European Commission

EUROPEAN SOCIAL POLICY NETWORK (ESPN)

Financing social protection

Serbia

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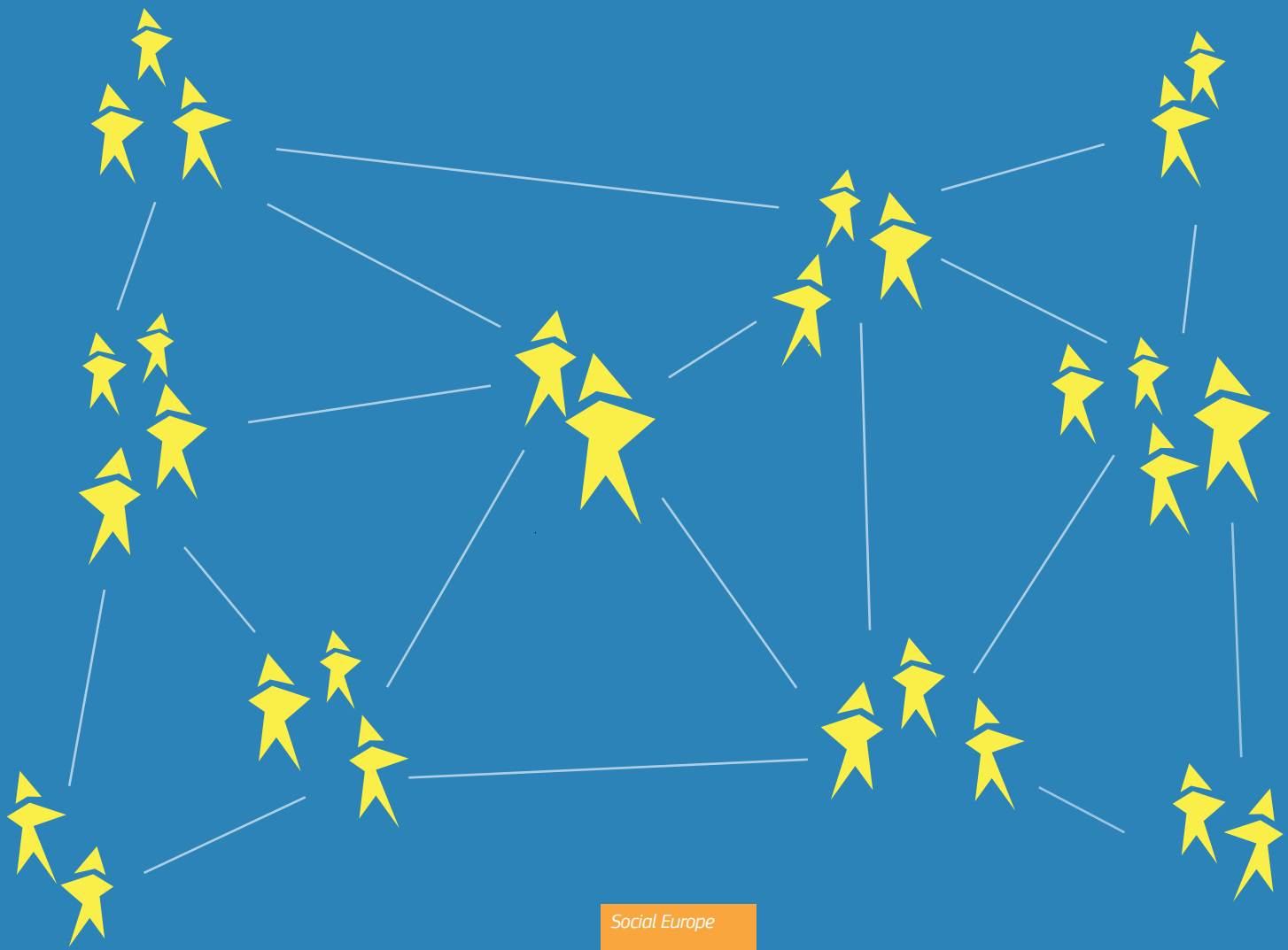

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European Social Policy Network (ESPN)

ESPN Thematic Report on Financing social protection

Serbia

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Directorate-General for Employment, Social Affairs and Inclusion
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The ESPN brings together into a single network the work that used to be carried out by the European Network of Independent Experts on Social Inclusion, the Network for the Analytical Support on the Socio-Economic Impact of Social Protection Reforms (ASISP) and the MISSOC (Mutual Information Systems on Social Protection) secretariat.

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Summary

The negative impacts of the economic crisis in Serbia affected the entire period under consideration, from 2008 to 2016. The economy registered recession, GDP had negative growth and public finances ran a deficit. The ongoing fiscal consolidation has required a number of very strict austerity measures, a cut in pensions and a reduction in wages, and a ban on new employment in the public sector. The measures have helped contain the deficit of the pension insurance fund; but on the other hand, the decreased social contribution payments have had a negative impact on living standards. This has all had a **negative effect on social protection, as spending is determined not by actual need, but by the available resources.**

Over the whole of the period 2008-2016, the share of gross expenditure on social protection as a proportion of gross domestic product (GDP) in Serbia was below the EU-28 average. In 2016, the figure reached a low of 21.5%, 1.4 percentage points lower than in 2008. From 2008 to 2016, gross expenditure measured in real terms (at 2005 constant prices) fell by 0.2% on average a year. Spending on old age continually represented the largest share of gross expenditures, with a 46.2% share in 2016; this was followed by the share of 'other' functions (28.9% share in the same year). The share of the sickness/health function was the lowest over the whole period – 24.9% in 2016. The relative shares of the three functions (sickness/health, old age and 'other') in total expenditure changed over time: the proportion of expenditure on the sickness/health function fell by 3.4 percentage points (pp), while the proportion of old-age expenditure increased by 3.9 pp and the share of the 'other' function fell by 0.6 pp. Over the whole period, net social protection expenditure differed only slightly from gross expenditure; in 2015, it was 0.5% lower.

The main sources of financing of social protection during the whole period were social contributions (with an average share of 59.8% in total financing), followed by general government contributions (38.9%). The respective relative shares varied slightly: when the share of social contributions in total financing was reduced, government contributions were increased in order to balance the necessary funding. Government revenues were the only source of financing of non-contributory schemes, while the **deficit in the social insurance funds** required a greater outlay of government revenue to the social insurance contributory schemes. The biggest decrease in financing was recorded for the sickness/health function, due to the decline in the healthcare insurance contribution rate, falling employment and evasion of contributions. In 2015, receipts of the Health Insurance Fund, adjusted by the consumer price index, were 29.3% lower than in 2008, while the social contributions received were 21.7% lower.[1]

The distributive effects of social protection were mostly negative. Over the whole period, a quarter of the population was exposed to the risk of poverty, and the corresponding at-risk-of-poverty rate in 2017 was 25.7%, 1.2 pp up on 2013. At the same time, the negative economic results led to high evasion of contributions; meanwhile, by formal decision of the government, a number of public companies were exempted from paying healthcare insurance contributions. The new forms of employment in the 'gig economy' have not been documented within the system of central insurance; however, informal evidence shows that these types of employment have been growing in the country.

