

BUILDING HUMAN CAPITAL FOR LONG TERM PROSPERITY





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Serbia Human Capital Review

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ACRONYMS

ALMP Active labour market programmes

CSW Centre for Social Work

CA Child Allowance

DRG Diagnosis Related Group

ECEC Early childhood education and care

ECA Europe and Central Asia

EU European Union

FSA Financial Social Assistance
GDP Gross domestic product
HD Human development
IMR Infant mortality rate

INSET In-service education and training

IPH Institute of public health
LSG Local self-government

LTC Long-term care

MRI Magnetic resonance imaging
MCH Maternal and child health

MoESTD Ministry of Education, Science and Technology Development

MoLEVSA Ministry of Labour, Employment, Veteran and Social Affairs

NMS New member states

NCD Non-communicable diseases

NEET Not in employment, education or training

NES National Employment Service

OECD Organisation for Economic Co-operation and Development

PIO Pensions and Disability Insurance Fund of Serbia

PHC Primary health care

PISA Programme for International Student Assessment

RSD Serbian Dinars

SILC Statistics on Income and Living Conditions
SIPRU Social Inclusion and Poverty Reduction Unit

SPIS Social protection information system

SEE Southeast Europe

SORS Statistical Office of the Republic of Serbia

TVET Technical and vocational education and training

TIMSS Trends in International Mathematics and Science Study

UN United Nations

UNICEF United Nations Children's Fund

UNOPS United Nations Office for Project Services

UMI Upper middle-income

WDI World Development Indicators

WHO World Health Organization

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EXECUTIVE SUMMARY

Rapid ageing, low productivity and enduring inequalities are affecting the living standards of Serbians

Living standards have improved substantially in the last two decades but remain significantly below European Union (EU) levels. Following the global financial crisis and before the COVID-19 pandemic hit the global economy, Serbia's economy registered sustained levels of growth and job creation. However, economic and social indicators remain significantly behind EU averages. GDP per capita is 25 per cent below that of Bulgaria, which has the lowest level in the EU, and employment rates are 8 per cent below average EU levels. In 2019, nearly a quarter of the population were poor or vulnerable to falling into poverty, and the COVID-19 pandemic worsened the living conditions of many poor and vulnerable households further.

A rapidly ageing population, low labour productivity and enduring inequalities are adding to Serbia's long-term prosperity challenges. Serbia's low birth rates, compounded by outmigration, have resulted in a rapidly ageing and shrinking population, a trend that will only intensify: the proportion of the population aged 65 or above will increase from an already high 21 per cent to 24 per cent by 2030. Demographic shifts are already changing the demand for skills, health and care services, and resulting in potentially escalating fiscal costs related to health and pension expenditure. To adapt to the changing age structure, Serbia will need to significantly increase the productivity of the shrinking pool of workers and help them access better and more productive employment.

This will require major efforts as Serbia's labour productivity is low and stagnating, and effectively holding back any convergence towards EU averages. High inequalities in opportunities also prevent a substantial proportion of the population from becoming productive members of society and improving both their wellbeing and their ability to support a growing number of elderly persons.

Low progress on human capital is worsening underlying challenges

Human capital is at the core of any successful strategy to boost long-term inclusion, well-being, and productivity. Human capital is the knowledge, skills, and health that people accumulate throughout their lives, enabling them to realize their potential as productive members of society. Raising the quality of children's and youth's education, skills and health, will help them reach their full potential as adults and build resilience against the long-term consequences of various life shocks. Building their human capital and boosting their productivity is also essential for ensuring that the shrinking pool of workers will be able to support and care for an expanding pool of elderly people.

Serbia has seen steady progress in human development outcomes but still lags behind aspirational peers, with progress uneven between geographical areas and socio-economic groups. Serbia's human development sectors deliver high educational attainment and almost universal coverage of basic health services.

However, children born in Serbia today can only expect to reach two thirds of the productivity levels they would have enjoyed with full education and health. Moreover, strong inequalities persist, and children from vulnerable families achieve considerably weaker learning outcomes. The rate of functionally illiteracy among the poorest quintile of students is 20 percentage points higher than that among the overall population. And only half of Roma children transition into secondary school, in a context where 12 years of schooling is the norm. Poor learning outcomes in turn affect job opportunities, perpetuating poverty across generations. Many university graduates also face challenges to finding gainful employment, at the same time that firms complain of difficulties in finding skilled workers. In the health sector, comparatively high mortality rates from non-communicable diseases (NCDs) are an important factor behind Serbia's overall high mortality rates, which are the highest in the Western Balkans and significantly above the EU average. NCDs may also affect people's ability to delay retirement in the context of a shrinking workforce. The quality of life of the elderly is also affected by challenges in the delivery of health services, including an insufficiency of long-term care services. Inequalities in health outcomes are also substantial, with indicators such as infant mortality rates higher in the poorest regions than in better-off regions. Furthermore, the COVID-19 pandemic has exposed vulnerabilities in the delivery of human development services, especially in terms of protecting the vulnerable.

More and better investments in human capital are needed to support long term prosperity

Better human development services are needed to ensure that every child and adult acquires quality human capital. The children and youth of today will ultimately support the elderly of tomorrow: investments in children and youth benefit all generations. The rapid ageing of the population also makes leaving no child behind even more crucial: with fewer and fewer workers joining the labour market, each of them needs to reach her full productive potential. Through financial incentives, the Government of Serbia aims to boost fertility and slow the decline in old age dependency ratios. However, fertility policies alone will not address Serbia's challenges if they are not accompanied by policies that provide children independent of origin and background — with good educational opportunities (from early childhood to higher education), ensure effective and affordable health care, and support struggling households with effective social assistance and social care services.

However, public expenditure in the human development sectors have been declining at a time when more and better investments are needed. Government expenditure on health and education has fallen in the past ten years, with education falling from 4.6 per cent of GDP in 2009 to 3.9 per cent in 2018, increasing the gap with EU countries. Private out-of-pocket expenditure on health is high, accounting for over 40 per cent of total current health spending; this fosters inequities in access to health services and reduces the ability of catatrophic events such as a shock from NCDs. Social assistance spending has also dropped, from 2.07 per cent of GDP in 2009 to 1.96 per cent in 2018, and has shifted away from means-tested poverty-targeted programmes: Serbia now spends under a third of the level of EU countries on poverty-targeted programmes. At the same time, the current parameters of some programmes (including the birth grant and pension) will potentially affect the sustainability of the whole social protection system in the medium term, and even further crowd out spending on supporting the poor and vulnerable.

Boosting the quality of learning and the relevance to the labour market of teaching and training, from early childhood to old age, is needed to improve the productivity of workers and access to jobs. Investing early in human capital delivers the highest returns. Most brain development happens in the womb and in the first 1,000 days, and hence investments in early childhood development open the door for solid accumulation of human capital across the life cycle. Strengthening early childhood development interventions, including broadening access to quality early childhood education — especially for poor

and vulnerable households — should therefore be a priority from both productivity and equity perspectives, and would also help to facilitate female labour force participation. Focus should also be placed on providing youth with skills that are in demand in the labour market, including solid foundational skills, transversal soft skills and technical skills. In addition to the formal education system. Active Labour Market Programmes that focus on vulnerable groups can also support their employability and improve the school-to-work transition. Health and skills initiatives that help to prolong the productive working life of adults — life-long learning initiatives, policies on active aging, and more — are also needed to foster a larger and more productive workforce.

The rapid ageing of the population will also require a strengthening of the health system to deliver quality care and address the surge in NCDs, expand affordable options for long-term care, and assist the vulnerable elderly through targeted social assistance programmes. Comprehensive strategies are needed to address the growing burden of NCDs such as cancer, diabetes, hypertension, and other cardiovascular diseases, by focusing on prevention, screening, early detection, and the management of diseases. There will also be a need to adopt integrated approaches that include financial incentives and human resource planning to improve the availability and the quality of both private and public services. Options such as means-tested social pensions for the elderly should also be considered to reach vulnerable elderly people who are not included in the pension system.

Serbia needs to prioritize and protect human development spending, but also reform programmes that threaten the financial sustainability of the **system**. For both equity and sustainability reasons, it will be necessary to reform the Birth Grant, which in its current format would grow exponentially and affect the country's ability to expand other equally important programmes. Parameters related to the public pension system (such as valorization formulas and the retirement age) will also need to be adapted to ensure sustainability, as the number of beneficiaries will rise. To close financing gaps, the Government should also step up efforts to support private retirement savings.

With high and increasing needs, each dinar earmarked for human development needs to be effectively spent. Improving resource management will require more attention to capacity and coordination challenges. Human resources — including teachers, health workers, social workers and care givers — are key to raising human development outcomes; therefore forward-looking and strategic human resource planning is needed to meet changing skill needs. More effective governance and results-based management processes should also be implemented to increase the overall quality of service delivery and more effectively leverage the private sector for education, health, and care services. And there is also a need to improve the quality of delivery at local level, especially in low-capacity municipalities. Demographic and poverty challenges vary significantly across the territory, and regional and local governments have significant implementation responsibilities, which are important for flexibility and relevance of service delivery. To overcome capacity and coordination constraints, however, mechanisms are needed to increase accountability at local level and to strengthen vertical and horizontal coordination.

The pandemic has also highlighted the critical importance of building flexible and resilient delivery systems that can respond to shocks. Among others, digitalization — infrastructure, skills, and assets — can help to create flexibility in the response to future pandemics, build trustworthy and high-quality information systems, and increase overall efficiency. Governance arrangements should also be structured to allow rapid responses and expansions during crises. And more efforts should be put into addressing vulnerable children's lost time in education, lack of preventive care, and other negative implications of the pandemic that will affect their human capital development over the long-term.



INTRODUCTION

Before the COVID-19 pandemic hit, Serbia's economy had recovered from the financial crisis and generated substantial jobs. In 2019 the Serbian economy grew by 4.3 per cent, unemployment fell to around 10 per cent, and employment rates reached a record high of 59 per cent for those aged 15-64. While the COVID-19 pandemic affected economic activity, thanks to an ambitious fiscal stimulus programme the economy only underwent a mild contraction of 0.9 per cent in 2020.1 The economic support measures led, however, to a significant increase in the fiscal deficit, with the 2020 deficit widening to 8.1 per cent of gross domestic product (GDP) compared to a pre-crisis projection of 0.5 per cent. During 2021, the government has upheld support to the economy, and this is expected to result in a fiscal deficit of around 7 per cent of GDP.

Even before the pandemic, however, progress had not been strong enough to achieve the living standards that Serbia is striving for. The country's economic and social indicators broadly reflect its income levels, and generally outperform other Western Balkan countries. However, even before the COVID-19 crisis, Serbia was not catching up with the living standards of European Union (EU) member states. GDP per capita is the highest in the Western Balkans region but remains 25 per cent below that of Bulgaria, the country with the lowest average in-

come level in the EU. And notwithstanding rapid job creation in the past few years, Serbia's employment rate (for ages 15-64) remained 8 percentage points below the EU average in 2018, with many years of potentially productive employment lost. To meet the EU's employment target of 75 per cent for people aged 20–64 by 2025, Serbia would need to create jobs at twice the already-high rates registered between 2015 and 18.

Relative and absolute deprivation and vulnerability remain high. Economic growth has not been sufficient to lift the most vulnerable population out of poverty. In 2019, using a relative poverty line, nearly a quarter of the population (23.2 per cent) were poor or vulnerable to falling into poverty, with children more likely to be poor or vulnerable than the overall population.² Some 7 per cent still lived in absolute poverty, meaning that they were unable to cover their most basic needs; this proportion had barely changed between 2015 and 2019 despite improved economic conditions. Preliminary estimates suggest that poverty has only been marginally affected during the pandemic,³ although the number of people vulnerable to falling into poverty is likely to have increased.

- The fiscal package includes direct payments to businesses and individuals, soft loans, and guarantees. Additional measures including wage subsidies (of 2/3 of minimum wage) for all employees and further deferral of social contributions and labour taxes were announced in August 2020.
- These persons are at risk of poverty (live in households with income below the national relative poverty line correwsponding to 60 percent of median income after social transfers.) Source: SORS 2020.
- 3 World Bank, 2021.

8.0 10 6.0 8 Population in absolute 3DP growth (%) 4.0 poverty (%) 6 2.0 0.0 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2006 2007 2008 2 -2.0 -4.0 0 GDP growth Absolute poverty

Figure 1.1 Absolute poverty has not fallen despite sustained pre-COVID-19 economic growth

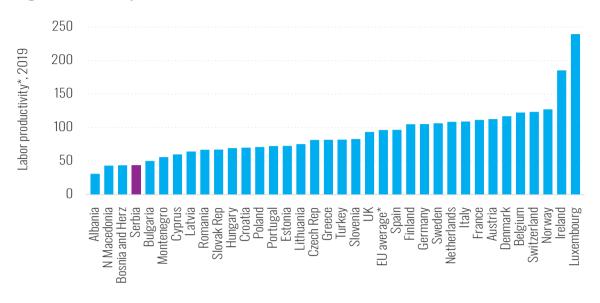
Source: Estimates based on data from World Development Indicators (WDI) and the Statistical Office of the Republic of Serbia (SORS). In 2019, the absolute poverty threshold was 12,495 RSD (expenditure per month).

Serbia's triple challenge: low productivity amidst an unequal and aging society

To speed up growth in prosperity, Serbia needs to tackle three formidable challenges: low and stagnant productivity, a rapidly aging population, and relatively high inequality. The negative effects of these challenges reinforce one another. Low productivity makes it more difficult for a shrinking workforce to finance a solid welfare state, and the pensions and long-term care needed by an ageing population; high inequalities from early ages affect people's health and productivity, the chances of poor and vulnerable youth to acquire the necessary skills for being successful in the labour market, and the ability of working age adults to save adequately for their retirement; and finally, the fiscal pressure generated by the health, pension, and long-term needs of an ageing population limit further ability to invest in the productivity and inclusion of the younger generations.

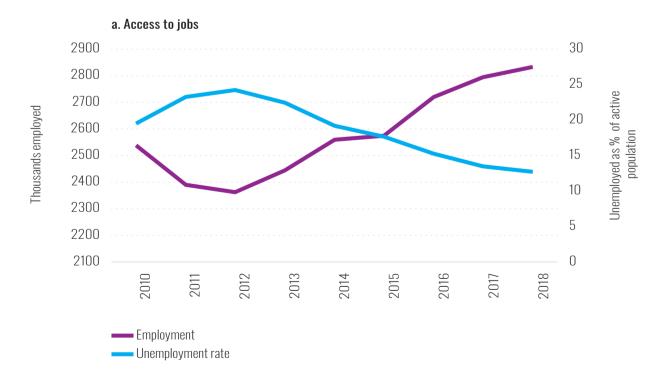
Labour productivity is remarkably low in Serbia and is not converging towards EU levels. Productivity is a key driver of economic growth and underpins improvements in earnings and living standards. Currently, Serbia's level of labour productivity (measured as GDP per worker) is less than half the EU average, and is even below some of its Western Balkan neighbours (Figure 1.2). Stagnant labour productivity in the post-crisis period has increased the gap between Serbia and EU countries, including the newest community members from Eastern and Central Europe. Serbia's rapid employment growth since 2014 partly reflects an increase in lower-quality employment, including temporary and informal jobs (Figure 1.3, a and b). While job creation has been inclusive, with women, youth, and older people accessing new jobs, it has not translated into access to better and more productive jobs. Accelerating productivity growth is even more essential as Serbia seeks stronger integration with the European Union, to improve people's incomes while remaining competitive at global level.

Figure 1.2 Labour productivity is low



Source: Estimates based on WDI. *GDP per employed, in constant 2017 PPP \$, thousands.

Figure 1.3a Before COVID-19, access to jobs increased but quality worsened



Source: Estimates based on SEE Jobs Gateway Database and WDI.

b. Quality of jobs -abor productivity, % of EU average Share of total employment (%) Temporary employees Informally employed Labor productivity, % of EU average

Figure 1.3b Before COVID-19, access to jobs increased but quality worsened

Source: Estimates based on SEE Jobs Gateway Database and WDI.

A rapidly ageing and shrinking population is exacerbating the need to raise access to employment and boost productivity in order to sustain — let alone increase — current living standards. As a result of low fertility rates and significant outmigration, the Serbian population has shrunk by around eight per cent over the past 20 years. At the same time, the proportion of elderly (65 years and above) has increased from 14 to 19 per cent and the share of working age population has fallen correspondingly. Other things being equal, an ageing

population leads to escalating expenditure on pensions, health, and long term care services, as well as higher dependency ratios: a smaller proportion of working-age people who are able to pay for elderly-related expenditure through taxes or savings. Without significant increases in productivity and higher employment, Serbia's current and projected demographic trends (Figure 1.4) will translate into a rapid decline in output per capita, as well as a severely reduced fiscal space.

⁴ Estimates based on data from SORS.

0.8 25% 65+ share of total population (%) 24.1% 23.7% 7.0 24% 6.0 23% 5.0 22% 4.0 21.0% 21% 3.0 20% 2.0 19% 1.0 ΠN 18% 2020 2031 2041 0-14 ____15-64 _____65+ ____Share 65+

Figure 1.4 There will be fewer and fewer working-age adults supporting the elderly

Source: Estimates based on population data from SORS.

