengthen these measures, it will also be necessary to redesign the social assistance and social insurance programs. In particular, the “formalization tax” that arises from the loss of social assistance benefits when a recipient finds a formal job should be removed or significantly reduced by designing a smooth transition period for exiting the social assistance program. Social insurance programs should also be analyzed to see how much the current high contributions could be reduced without affecting the financial sustainability of the programs. Options might range from contribution subsidies for low-income workers or new entrants into the labor market to a complete overhaul of health financing (from contribution-based to general revenues). There is growing international experience to build upon in analyzing options, and programs could be piloted in collaboration with the private sector, civil society, and academia to assess the results of some of these programs for Serbia.
Active labor market policies

50. **Serbia spends relatively little on ALMPs (an estimated 0.08% of GDP for 2019).** However, in the 2017 LFS, more than 71% of the unemployed mentioned having contacted the NES as part of their job search. Thus, it is vital that its programs be relevant and efficient.

**Figure 21: Job search strategies for the unemployed, 2014–17**

<table>
<thead>
<tr>
<th>Strategy</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>Applied to employers directly</td>
<td>13.6</td>
<td>5.7</td>
<td>4.5</td>
<td>0.7</td>
</tr>
<tr>
<td>Inserted or answered ads in newspapers, journals or on the internet</td>
<td>50.3</td>
<td>50.3</td>
<td>56.8</td>
<td>71.1</td>
</tr>
<tr>
<td>Contacted National Employment Office</td>
<td>23.8</td>
<td>20.7</td>
<td>19.5</td>
<td>13.6</td>
</tr>
<tr>
<td>Waiting for a call from the National Employment Office</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Contacted Private Employment Agency</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
<td>1.2</td>
</tr>
<tr>
<td>Other method used</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Studied ads in newspapers, journals or on the internet</td>
<td>80.3</td>
<td>71.1</td>
<td>69.7</td>
<td>50.3</td>
</tr>
<tr>
<td>Asked friends, relatives, trade unions, etc.</td>
<td>8.0</td>
<td>8.0</td>
<td>8.0</td>
<td>8.0</td>
</tr>
<tr>
<td>Waiting the results of a job application you sent earlier</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Took a test, interview or examination</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Waiting for a call from the National Employment Office</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Contacted Private Employment Agency</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Other method used</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Applied to employers directly</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Inserted or answered ads in newspapers, journals or on the internet</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
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</tr>
<tr>
<td>Contacted National Employment Office</td>
<td>0.0</td>
<td>0.0</td>
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<td>0.0</td>
</tr>
<tr>
<td>Other method used</td>
<td>0.0</td>
<td>0.0</td>
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<tr>
<td>Applied to employers directly</td>
<td>0.0</td>
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</tr>
<tr>
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<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
<tr>
<td>Other method used</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

*Source: LFS.*

51. The World Bank supports the NES through a component in the current Competitiveness and Jobs project to improve the efficiency of labor market intermediation services. With this support the NES has launched the training and certification of case workers and the reduction of the caseload differentials of local branch offers to improve the quality of service and the allocation of resources.

52. **Each year, the Serbian government of Serbia drafts a National Employment Action plan, which includes activities assigned to the NES.** The NES annual work plan establishes the year’s programs, the target numbers of participants in each, and the budgets allocated. NES has recently introduced a new management information system (MIS) that should make it easier to monitor its activities. NES successfully executes the programs specified in its annual plan, as evidenced by its annual reports and World Bank supervision of the Competitiveness and Jobs project.

53. The general assessment is that NES is a well-established institution with a clear mandate that it executes effectively. However, NES could do better in monitoring and evaluating its programs and adapting them to the evolving needs of the population across time and geographical areas.

54. Although NES does track indicators and monitor programs, it does not regularly evaluate their effectiveness, such as evaluating the impact of certain programs. For example, it regularly monitors the gross placement rate of certain intermediation programs but has not been able to measure the net placement rate. Although NES is working on developing such a methodology with the support of the
Competitiveness and Jobs project, this pending issue is a reminder that better evaluation of ALMPs is necessary in general.