The role of social protection will be more challenging in the future, as the system has to respond to changes in the country's demography and to the changes in the global economic environment. The future demographic trends – ageing and population decrease – will have an impact on the growth of future social expenditure. The changes in the business environment brought about by the 'fourth industrial revolution' place entirely

[1] Pejin Stokic and Nikolic (2016).

different requirements on the social protection sector. It is necessary to embark on long-term planning and to introduce innovative solutions to the reform of social protection schemes, which need to be responsive to the new forms of social inclusion of the most vulnerable population groups.

1 Current levels and past changes in financing social protection

This analysis is based on the available Eurostat European System of Integrated Social Protection Statistics (ESSPROS) data for the period 2008-2016, and on official national data.

In 2016, the share of gross expenditure on social protection as a proportion of GDP in Serbia reached its lowest level of 21.5% (Table 1). This was 1.4 pp lower than in 2008. Over the whole period 2008-2016, spending on social protection as a proportion of GDP in Serbia was below the EU-28 average. The smallest difference was at the beginning of the period (3.0 pp) and the biggest was at the end of the period, in 2016 (6.7 pp).

Table 1. Share of gross expenditure on social protection, as % of GDP, 2008-2016

	2008	2009	2010	2011	2012	2013	2014	2015	2016
RS	22.9	24.5	23.9	22.7	24.0	23.3	23.4	22.1	21.5
EU-28	25.9	28.7	28.6	28.3	28.7	28.9	28.7	28.4	28.2

Source: Spasova and Ward (2019), Annex ESSPROS tables.

Over the nine years under consideration, the Serbian economy experienced a period of decline (during the economic crisis) and later on a period of gradual recovery. The trends of GDP real growth were reflected in the fluctuations of the share of gross expenditure on social protection in GDP – but in opposite directions (Annex, Figure A1). The increased share of GDP matched the decline in GDP, but as GDP started to recover, so the share of social protection expenditure fell. GDP grew by 2.8% in 2016, while the share of social protection spending fell to 21.5%. Since the levels of gross expenditure on social protection (measured in real terms) did not fluctuate much, the corresponding share of GDP was mainly influenced by the GDP's growth trends.

Table 2. Gross expenditure on social protection in real terms (i.e. at constant 2005 prices), 2008-2016, Index 2008=100

	2008	2009	2010	2011	2012	2013	2014	2015	2016
RS	100.0	103.7	101.0	98.2	102.3	100.9	100.1	96.7	98.3

Source: Spasova and Ward (2019), Annex ESSPROS tables.

Gross expenditure on social protection, measured in real terms (at constant 2005 prices), did not fluctuate much from the 2008 value over the whole period (Table 2). From 2008 to 2016, gross expenditure fell by 0.2% a year on average; in the period 2010-2016, the decrease was greater, averaging 0.5% per annum. There were marked reductions, with expenditure falling below the base level in the last year. The fluctuations in gross expenditure paralleled the changes in the value of the Serbian dinar (RSD) against the euro. The largest currency contractions, which were recorded in the last two years, caused devaluation and a relatively sharp decrease in expenditure in 2015 and 2016.

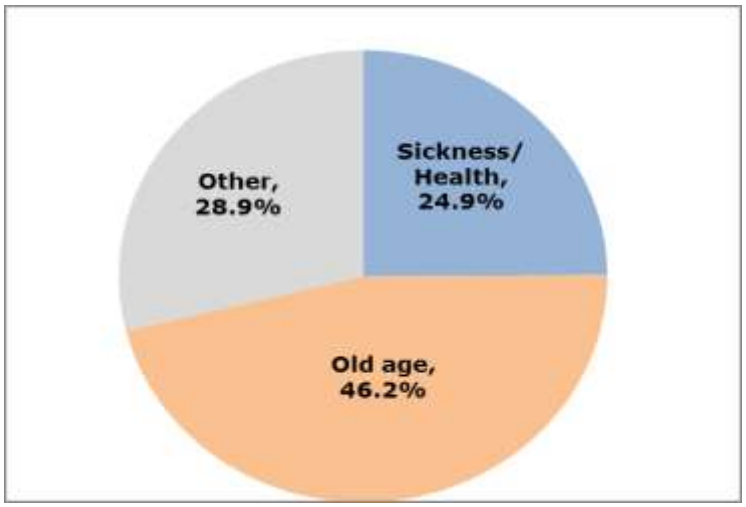
Table 3. Breakdown of gross expenditure on social protection by function, 2008-2016, % total expenditure

	2008			2010			2016		
	Sickness/Health	Old age	Other	Sickness/Health	Old age	Other	Sickness/Health	Old age	Other
RS	28.3	42.3	29.5	26.0	43.0	30.9	24.9	46.2	28.9
EU-28	29.3	39.4	31.3	29.1	39.1	31.8	29.5	40.1	30.4

Source: Spasova and Ward (2019), Annex ESSPROS tables.

Expenditure on the old-age function represented the largest share of gross expenditure on social protection over the period (Table 3; Figure 1). The structure of gross expenditures, classified by the relative share of three functions – sickness/health, old age and 'other' – has changed over the period 2008-2016, during which time the proportion of expenditure on the sickness/health function fell by 3.4 pp, while the proportion of old-age expenditure rose by 3.9 pp. Compared to the EU-28 average levels in 2016, Serbia spent less on the sickness/health function and more on the old-age function.

Figure 1. Breakdown of gross expenditure on social protection by main source, 2016



Source: Spasova and Ward (2019), Annex ESSPROS tables.

Means-tested benefits include family, social exclusion and housing benefits. The overall share of expenditure on means-tested benefits in gross expenditure on social protection was rather minimal, fluctuating from 3.3% in 2008 to 5.2% in 2013. In 2016, the share was 5%, 7.1 pp lower than the EU-28 average.

Net expenditure was lower than gross expenditure by between 0.4% and 0.5% of GDP. Social protection benefits in Serbia were only liable to taxation, not to social contribution levies; in 2016, the effective tax rate on gross social protection benefits was only 2.1%, up 0.5 pp from 2008.

A fiscal consolidation policy and related austerity measures were introduced in 2014 and continued till 2018, as a response to the slowdown in economic growth and increasing public debt. They targeted mainly public-sector employees and pensioners with higher-than-average pensions. The adopted regulation imposed a 10% cut in wages (except for wages of EUR 210 a month or below) and a freeze on new employment in the public sector, and a cut in pensions. The measures had a negative impact on the growth of net wages during 2013-2015, the real growth of net wages averaging only 0.4% per annum.