High inequality and lack of opportunities are leaving a significant proportion of the population behind and undermining Serbia's prosperity. With a Gini coefficient of 36.2 in 2017 (using internationally comparable data), income inequality is higher than in any EU country save Bulgaria, and the second highest of the Western Balkan countries.⁵ Inequalities and lack of opportunities also vary across the territory. For example, the rate of (absolute) poverty is over three times as high in the Southern and Eastern Serbia regions as in Belgrade. Some 15 per cent of young Roma women (ages 15-24) are illiterate.⁶ at par with or worse than levels registered in many considerably poorer countries, and 11 per cent of Roma children under 5 are moderately stunted.7 Only 55 per cent of women are employed, compared to 68 per cent of men.8 The poor and other vulnerable groups are also more likely than others to lack opportunities to improve their lot over time and across generations.

In addition to the intrinsic value of boosting equity and opportunities of the most vulnerable, lack of inclusion is affecting the country's ability to prosper and care for an ageing population. More and more young workers will come from poor and vulnerable backgrounds: estimates suggest that by 2030 some 30 per cent of new labour market entrants in Serbia will be from vulnerable and minority backgrounds.9 If Serbia fails to capture the full productive potential of these young workers, it will be increasingly difficult to generate the resources needed to take care of an ageing population. The cost of the status quo in terms of growth and productivity is already high. Estimates suggest that closing the employment and earnings gaps between Roma and the general population in Serbia could bring productivity gains in the order of 0.9 to 3.5 per cent of GDP,¹⁰ while bringing female employment rates up to the current level of males could increase per capita gross income by as much as 16 per cent.11

Estimates based on data from WDI.

UNICEF Serbia, 2020.

Ihid.

SEE Jobs Gateway Database.

World Bank, 2019.

Robavo-Abril and Millán, 2019.

Cuberes and Teignier, 2016.

Investing in children and youth and helping them build human capital to become thriving and productive members of society is a growing priority. Human capital is the knowledge, skills, and health that people accumulate throughout their lives, enabling them to realize their potential as productive members of society. As the welfare of all age groups ultimately depends on the productivity of current and future workers, investments in the human capital of children and youth benefit all generations. Whereas Serbia has made it a priority to boost fertility rates, it also needs to ensure that children and youth from all backgrounds thrive. Boosting fertility should therefore be the outcome of a more ambitious and comprehensive family support policy, which should also have a solid social element that accompanies children from conception through early years and all their youth.

The human development sectors — education, health, and social protection — are at the core of successful strategies to boost human capital and support long-term inclusion, wellbeing and productivity. Investing in children and youth's education, health and skills, and protecting them and their families from shocks, will be essential to help them build productivity and resilience and foster Serbia's transformation into a richer and more equitable society. Similarly, an ageing population will require pension reforms, tailored health and long-term care services, and a health system that can address the rise in non-communicable diseases (NCDs).

Human capital, resilience and the **COVID-19** pandemic

Serbia responded rapidly and decisively to the COVID-19 pandemic that emerged in 2020.12 The global COVID-19 pandemic reached Serbia in early spring 2020 and was still ongoing during the writing of this report. The Government of Serbia reacted quickly to contain contagion, reduce the economic and social consequences of the pandemic, and protect human development. In health, resources were rapidly reallocated towards mitigating health impacts and protecting the elderly, schools readjusted to remote teaching and learning, one off-cash payments were delivered to all adult citizens to boost expenditure, and some extended social protection measures were implemented. In addition, civil society, communities and businesses took various initiatives to mitigate the impact and facilitate a recovery.

The pandemic nonetheless exposed vulnerabilities in the delivery of human development services, particularly regarding protection of the most vulnerable. The social assistance system is not yet sufficiently shock responsive: the social card registry that would be instrumental in rapidly identifying vulnerable groups is still being developed, and a full regulatory basis for dealing with emergency expansion is not in place. Instead, the government opted for a universal one-off cash payment for all adults and an additional transfer to those receiving pensions. Most other economic and employment stimulus measures excluded those not formally employed, such as informal workers and farmers, children, and the elderly. The pressure of COVID-19 on health systems led to reduced delivery of preventive and curative care services. And remote teaching has reduced learning achievements, especially among more vulnerable children with lower digital access and digital literacy. For example, some 17 per cent of Roma primary school students were not able to participate in distance learning. Serbia also lacks the kind of monitoring and evaluation systems, including real-time data, that are needed to be able to track and understand the spread and impact of a pandemic.

Effective delivery systems are not only important for long-term prosperity, but also for responding **effectively to crises.** To respond effectively to crises, any system must prepare in advance and include crisis-specific response elements. But the most important element of a crisis response remains the overall effectiveness of the system. Systems with a well-trained and properly equipped workforce, and with a good governance structure, not only provide better quality services to their citizens in normal times but are also better equipped to address emergency situations.

Globally, the pandemic has also highlighted the strong interdependence of different human development services and the high cost of weak links. If health systems cannot contain communicable diseases, children's education, other health services, and people's livelihoods are seriously affected. Without functioning social protection systems, households may resort to harmful coping strategies, including violating social distancing or mobility rules, which increase the risk of community contagion. If digital skills are not taught in school, ability to transition service delivery online and reduce contagion is limited, or leaves out significant parts of the population. In Serbia, the most vulnerable included those in the informal economy, the Roma population living in substandard settlements, single parents, homeless people, migrants, the elderly and those dependent on medical and social services, few of whom would benefit from the Government's stimulus package. For instance, during the pandemic Roma mediators were not able to provide medical and social support to those in need, and online schooling was more difficult to access for children in the most deprived

Why a human capital review?

households.

Human capital is at the core of any successful strategy to boost long-term inclusion, well-being, and productivity. Human capital is the knowledge, skills, and health that people accumulate throughout their lives, enabling them to realize their potential as productive members of society. Raising the quality of children's and youth's education, skills and health, will help them reach their full potential as adults and build resilience against the long-term consequences of different life shocks. Building their human capital and boosting their productivity are also essential to ensure that a shrinking pool of workers will be able to support and care for an expanding pool of elderly.

Against a backdrop of growing needs and limited fiscal resources — further limited by the COVID-19 crisis — the government will need to focus on, prioritize and rebalance spending within and between sectors as well as improve the effectiveness of **service delivery.** Government spending should be rebalanced in favour of human development sectors, but there is also a need to prioritize and improve the effectiveness of delivery systems. This makes a human capital review a solid vehicle to assess system performance and discuss priorities for reform in human development sectors.

This report synthesizes findings from several sectoral notes looking at the performance of human development systems. Drawing from a set of technical notes providing detailed analysis at the sectoral level, this report summarizes the findings of analysis of the education and health sectors, pensions, active and passive labour market programmes, and social assistance programmes. Rather than providing a comprehensive summary of the findings, the report adopts a cross-sectoral lens and tries to identify transversal issues. Detailed policy recommendations for each sector are provided in the sector-specific notes.

The report is organized as follows. The next chapter reviews and benchmarks Serbia's outcomes in human development. Chapter 3 looks at overall spending levels across and within human development sectors. Chapter 4 looks at coverage of public services. Chapter 5 focuses on efficiency and identifies strengths and weaknesses in resource management. Chapter 6 concludes the report by setting out an agenda for policy reform.



SOLID PROGRESS ON HUMAN CAPITAL, BUT STILL SOME WAY TO GO

Serbia's human development outcomes are solid by Western Balkan standards, but progress is too slow and uneven to successfully tackle the triple challenges of low productivity, ageing and inequality. Across sectors Serbia fares well compared to many peer countries with similar income levels. Nevertheless, in many dimensions progress is still required to converge towards EU standards. Some achievements also mask high — and sometimes increasing — inequalities across regions and population groups that may threaten the sustainability of progress.

Serbia's Human Capital Index is the highest in the Western Balkans, and it improved between 2010 and 2020. The World Bank's Human Capital Index (HCI) measures the human capital that children born today can expect to attain by their 18th birthdays, given the risks of poor health and poor education prevailing in their countries.¹³ It is a compositive index reflecting measures of survival, quantity and quality of education, and health. Serbia's HCI index increased from 0.65 in 2010 to 0.68 in 2020. Although

Serbia performs better than other Western Balkan countries, human capital levels remain far below most European countries (Figure 2.1). An HCl of 0.68 implies that children born today will be about 32 per cent less productive than they would have been, had they enjoyed full health and complete quality education. For children in new EU member countries such as Estonia or Slovenia, for example, these gaps are considerably smaller (22 and 23 per cent respectively).

Nevertheless, when modern skills requirements and life-style factors affecting adult health are considered, Serbia's human capital drops significantly. As a global index, the HCl does not capture key dimensions of human capital that are relevant for middle-income countries such as Serbia. When the HCl is adjusted¹⁴ to include measures for quality of higher education¹⁵ and additional adult health indicators¹⁶ that are essential to support high productivity across the life cycle, Serbian children will achieve less than half (48 per cent) of their full productivity potential.

- 14 See Demirguc-Kunt and Torre, 2020.
- Proportion of population aged 30-34 with tertiary degree and a quality score for higher education.
- 16 Incidence of obesity, heavy episodic drinkers, and current smokers.

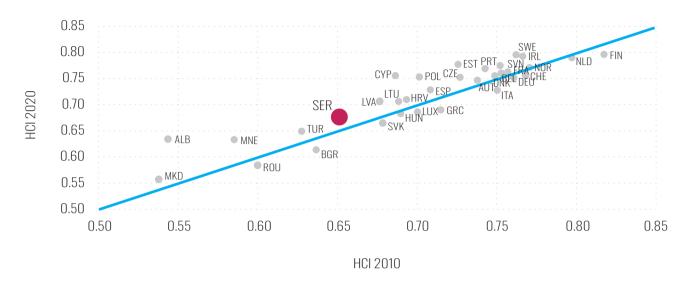


Figure 2.1 Serbia's human capital levels are high by Western Balkan standards

Source: Estimates based on World Bank HCl data. Points above the diagonal line represents improvements between 2010 and 2020.

This chapter provides an overview of human development outcomes and the accumulation of human capital across the life cycle. It looks at how human capital develops over childhood and youth, focusing on the health, learning and poverty outcomes of children under 18. The chapter then follows the transition into a productive working life, focusing on access to productive employment opportunities, and mounting health threats in adult life; next, it looks at human development outcomes during old age. The chapter concludes by reviewing the impact of the COVID-19 pandemic.

The foundations: childhood and youth

Investing early in human capital delivers the highest returns. Most brain development happens in the womb and in the first 1,000 days. What is more, investment in human capital today not only affects future payoffs but also positively influences subsequent accumulation of human capital: hence investing early in human capital delivers the highest returns. Solid early childhood development influences learning and health outcomes, resulting in long-term higher labour market returns and better health in adulthood. Socio-economically advantaged parents can afford better parenting practices which feed back into better childhood development for their children. Higher labour earnings, together with continued investment in lifelong learning and health, help reduce old-age poverty and contribute to healthy ageing.

A child born today can expect to live longer than ever before, though progress is still needed to converge to EU averages. Average life expectancy increased by some 4 years between 2000 and 2018, from 72 to 76 years, and a girl and a boy born in Serbia today can expect to live 78 and 73 years respectively, all else being equal.¹⁷ These levels are in line with Serbia's income levels but remain below those of most EU countries. Similarly, infant and child mortality rates are lower than in other Western Balkan countries, Montenegro excepted, but about 50 per cent higher than the EU average and more than twice the

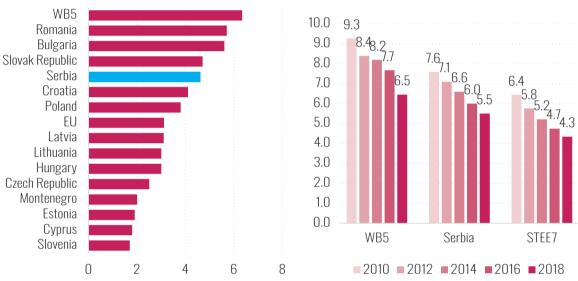
Data from WDI.

level of smaller transition countries such as Estonia or Slovenia (Figure 2.2a). Progress on reducing infant and child mortality rates over the last ten years has also been slower than in other Western Balkan countries or among other small transition countries (Figure 2.2b).

Figure 2.2 Infant and child mortality rates are improving but not fast enough



b. Mortality Rate, Under-5 (Per 1,000 Live Births)



Source: Estimates based on WDI. The seven small transition countries (STEE7) are Bulgaria, Croatia, Estonia, Latvia, Lithuania, Slovakia and Slovenia.

Children are more likely than any other age group to be living in poverty. In total 8.2 per cent of children aged 0-13 and 8.5 per cent of children aged 14-18 are living in absolute poverty, compared to 7.0 per cent for all age groups (Figure 2.3). While elderly poverty is increasing, with the rapid ageing of the population, children under 18 remain over-represented among the poor, making up 20 per cent of the absolute poor but only 16 per cent of the total population.¹⁸

¹⁸ Estimates by the Social Inclusion and Poverty Reduction Unit (SIPRU) of the Government of Serbia based on data from SORS.

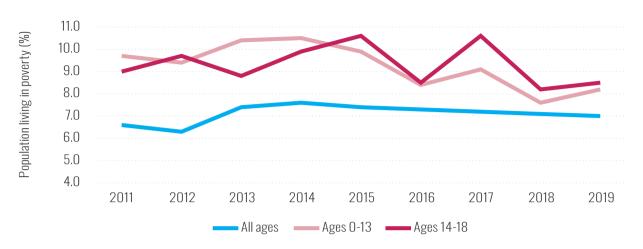


Figure 2.3 Children are more likely to be living in absolute poverty than adults

Source: Estimates by SIPRU based on data from SORS. In 2019, the absolute poverty threshold was equal to 12,495 RSD (expenditure per month).

There are significant differences in child health outcomes across regions, with poorer regions lagging behind. Poverty levels are considerably higher in Southern and Eastern Serbia than elsewhere. This is reflected in poorer child health outcomes. Infant mortality rates (the average per 1,000 live births in 2016-2018) reach 11.1 and 8.7 in Pirot and Pcinja, almost four and three times those of Moravica (3.1) or South Backa (3.2). Similar differences also exist for indicators such as babies with low birthweight (Figure 2.4). Similarly,

health outcomes among children from Roma settlements have improved but significant gaps remain. Although infant and child mortality rates among children in Roma settlements have significantly fallen in recent years, they remain almost double the average of the general population, and incidence of stunting is three times that of the country as a whole.²⁰ Undernourishment can significantly affect health and mental capabilities in the long term, and stunting is associated with poorer schooling outcomes, reduced productive capacity and poor health.²¹

¹⁹ Average infant mortality rate (IMR) per 1,000 live births (2016-2018). Estimates based on Serbian Health Indicators Database, Institute of Public Health (IPH).

²⁰ UNICEF, 2020.

²¹ WHO — publication date unknown.

14 12 Low birth weight (%), 2018 10 8 6 4 2 N Belgrade Podunavlje Zlatibor Jablanica Nisava Raska Serbia Pomoravlje Rasina Sumadija Macva Branicevo entral Banat South Backa **North Backa** West Backa **North Banat** South Banat

Figure 2.4 Regional differences in neonatal health (low birth weight)

Source: Estimates based on Serbian Health Indicators Database, Institute of Public Health (IPH).

Non-communicable diseases (NCDs) are on the rise among children. Obesity among children is increasing and mental health challenges are becoming more common among adolescents. The percentage of children aged 7-14 who are obese increased from 2.6 per cent in 2006 to 4.9 per cent in 2013, and reached 10.5 per cent in 2019.²² Research on child development from 2018 also revealed that 5 per cent of young children (aged 0-6 years) show some developmental delays or disability, and an additional 8-12 per cent have developmental risks.²³ The number of children hospitalized for mental health conditions has also been increasing.²⁴ Estimates show that over 60 per cent of adolescents had felt irritable or in a bad mood in the previous six months, and almost 30 per cent had had difficulty falling asleep.²⁵ Out of 100 adults, at least 20 have repeatedly

experienced certain forms of adverse childhood experience (violence and abuse, mental health problems in the family etc.) which negatively affected their health outcomes in adulthood (physical or mental illness, psychological problems, etc.).²⁶ Moreover, the COVID-19 pandemic has further affected the mental health of children, families and the overall population.

Serbia has seen concerted improvements in educational attainment, building on an already relatively **high quality of education.** The average years of total schooling for the population aged 25 and above has been increasing steadily, and Serbia is converging towards the levels of other countries in the region, including small countries that have acceded to the European Union (EU; Figure 2.5).

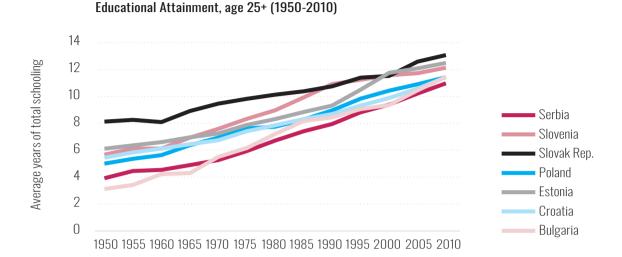
²⁰¹⁹ Serbian National Health Survey.

Paediatric Association of Serbia, 2018.

Peiovic-Milovancevic et al., 2018.

http://www.hbsc.org/membership/countries/serbia.html

Figure 2.5 Increasing educational attainment



Source: Estimates based on Barro and Lee (2018).

Access to quality early childhood education and care remains however limited. The attendance rate for children aged 3-5.5 is 61 per cent, compared to the EU 2030 goal of 96 per cent. Equity of access also remains a challenge: only 10.5 per cent of children from the poorest quintile and 7 per cent of children from the Roma population are enrolled.

