

Serbia: Pension Policy Challenges in 2020¹

Executive Summary

After a temporary reduction of pensions in 2014, Serbia was able to reduce pension costs to below 11 percent of gross domestic product (GDP) in 2018. The country still faces challenges with regard to the long-term sustainability of pensions due to demographic trends (ageing and shrinking of population) and reduction in coverage. Given the parametric reforms introduced in 2014 on valorization and lack of indexation, future adequacy of pensions is at risk, while voluntary retirement savings are underdeveloped.

The country should address the adequacy of pensions in a fiscally responsible manner by strengthening the link between contributions and benefits and complementing it with other sources of retirement income, like voluntary or semi-mandatory savings schemes for middle-income workers and non-contributory benefits for lower-income individuals.

1. Main Indicators

The Serbian pension system is a Defined-Benefit system based on points with pay-as-you-go (PAYG) funding. The system runs a deficit that requires government subsidies as contributions are not enough to fully fund the benefit expenditures. The system reached historically high levels of expenditures in 2014 but has since reduced total expenses and government subsidies as a result of a parametric reform and temporary reduction of pensions introduced in 2014.

The 2014 reform introduced two sets of measures: (a) permanent measures to reduce early retirement and increase retirement ages and (b) temporary reduction of pensions in payment, which were ultimately lifted in September 2018.

The pension law was amended in July 2014, raising the retirement age for women gradually between 2015 and 2032 until it reaches 65 years, equal to that for men. Furthermore, for the first time, actuarial reductions of 0.34 percent of the per month benefit of early retirement were enacted for those men and women retiring before the age of 65.

The Law on Temporary Reduction of Pension Payment, which came into effect in November 2014, reduced benefits above RSD 25,000 per month by 22 percent of the amount above RSD 25,000 and reduced benefits above RSD 40,000 by a further 3 percent of the amount above RSD 40,000, on a temporary basis. The government also discontinued the use of an automatic indexation rule, in favor of ad hoc adjustments of pensions subject to budget availability, until pension expenditures would fall below 11 percent of GDP.

In September 2018, Serbia abolished the Law on Temporary Reduction of Pension Payments introduced in 2014, increased pensions paid in October 2018 up to the value they had in October 2014, and additionally made all adjustments that should have been provided in the interim. Given

¹ This note was prepared under the World Bank's Advisory Services and Analytics (ASA) activity for Western Balkans pensions in Q1 2020. It does not capture the developments during and after the global Covid-19 pandemic and its potential impact on the pension system in Serbia. Analysis of the effects of Covid-19 on pensions in Serbia, policy responses undertaken by the authorities, and further policy options will be carried through follow-up ASA for Western Balkans and other World Bank programs and activities.

that the abolishment of the temporary reduction of pensions would only benefit higher pension earners, the government introduced an additional adjustment of pension benefits to aid lower pension earners. This adjustment was capped at a total cost of 0.3 percent of GDP.

The temporary reduction of pensions was abolished in September 2018; therefore, its impact is expected to be reflected fully in 2019 figures (not yet available).