This was reflected in a contraction of gross expenditure on social protection in the same period, due to the decreased levels of social protection financing (Annex, Figure A2). On the other hand, the measures had a positive impact on containing health expenditure, as the wage bill for employees in the public healthcare sector fell. The number of employees in the public healthcare sector dropped by 9.6% over the period, while the share of healthcare personnel wages in total health expenditure was gradually reduced and fell to 43.9%, a decrease of 2.4 pp from 2010. Ultimately, the impact of the austerity measures on the healthcare sector cannot be judged as positive, as it contributed to lower financing of healthcare and led to a drain of healthcare workers (due to inadequate wages and working conditions); estimates indicate that since 2012 around 2,000 health professionals have left the country to work abroad.[2]

Reform of the public sector was one of the main features of this period. Privatisation and restructuring of state-owned enterprises (SOEs) have been slow, with serious negative consequences for the economy. The Fiscal Council estimated that in 2014 the government policy to provide subsidies and loan guarantees to SOEs and to tolerate evasion of taxes and social contributions generated a fiscal cost that amounted to 3% of GDP.[3] In 2008, 2009 and 2012, the government adopted laws which regulated the clearance of debts for unpaid health insurance contributions and conditional clearance of unpaid interest accrued on debts for health and pension insurance.[4] This policy had a deleterious consequence for health expenditure, which saw negative growth over the period. In 2012, the accrued debts to the Health Insurance Fund (for unpaid contributions by SOEs, the self-employed and farmers) reached 69.6% of the fund's gross receipts in that year (70.9% of the realised expenditure), while 52.7% of those debts were non-collectable. The accumulated debts decreased in 2013, when they accounted for 42.3% of the fund's receipts.

The impact of employment levels on the level of gross expenditure on social protection in Serbia cannot be analysed properly across the whole timeframe, since the annual employment data are not comparable (the methodology for data collection changed). The comparable series are for 2008-2013 and 2014-2016. High employment in the informal sector is another obstacle to analysing the effects of employment on social protection expenditure.

1.1 Pensions

Within the expenditure on the old-age function, old-age pension benefits accounted for the largest share. The national data on pension spending in Serbia are derived from the financial reports of the republic's Pension and Invalidity Insurance Fund (hereafter the Pension Fund), since almost all pensions have been governed by this public body. The number of individuals with private pension insurance was negligible – around 2.7% in 2016 (there are no official data on the number of current pensioners). The Army Pension Fund was integrated into the Pension Fund from January 2012, when army pensioners accounted for 2.7% of all pensioners. Therefore, the national data for the pension function used in this report refer to the expenditure disbursed by the Pension Fund. The share of expenditure for all categories of pensions (old-age, survivor's and disability) averaged 95% of the Pension Fund's gross expenditure over the period, while the estimated share of old-age pension expenditure averaged 61%.

In nominal values, expressed in euro, the Pension Fund's gross expenditure had uneven growth, compared to the base value from 2008 (Figure 2). The average share of Pension Fund expenditure over the period was 14.9% of GDP; the initial value was 14.4% in 2008, but in 2016 this was 0.8 pp lower (Figure 3). The pension expenditure for all three

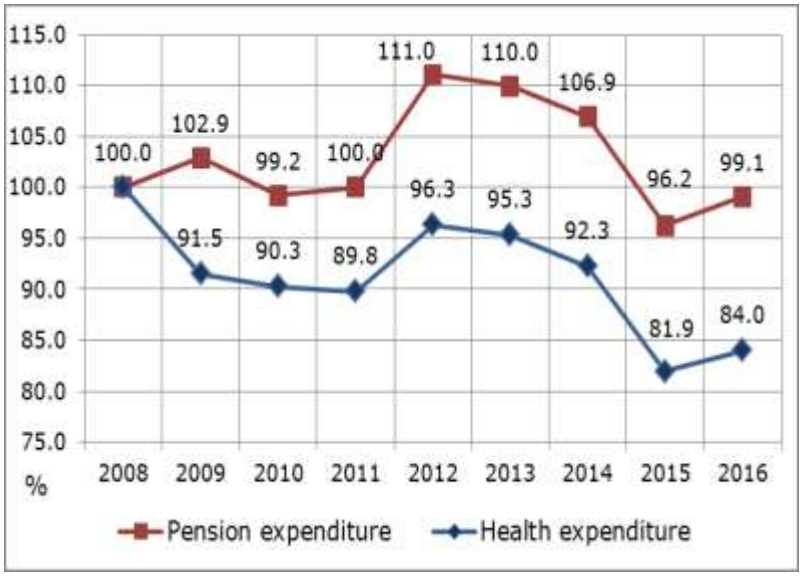
[2] News story 2 May 2017, http://rs.n1info.com/a246210/Vesti/Vesti/Odlazak-lekara-i-sestara-u-Nemacku-dobija-razmere-egzodusa.html

[3] Fiscal Council (2014).

[4] RS Official Gazette 102/2008, 31/2009, 119/12.

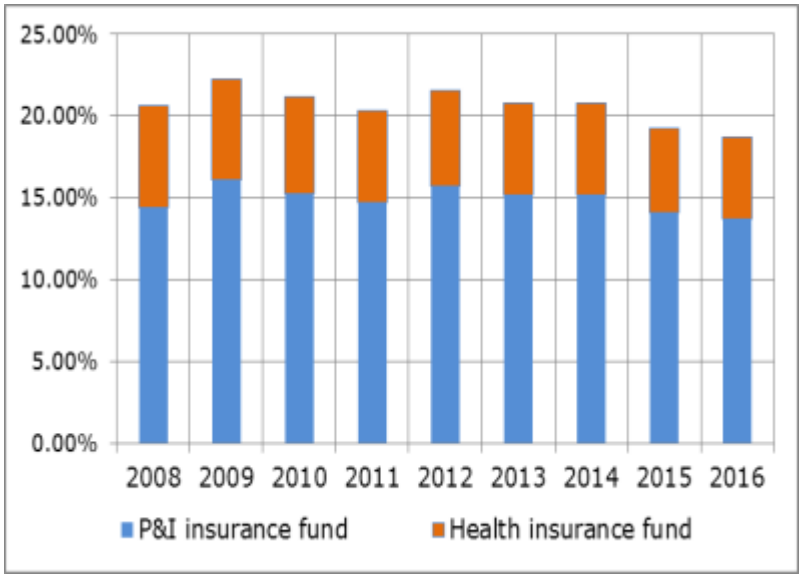
categories saw a negative annual growth in real terms, with an average rate of fall of 2.7% per annum.[5] Even though the number of all beneficiaries grew steadily over the period and increased by 9.4% in 2016, while the number of old-age pensioners increased by almost a quarter (23.4%) over the period 2008-2016, pension expenditure did not grow proportionally.[6]

Figure 2. Pension and Health Insurance fund expenditure (in EUR), 2008-2016
Index values 2008=100



Source: RS Ministry of Finance, 2018, Public finances bulletin, December 2017, authors' calculations.

Figure 3. Pension and Health Insurance fund expenditure
Share of GDP



Source: RS Ministry of Finance, 2018, Public finances bulletin, December 2017, authors' calculations.