Serbia's overall performance on international learning assessments for primary education is strong, though performance weakens in later grades. Based on TIMSS 2019,²⁷ Serbia's average achievement in Grade 4 mathematics is equivalent to that of Italy, Slovakia or

Spain. The average child in Serbia can expect to remain in school 13.3 years, the same as a German child. However, the quality of education worsens in later grades. In terms of learning-adjusted years of schooling, a Serbian child can expect to achieve 1.2 years less of actual learning than a German child, and remains 1 year behind the overall EU average. Serbia's scores in the Programme for International Student Assessment (PISA), which captures the knowledge and skills of 15-year-old students, are the highest in the Western Balkans. However, they have progressed little in the last decade and still lag behind EU comparators (Figure 2.6).

²⁸ Data from World Bank Human Capital Index.

²⁹ OECD, 2019.

550 Mean 2018 PISA reading score 500 450 400 350 300 HRV MKD EST SER CZE POL ECA* \Box

Figure 2.6 Learning Outcomes (Reading), PISA

Source: OECD 2019. ECA* includes non-EU countries in Eastern and Central Europe and Central Asia.

Strong inequalities remain in learning outcomes.

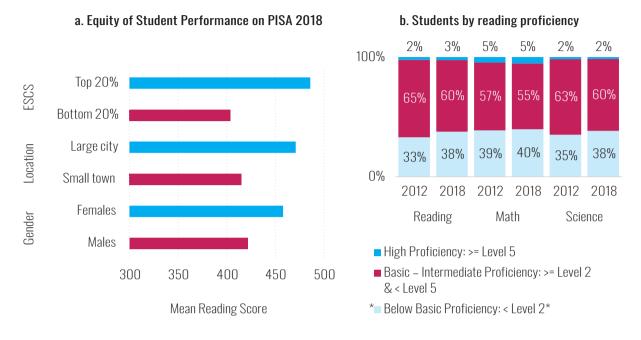
About one in three 4th graders (32 per cent) fail or reach only elementary levels in the TIMSS test,30 and the most recent findings from the PISA 2018 study show that nearly four in ten 15-year-old students are not performing even at the basic level in reading, mathematics, and science literacy (Figure 2.7), leaving Serbia behind the EU and Organisation for Economic Co-operation and Development (OECD) averages (the average is 22 per cent across the three subjects for the OECD).31

Poor learning outcomes are strongly correlated with socio-economic status and geographic loca**tion**. The rate of functional illiteracy in the poorest group of students (the lowest quintile) is over 20 percentage points higher than that in the overall population. Expressed in terms of risk, the poorest students in Serbia are 2.5 times more likely to be functionally illiterate after nine years of schooling than the overall student population.³² The difference in test scores corresponds to approximately two years of learning between rich and poor students and between students from large cities and small towns.

Mullis et al., 2020.

OECD, 2019.

Figure 2.7 Significant inequities in education outcomes



Source: PISA 2018. *Level 2 is the baseline level of proficiency at which students begin to demonstrate the competencies that will enable them to participate effectively and productively in life as continuing students, workers and citizens (OECD, 2019).

Overall, too many children get a poor start in life, affecting the country's ability to converge towards a more productive and inclusive society. Many of these children are born in poor or vulnerable households. This — given inequities in opportunities — affects their health status and quality of education. There are also significant differences across the territory: where children are born affects their chances in life.

Adult life

While school-to work transition has improved, many youths still face challenges entering the labour market after leaving school.³³ Young people aged 25-29, who are more likely to have left education than those aged 15-24, saw unemployment rates fall significantly between 2014 and 2018, from 31 to 21 per cent, and employment rates increase correspondingly. However, inactivity among youth remains fairly high: among youth aged 15-29, 20 per cent are not in employment, education or training (NEET).34

³³ Labour market data are from SEE Jobs Gateway Database.

³⁴ SORS, Labour Force Survey, 2020.

Serbia's economy is creating many jobs, but not for all. Before the COVID-19 pandemic hit, strong job creation in the post-crisis recovery years was increasing access to employment and lowering unemployment. In 2018, employment rates, at 59 per cent for the population aged 15-64, were significantly higher than the average for the Western Balkans, although still lower than in the EU27 (Figure 2.8). Access to employment varies significantly between groups, however. Serbian women are much less likely to work than males, with a gap in employment rates that has remained constant at around 13-14 percentage points since 2010. Those with low educational attainment (primary school at the most) are less able to access jobs, and more likely to hold precarious jobs in the informal sector.

The labour market relevance of tertiary education also remains an issue. Holding a higher education degree does not necessarily lead to employment: in 2018, nearly one in four active people aged 25-29 with higher education qualifications (23 per cent) were unemployed. There are also persistent gender gaps in remuneration, even among higher education graduates.35 Part of the challenge lies in the labour market relevance of education at both secondary (including technical and vocational education and training) and tertiary levels: a skills demand survey shows that around two in three firms that tried to hire workers complained of difficulties in filling positions due to skills gaps. Most firms also found that graduates did not have the necessary transversal workplace skills needed for today's job market.36

Youth's field of study may also not match the labour market demands. Currently, only 35 per cent of graduates come from the study fields deemed important for sustainable economic growth: agribusiness, manufacturing, tourism, pharmaceuticals, and information and communications technology (ICT).³⁷ Although women are now more likely to be enrolled in higher education than men (tertiary gross enrolment is 79 per cent for females and 57 per cent for males), gender segregation in fields of study is also common, and women are less likely to study in priority sectors.

Access to jobs is a key determinant of poverty and hence a potential source of intergenerational transmission of poverty. In families where the household head is unemployed or inactive, absolute poverty is more than eight times as high as in families with employed household heads. As the learning outcomes of children from disadvantaged backgrounds are weaker and poor schooling outcomes in turn impact job opportunities, poverty may perpetuate itself across generations. To achieve more inclusive growth, there is an urgent need to boost the productivity of future generations through more skills and better health that will help all youth, irrespective of background, to transition into productive first job opportunities, and enable all adults to adapt to changing labour market demands.

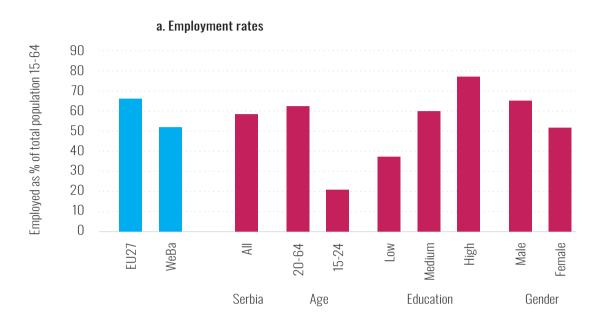


See, for example, Anic, A. and G. Kristic, 2019 or Government of Serbia/SIPRU, 2018.

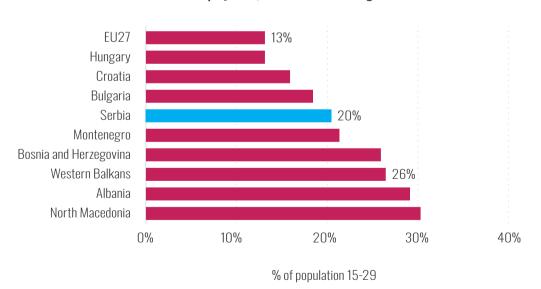
World Bank and Vienna Institute of International Economic Studies.

World Bank, 2019.

Figure 2.8 Key labour market outcomes differ across groups



b. Not in employment, education or training

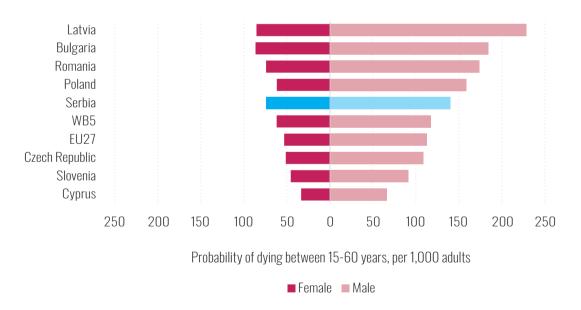


Source: Estimates based on SEE Jobs Gateway Database. 2018 data.

Non-communicable diseases (NCDs) are taking an increasingly heavy toll on the life and wellbeing of **Serbians**. Serbia is facing a rising burden of NCDs, such as ischemic coronary diseases, cerebrovascular diseases and cancer. This partly reflects lifestyle factors such as high incidence of obesity, and alcohol and tobacco consumption.38 In pre-COVID times, NCDs accounted for an estimated 95 per cent of all deaths in Serbia compared to 3 per cent for communicable, maternal, perinatal, and nutritional conditions, and 2 per cent for injuries. The share is higher than in most EU countries, reflecting the higher mortality from NCDs in Serbia.³⁹ As a result of the high incidence of NCDs, adult mortality rates (the probability of a person who has reached age 15 dying before reaching age 60) are higher than in other Western Balkan countries and higher than in the EU (Figure 2.9). Many of the NCDs are preventable or treatable with early detection and lifestyle changes. However, as seen in Figure 2.10, Serbia is comparatively ineffective in preventing cancer deaths: several countries — including Finland, Sweden and the Czech Republic — have higher incidence of cancer in the population, but much lower death rates among cancer cases.

Maternal mortality rates remain high in comparison to other countries. Access to prematernal and neonatal care is high and institutional delivery is universal (see Chapter 5); but the risk of dying in relation to giving birth is surprisingly high in Serbia. This indicates that the quality of clinical care is sub-optimal. At 12 per 100,000 live births, maternal mortality rates are higher than in any other Western Balkan country save Albania, twice as high as those of the EU27 and the United Kingdom and six times as high as in Poland.

Figure 2.9 Adult mortality rates are high



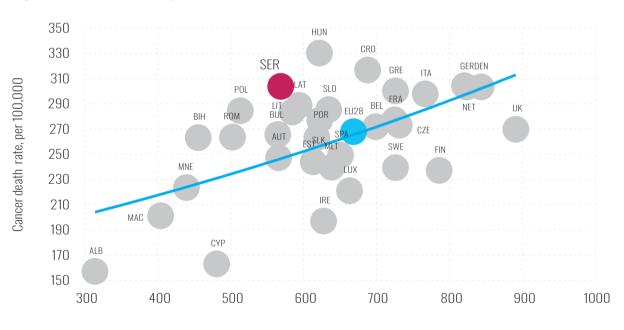
Source. Estimates based on WDI. Adult mortality rate: probability that those who have reached age 15 will die before reaching age 60 (shown per 1,000 persons).

³⁸ For example, incidence of obesity, heavy alcohol consumption and smoking are significantly higher in the adult population in Serbia than in most European countries, and above the Western Balkan average (Demirguc-Kunt and Torre 2020).

WHO, 2018.

Adult Serbians are among the least satisfied with their health status in Europe. Health self-assessments improved between 2015 and 2018, with over half of the population aged 16 and above reporting that they are in good or very good health. However, more people in Serbia still consider their health to be poor or very poor than in any other European country save Croatia. Adults living in Serbia are four times as likely as persons living in the Netherlands to assess their health status as poor or very poor.⁴⁰ The large toll of preventable and treatable mortality, and associated health costs, emphasizes the need for health sector reforms to improve quality, efficiency and inclusion.

Figure 2.10 Serbia is comparatively unsuccessful in early detection and treatment of cancer



Cancer incidence rate, per 100,000

Source: Estimates based on Eurostat. 2017 data.

⁴⁰ Data from EU Statistics on Income and Living Conditions (SILC).

Old age

The elderly continue to increase in numbers, and will need tailored health and long-term care, and social protection services. The share of elderly persons (aged 65 and older) in the population has nearly doubled since 1990; and according to United Nations estimates the old-age dependency ratio (the ratio of elderly persons over the active population) will increase by another 50 per cent between now and 2050, from 29 per cent to 44 per cent. The vulnerability of this age group is also increasing as the risk of ill health increases with age, while the ability to work falls. In fact, the elderly are growing as a share of the absolute poor, from 21 per cent in 2011 to 30 per cent in 2019 (Figure 2.11). This has profound implications for pensions and social assistance programmes, as well as for the need for tailored health care and long-term care (LTC) — the range of health and social services intended to help people live their own lives as independently as possible.

Quality of life in old age is significantly lowered by ill health in Serbia. At age 60, a Serbian man can only expect to live another 14 years in reasonably good health — with healthy life five years shorter than in France, and two years less than Albania (Figure 2.12). The gaps are similar for women. When asked about their health status, elderly people in Serbia are twice as likely to assess their health status as bad than their peers in the European Union. The share of persons with perceived health problems is also higher in rural areas.⁴¹ A survey of elderly people who are not in LTC institutions suggested that 38 per cent of the population aged 65 or above, and as many as 72 per cent of the population over 85 years, had difficulties with everyday activities such as cooking, cleaning, getting out, managing finances, or using the telephone or the internet.42

100 10 90 9 8 7 Share of all poor (%) 80 Poverty rate, 65-70 6 60 5 4 50 40 3 30 20 10 1 0 0 2011 2012 2013 2014 2015 2016 2017 2019 2018 0-18 19-64 65+

Figure 2.11 The elderly make up an increasing share of the population living in absolute poverty

Source: Estimates based on SORS, 2020.

Poverty rate, 65+

⁴¹ Monitoring Social Situation in Serbia (MONS), 2018.

⁴² Hirose, K. and Z. Czepulis-Rutkowska, 2016.

Figure 2.12 III health affects the quality of life in old age





Source: Estimates based on WHO database.



Human capital and the COVID-19 pandemic

Rapid and large-scale action on the part of the government mitigated the economic and social impact of the crisis on human development. The COVID-19 pandemic hit Serbia in early 2020. By October 2021, Serbia had registered over 900,000 official cases and just over 8,000 deaths from COVID-19. Among Western Balkan countries. Serbia appears to have weathered the crisis with the lowest cost to economic activity, thanks in part to a solid fiscal stimulus. Economic growth fell by 1 per cent in 2020 (quite a modest drop given the severity of the crisis), and no major job losses occurred.⁴³ Serbia has been one of the fastest countries in Europe to secure and roll out vaccination, which is the basis for sustainable economic recovery and containment of infections, illness and death related to COVID-19.

However, the population has been affected by the economic recession, direct containment measures and the crowding out of non-COVID health **services**. Among Western Balkan countries, Serbia has likely seen the smallest impact on poverty, an estimated 0.1 percentage points compared to around 4 percentage points for Albania and North Macedonia, and over 5 percentage points for Montenegro.44 However, an estimated third of households with children experienced income reductions.⁴⁵ Preserving formal employment was a central objective of support packages for the private sector, and thus formal employment and unemployment remained unaffected and even improved. However, the most vulnerable took the brunt of the impact as informal jobs declined by some ten per cent.⁴⁶ Information on earnings trends is not yet available, but these are likely to have fallen, especially in the informal service sector.

Vulnerable groups have been the worst affected **by the pandemic**. In addition to job and income losses, given the high level of private out-of-pocket expenditure on health, widening earning gaps imply widening health gaps, especially as regular primary care centre visits fell. Children without effective parental learning support at home and without digital skills or assets have also been negatively affected by online learning modalities. As mentioned above, 17 per cent of Roma students in primary schools were not able to access distance learning. Even though Serbia managed to secure wide coverage of remote learning during the pandemic, there is some evidence of loss of instructional time in the last school year, with about two-thirds of children aged 7-12 using distance learning for less than 4 hours per day.⁴⁷ There is still not sufficient information on actual learning losses, but international estimates on learning losses suggest limited distance learning may have affected learning outcomes among poor and vulnerable children.48

⁴⁵ UNICEF 2020.

⁴⁶ Data from Labour Force Surveys, 2019 and 2020, SORS.

UNICEF, MoESTD, and University of Belgrade Faculty of Philosophy, 2020.

Rigorous studies have been conducted in eight high-income OECD countries, and they confirm that (i) learning losses are occurring across a range of subjects and grades despite efforts to sustain teaching, and that (ii) some students are experiencing more learning loss than others. See Donnelly, R. and H. A. Patrinos, 2021.

⁴³ World Bank 2021.

⁴⁴ Ibid.



DECLINING PUBLIC SPENDING ON HUMAN DEVELOPMENT

The cost associated with the COVID-19 pandemic will lead to a tightening of the fiscal space, but it will be important to prioritize essential spending in the human development sectors to preserve and keep building human capital. Even with significant efforts to improve efficiency — achieving better outcomes with the same resources — it will be challenging to substantially improve human development outcomes and achieve convergence towards EU levels without boosting spending in the human development sectors.

Before the COVID-19 pandemic, Serbia's total general government expenditure was higher than in many Western Balkan countries and close in level to new EU member states. Budgetary expenditure in Serbia was on a declining path between 2014 and 2019. At 42 per cent of GDP (the average for 2015-2019), total general government spending levels were nonetheless significantly higher than the average for Western Balkans (36 per cent) and broadly at par with higher-income countries in the European Union.⁴⁹

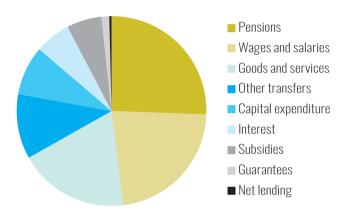
The composition of spending differs however from other countries, reflecting both Serbia's ageing population and policy choices. Recurrent expenditures dominate the budget. At around 3.5 per cent of GDP (the average for 2015 to 2019), capital expenditure was at a similar level to state support for the economy: spending on subsidies and activated guarantees averaged 3 per cent of GDP over the same period. The government's wage bill and pension expenditures account for nearly half of all expenditure (Figure 3.1), with pensions accounting for a quarter of all government expenditure. Public sector employment has fallen in recent years due to attrition, but public sector wages still exceed those of the private sector and the wage bill remains at around 9 per cent of GDP, similar to new EU member states.