Table 1: Pension Parameters in Serbia

Retirement age	65 for males/62 for females (gradually rising by six months a year until reaching 63 years in 2020 and then by two months a year until reaching 65 years in 2032) with 15 years of contribution Any age with 45 years of contribution Early pension: Age 58 for men/57 for women (gradually rising to 60 years by 2023 for both men and women) with at least 40 years (men) or 38 years (women, gradually rising to 40 years by 2023) of contributions. The pension is reduced by 0.34% for each month it is claimed before the normal retirement age, up to 20.4%.
Pension calculation	The pension is calculated based on the number of years of contributions (up to 45 years), the ratio of the individual's gross earnings to the national average annual wage in each year of contributions, and the value of the general point.
Valorization	Value of the general point is determined each year and it is indexed with general prices.
Indexation post-retirement	Law approved in December 2019 to reintroduce Swiss formula indexation (according to prices and wages).
Eligibility for disability pension	Contributed for 1 year if younger than 20; 2 years if between 20 and 24; 3 if 25–29 and at least 5 years if age 30 years or older. No requirement if work injury (defined as inability to perform any work).
Level of disability pension	The pension is calculated based on the number of years of contributions, the ratio of the individual's gross earnings to the national average annual wage in each year of contributions, and the value of the general point.
Eligibility for survivor's pension	The deceased was a pensioner or had at least five years of coverage. Eligible survivors include a widow age 53 years or older or a widower age 58 years or older who is disabled or caring for a child younger than 15 years (26 years if a student; no limit if disabled); a dependent mother age 60 years or older or disabled; a dependent father age 65 years or older or disabled; children younger than age 15 (age 26 if a student; no limit if disabled); and dependent grandchildren, brothers, and sisters. A widow(er) must have been married to the deceased for at least two years or had a child with the deceased or if the deceased was age 65 years or older (men) or age 60 years or older (women) at the time of marriage. The widow(er)'s pension does not cease upon remarriage.
Level of survivor's pension	70% of the old-age pension the deceased received or was entitled to receive is paid for one survivor (140% for a full orphan); 80% for two survivors (160% for full orphans); 90% for three survivors (180% for full orphans); or 100% for four or more survivors (200% for full orphans). The pension is split equally among all eligible survivors. The minimum survivor pension is the old-age pension calculated based on 20 years of coverage.
Contribution rates	26% of gross salary - 12% by employer and 14% by employee. (Reduced to 25.5% by law approved in December 2019)

The system covers three categories of workers: employees (salaried workers), farmers, and the self-employed (independent activities). In 2018, the total number of contributors was 2.17 million,

compared with a total number of 1.715 million beneficiaries, which means that there are 79 beneficiaries for every 100 contributors. This is a comparatively high dependency ratio by international standards, and population ageing is only making it worse. Old-age pensions represent 63 percent of total pension beneficiaries and constitute 60 percent in the employees category. The number of contributors is equivalent to 75 percent of the total employed population, while the number of old-age beneficiaries is around 63 percent of the population (65 years or older), a proportion that has remained relatively stable since 2011.

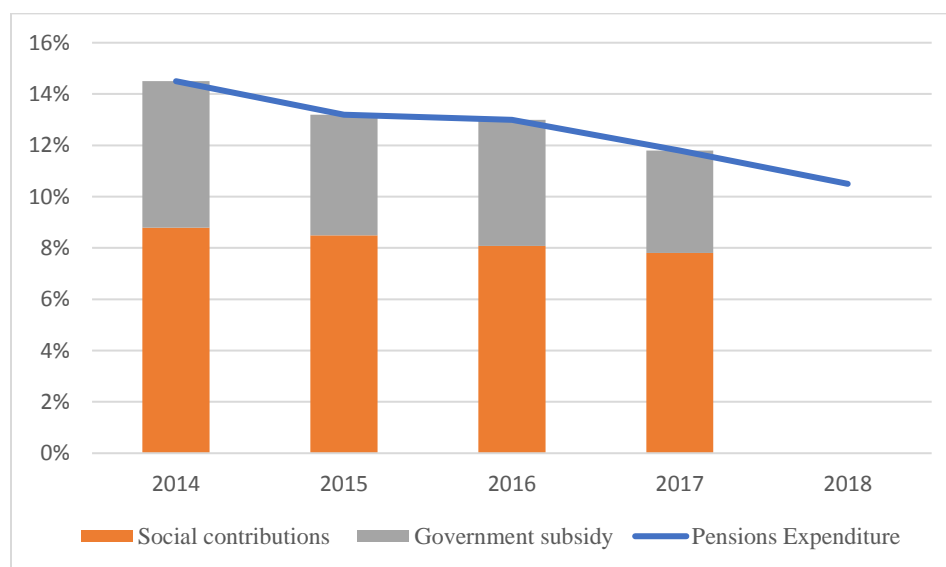
Table 2: Number of Participants in the Pension System by Category

		Employees	Farmers	Self-employed	Total
2018	Number of contributors	1,810,039	117,624	242,507	2,170,170
	Number of pension beneficiaries	1,443,397	178,400	93,355	1,715,152
	Dependency ratio (%)	79.70	151.70	38.50	79.00
	Support ratio	125.40	65.93	259.77	126.53
2017	Number of contributors	1,744,805	125,131	232,553	2,102,489
	Number of pension beneficiaries	1,445,724	185,808	88,920	1,720,452
	Old-age pensions	872,512	150,496	53,882	1,076,890
	Disability pensions	262,277	13,701	17,857	293,835
	Survivors' pensions	310,935	21,594	17,181	349,710

Source: Annual Financial Reports of the Republic Fund for Pension and Disability Insurance.