[5] Ministry of Finance (2018).
[6] Republic Pension and Invalidity Fund (2017)

Box 1 Pension's sector reforms and applied austerity measures

Since there have been problems with the high deficit of the Pension Fund for several decades, in 2005 the government introduced a number of policy measures and pension reforms to restrain spending on pension benefits. The measures/policies can be divided into two groups in relation to the changes in the fundamental elements of the pension scheme:

A. Change in the retirement age (old-age and survivor's pensions)
1) Prior to 2008, 58 years for women and 63 years for men
2) From 2008-2011, a gradual increase of six months every year so that women retire at 60 and men at 65 (2005 Law)
3) 2014: phased-in harmonisation of the retirement age, with women retiring at 65; introduction of penalties for early retirement – 4.08% for every year before the statutory retirement age, up to 20.4%

B. Policies with an impact on the level of pensions:
1) 2009-2010: pension freeze
2) 2011-2014: change in pension indexation below the inflation rate
3) 1 November 2014-2018: the Law on Temporary Changes of Calculation of Pensions imposed a cut in pensions over RSD 25,000 (around EUR 208); pensions of up to RSD 40,000 were reduced by 22% and pensions above RSD 40,000 (EUR 330) by 25%. In 2014, some 61.2% of all pensioners received a pension below the threshold.

The combined impact of the austerity measures and of the positive changes in economic growth brought a decrease in the Pension Fund deficit. The austerity measures imposed in November 2014 had an immediate effect, containing pension expenditure in the following years. The increase in the retirement age and the strengthening of retirement conditions will have a long-term impact on the entry of new pensioners. At the same time, demographic trends – specifically an increase in life expectancy of two years (for the whole population) between 2008 and 2016 – reduced exit from the pension scheme due to death.

1.2 Healthcare

The share of expenditure on the healthcare/sickness function was the second largest relative to gross expenditure on social protection benefits (Table 3). In Serbia, the majority of citizens have been covered by compulsory public health insurance. The Health Insurance Fund (HIF) is the main public institution governing the provision of public healthcare and its financing. Private healthcare insurance is rather underdeveloped: in 2016, only around 0.13% of citizens had private health insurance.[7] Since there are no exact data on actual expenditure on private health insurance, the expenditure is not included in this report.

Expenditure in the public health sector includes healthcare protection costs, sick-leave payments (for leave lasting more than 30 days), reimbursement of travel costs and administration costs.[8] Spending on healthcare services (consumption of healthcare services and goods) represented the largest proportion of sickness/health expenditure, with an average share of 93.6% over the period. Spending on sick-leave benefits accounted for 4.2% on average, while administrative costs accounted for 2.1% on average of gross expenditure by the HIF.

[7] National Bank, Serbia, Review of number of insured persons 2017, https://www.nbs.rs/system/galleries/download/osg-izv-y/god_T1_2017.pdf

[8] Employers cover sick-leave payment of less than 30 days.

Healthcare/sickness expenditure, unlike expenditure on "other" functions, depends almost entirely on receipts by the HIF. Article 59 of the Health Insurance Law states that if the legally defined scope of healthcare cannot be achieved because the HIF lacks resources, the government will set the priority list for the provision of healthcare services.[9]

Over 2008-2016, the share of sickness/health expenditure relative to the receipts of the HIF averaged 99.5%. In 2010 and 2014, expenditure was around 1% higher than receipts; in those years, the difference was covered by utilising the undisbursed funds from the previous year.[10] In nominal values, expressed in euro, expenditure declined from the base year 2008 (Figure 2). In real terms (adjusted for changes in retail prices), the average decline in expenditure was 2.8% per annum.[11] In 2008, health/sickness spending accounted for 6.2% of GDP, but over the period under consideration this proportion gradually declined, reaching 4.9% in the last year (Figure 3). Per capita (public) healthcare expenditure decreased over the period, from EUR 280 in 2008 to EUR 244.40 in 2016. The overall fall in health/sickness expenditure was also reflected in the decreased share of this function relative to gross expenditure on social protection.

1.3 'Other' functions

Over the period under consideration, the share of 'other' functions in gross expenditure decreased by 0.6 pp (Table 3). The structure for the financing of 'other' functions did not change substantially over the period (Annex, Table A1). The shares of the financing of social exclusion benefits and housing remained the lowest, compared to other functions, although the share of social exclusion benefits increased by 1.7 pp over the period. Disability pensions accounted for the largest proportion of the disability function expenditure. From 2008 to 2016, the number of disability pension beneficiaries fell by 19.8%, due to the better control of compliance with the eligibility conditions.[12] The share of disability expenditure fell by 3.7 pp over the period, and accordingly the shares of other functions increased. In Serbia, cash benefits covering the family, social exclusion (financial social assistance and social services provided by centres for social work) and housing have been 100% means tested. The cash benefits targeted at the family function have mainly been for the following: child allowance, parental (birth) grant and parental leave benefit. These expenditures have been correlated with the demographic trends in the country and the government's pro-natal policy measures. In 2016, the share of the family function was 2.4 pp higher than in 2008.

1.4 Conclusions

Overall, it can be concluded that the level of expenditure on social protection has been closely determined by the available sources: in those periods when the sources were inadequate, the coverage of even statutory rights was reduced. The impact of negative economic growth caused by the economic crisis, and the effects of the austerity measures had a strong influence on the overall stagnation and periodic falls in gross expenditure on social protection. The decline in gross expenditure ended in 2015, while 2016 marked a turning point for positive change. In real terms, both GDP and net wages rose, compared to 2015 – by 2.8% and 2.5%, respectively. Gross expenditure on social protection also started to rise, and the same upward shift was recorded for expenditure on pension and sickness/health functions.

Within the pension scheme, the greatest burden was borne by pensioners, whose pensions were reduced over the period 2014-2016. The impact of decreased health

[9] RS Official Gazette 109/2005.

[10] Health Insurance Fund, Financial reports 2008-2016.

[11] Pejin Stokic and Nikolic (2016).

[12] Pension and Invalidity Insurance Fund, Statistical monthly bulletin 2008-2016.

expenditure is not possible to estimate without detailed analysis of gaps in accessibility and availability of healthcare services. The long waiting lists and lack of innovative drugs are some of the evident shortcomings. Over the period 2012-2016, there was a constant increase in new patients on the waiting lists, while in 2016 the average waiting time was higher for all major surgical procedures than in 2015.[13] From 2011 till the end of 2016, the HIF did not introduce any innovative pharmaceuticals onto the Positive Drug List (the list comprises drugs which are reimbursed by the fund). It may be concluded that expenditure and, in turn, the supply of health services and goods were not driven by actual need and demand, but were kept in check by the level of receipts.

2 Current mix and past changes in the sources of financing social protection

Over the whole period, the main sources of funding for social protection were social and government contributions (Table 4). Their shares in total financing varied slightly: when the share of social contributions decreased, government contributions increased to balance the necessary funding. Government revenue was the only source of government contributions, since no ear-marked taxes were used to finance social protection. The share of other receipts was negligible, and fell to only 0.5% in 2016. This segment of financing represented mainly transfers from other schemes, social insurance contributions re-routed from the pension and unemployment schemes to the HIF.

Table 4. Division of financing for social protection by main source, 2008-2016 (% of total financing)

	2008			2010			2015		
	Social contribs.	Govt. revenue	Other receipts	Social contribs.	Govt. revenue	Other receipts	Social contribs.	Govt. revenue	Other receipts
RS	61.3	36.0	2.6	57.8	41.5	0.7	60.2	39.3	0.5
EU-28	55.7	38.4	6.0	54.9	39.4	5.7	52.8	41.7	5.5

Source: Spasova and Ward (2019), Annex ESSPROS tables.