Serbia's spending in the human development sectors, when measured as share of GDP, remains low compared to spending in most EU countries. In 2018-2019, government spending on health, education, and social protection reached 23 per cent of GDP, or 55 per cent of all government expenditures. If pension expenditures are not included, however, Serbia's spending in human development sectors remains at par with other Western Balkan countries, but significantly lower than the EU. The most recent information using comparable data, for 2013-2018, suggests that Serbia's spending as

⁴⁹ Estimates based on IMF World Economic Outlook database, April 2021 edition.

a proportion of GDP was three quarters of the average for EU countries, and only two thirds of that of Finland or Denmark.⁵⁰ Given that the EU countries are wealthier, even small differences in shares of GDP translate into vast differences in the absolute level of resources that are put into strengthening human development outcomes.

Figure 3.1 Serbia's government expenditure partly reflects high outlays on wages, salaries and pensions



Source: Estimates based on Ministry of Finance, ERP.

Before COVID-19, public spending in the human development sectors had been declining at a time when more and better investment would have been needed. The economic recovery from the global financial crisis did not translate in a recovery of public human development spending. Expenditure on health and education has fallen in the past ten years: public spending in education has declined by half a percentage point of GDP, and public spending in health by one percentage point, increasing the divide with the EU. Government spending on social assistance has also fallen over time.

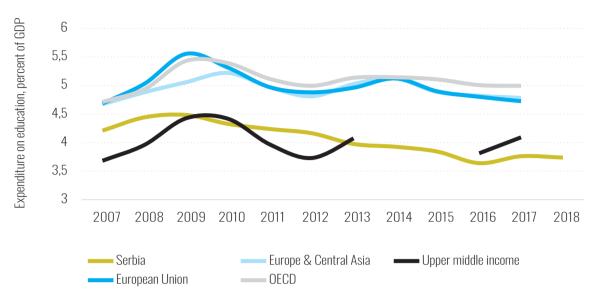
Compared to other countries in the region, and to the EU average, Serbia spends a relatively modest share of its public resources on education (all levels included). In 2018, the latest year for which complete data were available. Serbia spent 3.7 per cent of GDP on education, compared to 4.7 per cent in the EU27 (Figure 3.2) and compared to 4.5 per cent in Serbia back in 2009. As a proportion of total public spending, Serbia also spends slightly less than the average for the EU27, at 9.3 per cent and 9.9 per cent respectively. Public funding of tertiary education in Serbia has also been declining, and now stands at 0.55 per cent of GDP, down from 0.66 per cent in 2014. Serbia's spending on education falls short of the United Nations benchmark of at least 4.6 percent of GDP to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all (Sustainable Development Goal 4). On a per-student relative basis, Serbia's spending is at par with the EU average, although in absolute terms it amounts to less than a fifth of the average for EU countries.

Government spending on health was falling prior to COVID-19, while private expenditure remains exceptionally high. There has been a downward trend in public health spending since 2013 (Figure 3.3). At around 5 per cent of GDP (the latest figure, from 2018), general government health expenditure is similar to that of neighbouring countries but below the EU average of 6 per cent. However, Serbia stands out among both neighbours and higher-income countries for the high levels of out-ofpocket expenditure on health (Figure 3.4). This substantial additional private expenditure on health care — mostly for pharmaceutical products — generates a challenge for low-income groups to access quality health care, and significantly reduces their capacity to handle "catastrophic" health events. A UNICEF survey from early 2021 indicates that unplanned expenses related to COVID-19 affect a quarter of households with children, and 77 per cent of expenditure is now health-related.51

⁵⁰ Estimates based on data from EUROSTAT European System of integrated Social Protection Statistics (ESSPROS).

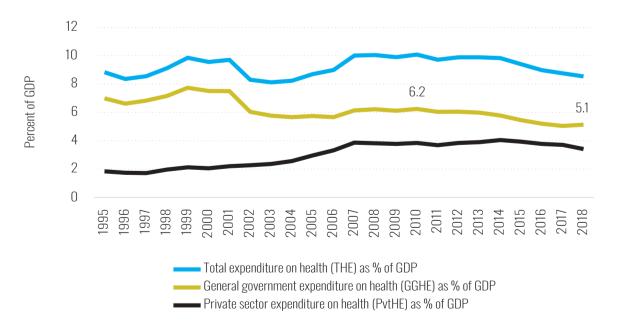
Figure 3.2 Government expenditures on education have been falling

Government expenditure on education, total (% of GDP)



Source: Serbia data for 2018 is based on the final accounts of the budget of the Republic of Serbia and AP Vojvodina for 2018, along with local-level spending based on data from the Treasury Administration. Data for previous years and comparator countries are from UIS and Eurostat.

Figure 3.3 Government expenditures on health have been falling



Source: Estimates based on Serbia National Health Accounts

50 BGR. Out-of-pocket (% current health expenditures) 45 SER ΙVΔ 40 35 LTU WRE 30 NMS13 25 ESP ROU 20 SWE CZE 15 SVN 10 5 \bigcap 3.0 5.0 6.0 4.0 7.0 8.0 9.0 10.0

Figure 3.4 A large part of health expenditure is out-of-pocket expenditure

General Government health expenditures (% GDP)

Source: Estimates based on WDI. Note: Data are for 2017.

A similar declining trend can be observed in social protection spending (Figure 3.5). Social protection covers social insurance,⁵² labour market policies,⁵³ and social assistance.⁵⁴ Pensions account for the lion's share of social protection spending (and for the bulk of spending in the human development sectors taken all together). With a Law on Temporary Reduction of Pensions (implemented in 2014), the government managed to contain pension ex-

- 52 Social insurance includes contributory-related pensions (old age, disability), health insurance (including sick leave and work injury) and unemployment insurance.
- Labour market policies include labour market services, labour market training, employment incentives/wage subsidies, employment measures for persons with disabilities, entrepreneurship support (cash, in-kind grant, loans and training), other active labour market policies, and unemployment benefits.
- In Serbia, unlike in other countries, wage compensation for maternity leave falls under social assistance as it is non-contributory: that is, the state finances this directly from tax revenue rather than through social insurance contributions, which is the standard practice in other countries.

penditure. Together with economic growth, this measure helped to reduce the proportion of pension outlays in GDP from 12.3 per cent in 2014 to 10.3 per cent in 2020. At the same time, the rapid improvement in labour markets in the post-crisis recovery period resulted in a substantial increase in pension contributions. However, these trends are not likely to be sustained in the future as the demographic decline continues. As for labour market-related spending (0.38 per cent of GDP), unemployment benefits occupy the major share and Serbia spends very little on active labour market programmes: about 0.08 per cent of GDP, compared to over 0.40 per cent for many European peers.

Social assistance spending has also fallen and has shifted away from poverty-targeted programmes. Social assistance spending, at 1.96 per cent of GDP in 2020, is similar to spending levels in many EU countries, but has fallen since 2013 (Figure 3.5). Moreover, within social assistance programmes, there has been an important shift towards categorical programmes, especially

those focusing on pro-natal benefits, which are overtaking poverty-targeted programmes as the largest social assistance programmes. Looking only at poverty-targeted programme spending, Serbia spends under a third of the European average (3.2 per cent of GDP). Little is also spent on formal public care services and benefits for the elderly (0.45 per cent of GDP in 2017).55

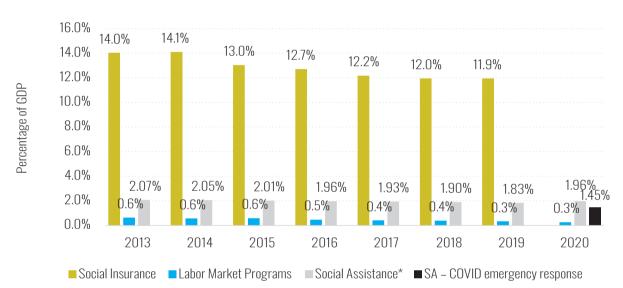


Figure 3.5 Spending on social protection in Serbia

Source: Author's calculations based on administrative data provided by the government. Total social assistance spending was calculated using administrative data provided by the MoLEVSA and estimates for War Veterans Benefits (based on 2011 expenditure, the latest available) and for Wage Compensation for Maternity and Child Care Leave for the years 2016 2018, based on the values available for 2013 and 2019.

To meet growing human development challenges, the government will need to raise expenditure levels in the human development sectors while increasing the efficiency of spending. The COVID-19 pandemic brought a halt to fiscal consolidation efforts between 2014 and 2019: in 2020, the deficit widened to 8 per cent of GDP, and it is expected to reach 7 per cent

in 2021. Even as the global economy begins to recover, fiscal space may therefore remain tight for the foreseeable future. It will be critical to achieve efficiency gains to improve quality. Nonetheless, it will be impossible to make significant progress if the decline in spending observed in recent years is not halted and reversed.



INEQUITABLE COVERAGE AND QUALITY OF SERVICE DELIVERY

Some poor and vulnerable households are not receiving the quality services needed to boost their inclusion and overall productivity. Access to early childhood education is limited for many poor children. and the substantially lower learning achievements of poor children reflect in part the lower-quality education they receive and a failure to support them with economic, pedagogic, and social measures that would provide a better learning environment. In the health sector, preventive interventions and services for all age groups need a boost, and the increasing burden of NCDs needs more attention. Despite a rapidly ageing population, provision of long-term care services remains limited. Social assistance programmes do not sufficiently cover the poor and provide inadequate support to cover beneficiaries' essential needs, while few unemployed persons access either passive or active employment programmes. Ageing and an increase in informal activity also threaten the sustainability of the pensions system.

Education

Access to early childhood education and care remains uneven, particularly for children from poor and vulnerable groups. Early childhood education and care has strong and positive effects on social and emotional well-being, later educational attainment and labour market opportunities (Box 4.1), especially for children from disadvantaged backgrounds. The attendance rate in early childhood education has increased in Serbia but — at 61 per cent for ages 36 to 59 months — it remains far below the EU's goal of 95 per cent for 2030. There are also significant inequities in enrolment of children aged 3-6 years between urban and non-urban areas. Only 11 per cent of children from the poorest quintile, and only 7 per cent of children from the Roma population, are enrolled in any form of early education. The disparities are due to an unevenly distributed network of facilities, parental attitudes including lack of awareness of the importance of early learning, large distances to the nearest preschool, lack of transportation, costs associated with attendance, and the quality of service provision. Recognizing these challenges, the Ministry of Education, Science and Technological

Development (MoESTD) is implementing programmes to improve access to, quality of and equity of preschool education.

Box 4.1 Early childhood education and care — Getting children off to the right start

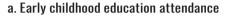
There is substantial evidence that early childhood education and care sets a strong foundation for later learning, helps to make education systems more effective and efficient, and is an effective strategy for promoting economic growth as it reduces achievement gaps and inequities and builds skills for future employment. Children need quality environmental inputs to grow in a healthy and timely fashion, including quality pre- and postnatal nutrition, health care, and safe physical environments, as well as nurturing, protection and stimulation. However, early exposure to risks associated with poverty may prevent children from realizing the promise of education. Children who have fallen behind in their physical, cognitive, linguistic, or socioemotional development are more likely to enter grade 1 late, receive poor results at school, repeat grades, drop out before completing primary school, engage in high-risk behaviour, be less productive, and ultimately earn less than others. Empirical evidence from around the world has demonstrated these linkages and underscored the importance of investing in quality preschool education and focusing on expanding access for the most vulnerable. Preschool education programmes targeting children aged 3-6 can foster foundational skills, boosting children's ability and motivation to learn, especially when designed to stimulate learning through exploration, play and interaction with others.

Source: Nadeau et al. 2011, OECD 2017, UNICEF 2019, World Bank 2018.

These inequities also carry over into primary and secondary education and beyond. For Serbia as a whole, net attendance in primary education is near universal, and net attendance reaches 94 per cent for secondary

education. However, only 53 per cent of Roma children transition into secondary school, and the secondary net attendance rates for Roma is very low, at 28 per cent (Figure 4.1). At a time when 12 years of schooling is the norm and a minimum to access formal jobs, these high levels of dropping out have life-long consequences for earning opportunities and overall wellbeing.

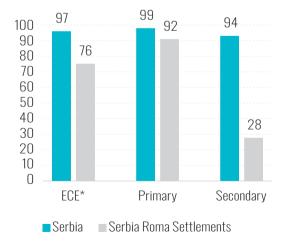
Figure 4.1 Significant disparities in getting children off to the right start





Serbia Serbia Roma settlements

b. School net attendance rates (adjusted)



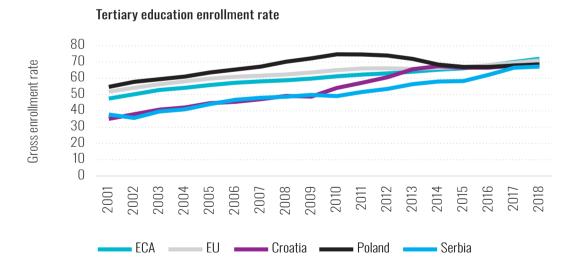
Source: MICS 2019. Note: ECE*= participation in organized learning one year prior to entering primary school.

The quality of vocational education and training (VET) education is highly variable. Three in four secondary level students in Serbia are enrolled in 3-year or 4-year VET tracks, compared to 47 per cent in the EU. There is particularly high demand for general secondary education tracks offering both gymnasium and VET service sector training,⁵⁶ as these are seen as good sectors for continuation into tertiary education. Many secondary VET schools offer poor-quality education however, with outdated curricular profiles and teaching methods. The MoESTD is in the process of consolidating VET profiles and expanding dual education models in secondary education, but more is needed to ensure students acquire labour market-relevant skills and access quality employment.

The demand for higher education is high and is expected to grow, but vulnerable students have less access to it and the quality of instruction is low by **EU standards**. Gross enrolment in tertiary education has

increased rapidly in the past two decades, from around 40 per cent in the early 2000s to nearly 70 per cent, and it is now comparable with EU levels (Figure 4.2). And demand is growing: in total, 77 per cent of 15-year-old students in secondary education expect to complete tertiary education, compared with 69 per cent in the OECD. Even among socioeconomically disadvantaged students, 62 per cent expect to complete tertiary education. However, equity in access is a challenge and disadvantaged students face more obstacles to access due to the current admission system (discussed in Chapter 5). In fact, between 2012 and 2017, Serbia recorded a 11 per cent decline in the proportion of university students whose parents had not completed tertiary education (a proxy for socioeconomic status).⁵⁷ Moreover, although the quality of Serbia's tertiary education is comparatively high in the context of the emerging and developing countries of Europe and Central Asia (ECA, as defined by the World Bank), there is a significant gap compared to EU averages (Figure 4.3).

Figure 4.2 Tertiary enrolment is increasing



Source: Estimates based on WDI.

DZHW (German Centre for Higher Education Research and Science Studies), Ed. 2018.

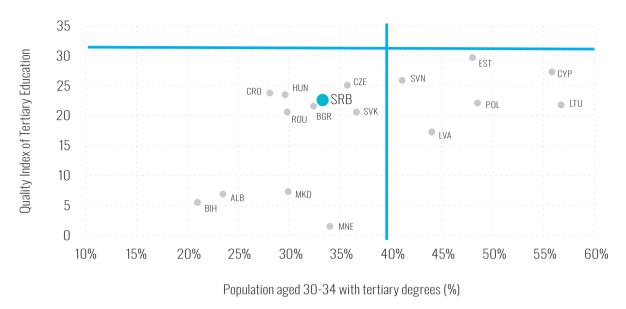


Figure 4.3 Gaps compared to the EU in terms of quality and attainment

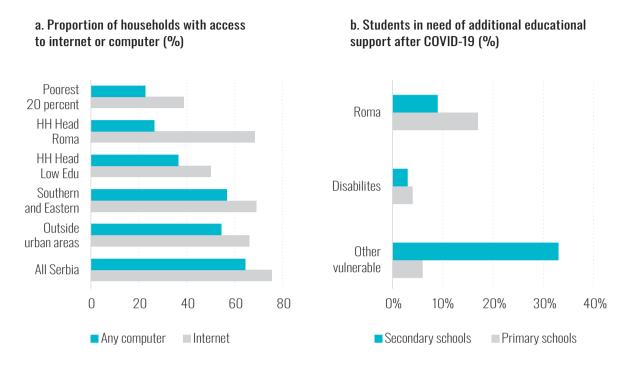
Source: Estimates based on Demirguc-Kunt and Torre 2020. The EU average (dotted line) is population weighted. Data for 2019.

The response to the COVID-19 pandemic shows that the education system was able to adapt to changing environments. During school closures, the MoESTD managed to secure nearly universal coverage of continued education through an impressive readjustment to remote teaching and learning (television lessons, use of online platforms, information technology tools and solutions).

Nonetheless, children from vulnerable families suffered more from changes in learning modalities. Differences among students in digital access and capabilities, coupled with parental support and the likely lower quality of remote teaching have exacerbated existing inequalities. Households in Serbia differ in access to internet

or computers depending on socio-economic characteristics (Figure 4.4a). Online learning coverage of students from vulnerable groups was insufficient: 17 per cent of Roma students in primary schools were unable to access distance learning, due to lack of internet connectivity, lack of digital devices, and weak digital literacy among teachers and parents. More generally, there is some evidence of loss of instructional time in the 2020-2021 school year, with about two-thirds of children aged 7-12 involved in distance learning for less than four hours per day. Additionally, one in four had some or many problems adapting to distance learning. These difficulties were not unique to Serbia, but have given rise to a need for additional education support in the aftermath of COVID-19 (Figure 4.4b).