55. **The results of impact evaluations and better monitoring of ALMPs should be drawn on to adapt programs to the needs of the population.** Those needs are dynamic in time but likely differ by location. The NES should therefore have greater flexibility to adapt, discontinue, and create new programs after thorough evaluation. NES should have the capacity to adapt programs to local needs—to the particular demands of a given community. It should also have the authority to conduct pilot programs to measure their effectiveness before scaling up to the local or national level.

56. **To improve the efficiency and relevance of ALMPs, we recommend that the NES adopt a formal M&E methodology,** through either a dedicated internal unit or an external evaluation agency. The NES should also set up a unit dedicated to designing and testing ALMPs that respond to current or emerging local needs. This unit should implement policies backed by evidence from evaluations and pilots of their effectiveness, appropriateness, and cost.

Conclusion

57. **Stronger growth and job creation require that Serbia address its labor market challenges.** Serbia has been creating jobs in recent years, but more are needed to catch up with its European neighbors and boost growth. Robust increases in employment will require releasing both demand-side and supply-side constraints: boosting private job creation, reducing barriers and disincentives to work and improving worker skills, and ensuring that labor market intermediation and institutions facilitate employer-employee matches.

58. **Improving skills and reforming labor market policies, in particular, will not only enhance Serbia’s human capital and productivity for higher growth but also boost people’s incomes, reduce poverty, and strengthen the middle class.** Serbia’s education and training system needs reforms to build the skills valued by today’s labor market. Despite great progress since the 2014 labor law reform in making the labor market more flexible, persisting challenges and new forms of work underscore the need to again modernize the laws. Labor taxes in Serbia are characterized by high social security contributions and low progressivity, and their structure inhibits formal employment. Serbia spends relatively little on active labor market policies (ALMPs), but monitoring and evaluation should be strengthened to ensure that programs are effective and efficient. Table 2 summarizes the specific recommendations for improving skills and reforming labor market policies in Serbia.
### Table 2: Recommendations for Improving Skills and Reforming Labor Market Policies

<table>
<thead>
<tr>
<th>Area</th>
<th>Recommendations</th>
<th>Authority</th>
</tr>
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</table>
| **Skills**            | • *Make it a priority to modernize general education:* Specifically, upgrade the curriculum and focus on quality in upper primary and secondary education, including socioemotional as well as technical development; and where feasible, optimize the school network to raise efficiency, working with the municipalities. Modernizing general education would help rebalance educational achievement away from over-enrollment in vocational education.  
• *Keep VET profiles current:* There is a continuing need to assess the market relevance of VET profiles and update them, through coordination between the Ministry of Education, Science and Technological Development (MoESTD), Chambers of Commerce, Ministry of Labor, Employment, Veteran and Social Affairs (MoLEVSA), the National Employment Service (NES) and other labor market actors.  
• *Enhance accountability and the strategic relevance of higher education:* Draft a higher education diagnostic to help set the strategic direction and find opportunities to introduce quality assurance mechanisms.  
• *Increase equitable access to preschool education:* Remove the flat 20 percent co-payment for preschool for the poorest families. | MoEST, Ministry of Economy, NES |
| **Labor Regulation**  | • *Simplify collective dismissal procedures.*  
• *Adapt labor regulation to the new forms of work* to facilitate classification of workers and enforcement of accurate classification.  
• *Reduce tax treatment differentials* between different categories of workers. | MoLEVSA |
| **Personal income tax** | The overall labor tax wedge should be reduced, especially for low income workers. A set of measures to achieve this objective includes:  
• *Increase PIT progressivity, introducing higher marginal income tax rates at higher incomes.*  
• *Introduce a tax-free family allowance,* to help low income workers with dependents find formal jobs and boost labor force participation among women.  
• *Provide contribution subsidies for low-wage earners.* There are good examples of targeted contribution subsidies benefiting low income and/or younger workers, e.g. temporary subsidies in Bosnia & Herzegovina. | MoF |
| **Employment Services** | • *Draft and adopt a strategy for M&E of ALMPs.*  
• *Measure net placement rates and carry out impact evaluations of selected programs*  
• *Set up an NES design unit* that uses the results of evaluations to design, test, and put in place new ALMPs or adapt ALMPs to the local needs. | NES |