Social contributions are the main source of financing for the compulsory pension, healthcare and unemployment insurance schemes. This area has been regulated by the Law on Contributions for Compulsory Social Insurance, while separate laws on pension and disability, healthcare and unemployment insurance regulate the rights and obligations stemming from the compulsory insurance schemes. Compulsory social insurance covers every person who is employed on a permanent or temporary work contract, including farmers, the self-employed and seasonal workers, and also those with non-standard work arrangements. Since 2011, private employers have been granted a 'release' from making contribution payments for the newly employed, under specific conditions that have been modified over the years. The contribution rates for pension and disability insurance for workers in arduous or hazardous jobs (who are entitled to early retirement) are higher than the regular rates, ranging from 3.7% to 11%, depending on the granted extension of the pension insurance period. The minimum base for the calculation of all rates has been 35% of the national average wage (from the last quarter of the previous year), while the maximum is set at the level of five national average wages (from the previous month). Over the period under consideration, the pension insurance contribution rate was increased by 4 percentage points, while the health insurance contribution rate was reduced by 2 percentage points (Table 5). The pension

[13] Institute of Public Health of Serbia (2017).

insurance contribution rate was raised in response to the high deficit of the Pension Fund, while the health insurance rate was reduced in order to maintain the labour cost burden.

Table 5. Social insurance contribution rates, by function, 2005-2016

Contribution Rates	2005	2013	2014	2016
Pensions & invalidity	**22%**	**↑ 24%**	**↑ 26%**	**26%**
Employers	11%	11%	12%	12%
Employees	11%	13%	14%	14%
Healthcare	**12.3%**	**12.3%**	**↓10.3%**	**10.3%**
Employers	6.15%	6.15%	5.15%	5.15%
Employees	6.15%	6.15%	5.15%	5.15%
Unemployment	**1.5%**	**1.5%**	**1.5%**	**1.5%**
Employers	0.75%	0.75%	0.75%	0.75%
Employees	0.75%	0.75%	0.75%	0.75%

Source: Law on Contributions for Compulsory Social Insurance, 2005, 2013, 2014, 2016.

Receipts from the social contributions are correlated not only to the contribution rates, but also to the employment level. They have also been strongly affected by the lack of fiscal discipline, as the practice of evasion has been ever-present over the period.

Government revenues have been used for: a) non-contributory schemes and b) contributory schemes.

Government revenue transfers to non-contributory schemes can be grouped into:

I. Transfers for the following means-tested benefits:
   a. Family/child benefits (child allowance, birth grant, child day care)
   b. Social exclusion benefits (income support – minimum income scheme, accommodation)
   c. Housing benefits (social housing)
   d. Old-age benefit (accommodation)

II. Transfers for non-means-tested benefits:
   a. Disability benefits (carer allowance, economic integration of the handicapped, accommodation, rehabilitation)
   b. Family/child benefits (parental leave).

Government revenue transfers to contributory compulsory social insurance schemes comprised:

a. Regulated coverage of expenditure for social protection benefits (for select vulnerable groups)
b. Coverage of the deficits of the compulsory insurance schemes.

The social insurance scheme (pension and healthcare insurance) in Serbia is based on a Bismarckian system. The public pension system (the PPS) is a statutory pension scheme that is compulsory for all persons engaged in standard or non-standard forms of employment. The PPS is based on the mandatory pay-as-you-go (PAYG) unfunded scheme, and it has been governed by the Pension and Invalidity Insurance Fund. This Pension Fund governs the financing and administration of the following benefits: old-age, disability and survivor pensions, disability benefits (carer's allowance and compensation for work-related disability), transfer of health insurance contributions, and compensation for funeral costs arising from the death of a family member. Since 2012, all beneficiaries (employees, self-employed, farmers and army personnel) have been integrated into the

republic Pension Fund.[14] In 2016, there were 1.73 million pensioners, or 24.4% of the population.

2.1 Pensions

The Law on Pension and Disability Insurance defines the following sources of funding for the Pension Fund: social insurance contributions, transfers from government revenue to cover benefits acquired under certain conditions (mostly disability benefits) and income derived from the fund's financial and capital assets.[15] The state revenues have been a guarantee for the realisation of the Pension Fund's obligations outlined in the law. Since the problem of financing has been present for decades, the Pension Fund's deficit has been constantly covered by government revenues.

Table 6. Division of financing of pension benefits by the main source, 2008-2015 (% of total financing)

2008			2010			2015		
Social contrib.	**Govt. revenue**	**Other receipts**	**Social contribs.**	**Govt. revenue**	**Other receipts**	**Social contribs.**	**Govt. revenue**	**Other receipts**
Old-age benefits								
58.2	36.1	5.7	55.6	41.8	2.6	61.3	37.1	1.6
Survivor benefits								
58.7	35.5	5.8	55.9	41.4	2.7	61.7	36.7	1.7
Invalidity benefits								
38.3	57.9	3.8	38.0	60.2	1.8	38.7	60.3	1.1

Source: Spasova and Ward (2019), Annex ESSPROS tables.

Social contributions have been the main source of funding for old-age benefits and survivor benefits over the whole period, while invalidity benefits (which cover invalidity pensions and carer's allowance) have largely been financed by government revenues (Table 6). The share of social contributions in financing the first two functions varied only slightly over the period. Since government revenue was allocated mostly to the coverage of deficits, the corresponding share was negatively correlated with the share of social contributions.

Further analysis of the receipts and revenues of the Pension Fund is based on national data.

The shares of social contributions and government revenue in total receipts of the Pension Fund had a negative correlation (observed by year-on-year changes) (Annex, Figure A3). The fund receipts from social contributions started to grow from 2012, since the pension insurance contribution rate was raised by 4 pp, and the impact of the economic recovery was felt by the end of the observed period. On the other hand, the fund's deficit, which has been linked with the expenditure side, declined substantially from November 2014. Due to the cut imposed on pensions, spending was reduced; consequently the Pension Fund's deficit improved, and the share of government revenue used to cover the deficit declined accordingly.

[14] The self-employed and farmers were integrated in 2008, and army personnel were integrated in 2012.

[15] The main legislation was adopted in 2003, with several amendments up to 2014. RS Official Gazette 75/2014.

2.2 Healthcare

Table 7. Division of financing of healthcare expenditure and sickness benefits by main source, 2008-2015 (% of total financing)

	2008			2010			2015		
	Social contribs.	Govt. revenue	Other receipts	Social contribs.	Govt. revenue	Other receipts	Social contribs.	Govt. revenue	Other receipts
RS	71.8	3.0	25.2	70.8	0.8	28.4	65.5	9.8	24.7
EU-28	41.9	48.1	10.1	42.2	47.7	10.1	40.6	49.9	9.5

Source: Spasova and Ward (2019), Annex ESSPROS tables.