Total pension expenditures reached 10.5 percent of GDP in 2018, down from 14.5 percent in 2014. As of 2017, total social security contributions for pensions (old age, disability, and survivors) represented 7.8 percent of GDP, while government subsidies had to cover the remaining 4 percent of GDP in pension expenditures. In contrast, social security contributions amounted to 8.8 percent of GDP in 2014, while government subsidies were 5.7 percent, implying that the fiscal situation has improved in the last four years.

Figure 1: Pension Expenditure, Contributions, and Deficit as % of GDP



Source: Annual Financial Reports of the Republic Fund for Pension and Disability Insurance.

The average pension shows a downward trend between 2013 and 2017, recovering in 2018 due to the special adjustments and abolishment of the temporary reduction of pensions that took effect after September that year. Similarly, the relationship between average pension and average wages deteriorated up to 2017 and recovered somewhat in 2018, reaching 39.6 percent on average and 43.5 percent for old-age pensions.

Table 3: Average Pension (Employees Category) in Dinars

	Total	Old Age	Disability	Survivors
2013	25,976	29,452	23,624	19,739
2014	26,055	29,293	23,709	19,657
2015	24,969	27,662	22,970	19,623
2016	25,234	27,827	23,234	19,966
2017	25,632	28,154	23,613	20,369
2018	27,099	29,731	24,865	21,487

Table 4: Benefit Ratio (Average Pension/Average Gross Wages in %)

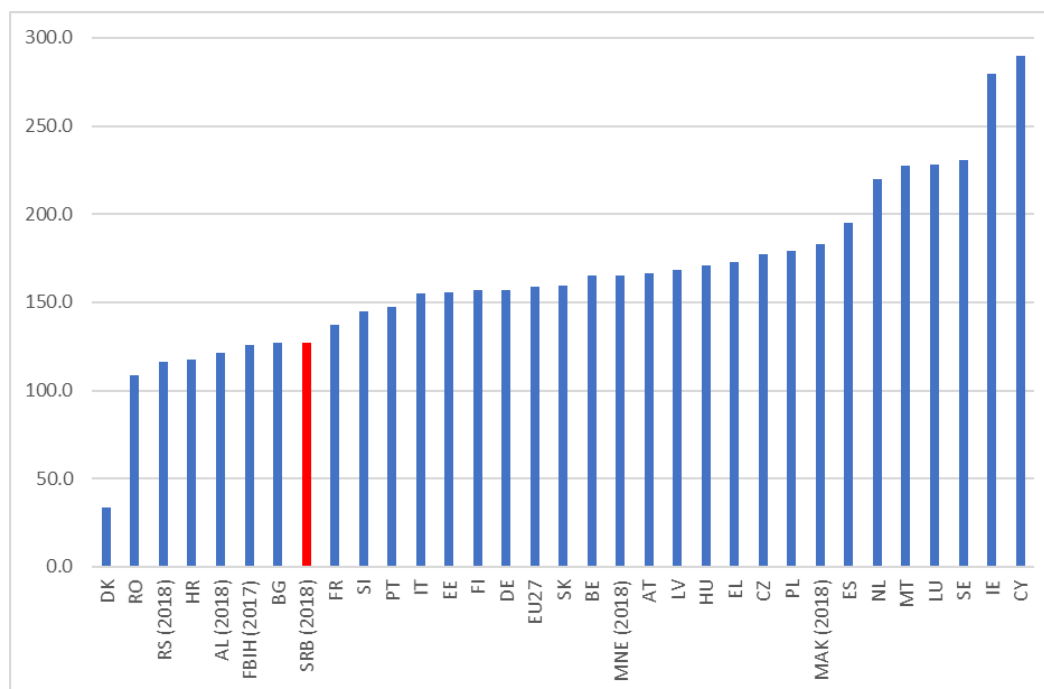
Total	Old Age	Disability	Survivors
42.8	48.5	38.9	32.5
42.4	47.7	38.6	32.0
40.8	45.2	37.6	32.1
39.8	43.8	36.6	31.5
38.9	42.7	35.8	30.9
39.6	43.5	36.4	31.4

Source: Annual Financial Reports of the Republic Fund for Pension and Disability Insurance

2. International Comparison

Serbia tends to fare unfavorably when its main indicators are compared with other pension systems in the Western Balkans region and the European Union (EU). Serbia's support ratio (SR, the ratio between contributors and pensioners) is one of the lowest in the continent, comparable with the ones found in Bosnia and Herzegovina and Bulgaria and higher than Croatia and Romania.