Figure 4.4 Socio-economic inequalities lead to learning inequalities



Source: MICS 2019 (Figure a), UNICEF 2020 (Figure b).

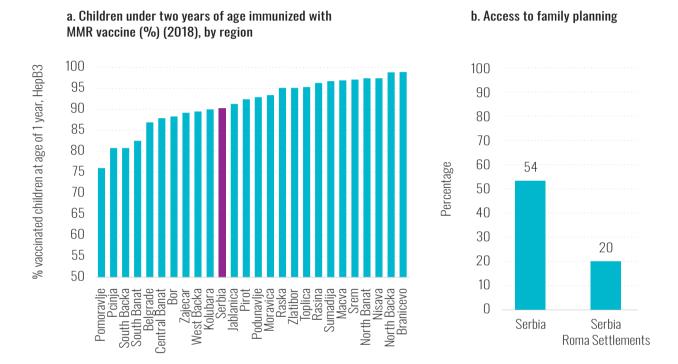
Health

Universal health coverage is supported through social health insurance, a well-developed health facility network, and a skilled workforce. Purchases are managed by a single entity, which is critical for ensuring financial protection and efficiency gains. On the service delivery side, the country has a widespread health facility network and a particularly well-organized primary health care (PHC) system. The health workforce is also more balanced toward general practitioners than specialists, which supports basic services at PHC level.

Coverage of basic maternal and child health services is high but with some variations between regions. The high access to PHC is evident in the high access to antenatal and infant care. All pregnant women have visited a skilled health professional at least four times during pregnancy, even in the poorer southern and eastern regions. In terms of vaccination rates, Serbia traditionally outperformed some of its European peers, with significant challenges in the last few years. Analysis indicates, however, that while access to services is not necessarily related to income poverty, some groups still do not access basic services. In four Serbian districts, more than 15 per cent of children had not received MMR or HepB3 vaccinations by age 1 year in 2018 (Figure 4.5a). And while the public health system has made significant progress in reaching out to the Roma population with antenatal and neonatal care (the percentage of Roma children aged 24-35 months who had received full vaccination increased from 44 per cent in 2014 to 63 per cent in 2019), Roma continue to lag behind the national average of 80 per cent full vaccination. Important gaps also remain in sexual health and reproductive rights: only 20 per cent of women in Roma settlements had ever consulted a gynaecologist for family planning purposes (Figure 4.5b), and the in-

duced abortion rate in Roma settlements is six times higher than the national average.⁵⁸

Figure 4.5 Coverage of health services for children and mothers is good but some gaps remain



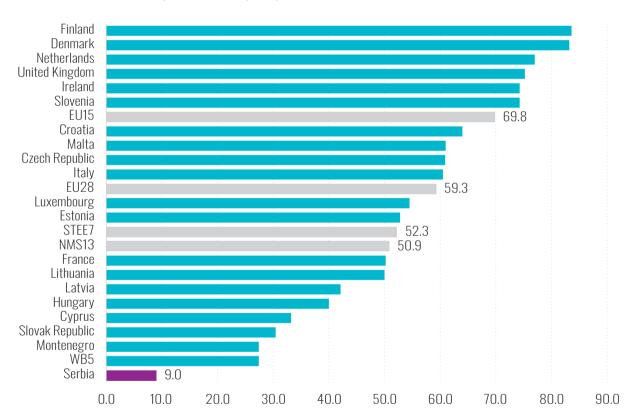
Source: Estimates based on Serbian Health Indicators Database, IPH (2018 data) (Figure a), UNICEF 2020 (2019 data) (Figure b). **Percentage of women currently married or in union who have ever consulted with a gynaecologist on the use of any method to avoid getting pregnant (2019).

Although improving, the health care system is experiencing challenges in dealing with issues for which there is significant influence from behavioural, social and economic determinants, and for which close interlinkages are required with social welfare, education and other systems (such as care for children and adults with disabilities, prevention of violence, substance use and mental health).

Preventive interventions and services for the elderly require significant improvements. Only 11 per cent of the elderly Serbia population (65+) received a vaccination against influenza in 2018. Moreover, the increasing weight of NCDs is not met with sufficient interventions to prevent, detect and treat them. Despite the heavy burden of cancer, cancer screening remains particularly weak. As of 2018, only 9 per cent of women aged 50-69 reported having had a bilateral mammography within the preceding two years, compared to an average of 51 per cent among the EU 13 new member states (Figure 4.6). Serbia's death rate due to cancer in 2017 was 310 per 100,000 population, higher than comparator countries with similar incidence levels, indicating shortcomings in treatment and management of cancer cases.59 Estimates suggest that 407 of every 100.000 deaths from all causes in 2017 could have been averted with better prevention and treatment. 60 Procedures for which demand typically increases with old age also have long waiting times. In 2016 the waiting time for surgery for cataracts was 637 days (21 months) and the waiting time for hip- and knee-replacement surgery was 587 days (20 months), set against 115 and 169 days for OECD countries. 61 These long waiting times increase the health burden for elderly persons, reduce their working lives and increase the care burden for their families.

Figure 4.6 Early detection and prevention measures for cancer are insufficient

% of surveyed women aged 50-69 who have received a bilateral mammography within the past two years (2018)



Source: Eurostat.

⁵⁹ Data from Eurostat.

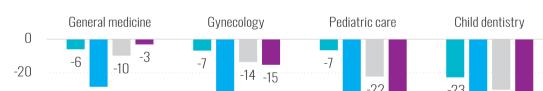
⁶⁰ Ibid.

The health system successfully mitigated the worst health impacts of the COVID-19 pandemic during the first wave. Swift action and well-timed restrictions, comparatively well-resourced public hospitals and highly skilled personnel enabled the country to step up prevention, diagnosis and treatment and contain the spread and health impact of the virus. Equipment for personal protection and other areas were provided quickly, and health personnel were redeployed to priority services.62

However, the system struggled to sustain regular health services while dealing with the pandemic as essential procedures were postponed, with possible long-term implications for people's health.

As in many other middle- and high-income countries, the system struggled to sustain regular health services while dealing with the pandemic. Essential procedures including diagnostics and treatment — were suspended. Thus patients either turned to private health care services, raising high out-of-pocket expenditure even further, or did not undertake these procedures, increasing the risk of health problems later in life. The number of visits to regular primary health care services fell dramatically, especially in the second quarter, compared to the previous year (Figure 4.7). The inability to sustain these services may further affect people's long-term health conditions.

Figure 4.7 Primary health care service coverage fell dramatically during the first half year of the pandemic



Change in primary health care service utilization (visits) between 2019 and 2020, per quarter



■Q1 **■**Q2 **■**Q3 **■**Q4

Source: Estimates based on IPH Capitation Data

Social protection

A changing demographic and the need to support the development of children from poor and vulnerable backgrounds will require systemic social protection reforms. Among other challenges, social assistance programmes do not sufficiently cover the poor and the support provided does not adequately cover beneficiaries' essential needs. Ageing and an increase in informal activity is also eroding the coverage and sustainability of the pension system.

The coverage of social care services is developing but remains low and uneven. A legal framework is in place and Serbia is making progress with the introduction of new services and in transforming social care institutions into modern accommodation services. Estimated at 9 per cent, the proportion of the population served by social care services nevertheless remains low when compared with most European countries, and is insufficient to cover the needs. Deinstitutionalization of services for children with disabilities remains a bottleneck and institutional reform of care for adults and elderly persons is taking place at a slow pace. Many social care services are being delivered by local governments, with significant gaps in availability and quality across entities. Some social care services, such as shelters for children, are rarely offered. The home care service -the most prevalent social service offered in Serbia — is much less developed than in EU countries. 63

Long-term care needs are not being met. The public sector provides formal care in the form of public homes for the elderly, day care and home care services. There is also a specific social assistance allowance for dependent persons who need to care for a third person. Set against the high and increasing care needs of the elderly (Chapter 2), public provision of these services remains low, however. In 2016, only 1.5 per cent of the elderly were covered by public institutional care, day care or home care services, and waiting lists are long in larger cities. Private institutions are more present but are not affordable for most of the population. Only 7 per cent of the elderly received special allowances/cash benefits, and there is evidence that most of this money was used to complement family income rather than buy care services. 64 A survey from 2012 showed that nine out of ten elderly that needed assistance had to rely on personal networks such as relatives, friends, or neighbours.65

Social assistance

The proportion of total social assistance benefits received by the poor remains relatively low. While social assistance programmes' coverage of the poor has improved in recent years, it remains lower than in other countries of the region. In 2019, 45.2 per cent of social assistance benefits as a whole reached the poorest quintile of the population (63 per cent for the bottom two quintiles), against 90 per cent for Slovakia, Hungary, Georgia and Romania, among others.⁶⁶ This reflects a comparatively high share of social assistance directed at categorical rather than poverty-targeted programmes. An overview of Serbia's social assistance programmes is provided in Box 4.2.

⁶⁴ European Commission, 2018.

⁶⁵ Hirose, K. and Z. Czepulis-Rutkowska 2016, Op. cit.

Data from Social Protection Expenditure and Evaluation Database (SPEED) 2020.

Box 4.2 Social Assistance Programmes in Serbia

Poverty targeted (means-tested) Social Assistance Programmes:

Financial Social Assistance (FSA), Serbia's last-resort social assistance programme, provides income support for families or households that meet the eligibility criteria related to income, asset ownership, and unemployment status of able-bodied members.

The Child Allowance (CA) Programme is intended to support the income of poor households with children. As with the FSA, eligibility is determined by means test and, as of 2018, it is universal for households with children with disabilities. The programme has the additional requirement that children should attend school.

One-off assistance is a locally financed and administered programme, not uniform across the country. To be eligible, families usually have to provide documents "proving a state of unexpected and temporary hardship". The benefit is provided once or twice per year in cash or in-kind, and eligibility can be categorical or means-tested.

Energy benefit is intended to protect the poor by reducing their monthly electricity and gas consumption bills, and it is a means-tested programme. Local self-governments review and decide upon applications for energy benefit, which creates fragmentation in benefits delivery.

Categorical (non-poverty targeted) Social Assistance Programmes:

Wage compensation during maternity and extended childcare leave compensates mothers who are temporary or permanent formal employees for lost earnings during maternity leave. As of 2018, women with flexible working arrangements, who were self-employed or who were paying contributions for farmers' pensions became eligible for a similar set of benefits. Benefits are proportional to wages or earnings.

The Birth Grant (also known as Parental Allowance) is a programme comprising a lump-sum payment for first-born children; 24 monthly instalments for second-born children; and, as of 2018, 120 monthly instalments for third and fourth-born children. In 2018, the government also introduced immunization, pre-school and primary school requirements.

Caregiver's allowance is a programme for people who, due to physical or sensory impairment, intellectual disabilities or changes in health, require the help and care of other persons in order to satisfy their basic life needs.

War veteran benefits programme comprises various forms of income and in-kind support for war veterans, survivors, civilian victims of war, and their families. Benefits include wage compensation for working veterans, cash compensation for veterans with disabilities, a caregiver allowance, and survivor benefits.

Preschool subsidy is provided to children with disabilities, children without parental care and children whose parents are FSA beneficiaries who attend kindergarten (this subsidy can be considered a hybrid between means-tested and categorical.)

Moreover, social assistance programmes do not reach all the poor and do not adequately support beneficiaries' essential needs. Despite the Social Protection Law granting the right to protection for all the

vulnerable, many of the poor do not receive any support. This is partly due to the small size of means-tested programmes. Of social assistance programmes, Financial Social Assistance (FSA) and Child Allowance are the only means-tested programmes directly targeting the poor. However, only 3.5 per cent of the population receive FSA, the main poverty-targeted programme, which is low compared to the share of the population living in absolute poverty (7.0 per cent). The value of poverty targeted transfers is also too low to meaningfully address beneficiaries' poverty.

There has also been a steady decline in the number of beneficiaries of the poverty-targeted programmes while those of categorical programmes has been increasing. The number of beneficiaries of poverty targeted programmes has fallen since 2013, though there has been no statistically significant decrease in the poverty rate or population in the same period (Figure 4.8). There has also been a fall in the total number of beneficiaries of Child Allowance, considerably steeper than the fall in the number of live births in the country. FSA also started a downward trend at the end of 2018 and reduced its reach to 90,000 households, or 218,000 individuals, by September 2020. Meanwhile, the number of beneficiaries of categorical programmes has remained constant (Caregiver Allowance) or increased (Birth Grant).

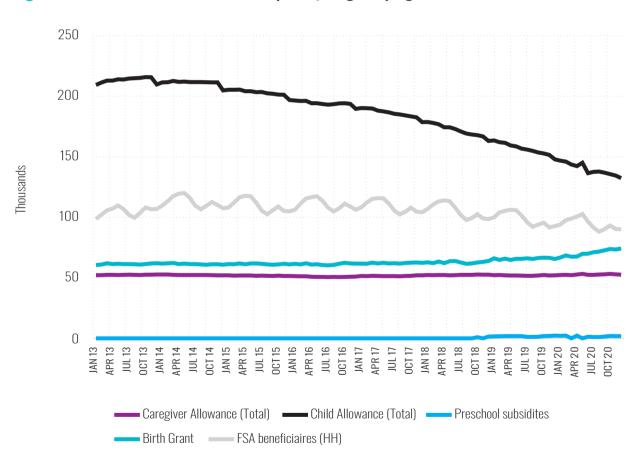
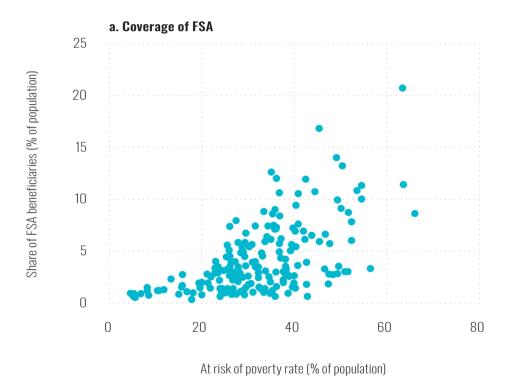


Figure 4.8 The number of beneficiaries of poverty-targeted programmes has fallen

Source: Estimates based on administrative data provided by the government.

There are significant regional variations in coverage and a large proportion of children living in poverty are not covered by any benefit. Social assistance programmes are less effective at reaching the poor in rural than in urban areas. Coverage of poverty-targeted programmes is also uneven across municipalities, pointing to problems with eligibility criteria or variable quality of programme delivery (Figure 4.9, a and b). Despite the government's clearly expressed aim of supporting families with children through the new Law on Financial Support to Families with Children, ⁶⁷ over half of children under the age of 18 years from poor households are not covered by social assistance benefits, 68 be these means-tested or universal benefits. Lack of financial support for some poor households with children and youth may prevent them from meeting their basic needs and affording basic services, including proper nutrition and (preschool) education, and thus from developing to their full potential.

Figure 4.9 Coverage of poverty targeted programs is not related to municipality poverty levels



Source: Estimates based on data from the Information System of the Ministry of Labour, Employment, Veteran and Social Affairs and SORS — "Vital Statistics", and the World Bank and the Statistical Office of the Republic of Serbia — "Poverty Map of Serbia"

⁶⁷ The new Law on Financial Support to Families with Children was adopted with the aim of boosting the birth rate and securing financial support for children and parents, including expanding coverage of wage compensation for maternity leave. Official Gazette of RS, Nos. 113/2017 and 50/2018.

Estimates refer to children below the age of 18 and, in the case of FSA, to children of FSA household recipients.

b. Coverage of Child Allowance 18 16 Share of CA beneficiaries (% of population) 14 12 10 8 6 4 2 0 0 20 40 60 80

Figure 4.9 Coverage of poverty targeted programs is not related to municipality poverty levels

Source: Estimates based on data from the Information System of the Ministry of Labour, Employment, Veteran and Social Affairs and SORS — "Vital Statistics", and the World Bank and the Statistical Office of the Republic of Serbia — "Poverty Map of Serbia"

At risk of poverty rate (% of population)

The social assistance system was not sufficiently leveraged to reduce the impact of the COVID-19 pandemic. Serbia does not yet have a solid shock-responsive social protection system and lacked both the legal framework and the information database to scale up and adapt existing social assistance programmes. Hence, programmes were not scaled up vertically (by increasing benefit adequacy), or horizontally (by increasing coverage to the "new poor" — those falling from lower middle class into vulnerability). In fact, social assistance expenditure did not increase during the first or second COVID-waves in 2020.

Instead, the government relied on one-off cash assistance. The transfer covered all adults (with additional amounts for pensioners). This is both costlier and less effective than targeted support. Meanwhile, several vulnerable groups, including refugees, were left out of social assistance, direct cash assistance, or child/parental allowances. Child poverty was not a policy focus in the response measures, and children and adults with disabilities did not receive specially targeted benefits despite their higher vulnerability.69

Active and passive labour market programmes

Unemployment benefits are leaving out the more vulnerable labour market participants. Unemployment benefits account for the largest share of labour market programme expenditure, but cover only about 6 per cent of the registered unemployed. They are also less likely (relative to the profile of unemployed) to be claimed by youth or groups with low educational attainment. This reflects eligibility criteria that include a history of some form of formal employment and contribution to the unemployment system, and incentives to remain registered as unemployed as a means to qualify for other potential benefits.