The main source of healthcare expenditure and sickness benefits in Serbia was social contributions (Table 7). Serbia has a compulsory healthcare insurance scheme, which in 2016 covered 97.5% of the population.[16] All individuals employed on permanent or temporary contracts are insured; dependent family members who live in the same household as the insured person are also covered, if not covered otherwise. There are two public health insurance funds: the army fund and the republic Health Insurance Fund. In 2016, receipts of the army fund made up only 5.3% of the receipts of the HIF; the army fund data are not analysed in this report. Since the coverage of private health insurance has been negligible, the national data presented here refer to the receipts of the HIF.

The Health Insurance Law regulates the rights and obligations of insured persons.[17] By law, the HIF adopts the annual 'Plan of healthcare protection within the scope of obligations of compulsory health insurance'. Specific support is given to the healthcare protection of vulnerable population groups (the registered unemployed, older persons, socially excluded, Roma, etc.). If they are not insured under the regular scheme, social contributions are covered by government revenue. The base for calculation of this contribution has been very low, at just 15% of the national average wage from the previous year. In 2016, 20% of all insured persons were covered by this provision (Article 22 of the Health Insurance Law).

Social contributions have been the dominant source of HIF receipts; in the period under consideration (2008-2016), their share of total receipts averaged 65.4%. Other receipts were the second-largest source of financing: over the period their share of total receipts averaged 25.6%. The main source of other receipts was the transfer of money from the other schemes: re-routed transfers from the Pension Fund and from the National Employment Service (for unemployment benefit claimants). The third source was government revenue: the share of government revenue in total receipts fluctuated greatly, from 0.3% in 2011 to 9.8% in 2016. The transfers from the government revenue were allocated to the following:

1) Coverage of social contributions defined by Article 22 of the Health Insurance Law (vulnerable population groups)
2) Coverage of 35% of sick-leave payments due to pregnancy complications (lasting more than 30 days) (from 2014)
3) Coverage of healthcare for rare diseases (from 2012)
4) Transfer of the 'tobacco dinar' – the excise tax levied on cigarettes: RSD 1 for every packet of cigarettes (from 2006).

[16] HIF statistics at: http://www.rfzo.rs/index.php/nosioci-osiguranja-stat
[17] RS Official Gazette 10/2016.

The transfers listed below were not regulated by the Health Insurance Law:

1) Financial support due to reduced funding caused by a decrease in the healthcare insurance contribution rate (from 2014)
2) Coverage of health contributions for employees of public companies (occasional, upon the Conclusions adopted by the government)
3) Transfers of capital, i.e. acquisition of assets of state companies, as conversion of accrued debts for unpaid social insurance contributions (on government decision).

The HIF receipts, adjusted by the consumer price index, showed a sharp decline over 2008-2016: by 2015 they were 29.3% lower than in 2008 (Annex, Figure A4).[18] Measured in real terms, social contributions in 2015 were 21.7% lower than in 2008. Consequently, in 2015 the share of social contributions in total receipts was 6.3 pp lower than in 2008 (Table 7). A combination of factors had a negative impact on the constant decline in social contributions: the accumulation of debts for unpaid contributions, the cut in the contribution rate of 2 pp in 2014, the low employment rate and the minimal growth of net wages over the whole period.

The share of government revenue fluctuated greatly, from 0.8% in 2010 to 9.8% in 2015. Such fluctuations were caused by inconsistent fulfilment of the statutory obligations by government revenue. Namely, the financing of contributions for vulnerable groups has been consistently lower than the mandatory level. The HIF financial reports show that in 2013, government revenue covered only 3.9% of the required contribution and accounted for 6.7% of the HIF's total receipts. A similar practice has been in place for other receipts from government revenue. A sharp rise of 6.8 pp in the share of government revenue in total receipts came in 2015, when 85% of government revenue was allocated to the coverage of the HIF deficit.

The significant decline in health/sickness receipts was a result of negative economic trends, but also of the ongoing government health policy decisions. The most urgent problems in financing social protection were, to a certain degree, resolved at the expense of healthcare protection.

2.3 Unemployment

The National Employment Service (NES) governs the financing and administration of unemployment benefits. The main sources of NES revenues are the compulsory unemployment insurance contribution and government revenue. The share of these two sources in total receipts varied over the period, and was mainly conditioned by the level of government revenue in NES receipts (Table 8). Neither the unemployment contribution rate nor the eligibility conditions for unemployment benefit have changed over the periods.

Table 8. Division of financing of unemployment benefits by the main source, 2008-2015 (% of total financing)

	2008			2010			2015		
	Social contribs.	Govt. revenue	Other receipts	Social contribs.	Govt. revenue	Other receipts	Social contribs.	Govt. revenue	Other receipts
RS	50.4	49.4	0.2	45.8	53.7	0.5	72.2	27.8	0.1
EU-28	54.4	35.4	10.2	49.3	39.8	11.0	55.4	35.8	8.8

Source: Spasova and Ward (2019), Annex ESSPROS tables.

[18] Pejin Stokic and Nikolic (2016).

3 Strengths and weaknesses of the existing mix of financing options and potential future sources of financing - national debate on the topic (if any)

The economic crisis had a grave impact on the Serbian economy. Negative GDP growth, high public debt and government revenue deficit were all recorded over the period. Under such circumstances, the government introduced a number of restrictive measures: a cut in pensions, the abolition of pension indexation, a decrease in the health insurance rate and writing-off debts for the unpaid social contributions. For these reasons, the trends observed in financing and spending on social protection benefits deviate slightly from the regular patterns during periods of economic stability. On the other hand, the evidenced disturbances revealed the shortcomings and bottlenecks in this area, which caused distortions in functioning of the social protection sector.

The financial sustainability of the social protection sector was seriously threatened at the onset of the economic crisis. The high deficit of the Pension Fund prompted the government to impose a cut in pensions. Under an agreement with the International Monetary Fund, this temporary solution is only valid until pension expenditure falls below 11.5% of national GDP. The fall in revenue has been even more pronounced, but less visible, in the financing of healthcare. Evidence shows that the healthcare sector can forgo much higher restrictions, due to the general public perception that 'healthcare is free' (caused by lack of public awareness of who pays for healthcare).

Economic recovery led to GDP growth and an increase in employment, and in 2018 there was a budget surplus. By the end of 2018, these positive trends had brought an end to pension cuts and pensions were restored to their previous levels, an increase in wages in the public sector and an increase in the number of public-sector employees.

Serbia has a Bismarckian system of social insurance, which has been a major determining factor in the high share of social contributions in the financing of social protection: in 2016, social contributions accounted for 60.2%, while government revenues accounted for 39.3% (and other sources for only 0.5% of total outlays). The analysis shows that, at the time of the economic crisis, the financing of social protection benefits had to be complemented by additional transfers of government revenue, which were allocated to cover the deficits of the two main compulsory contributory schemes, pension and invalidity insurance and sickness/health insurance.