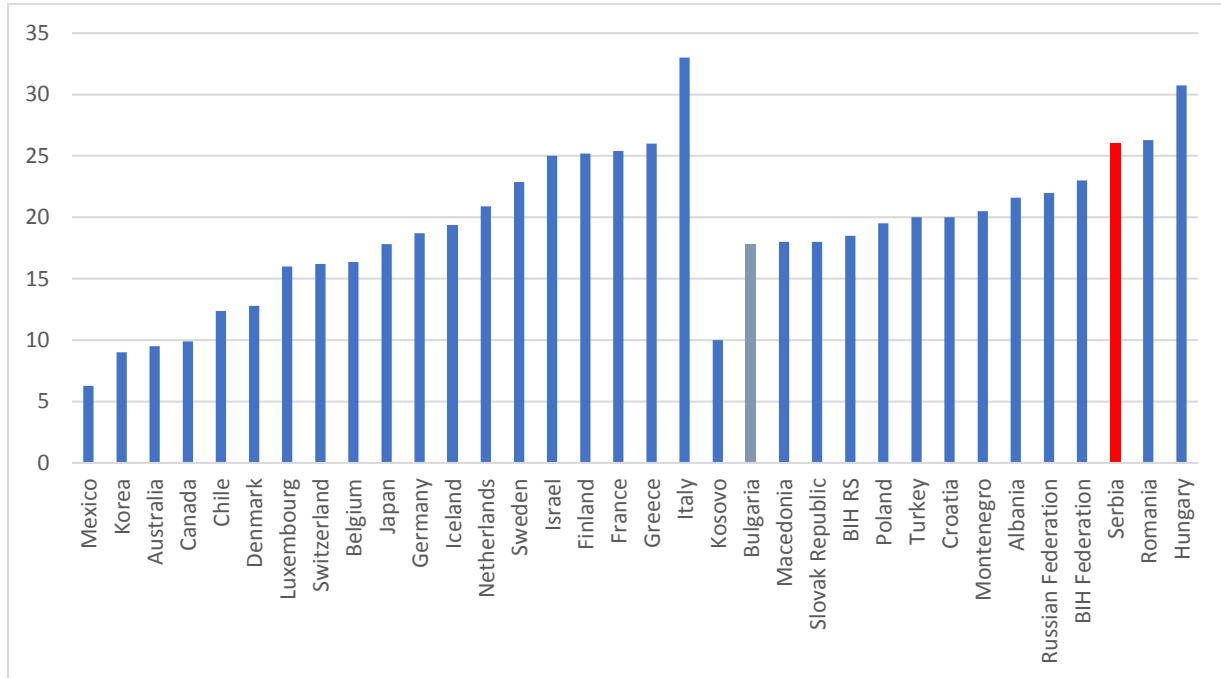
Figure 2: Support Ratio (Ratio of Contributors and Pensioners) across EU and Western Balkans Countries



Source: EU Aging Report 2018, PAYG pension agencies in Western Balkans countries.

At the same time, Serbia's contribution rate is one of the highest compared with Organisation for Economic Co-operation Development (OECD) and EU member countries. The recent reduction in half of a percentage point to 25.5 percent would bring it to the same level as observed in France.