The offer and take-up of active labour market programmes is very low. The National Employment Service (NES) offers job search assistance, skills development, and private and public incentive employment schemes. Job search assistance uptake is universal, as meeting with a caseworker to register a profile is a requirement for registration. Participation in other, non-compulsory activation programmes is very limited, however. There were 18,815 in 2020, representing only 3.7 per cent of the average number of registered unemployed. Private sector incentive schemes (entrepreneurship programmes, wage subsidies for new jobs) and public sector incentive schemes (public works) reached 2 per cent and 1 per cent respectively of NES unemployed clients in 2020.

Skills development programmes focus on providing workplace experience ("on the job training"), especially for young college graduates, but no programme provides opportunities for lifelong learning. Most skills training beneficiaries are youth, university graduates, and those who have been looking for work for less than one year. On the other hand, there is little offer of adult training and reskilling programmes. Since 2019 NES offers a training program that responds to the needs of the employer in terms of the employee skills, but it is still very early to assess its reach and impact. Neither the NES nor any other entity provide a clear route for skills upgrading where persons, whether employed or not, can re-enter education and training whenever the need arises to update their skills.

The NES adjusted some of its service provision during the COVID-19 pandemic, shifting into online services for unemployment registration, benefit claims, and job matching services for employers and unemployed persons. The NES also prepared a plan for transferring Active Labour Market Programmes, in particular training, to an online modality, but ultimately did not implement this. This may have been a lost opportunity to scale up skills upgrading to new skills sets, such as distance working and online capabilities, that will be important even after the pandemic 70 .

Pensions

Rapid ageing will put further pressure on the pensions system and its ability to support the elderly. Serbia's pension system is based on a pay-as-you-go approach, where — to a large extent — existing workers pay for the pensions of the elderly. Rapid ageing implies that fewer and fewer workers will pay for a growing number of elderly persons, threatening the financial sustainability of the system. Pension coverage and the value of benefits are already falling. Some 14 per cent of the elderly population (65+) was not covered by pensions in 2019, and with demographic changes these trends are likely to intensify. Serbia's support ratio (the ratio between contributors and pensioners) is now one of the lowest in Europe, and the benefit ratio (average pension/average gross wages) is also on the low side.71

Substantial informal employment has resulted in a fall in the pension coverage of the population in the post-financial crisis period, especially between **2012 and 2016.** Currently, one in four employed persons are estimated not to be covered by the pension scheme, which will affect their old age income security (Figure 4.10a). As informal employment tends to be associated with lower earnings, informal workers have few options to build up private savings to compensate for the lack of public pensions. Contributions through the Voluntary Pensions Scheme, introduced in 2006, have not expanded either.

In 2021 a training course on bookkeeping was conducted online

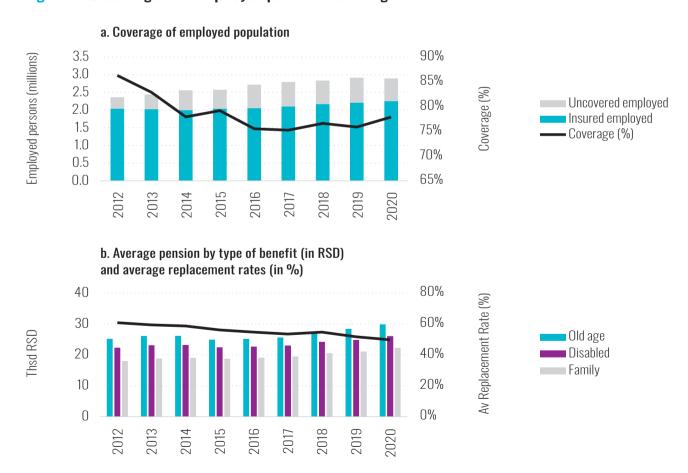
European Commission, 2018.

The total proportion of the employed who are members has hovered between 9 per cent and 10 per cent between 2010 and 2020.

At the same time, the value of pension benefits has been reduced. A fiscal consolidation programme in 2014 reduced the value of pensions above a certain level, which affected almost 40 per cent of pensioners. As a result, average pensions in 2017 were almost at the same level as 2013, and the average replacement rate for old-age pensions (calculated as the average pension divided by average earnings) declined to 50 per cent in 2020 from 61 percent in 2012 (Figure 4.10b).

Even in the unlikely case of a continued buoyant labour market, demographic trends will erode further the value of pensions coverage and generosity of pensions. The past decade saw increases in contribution revenues, because of a rapid increase in employment-to-population ratios (of more than 12 percentage points) and rapid wage increases. However, these trends will by necessity level out over time: to sustain further revenue levels, an increase of more than 15 percentage points in the employment ratio would be needed, which is highly unlikely. Over the next 20 years, the proportion of pension expenditure not covered by contributions is thus expected to increase.

Figure 4.10 Coverage and adequacy of pensions are falling



Source: Estimates based on Labour Force Surveys and statistics from the Pensions and Disability Insurance Fund of Serbia (PIO).



EFFICIENCY GAINS COULD HELP IMPROVE THE COVERAGE AND QUALITY OF SERVICE DELIVERY

Across human development sectors, efficiency gains could help improve the quality of delivery under tight fiscal constraints. Efficiency gains alone will not suffice to reach the necessary levels of human capital investments required to converge towards EU outcomes, but would be an important step towards better quality services, especially under the tight fiscal constraints created by the COVID-19 pandemic.

Education

Continued emphasis should be placed on expanding access to and quality of early childhood education and care (ECEC). This is a principal objective of the MoESTD and the Government of Serbia. However, more efforts to address high disparities in access are needed. This will require policy actions to increase the supply of ECEC, foster higher quality education and care services, and continuously stimulate and support enrolment among poor and vulnerable households.

At the primary and secondary levels, delivery inefficiencies have increased, with the level of spending per student increasing and student/teacher ratios falling. Central government per-student budgetary spending primary and secondary education amounted to approximately 16 per cent of GDP per capita in 2015 but increased to about 18 per cent of GDP per capita in 2019. The number of pupils has fallen more rapidly than the number of classes, school, and especially teachers. However, Serbian children receive approximately four less school weeks of instructional time than the average child in the EU, suggesting efficiency losses even with more resources (teachers) available.

Teachers' capacity needs strengthening as this remains the main policy instrument to improve outcomes. Teacher's compensation accounts for most spending (around 70 per cent from the critical level). Curricula reform and digitalization are central tools to improve learning outcomes, and teachers hold the

central role in this transformation. Currently, however, teacher training remains largely theoretical and based on subject knowledge with insufficient attention to up-todate teaching methods. Once in service, teachers have very limited access to further professional development. Teachers report needing development in high-priority areas, such as teaching critical thinking skills or incorporating technology.⁷² Their access to in-service education and training (INSET) depends on the decisions and limited financial resources of their schools and local self-governments (LSGs), and a high proportion of teachers (37 per cent) report having to pay out of their own pockets for INSET.73

LSGs, particularly the poorer ones, lack the financial and human resources required to succeed in the important role they hold in education policy planning and financing. The governance set-up of the pre-university education system, particularly related to allocation of financial resources, is spread across central, regional, local and school levels. Although the central level is the regulator and remains responsible for strategic management of the education sector, all levels of government play a role in allocating and/or implementing public funding. For example, although LSGs provide "only" 29 per cent of funding, they play a strategic role for inclusion as well as the overall quality of training. LSGs approve the local portion of school financial plans, and allocate funds for maintenance costs, teacher professional development, and student transportation. LSGs are also responsible for the preparatory preschool programme, where inequities in later learning outcomes are born. They also create and manage school networks, participate in school boards, and coordinate multisectoral services for inclusive education. With the Law on Education Inspection, the tasks of school inspection have also been delegated to LSG units/cities: that is, education inspectors in municipalities and cities. However, the weak capacity of LSGs. lack of coordination and information flows between levels as well as the absence of an accountability mechanism at decentralized levels profoundly affect policy coherence and the quality of service delivery.

The level of economic development of LSGs directly and significantly affect whether support to inclusive education is effective, exacerbating inequities between poorer and richer regions. Additional support for inclusive education is the responsibility of LSG units, but low-income municipalities and low-quality schools often fail to receive targeted support from the respective LSGs. Moreover, there is no intersectoral financing at national or local level to support the introduction of inclusive education, which exacerbates existing equity gaps.

Schools in disadvantaged areas lack the financial resources with which to fund the teachers' education and training that would be needed to improve quality. Schools in the least developed LSGs have the lowest school evaluation ratings, and the least financial resources for school improvements. The least developed LSGs spend the lowest proportion of overall spending on education (16.4 per cent for the poorest quintile, compared to 19.8 per cent for the richest quintile), and they also spend the least on contractual services, which covers teachers' INSET (0.92 per cent of total education spending versus 1.45 per cent). The MoESTD has no mechanism for coordinating and tracking local-level spending on education, to prioritize equalization mechanisms for LSGs and schools and support underperforming schools.

Pathways to tertiary education are ineffective, with a high proportion of students at secondary level in technical and vocational education and training (TVET). In Serbia, three in four secondary school students are enrolled in TVET, compared to 56 per cent in the Western Balkans and 47 per cent in the EU. Although TVET programmes are intended to primarily prepare students for labour market entry, most students, whether in TVET or in general secondary education, aspire to enter tertiary education. In addition to the higher costs of providing TVET education — which generates large inefficiencies if students continue to higher education — learning outcomes are significantly worse in TVET than in secondary general education, leaving stu-

⁷² Mullis et al., 2020.

⁷³ OECD, 2014.

dents insufficiently prepared for higher levels of study. As students from disadvantaged backgrounds are more likely to enter TVET, they are also less well prepared for higher education.

Tertiary education financing is underused as a policy tool to increase equity and student success. A decentralized university model, coupled with low financial autonomy and input-based funding, reduces opportunities for efficiency gains. Poor coordination, as well as lack of incentives to improve efficiency, result in duplication of courses and few synergies across faculties.74 Higher education funding works primarily through the allocation of public funds for salaries of faculty employees. Faculties also optimize revenues by setting tuition fees low enough that they can maximize the number of self-financing students.75

The preconditions, in terms of data and information, are not yet in place for a move to performance-based funding. Moving towards performance-based funding would require boosting transparency, monitoring and data collection; while basic statistical data on the number of enrolled students and graduates are collected by the Statistical Office. The MoESTD does not yet have a data collection and management system that would enable compilation of a wider range of data for performance indicators (such as graduates' employability) through graduate surveys or tracer studies. Commonly used performance indicators (such as the number of graduates or the number of students who acquired a given number of European Credit Transfer System (ECTS) credits within an academic year) are not adequate for measuring long-term effects.

The higher education system is also characterized by inequities as admission processes and the division of students into two groups — budget-financed and self-financed — channels public funds to students from more favourable socio-economic backgrounds. For entry, students are ranked according to average grade in secondary education and entry exam. with no consideration to equity. Students from wealthier and better-off families are therefore more likely to access higher education, both because they tend to have higher grades, and because they are able to pay for entry-exam preparatory lessons. Paradoxically, students from wealthier backgrounds are therefore more likely to be budget-funded, whereas students from vulnerable backgrounds are more likely to self-finance, with the need to work competing with their ambition to study.⁷⁶ Inequities worsen as only budget-funded students are eligible for additional support such as scholarships, subsidized food, and so on. The costs of studying even at the cheapest institutions are high and above the OECD average, and for the more popular areas of study they are several times higher than in most OECD countries.77 Consequently, students who rely on their own income from work as their predominant source of income are much more likely to delay enrolment in higher education and to interrupt their studies once enrolled.⁷⁸

Health

The health system is also inefficient. Many factors influence life expectancy beyond health resources. With this caveat, value for money in terms of longevity is low in Serbia. For example, Serbia's population spends slightly more than those of Greece or Slovenia on health (8.4 per cent, 8.0 per cent and 8.2 per cent of GDP respectively). However, a person living in either Greece or Slovenia can expect to live more than 81 years on average, more than six years longer than in Serbia (Figure 5.1, a and b). And a person that has reached aged 60 can expect to live at least three years more in good health in either of these countries

⁷⁴ This is applicable to all public universities except the only integrated public university State University of Novi Pazar.

Mitić and Mojić (2020) note that Serbia has "established a fairly free market in higher education," contributing to "proactive behavior of HEIs towards customers/future students" in which "universities and other HEIs compete for every potential student, introducing main market principles into their strategy."

Babin, M., Pantić, N., & Vukasović, M., 2009.

Maghnouj, S., et al., 2020.

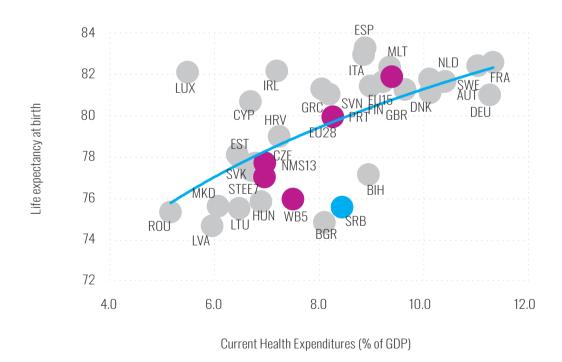
Savić et al., 2016.

than in Serbia (Figure 5.1a).⁷⁹ The importance of improving system efficiency will only grow as pressures on health resources increases with population ageing.

The health system relies excessively on hospitals and inpatient care, which raises the cost of de**livering services**. Unlike many countries in the region, Serbia's public health sector has not undergone reforms to downsize the hospital sector. In fact, the number of curative care beds per population in Serbia has increased slightly over the last 20 years, from 4.5 to 4.7 beds per 1,000 population. Similarly, the number of patients discharged from hospital rose from 18 to 21 persons per 100 population between 2015 and 2019. Serbia's hospital services are also characterized by exceptionally high lengths of stay (8.9 days on average in 2018, compared to less than 6 days among the EU 13 new member states). At the same time, hospital bed occupancy is low (65 per cent in 2018, compared to a 70 per cent average among EU 13 NMS), pointing to inefficient use of resources (Figure 5.1b).

Figure 5.1 Low value for money and inefficient resource use

a. Current Health Expenditures and Life Expectancy (2017)



Source: a. Estimates based on WDI, b. Estimates based on Serbian Health Indicators Database, IPH.

Data from WHO.

Figure 5.1 Low value for money and inefficient resource use

b. Curative care length of stay and bed occupancy rate (2018)



In-patient average length of stay (in days)

Source: a. Estimates based on WDL b. Estimates based on Serbian Health Indicators Database, IPH.

High levels of hospital care partly reflect care that is not clinically appropriate, as well as essentially preventable hospitalizations. For instance, between 2015 and 2019, the rate of Caesarean sections increased from 30 per cent to 37 per cent. C-sections are contraindicated for low-risk women, and the rate is significantly higher than the 10-20 per cent that would be appropriate from a medical point of view. Moreover, too many hospitalizations are for conditions that should have been managed in outpatient settings, including worsening chronic conditions such as diabetes or asthma. Lack of long-term care options for the elderly contributes to high in-hospital care: it is common that elderly persons in need of care are accommodated in hospitals for an extended period.80

Disease patterns are changing but the health system is not adapting. New approaches reflecting international best practice are only slowly being implemented. The adoption of day surgeries, which could deliver services at significantly lower cost, higher quality and greater convenience for patients, has only recently picked up. Serbia also lags behind European peers in other more sophisticated inputs for service delivery, such as day care units, operating theatres, and magnetic resonance imaging (MRI) equipment. In the European Union, only 11 per cent of cataract surgery is performed in hospitals compared to 74 per cent in Serbia. Finally, while Serbia's extensive primary health care system benefits from a relatively high supply of general practitioners, the system lacks sufficient human resources in other specializations, including surgeons and pharmacists among others.81

⁸⁰ Hirose, K. and Z. Czepulis-Rutkowska, 2016. Op. cit.

There are large differences between regions and districts in terms of inputs and outputs of services, suggesting room for efficiency improvement. For example, bed occupancy rates vary between 47 per cent and 74 per cent in acute care hospitals across districts. The number of physicians in Belgrade is 40 per cent higher than in Voivodina. The private sector accounts for a small but significant share of service provision, and also varies by specialty and geography. In Belgrade, the estimate is that one in eight physicians are private.

Social protection

The social protection system faces effectiveness, adequacy and long-term sustainability challenges. Given the demographic transition, unreformed pensions systems based on pay-as-you-go (PAYG) will involve a difficult trade-off between adequacy and coverage. The composition of social assistance programmes is also too much geared towards categorical programmes, leaves out many of the poor and — because of the pro-natal benefits — may potentially become unsustainable.

The rising demand for social care services is largely **unmet** due to the slow development of services, a shortage of funding due to economic and financial difficulties and the high caseloads at Centres for Social Work. Local governments cite lack of funds, staff and competences as major reasons why some social care services are not offered (rather than because the services are not needed).82

Long-term care suffers from fragmented delivery.

Public long-term care provision in Serbia is delivered by both the state (institutional care) and local governments (home care, day care and clubs). Delivery of long-term care services also suffers from lack of coordination between the state and local governments. The shortage of residential and home services, coupled with free health care for elderly citizens, shifts the burden back onto the health system.