The overall distributive effects of social protection benefits, measured by the Gini coefficient and the S80/S20 income quintile share ratio, were not positive over the period 2013-2017, and there have been slight improvements only in the last year. The available Statistics on Income and Living Conditions (SILC) data show that the Gini coefficient went up from 38.0 in 2013 to 39.8 in 2016, and then fell by 2 pp in 2017.[19] The S80/S20 income quintile share ratio grew steadily from 8.6 in 2013 to 11.0 in 2016, before falling to 9.4 in 2017.[20] Over the whole period, a quarter of the population was exposed to the risk of poverty; in 2017, the corresponding at-risk-of-poverty rate reached 25.7% – a 1.2 pp increase over 2013. The data on poverty reflect the impact of the decline of gross expenditure on social protection benefits, while the income inequality indicators point to the fact that lower-income households were those most affected.

The fiscal burden of labour costs remained almost the same over the period. The social contribution burden was increased by 2 pp from 2008 to 2016, while the wage tax was reduced by 2 pp (2013), and the non-taxed wage threshold was regularly increased for all wage levels. In the second half of 2013, the estimated tax wedge in Serbia was 39.1%, which was 3 pp higher than the average for the OECD countries.[21] The evasion of

[19] Eurostat, EU-SILC Survey, [ilc_di12].

[20] Eurostat, EU-SILC Survey, Code: tessi180.

[21] NALED (2014).

social contributions and taxes has long been practised in Serbia. Two forms of evasion have been present: 'officially approved' evasion (applicable to public companies and farmers) and illegal evasion, which has taken a number of different forms, from informal employment to under-reporting of the true level of wages in formal employment.[22] In both cases, the consequences have been damaging to public finances, while the persistence of this practice over the decades has revealed the relevant institutions' inability to resolve the issue.

The estimation of total administrative costs is extremely complex, though the administrative costs of the compulsory contributory schemes are accessible from the financial reports. On average, these costs were not too high: in 2016, they accounted for 1% of the total expenditure of all three compulsory insurance schemes (pension, health and unemployment).

There are no official data or estimates of the number of people employed in the 'gig economy'. However, informal evidence from social media sources suggests that in 2017 around 100,000 people (3.6% of all employed) were engaged in some form of the 'gig economy'.[23] For some, such activity presented an additional source of income, alongside formal employment; for others, it was their only work engagement. This employment is mainly informal and 'invisible' to the official central register; hence, no taxes or social contributions are collected, even though, under national legislation, this type of work is subject to compulsory social insurance. The premise of the Health Insurance Law, which guarantees health insurance coverage (financed by government revenue) for all registered unemployed persons, greatly encourages those engaged in informal work not to report to the central work register, while they remain registered with the NES as unemployed.

Future demographic trends – ageing and population decline – will have an impact on future social expenditure. The old-age dependency rate is expected to increase in the next 20 years, while the proportion of the population aged 80 and over will almost double (Annex, Table A2). The estimates on future spending contained in the European Commission's *2018 Ageing Report* point to the long-term effects of ageing, as the increase in the dependency ratio pushes up pension expenditure, while healthcare spending may also increase on account of population ageing.[24] An increase in the proportion of the very old population will further burden the social protection sector in Serbia, which still lacks an appropriate long-term care system. The current relatively advantageous financial position of pensioners, compared to other population groups, could be reversed, as the net replacement rate constantly fell over the period 2009-2017, from 76.7% to 62.2%.[25]

A number of factors within the area of employment will, in the long run, affect the financing of social protection: aside from employment rates and quality of labour, productivity rates will have a substantial impact on future economic development. Serbia may face a negative net migration, due to the 'brain drain', which is already in evidence. The drainage of high-skilled workers might contribute to a decrease in employment and productivity, and in turn to reduced financing of the contributory insurance schemes.

National debate on the future sustainability of the social protection system has mainly focused on academic circles. The Serbian Academy of Sciences and Arts, in cooperation with the Faculty of Economics at the University of Belgrade and the Economics Institute, has organised conferences on the future of employment and healthcare in Serbia.[26] The

[22] RS Official Gazette 117/2008 Law on Abolition of Debts for Healthcare Insurance; Government Conclusions on Healthcare insurance coverage for public companies No. 450-8746-2009; 450-5301-2010.

[23] https://www.blic.rs/biznis/u-srbiji-ih-ima-vise-od-100000-bave-se-razlicitim-poslovima-a-zaraduju-do-5000-evra/5xm4yv8, accessed on 16 February 2019.

[24] European Commission (2018).

[25] SIPRU (2018).

[26] Serbian Academy of Sciences and Arts (2017; 2018).

conclusions from both gatherings underlined demographic trends as the most challenging issues for further economic growth and sustainability of the social insurance schemes. A number of non-governmental organisations and research institutions have covered the topics of poverty and social inequality. Even though the important topics have been addressed by national experts and research institutions, there has been no active cooperation with public officials to design future policies. The announced reforms of the social protection sector have been postponed for several years; a new health insurance law and a law on healthcare were adopted in April 2019.

The expected demographic changes, with an increase in the proportion of the elderly and a potential weakening of their financial status, along with an expected increase in healthcare and pension expenditure, present new challenges for the social protection sector. The potential spill-over of negative effects from the 'fourth industrial revolution' will impact the most vulnerable groups. These changes will affect not only the financial sustainability of the social protection sector, but also the adequacy and competency of the current measures and instruments.

The events from the period under consideration show the particular vulnerability of healthcare funding. A potential option to prevent a similar situation recurring in the future is to adopt the Beveridge model for the financing of healthcare. This option has been debated by several experts; however, no comprehensive analysis has been undertaken. The following arguments favour such a change: decreased labour costs; government revenue already covers insurance for 20% of insured persons; the evasion of contributions has been high and is frequently officially tolerated; and this type of financing may reduce the regional healthcare inequities. Under the present situation, the Beveridge model is more just in treating all citizens the same.

The main weaknesses of the country's current social policy are:

- Lack of long-term planning for future needs and adherence to the adopted plans. The frequent changes of government in recent decades have undermined the importance of long-term planning, as every new government makes new development plans. This results in inadequate responsiveness to change and in policies focused on coping with the ongoing problems.
- Delayed reform of the social protection system. The social protection sector now faces new challenges, which require the reform of existing policies. Financial sustainability will not be the only challenge, as the new business environment will require innovative solutions for the social protection of the most vulnerable population groups. Presently, reform of the education sector is advancing slowly, while reforms of the social care and healthcare sectors are still under way.
- Low representation of different social partners from the civil sector in policy making. The important topics have been researched and debated by academia and research institutions; however, they have been mostly funded by international assistance. For this reason, policy making often lacks an evidence base and preliminary impact assessments.