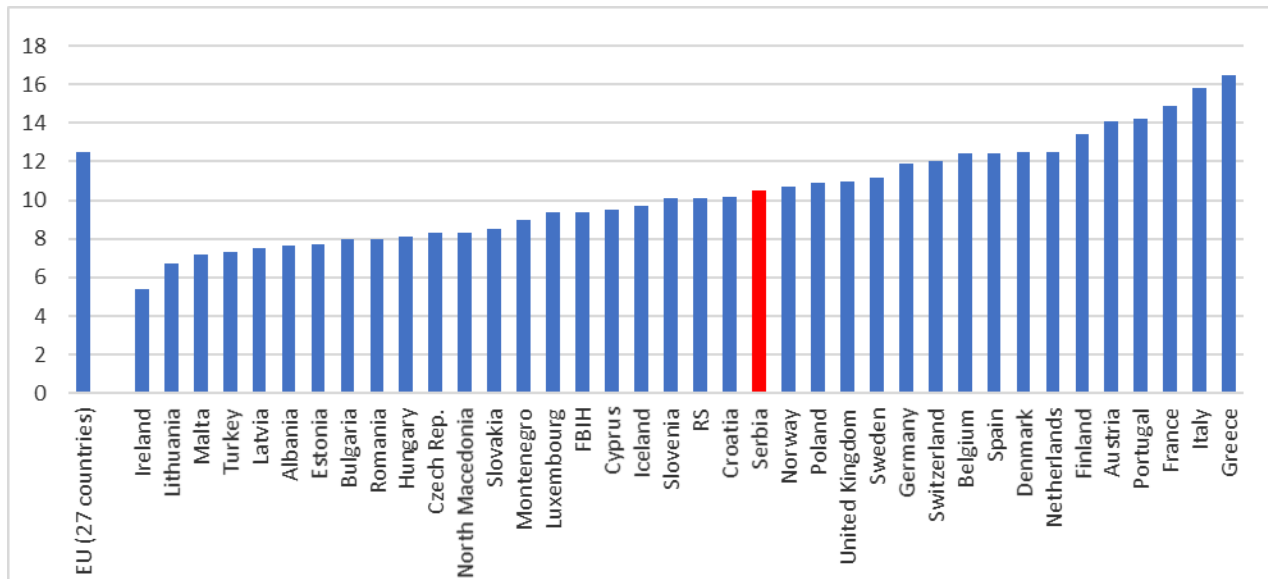
Figure 3: Mandatory Pension Contribution Rates for an Average Worker in OECD and Europe



Source: OECD, Pensions at a Glance, 2018, pension agencies in Western Balkans countries.

Serbia's pension expenditure is the highest among the Western Balkan countries, but it is actually lower than many European countries and falls below the EU average of 12.5 percent of GDP.

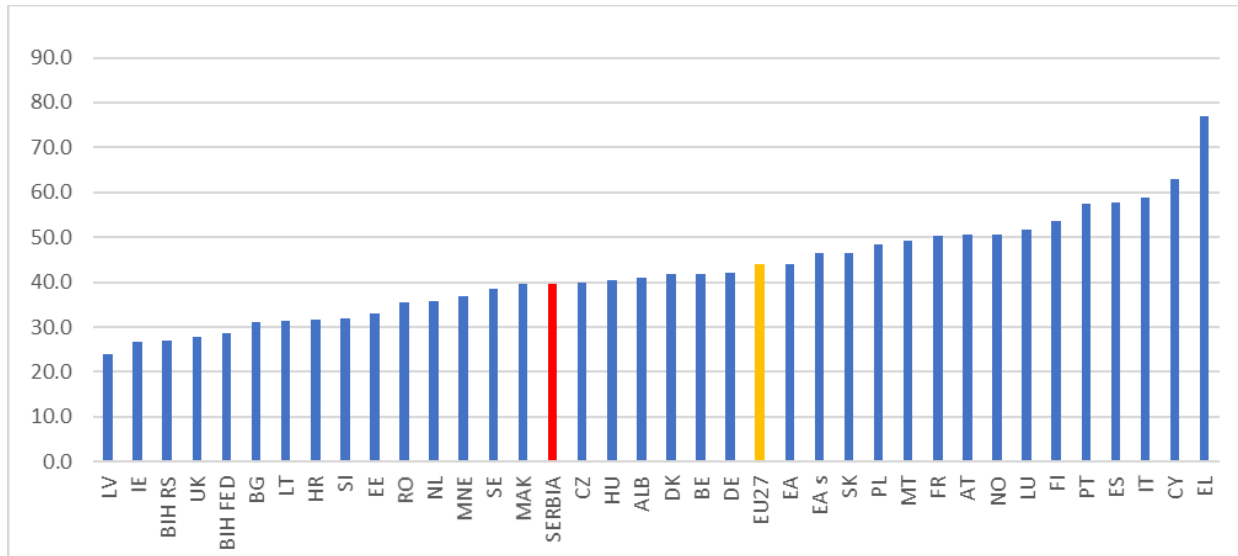
Figure 4: Pension Expenditure as % of GDP



Source: Eurostat, pension agencies in Western Balkans countries.