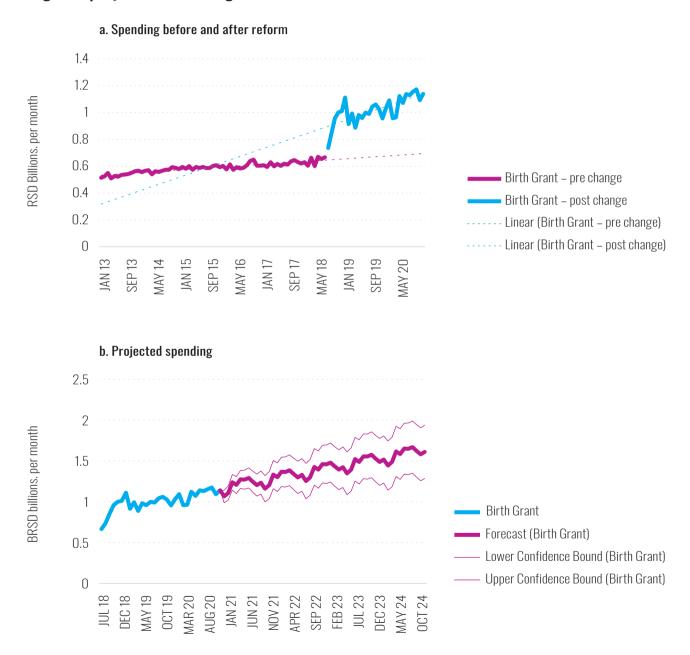
Poverty-targeted social assistance programmes are underfunded. Despite considerable poverty and vulnerability, the social assistance portfolio is increasingly dominated by categorical programmes. These do not reach all households that would be eligible for support, with particular gaps among the poor; in addition, many of the poor do not qualify for the categorical programmes. The relative low emphasis on covering the poor (see Chapter 5) can be traced to the composition of programme spending. Spending on categorical programmes is more than three times higher than spending on means-tested benefits, reaching 77 per cent of all spending in 2020 against 70 per cent in 2013. Many of these categorical programmes fill an important role for families at various stages of the life cycle, and can contribute to the welfare of children and the elderly while supporting female labour force participation. However, the composition of support to families should be reviewed to ensure sustainability. Greater emphasis on poverty-targeted programmes could lead to major efficiency gains in the system's ability to support the poor and vulnerable.

Significant numbers of children living in poverty are still missing out on social assistance. There is a need to introduce further reforms to the child allowance programme that would ensure improvements in coverage as well as the adequacy of the benefit. Income thresholds, and asset and cadastre tests are currently limiting access.

Expenditure on pro-natal benefits is expanding rapidly and risks crowding out poverty-targeted programmes and threatening the sustainability of overall social assistance financing. As shown in Figure 5.2a, the reform (including long-term benefits for third and fourth children) significantly changed both the level (near doubling) and trend (rapid increase) of the Birth Grant's budget. After an initial spike, which increased the monthly budget from 0.6 billion RSD to 1.1 billion RSD, the growth trend also increased significantly. Given that the grant is given for ten years, it is reasonable to expect that this growth in spending will continue. A simple projection based on the months after July 2018 shows the budget will reach 1.5 billion RSD within five years (Figure 5.2b), surpassing the current total expenditure for categorical programmes,

and 2 billion RSD after ten years, which is higher than the current budget for all Social Assistance programmes.

Figure 5.2 Spending on the Birth Grant has increased drastically and would continue to grow rapidly under current regulations



Source: Estimates based on administrative data provided by the government. Simulations using an exponential smoothing forecast

Wage compensation during maternity leave is the largest social assistance programme, with rapidly rising expenditure. In 2019, the largest social assistance programme was Wage Compensation during maternity leave, with spending of 26 billion RSD over the entire year, making up 26 per cent of total social assistance expenditure — roughly twice the amount spent on FSA. While serving an important function, wage compensation programmes during maternity leave are usually contributory in other countries in Europe, and therefore normally fall under the social insurance pillar of the social protection system. Funding these programmes through social insurance ensures that they do not compete with social assistance programmes targeted to the poor.

Birth grants will most likely only affect the fertility decisions of low-income households, strengthening the rationale for poverty-targeted benefits while providing stronger support to poor and vulnerable children along their life cycle. The impact of birth grants, if any, will be concentrated on poor and vulnerable households for whom the financial transfers make an important difference (Box 5.1). There is therefore potential for efficiency gains by targeting the birth grant to poor and vulnerable households and using the freed-up resources to accompany poor and vulnerable children throughout their life cycle to support human capital accumulation. Some of these gains could also be allocated to boost other, more effective pro-natal policies such as helping women combine work with family creation, or provision of childcare services and regular financial transfers during early childhood.

In addition to limited budgets, shortfalls may arise in the coverage of social assistance from outdated and opaque eligibility criteria, and weaknesses in the delivery of services. The FSA, the main poverty-tar-

Box 5.1 Pro-natal policies — what does the evidence tell us?

Low fertility rates do not necessarily reflect population preferences — countries with very low fertility often display a wide gap between fertility aspirations in youth and actual fertility later in life. This suggests that there are concrete obstacles — whether aspirational, psychological, values-related, or financial — to realizing family aspirations, which opens space for policy interventions. Some of these, such as labour market conditions or political instability, are beyond the direct sphere of family policy. Direct fertility policies generally fall into three categories: financial transfers, child-care services, and parental leave policies. Serbia's birth grant falls into the first category.

Evidence from other countries suggests that Serbia's Birth Grant is not an optimum policy to achieve natality objectives and comes at an unsustainably high fiscal cost. Empirical research shows that financial incentives only modestly influence overall fertility. They may have a stronger impact on low-income households for whom a public transfer constitutes a larger incentive (relative to their income), shifting the share of births and children towards socio-economically vulnerable groups. The evidence on the effect on fertility of "baby bonuses" such as Serbia's Birth Grant suggests that it can vary significantly depending on context, but it is generally less effective than regular financial transfers during childhood. In contrast, the fiscal costs per additional child of such grants are universally very high.

In contrast, helping women combine work with family formation has been a critical policy in all countries that have achieved a rebound in fertility rates. Regular financial transfers during early childhood and childcare services for children under three appears to have the strongest impact. Extended parental leave has more limited effects and may create a trade-off with women's labour market participation. Iceland provides an example of policy packages that focus on shared parental leave as well as extensive childcare coverage: these can boost fertility rates and simultaneously foster high labour market participation among women.

Source: Sobotka, T., A. Matysiak, and Z. Brzozowska 2019, and Bussolo, M., J. Koettl, and E. Sinnott 2015.

geted programme, suffers from several delivery challenges. First, the overall lack of data on beneficiaries and case workers, as well as limited monitoring and evaluation systems, are major barriers to improving programme delivery. Second, awareness of FSA and the Child Allowance program is high, but many of the poor believe that they are not entitled, which may be based on misleading information. Third, the high degree of discretion in outreach activities. information, and assessment of cases by case workers results in opaque processes, as accountability mechanisms are generally lacking. And fourth, the application procedure is more than a decade old and linked to the by-law created during the previous law on social protection.

Discretion in determining de facto eligibility for FSA risks high exclusion errors. Legal definitions, while granting protection to "all the vulnerable", leave a wide margin for interpretation that essentially defers significant decision power to the individual case worker. The regulations stipulate that income, revenues and assets as well as ability to work should decide whether a household is eligible. The regulations do not clarify however how ownership of assets should affect eligibility.83,84 The greatest number of households appear to be excluded because of the possession of land. Income-poor households may own more land than the limit set for FSA, but land parcels can often not be put to productive use (poor quality, distant location, difficult access (such as absence of road infrastructure), unresolved ownership or inheritance issues, and so on).85 These limitations are likely to be more binding for vulnerable households in rural areas. The Child Allowance program suffers from similar limitations with respect to asset and income thresholds.

The social protection information system has improved in recent years, but more work is needed. The social protection information system covers all entitlements stipulated under the Law on Financial Support to Families with Children (such as the Child Allowance), while an information system is currently being developed related to entitlements to FSA and social services administered by Centres for Social Work. Building the Social Card Registry and Social Protection Information System (SPIS), as the government is currently doing, might facilitate outreach, but will not resolve all information gaps. Strong capacity building and improved monitoring systems should be further developed. along with developing missing legislation and updating current legislation to make the delivery system more effective. Already-existing data could also be further analysed and use for facilitating improved decision-making.

On the employment side, Active Labour Market Programmes (ALMPs) would need to be adapted to better prepare Serbia's labour force for changing demand for skills. ALMPs and skills development and training programmes are currently underused. As the current crisis may be generating labour market movements across sectors, it may present an opportunity to regear skills development programmes towards the skills needed in the post-pandemic world. However, careful design and implementation will be needed, as international evidence shows that careful design and targeting of ALMPs is essential for achieving impact. Job search services, which dominate ALMPs in Serbia, are low cost and can be effective, but work best when information gaps and costly job matching are the main constraints to job creation. Subsidized work programmes generally struggle to create sustainable employment. Training and skills development programmes tend to have meaningful long-term impacts, but only when designed taking into consideration the need for on-the-job training and the specific skills in demand in the labour market.

Serbia would benefit from developing an advanced labour market information system that could improve the workings of the NES. The NES collects a variety of data and has a modern information system for business processes. The existing information is, however, underutilized for the improvement of labour market interventions and the analysis of labour market conditions. A broader view of the data and information that the NES manages, enriched with information from external sources, could improve NES monitoring and evaluation systems, and enable better monitoring of labour market developments and the proactive adaptation of services.

⁸³ If an applicant's family owns a car, for example, the CSW has to determine its value and — if above a certain threshold — if a car is essential for the applicant's family to meet basic living needs.

World Bank, 2017.

Petrovic, M., 2011.



ADDRESSING AGEING, EQUITY AND PRODUCTIVITY CHALLENGES FOR LONG-TERM PROSPERITY

Increasing the productivity of the workforce and boosting its numbers is essential for sustainably raising living standards and supporting growing numbers of elderly people. Adjustments in health, long-term care and pension systems will be necessary to help cover the needs of an ageing population. But ultimately, ability to care for a growing number of elderly persons hinges on boosting access to employment and the productivity of the overall workforce, in order to increase the level of prosperity to be shared across generations. This, in turn, will require investment in all children and youth, coupled with efforts to prolong the healthy working lives of adults and increase their productivity and labour market participation through life-long learning.

Human development policy needs to attack, headon, inequity in opportunities to ensure that all children and adults reach their full productive **potential.** Through financial incentives, current policies are intended to boost fertility and thus slow the decline in old-age dependency rates over time. Because lower-income households tend to have higher fertility rates (and are more likely to respond to financial incentives for family planning), new labour market entrants will increasingly come from poor and vulnerable backgrounds. Therefore, without investment to provide children from all backgrounds with good education opportunities (from early childhood to higher education), ensure effective and affordable health care, and support struggling households with good social care services, fertility policies may fail to boost productivity and address the triple ageing, equity, and productivity challenge.

With limited fiscal resources, Serbia needs to prioritize human development spending, ensure the sustainability of programme financing over the long term, and improve the efficiency and effec**tiveness of services.** Compared to its EU peers. Serbia is investing less in the human development sectors (with the notable exception of pensions). While the COVID-19 crisis will make it difficult to raise spending, it will be essential to at least protect current expenditure levels in human development and assign the highest priority to closing equity gaps. To do so will require reforms to manage existing resources more efficiently and redress spending patterns that create inefficiencies and threaten sustainability. The latter is a particular concern in the area of social protection, where spending on pensions and categorical programmes, if unchecked, will crowd out other forms of spending. Across sectors, early intervention will help to avoid costly remedial treatment, whether related to investment in early childhood education, preventive measures to deal with NCDs, or social care services.

The next sections summarize in greater details four critical policy directions: adapting human development systems to changing demographics; closing equity gaps; protecting human development spending and ensuring its sustainability; and increasing the efficiency of service provision. More detailed policy proposals are provided in the sectoral notes upon which this report is based.

Adapting to changing demographics

To help boost economic growth and manage increasing old age dependency ratios, people need to access more and better employment. Labour market outcomes depend largely on private job creation. However, human development policies are critical for providing workers with comprehensive and relevant skills and ensuring that the supply of workers meets the increasingly sophisticated needs of the labour market. In Serbia, this includes increasing access to early childhood education, the overall quality of primary and secondary education, updating curricula to focus on transversal modern skills (i.e., digital and socio-emotional skills) and increasing the capacity of schools in underprivileged areas. Collaboration between the private sector, schools, students and educational institutions for both secondary and tertiary TVET, and for general tertiary education, is also necessary to raise the labour market relevance of education. For the higher levels of education, results-based approaches can help focus attention on labour market relevance. Other social policies, including ensuring availability of long-term care as well as early childhood education, can help reduce the burden of unpaid family work, especially for women, and free up time for active participation in paid activities. Well-designed Active Labour Market Programmes, based on good practices, can also support reskilling and access to better jobs for vulnerable groups.

Policies that increase productive working life and reduce early retirement will also be needed. Social investment policies such as education and life-long learning initiatives, Active Labour Market Programmes, as well as social care services for families, persons with disabilities, socially excluded and elderly persons that reduce the care burden for working age women, have been shown to have a positive impact on the retirement age, albeit to a smaller extent than statutory age requirements.86 Other policy tools to increase productive working life, such as policies on active ageing or end-of-career psychology and management, are only nascent in Serbia. In addition, notwithstanding an important overhaul of the pension system in 2014, a number of professions still enjoy special conditions which enable very early retirement. Additional policy measures — such as health care directed at older workers or opportunities for combining pensions and work — are also needed to help workers maintain productivity and encourage them to retire later.87

Serbia urgently needs to develop comprehensive and overarching strategies to more effectively tackle the health burden related to NCDs, including among children and youth. Beyond the direct positive welfare effects for the working age population and the elderly, a healthier older population will help to

Kati Kuitto, K., and J. Helmdag, 2021.

Jakovljevic M., Jovanovic M., Milovanovic O., Radevic S., 2020.

increase overall productivity through longer working lives, and lower health and care expenditure. This would require expanding health prevention and promotion efforts to further improve basic maternal and child health services and focus significantly more on NCDs. Approaches that help people avoid developing diseases (primary prevention) and avoid complications from diseases (secondary prevention) have proven cost-effective in addressing NCDs in Western Europe.88 PHCs should be strengthened in their preventive role, early detection and management of NCDs such as cancer, diabetes, hypertension, and other cardiovascular diseases, as well as mental health and obesity among children. Serbia recently developed an updated comprehensive cancer strategy, and similar efforts need to be made for other NCDs.

The elderly population will require additional sources of income security beyond the capabilities of the current pension system. A recent and temporary period of improved finances in the pension systems has done little to reverse the decline in coverage and adequacy of pension benefits. The decline is expected to continue. Both pension reform and social assistance interventions are needed to address vulnerability among the elderly. For example, Serbia could consider introducing a poverty tested "social pension" for the elderly, or provide a pension benefit targeted to geographic areas that are rural (non-urban) and have concentrated high poverty levels. These benefits may provide a more efficient instrument than the current farmers' pensions which de facto function as social pensions.

Expanding affordable options for long-term care should also become a priority. The lack of formal long-term care directly affects the welfare of the elderly and contributes to low rates of women's labour market participation. Potential demand for long-term care grows exponentially with age and is concentrated in persons over the age of 80. In addition to improving health among the elderly, Serbia will need to move away from the current approach in which long-term care services are fragmented, provided at a very limited scale and disconnected with health care policy. An integrated approach is needed to improve the availability and quality of long-term care, focusing on expanding public and private provision while supporting informal care workers (often family members). Human resources planning should also ensure a sufficient supply of qualified care personnel (for formal provision) and training for informal care workers.

Closing equity gaps in opportunities

Closing equity gaps in opportunities is essential to raise overall productivity growth. Given the rapid ageing of the population, each child needs to develop into a productive member of society. Serbia must not fail to address the imbalances in education and health outcomes, and it must protect the more vulnerable against shocks. Serbia's pro-natal policies, if effective, are likely to increase the number of children from more economically vulnerable backgrounds relative to more affluent families. Currently, these children are more likely than children from more affluent backgrounds to underperform in school, drop out early, and face limited labour market opportunities. Providing these children with tailored support and human development investment to increase their opportunities to contribute to employment and productivity growth is therefore key. From this perspective, there is now an urgent need to identify and compensate for the lost instructional time due to COVID-19, which widened educational gaps. Similarly, although education and health gaps have fallen between the Roma population and other disadvantaged groups, significant discrepancies still require continued attention.

Access to quality ECEC should be expanded further, and policies should be developed to stimulate the enrolment of poor and vulnerable children. Government policy rightly emphasizes access to ECEC as a key policy priority, but reforms are needed to increase access more effectively to quality pre-school education, especially for the most vulnerable, at the local level. Private pre-school service provision should be scaled up to help fill this gap, with the rolling out of the new preschool curriculum to private preschools. Access is not the same as takeup, however, and policies also need to incentivize families

to send children to preschool. To increase take up and leverage the market for private provision, vouchers have already been introduced in Belgrade, Niš and Kragujevac, where they have led to increased enrolment. For further scaling up, careful piloting is needed to test the effects in rural areas and ensure the efficacy of the model using a careful calculation of economic costs and with embedded equity elements, prioritizing families with lower socioeconomic status.

In higher education, additional mechanisms should be considered for supporting students from lower socioeconomic backgrounds. The current admission system is biased against students from lower socio-economic groups. This would entail including equity considerations as an objective for universities and reflecting this in the admissions process; reforming student loans and other financial support mechanisms; and establishing various forms of support for students, such as information on study choices and occupational outcomes, career counselling, and psychological and health support.