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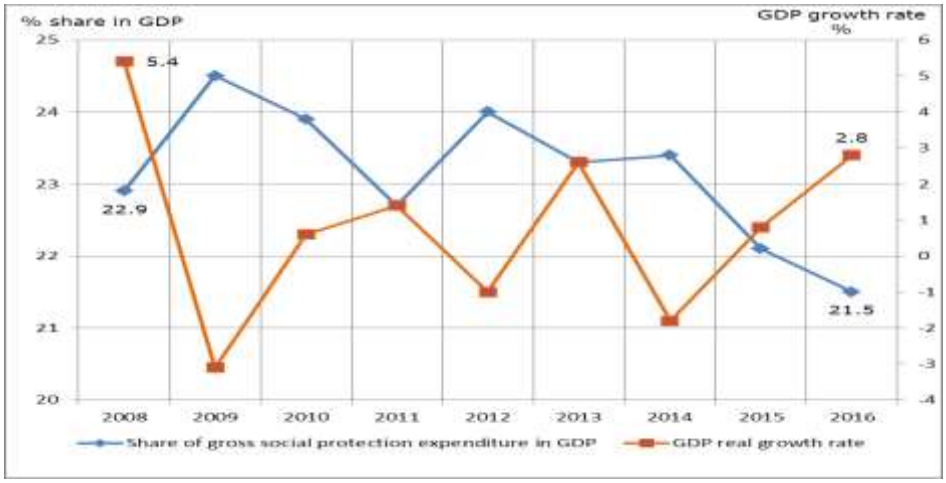
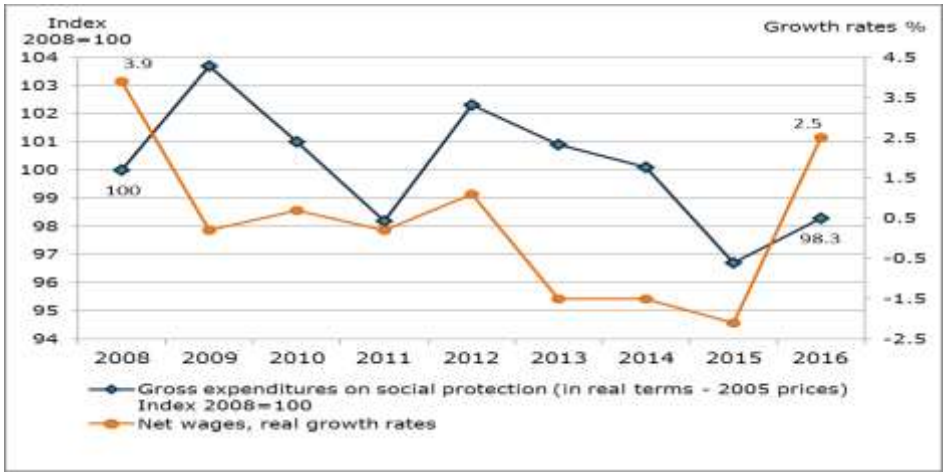
ANNEX

Figure A1. Trends in the share of gross social protection expenditures in GDP and GDP real growth, 2008-2016



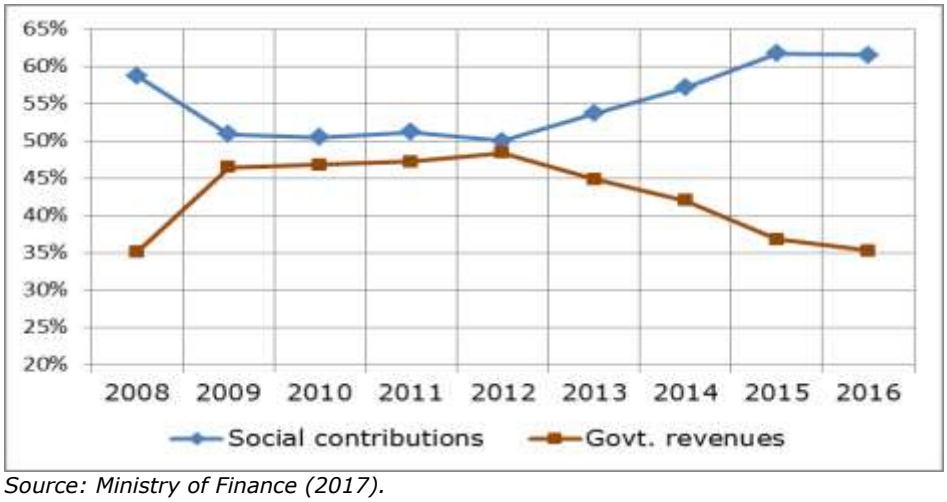
Source: Statistical annex on financing social protection: levels and structure (2005-2016); Ministry of Finance (2018)

Figure A2. Gross expenditure on social protection in real terms and net wages – real growth rates (year on year)



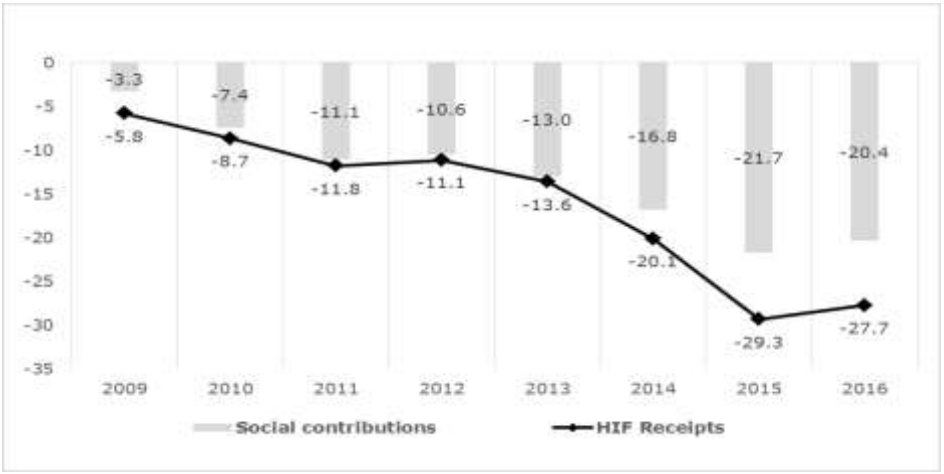
Source: Statistical annex on financing social protection: levels and structure (2005-2016); Ministry of Finance (2018).

Figure A3. Share of social contributions and government revenue in the total receipts of the Pension Fund, 2008-2016



Source: Ministry of Finance (2017).

Figure A4. Share of social contributions and government revenue in the total receipts of the Health Insurance Fund, 2008-2016



Source: Pejin Stokic and Nikolic (2016).

Table A1. Breakdown of gross expenditure by function in 'Other' category, 2016 (% of total expenditure)

	Disability	Survivors	Family	Unemployment	Housing	Social exclusion
EU-28	7.4	5.5	8.7	4.6	2.0	2.2
RS	6.2	9.6	6.2	3.3	0.8	2.8

Source: Spasova and Ward (2019), Annex ESSPROS tables.

Table A2. Projection of Serbia's population, 2015-2040 (expected fertility, mortality and migration variant)

	2015	2020	2030	2040
Life expectancy - male*	71.8	73.6	75.9	78.0
Life expectancy - female*	76.9	78.8	81.1	83.1
% share 20-64 years	62	60	59.1	57.7
% share 65+ years	18.7	21.3	24.4	26.3
% share 80+ years	4.4	5.0	7.4	7.9
Old-age dependency ratio (65+/20)	30.16%	35.50%	41.29%	45.58%

**Life expectancy figures start in 2010, instead of 2015.*

Source: Penev (2013).

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