Benefit adequacy is higher in Serbia than in other Western Balkan countries but still lower than in most European countries and below the EU average, when measured as the ratio between average pensions and average gross wages.

Figure 5: Benefit Ratio (Average Pension/Average Gross Wages)



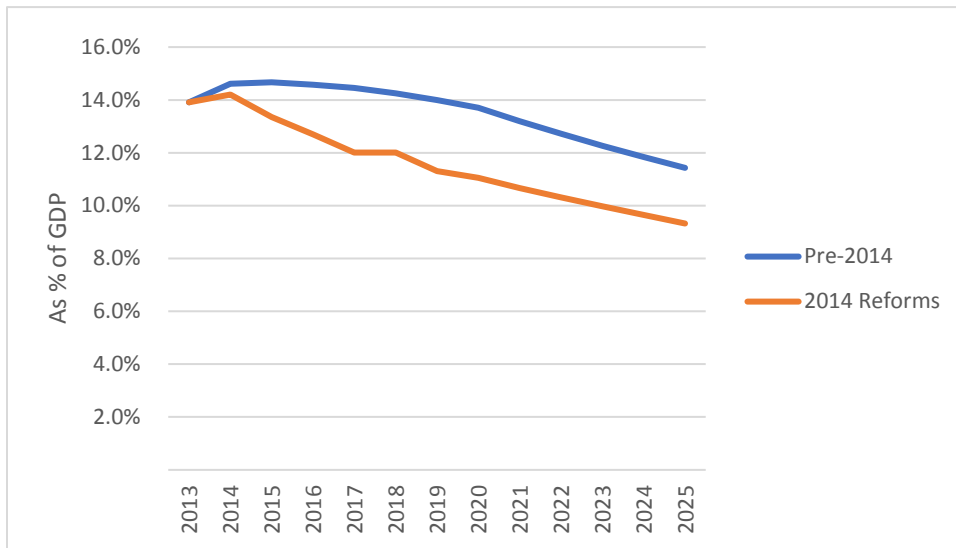
Source: EU Aging Report 2018, PAYG pension agencies in Western Balkans countries.

3. Projections and Future Perspectives

The last in-depth projection and simulation exercise done by the World Bank on pensions in Serbia was at the time of the 2014 pension reform, as part of the Public Expenditure Review (PER).

The 2015 PER estimated that pension expenditures would fall sharply after the 2014 reform and that the threshold of 11 percent pension expenditure as percentage of GDP would be achieved by 2020. In reality, this figure was reached in 2018, due to higher than expected economic growth in the 2014–2018 period. However, the trend estimated for both pension expenditures and adequacy measures in the PER still holds.

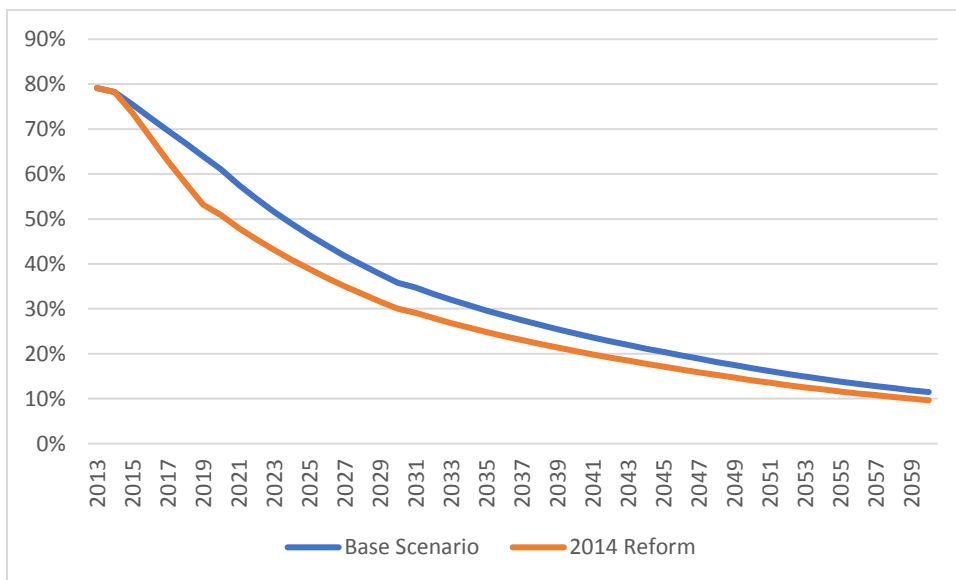
Figure 6: Pension Expenditure (Relative to GDP in %)