Social assistance needs to improve coverage of the **poor.** Only half of households living below the absolute poverty line are covered by social assistance programmes. Making social assistance more effective in addressing poverty would require broadening of the eligibility criteria to increase access and reduce arbitrariness, and improving outreach to the most marginalized groups, with a particular focus on rural areas and on households with children, many of which remain uncovered.

Spending on social assistance also needs to be rebalanced towards poverty targeted programmes.

The government could consider shifting resources towards means-tested programmes (FSA and child allowances) to better protect the poor and vulnerable. Alternatively, a means-tested component could be introduced into categorial programmes. This would be especially urgent for the Birth Grant, as recent changes to this programme have resulted in spending levels which over time will threaten the sustainability of overall social assistance funding.

Pro-natal policies need to move towards integrated and comprehensive support to poor and vulnerable children during childhood and youth. The ultimate objective should not be for more children to be born, but to foster the development of healthy, educated and productive members of society. Hence, cash grants should be accompanied by integrated and comprehensive support to poor and vulnerable children through social assistance support, effective social care services, and targeted education and health policies, to ensure that all children realize their full productive potential. These policies would increase expenditure, but part of their financing could stem from a more strategic use of resources that are currently devoted to the Birth Grant. For middle- and upper-class households, the grant is unlikely to affect fertility decisions, and these households may benefit more from other kind of policies, such as access to day care and early childhood education.

Active Labour Market Policies are a potential but underused tool to address high unemployment and inactivity among vulnerable and poor workers and reduce skills gaps in the labour market. Spending on ALMPs is low, relative to international standards and to Serbia's needs. Before scaling up, however, more information is needed to assess which interventions are most effective. This points to an urgent need to further increase monitoring and evaluation capacity and use existing information captured by the NES for these purposes. Flexibility to adapt interventions based on evidence as well as to procure external providers for training courses would improve the effectiveness and relevance of the labour market programmes offered by the NES.

Protect human development spending and ensure its sustainability

It will be important to halt the downwards trend in human development spending — and to possibly raise spending in the post-pandemic era. Spending in the human development sectors has been declining at a time when more and better investment is needed, and it is now low compared to spending in most EU countries. While efficiency gains can lead to better human development outcomes there is a limit to what efficiency can achieve. Thus, it will be important to halt the downwards trend in human development spending and, if possible, reverse it.

Selected programmes that threaten the sustainability of human development expenditures will have to be revised. There are, in particular, two large spending items that — if unaddressed — may reduce ability to spend on other, important programmes: the Birth Grant, and pension payments.

Under existing parameters, Birth Grant expenditure will continue to grow and may potentially crowd out spending on other important social assistance programmes. The Birth Grant was expanded in 2018 but is not likely to increase overall birth rates significantly. Expenditure related to the Birth Grant will grow exponentially if the current format is retained, draining fiscal resources and potentially crowding out other social assistance programmes. To avoid this scenario and achieve its policy objectives, Serbia should shift towards policies that better target vulnerable children with financial assistance and more effectively impact natality.

The pay-as-you-go contributory pension system faces increasing fiscal pressure and will need to adapt its parameters and permanently rely on budget transfers to cover its deficit. The pension system accounts for a quarter of all government spending and three quarters of social protection spending. Parametric changes such as valorization formulas or retirement age could be considered to improve sustainability.

To close financing gaps, the government should also tap into the public's willingness to save for retirement by promoting complementary schemes.

Both voluntary pension plans, and occupational pension schemes are relevant for middle- and higher income earners but remain underdeveloped in Serbia, despite relatively high willingness to save for retirement. Given the country's tax structure, tax benefits are unlikely to provide sufficient incentives to expand coverage. Measures such as auto-enrolment and provision of clear and well-regulated default options for contributors could significantly increase participation in voluntary pension plans at little additional cost to the government.

Increasing spending efficiency

Improving resource management at regional and local level will help to address both inequities and inefficiencies. Regional and local governments carry important management responsibilities in human development systems — including in the management of the COVID-19 pandemic — but are not recognized as such in the current governance or financial systems. Demographic and poverty challenges vary significantly across local entities, which speaks to the importance of locally based solutions. Planning and implementation capacities also vary, affecting resource management and outcomes. Coordination within and between human development sectors is often weak, and input-based decision-making processes reduce opportunities for effective resource management. Financing formulas do not take into consideration the low financial capacity of LSGs in more vulnerable communities. For example, the response to COVID-19 was largely implemented by LSGs and the effectiveness of that response depended significantly on local human and financial capacity, rather than needs.89,90 Decentralized management structures afford much needed flexibility but require the establishing of standards and introduction of mechanisms to increase overall accountability at decentralized level, and the strengthening of cross-financing and coordination.

⁸⁹ United Nations Serbia, 2020.

⁹⁰ United Nations Office for Project Services (UNOPS), 2020.

More effective governance and results-based management processes should be implemented, starting with financing policies. For example, at all levels of education, public funding continues to be based on the real costs of inputs, disconnected from institutional and local needs, changing demographics, and policy priorities. To reverse the trend of increasing costs of student life, Serbia should move towards a new formula-based funding mechanism for primary and secondary schools that reflects the real costs of service delivery and creates incentives for LSGs to consolidate classes and schools. In higher education, to encourage innovation and entrepreneurial approaches among universities and improve labour market alignment, Serbia could pilot a more competitive funding mechanism to incentivize cross-disciplinary collaboration between university faculties. In the health sector, performance-based incentives have been initiated through an introduction of Diagnosis Related Group (DRG) payment for hospitals and a variable payment for primary health care that is conditioned on quality and coverage of services. However, the sustainability and success of such mechanisms remain fragile.

In the health sector, the service delivery network and underlying financial incentives need to move away from inpatient care towards a new model of care (day care) and PHC. This would continue and complete reforms already started in health financing, particularly in the provider payment systems mentioned above. It would also be necessary to apply and enforce standards to reduce regional differences in quality and efficiency through, among other measures, optimization of the health care facilities network to better respond to the needs of the population, bearing in mind demographic changes and technological advances in care provision.

Health care governance should be strengthened by the introduction of integrated oversight over both public and private health care providers. This requires a review to clarify roles and accountabilities between different actors and begin the development of options for their closer engagement and integration to explore synergies and improve effectiveness of resource use. Following that, a well prepared contracting with private providers could help lessen private health expenditure by the population for accessing private services and minimize potential duplication of services.

Forward looking and strategic human resource planning for professionals in the human development sectors is necessary to meet changing skills **needs.** Teachers matter most for improving learning outcomes, especially for the most disadvantaged students.91 Rapidly evolving demand for transversal and specialized skills and innovations in delivery modes (especially digitization) requires continuous adaptation of teachers' subject knowledge and teaching methods. To improve teacher INSET, stronger links should be created between INSET planning, school development plans, and demand-based development of teachers' INSET options. School managers also need to be empowered and capacitated to assess and plan for INSET needs. Improvements in health workforce management and strategy are also needed to avoid a decline in the number of health professionals, meet changing needs for specialists, rebalance the system towards PHC rather than in-hospital and curative care, and address regional imbalances and deficits. Increasing demand for LTC workers will require policies that improve recruitment and retention and ensure the right skill mix.92 Finally, social workers should be empowered and trained to apply cross-sectoral case management techniques.

Eligibility criteria for means-tested social assistance programmes need updating to improve coverage and take-up among the poor. The FSA and the Child Allowance would reach more of the poor by removing or relaxing some of the eligibility criteria that currently penalize vulnerable groups. For example, the criteria on land ownership or housing size criteria for elderly persons for the FSA may be too restrictive for rural households. With respect to the Child Allowance, the income and asset requirements could be relaxed, which would also reduce arbitrariness in case workers' evaluation of vague potential income sources such as agricultural income, immobile assets other than land, and others. More generally, clearer

⁹¹ OECD, 2018.

⁹² OECD, 2015.

guidelines are needed on eligibility to limit the discretion of case workers in assessing alternative sources of income. Synergies between social assistance and other human development systems could also be explored: over the medium term, social assistance and labour market services could be integrated with more intensive support of ableto-work FSA beneficiaries from the National Employment Services.

Across the world, the pandemic exposed significant vulnerabilities and highlighted the critical role of flexible and shock-responsive systems in ensuring overall resilience. Building flexible and shock-responsive systems, based on comprehensive and high-frequency information systems and clear delivery mechanisms, is necessary. Investing in digitalization — infrastructure, skills, and software — can help create flexibility in the response to future pandemics and increase overall efficiency. As the economy opens up, it will also be urgent to begin work to compensate for lost time in education of children, preventive care, and other measures that affect human capital over the long-term and have seen significant setbacks during the pandemic.

Stronger monitoring and evaluation systems are also necessary to make informed policy decisions, support decentralized decision making, and improve service delivery during both normal times and crises. During the COVID-19 pandemic, the lack of comprehensive health data-systems including reliable real-time data on the number and profile of the most affected populations, has proven a significant drawback when adjustments are rapidly needed across the system. The lack of solid and interlinked human development data systems is also a constraint to expanding online service delivery and offering integrated support across sectors. Similarly, Serbia's labour market information system needs to develop into a more advanced and client-oriented system. Across all sectors, better monitoring and evaluation tools and processes would support reforms towards higher efficiency and impact.



REFERENCES

Anic, A. and G. Kristic. 2019. What lies behind the gender wage gap in Serbia? Economic Annals, Vol. 64, No. 223

Babin, M., N. Pantić, and M. Vukasović. 2009. Reprodukcija socijalnih nejednakosti kroz obrazovne tranzicije. Analiza karakteristika siromaštva u Srbiji.

Barro, R. and J. Lee, 2013, A New Data Set of Educational Attainment in the World, 1950-2010, Journal of Development Economics, vol 104, pp.184-198.

Bussolo, M., J. Koettl, and E. Sinnott. 2015. Golden Aging: Prospects for Healthy, Active, and Prosperous Aging in Europe and Central Asia. Washington, DC: World Bank.

Cuberes, D. and M. Teignier. 2016. Aggregate Effects of Gender Gaps in the Labor Market: A Quantitative Estimate. Journal of Human Capital 10 (1): 1-32. doi:10.1086/683847.

Demirguc-Kunt, A. and I. Torre. 2020. Measuring Human Capital in Europe and Central Asia. Policy Research Working Paper; No. 9458. World Bank, Washington, DC. World Bank.

Donnelly, R. and H. A. Patrinos. 2021. Learning loss during COVID-19: An early systematic review. COVID Economics, Issue 77, 30 April 2021.

European Commission. 2018. EU Aging Report 2018, PAYG pension agencies in Western Balkans countries.

European Commission. 2018. ESPN Thematic Report on Challenges in long-term care: Serbia.

Government of Republic of Serbia/SIPRU. 2018. Gender Equality Index for the Republic of Serbia.

Government of Serbia (MoESTD), Faculty of Philosophy/University of Belgrade, and UNICEF. 2020. Monitoring the Participation and Learning Process of Students from Vulnerable Groups During Distance Learning

Government of Serbia/SIPRU and Centre for Social Policy. 2020. Mapping Social Care Services within the Mandate of Local Governments in the Republic of Serbia

Hirose, K. and Z. Czepulis-Rutkowska. 2016. Challenges in long-term care of the elderly in Central and Eastern Europe. Budapest: ILO.

Jakovljevic M., M. Jovanovic M., O. Milovanovic and S. Radevic. 2020. Serbia. In: Ní Léime Á. et al. (eds) Extended Working Life Policies. Springer, Cham. https://doi.org/10.1007/978-3-030-40985-2_31

Kati Kuitto, K., and J. Helmdag, 2021. Extending working lives: How policies shape retirement and labour market participation of older workers. Social Policy Administration, Special Issue: Inequalities in pension and retirement: Life-courses and pension systems in comparative perspective. Vol. 55(3): pp 423-439.

Maghnouj, S., et al. 2020. OECD Reviews of Evaluation and Assessment in Education: Serbia, OECD Reviews of Evaluation and Assessment in Education, OECD Publishing, Paris, https://doi.org/10.1787/225350d9-en

Mitić, S. and D. Mojić. 2020. "Student choice of higher education institutions in a post-transitional country: evidence from Serbia." Economic Research-Ekonomska Istraživanja, 33:1, 3509-3527.

Monitoring Social Situation in Serbia (MONS). 2018. Long-term care. Published September 6, 2018. Accessed May 23, 2021, at http://mons.rs/long-term-care

Mullis, I., M. O. Martin, P. Foy, D. L. Kelly, and B. Fishbein. 2020. TIMSS 2019 International Results in Mathematics and Science. Retrieved from Boston College, TIMSS & PIRLS International Study Centre.

Nadeau et al. (2011), Naudeau, S., N. Kataoka, A. Valerio, M.J. Neuman, and L.K. Elder, 2011. Investing in Young Children: An Early Childhood Development Guide for Policy Dialogue and Project Preparation. Africa regional educational publications, Directions in development; human development. Washington, DC: World Bank.

OECD, 2014, TALIS 2013 Results: An International Perspective on Teaching and Learning, OECD Publishing,

OECD. 2015. "Long-term care workers", in Health at a Glance 2015: OECD Indicators, OECD Publishing: Paris

OECD. 2017. Starting Strong 2017: Key OECD Indicators on Early Childhood Education and Care, Starting Strong, OECD Publishing, Paris, https://dx.doi.org/10.1787/9789264276116-en

OECD, 2018, Effective Teacher Policies: Insights from PISA, PISA, OECD Publishing: Paris,

OECD. 2019. PISA 2018 Results, Volume I: What Students Know and Can Do. Paris: OECD Publishing.

Official Gazette of RS. No 113/2017 and 50/2018.

Paediatric Association of Serbia. 2018. https://www.udruzeniepedijatara.rs/pdf/Zbornik web 2021 2.pdf

Pejovic-Milovancevic, M., Kesic, A., Grujicic, R. et al. 2018. Inpatient care in Serbia: trends in hospitalization and diagnostics over time. Eur Child Adolesc Psychiatry 27, 1645-1651.

Petrovic, M. 2011. Social Assistance and Activation in Serbia: In Search of Inclusive Policy Options. CLDS, Belgrade, October 2011.

Robayo-Abril, Monica, and Natalia Millán. 2019. "Breaking the Cycle of Roma Exclusion in the Western Balkans". Washington, DC.

Savić, M., I. Živadinović, V. Jovanović, J. Marković, and M. Kresoja. 2016. Social Dimension of Studying in Serbia: EUROSTUDENT V. Report for the Republic of Serbia. Belgrade: University of Belgrade. Co-funded by the Tempus Programme of the European Union.

SEE Jobs Gateway Database, https://wiiw.ac.at/see-jobs-gateway-database-ds-5.html

Sobotka, T., A. Matysiak, and Z. Brzozowska, 2019, Policy responses to low fertility: how effective are they? Working Paper No.1., Population and Development Branch, UNFPA

Statistical Office of Republic of Serbia. Statistical Release PD10 No 283, 15/10/2020. Poverty and Social Inequality, 2019.

The Report on the Swiss PRO Survey of the COVID-19 Crisis Effects in the Programme AoR, Survey Report (May 2021).

UN Serbia. 2020. Serbia COVID19 Socio Economic Impact Assessment — Sept 2020.

UNICEF 2020. Research on the Effect of COVID19 Pandemic on Families with Children in Serbia, UNICEF (Figure b).

UNICEF, MoESTD, and University of Belgrade Faculty of Philosophy. 2020. "Monitoring the participation and learning process of students from vulnerable groups during distance learning."

UNICEF, Oxford Policy Management 2021. The potential impact of the COVID-19 pandemic on children in Serbia. Briefing note.

UNICEF, 2019, A World Ready to Learn: Prioritizing Quality Early Childhood Education, http://dx.doi.org/www.unicef.org/ media/57926/file/A-world-ready-to-learn-advocacy-brief2019.pdf

UNICEF. 2019. Adverse Childhood Experiences (ACE) Study: Research on Adverse Childhood Experiences in Serbia. Belgrade.

UNICEF. 2020. Study on the effects of COVID-19 pandemic on families with children in Serbia, June-July 2020.

UNICEF. 2020. Serbia Multiple Indicator Cluster Survey 2019 and Serbia — Roma Settlements Multiple Indicator Cluster Survey 2019: Findings Report. October 2020.

UNICEF. 2021. Research on the effect of the COVID-19 pandemic on families with children in Serbia (wave 3)", 2021.

United Nations Office for Project Services (UNOPS).2020. COVID-19 Crisis Effects,

WHO. 2018. NCD country profiles: Serbia.

WHO, publication date unknown. WHA Global Nutrition Targets 2025: Stunting Policy Brief. Available at https://www.who.int/ nutrition/topics/globaltargets stunting policybrief.pdf

World Bank and Vienna Institute of International Economic Studies 2020. Western Balkans Labor Market Report 2020.

World Bank. 2015. Serbia's Potential for Sustainable Growth and Shared Prosperity Serbia Systematic Country Diagnostic. Washington, DC: World Bank.

World Bank ECA Fall 2020 Economic Update.

World Bank. 2017. Vertical Functional Review of Service Delivery in Social Services Sector. Synthesis Report.

World Bank. 2017. Delivering Health Services Efficiently for Serbians. Synthesis Report.

World Bank. 2018. World Development Report: Learning to Realize Education's Promise.

World Bank. 2019. Serbia Country Economic Memorandum: Serbia's New Growth Agenda.

World Bank. 2020. The Human Capital Index 2020 Update: Human Capital in the Time of COVID-19. World Bank, Washington, D.C.: World Bank.

World Bank. 2021. Western Balkans Regular Economic Report No.19. Subdued Recovery. Spring 2021