Source: World Bank 2015, Public Expenditure Review.

The 2015 PER also estimated a quick erosion in the value of pensions in the future with respect to the level of real wages due to the existing rule used to index the value of the general point to inflation. Given this rule, prior contributions are valorized using inflation and do not keep up with the increase in real wages, resulting in a systematic reduction of pension values with respect to observed wages for each generation of new retirees.

Figure 7: Average Replacement Rate as % of Net Wage



Source: Results from 2015 PER, World Bank.

Regardless of the increase in pensions introduced in 2018, the PER estimated that this erosion in the value of pensions will continue into the future,² as it is the result of permanent measures embedded in the system, which link the indexation of the value of points (which represent contributions made into the system) with the formula used to index pensions in payment. This link creates a clear tension between sustainability and adequacy in the system. The current situation of ad hoc indexation or the previous rule of inflation indexation tilts the balance in favor of sustainability and against adequacy. On the contrary, any rule that would provide more adequate benefits would also affect the financial sustainability of the system.

4. Recommendations

It seems clear that with the ongoing demographic trend faced by Serbia, the current pension system will be unable to provide adequate pensions in a sustainable manner in the future. It seems that the recent policy decisions have tended to improve the sustainability of the system, sacrificing adequacy to a certain level. An explicit policy decision embedded in the Serbian pension system is to use the same rule for the valorization of points and the indexation of benefits. This design results in a declining replacement rate over time. Therefore, a simple parametric reform that would mitigate the adequacy problem would be to delink the valorization of point value from indexation after retirement.

Since it is apparent that the current system will not be enough to provide adequate pensions, complementing it with other sources of income seems like an adequate policy. In the first place, extending the voluntary pension system, based on individual savings, should be explored. Good practices in this matter have used lessons from behavioral finance and introduced a semi-mandatory scheme, where automatic enrollment into the system is set up, giving the individual the choice to opt out of the system. This mechanism has greatly increased coverage of voluntary schemes in a cost-effective way, since it does not rely on tax incentives that may become expensive and regressive. Given that current contribution rates are relatively high, introducing semi-mandatory schemes would need to be addressed in the context of a broader discussion of affordability and balance between different pillars in the system, both in the short run and in the future.

While voluntary and savings-based pensions would be an option for those individuals with savings capacity, some measures need to be introduced for low-income workers. Non-contributory pensions have been introduced in many countries to provide an income floor that prevents poverty in old age. Given the situation in the farmers' portion of the pension system, where beneficiaries surpass the number of contributors and participants have accumulated an amount of debt that is practically impossible to collect, the country might consider introducing a special geographically targeted rural pension as a particular kind of non-contributory benefit. Additionally, a basic means-tested subsistence pension can be considered as an alternative or a complement to this rural pension as a means to provide coverage to those outside the contributory pension system. In any case the cost of any non-contributory benefit must be contained and adequately measured.

² Figures for replacement rates calculated in the PER differ from those presented based on observed data because the PER used average contributory wages, while we can only observe average overall wages in the statistical data.

Long-term projections and actuarial analyses will need to be updated after the recent changes introduced in the pension system (restoration of benefits, reduction of contributions, and re-introduction of indexation). Any proposal for changes in the system should be subject to long-term projections that include the most up-to-date data and characteristics of the system.

The World Bank can support the government in the analysis of these pension reform options through its regional ASA on pensions for the Western Balkans. In addition, a small component to support the farmers' pension scheme has been included in the recently approved Serbia Competitive Agriculture Project (SCAP).