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On the Necessity of Pension Reform in Belarus

Belarus has a pay-as-you-go pension system that becomes unsustainable with an aging population. The country has recently finished the process of increasing the retirement age by 3 years to 63 and 58 for men and women, respectively. In Lvovskiy and Bornukova (2022), we show that this reform is not sufficient for delivering sustainability to the pension system, and further reforms are necessary. We show that the available space for further increasing the retirement age is limited and cannot eliminate deficits. The introduction of a fully-funded component delivers balance and pension gains in the long run but deepens the deficit problem for the first 30 years after its introduction. Reforming the pension system and transitioning to a fully-funded system would be a major policy challenge for Belarus after political change, and possible policy options should be explored now.

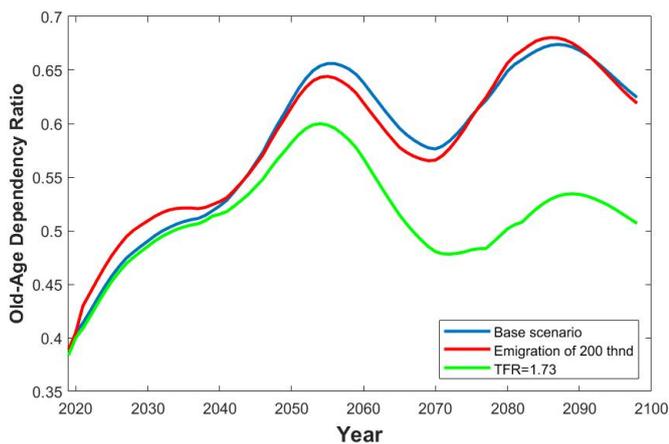


Demographic Challenges

Similar to many European countries, the population of Belarus is aging. The average age is rising both due to increasing life expectancy and low fertility.

Another demographic peculiarity that has contributed to population aging is the series of strong demographic waves post-WWII, which were entrenched by the fertility crisis 1990s following the dissolution of the Soviet Union. As a result of these waves, one of the largest cohorts is entering retirement in Belarus in the coming years, while being replaced by one of the smallest cohorts in the labor market.

Figure 1. Old-Age Dependency Ratio in Belarus



Source: Own projections based on Belstat data on current demographic trends. The base scenario assumes the current total fertility rate of 1.38 children per woman and current age-specific death rates. The emigration of 200 thousand scenario represents the base scenario in addition to 200 thousand working-age adults emigrating from the country in 2022. The TFR= 1.73 scenario assumes current age-specific death rates but an increase in TFR to the recent high of 1.73 children per woman.

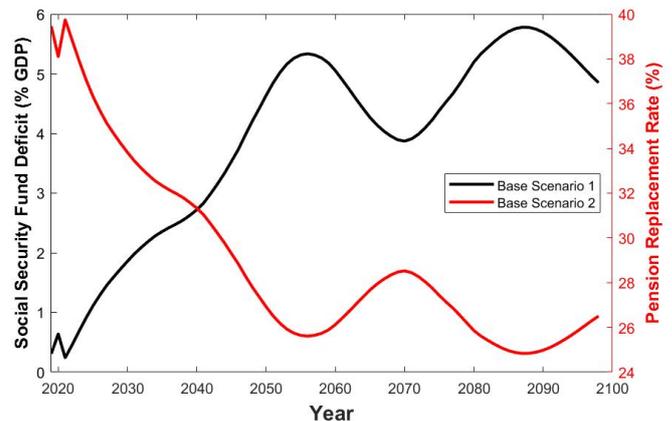
Due to the combination of population aging and the demographic waves, old age-dependency (number of people above the retirement age per number of working-age people) is projected to increase from 0.4 in 2020 to around 0.65 in 2055 (see Figure 1).

Status Quo in the Pension System

Currently, the Belarusian pension system is almost entirely pay-as-you-go, with today's workers paying contributions that are channeled directly into pension benefits. Almost all workers pay 35% to the Social Security Fund, with 27 percentage points dedicated to pension expenditure. There are several exemptions with lower rates applied: agrarians, IT, and individual entrepreneurs. Considering all the exemptions, we have estimated the effective rate of pension contributions to be 18%.

If the pension system does not undergo substantial reform, it would need to go into large deficits (as shown previously in Lisenkova & Bornukova, 2017), or the pensions (as a percentage of the average wage) would have to decrease. Based on current demographic data, our own demographic projections and financial data from the Social Security Fund, we have simulated two scenarios without any reforms.

Figure 2. Two Scenarios under Status Quo.



Source: Own projections based on Belstat data on current demographic trends.

Base Scenario 1 assumes that the level of pensions remains at the current 39% of the average wage. As seen in Figure 2, under this Scenario the deficit rapidly takes off from the current level of around 0.5% of GDP and surpasses 5% of GDP annually after 2050. Theoretically, it is possible to finance



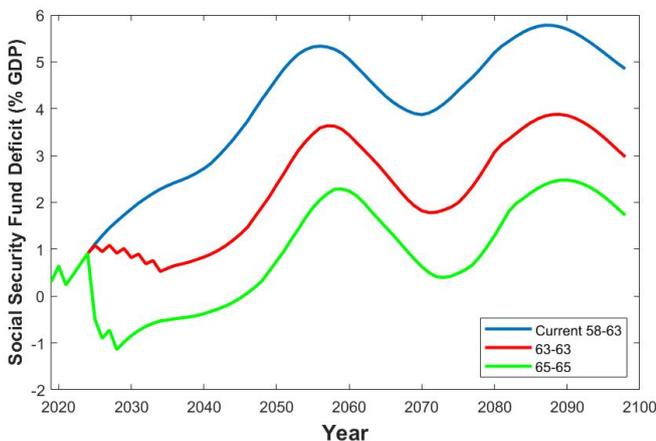
this deficit with budget transfers, but it will require a lot of budget consolidation.

Scenario 2 assumes that the Social Security Fund deficit remains constant at 0.31% of GDP as in 2019, while the size of the pensions adjusts. In this case, by 2050 the replacement rate (the ratio of the average pension to the average wage) falls below 26% from the current level of 39%. While this replacement rate would be similar to the lowest among the OECD countries (31% in Lithuania, OECD 2022), it would put many retirees below the poverty line, given the low earnings in Belarus.

There Is No Easy Way Out

To avoid the negative scenarios that assume either a significant budget consolidation or a deterioration in the well-being of retirees, Belarus would have to reform its pension system. The reforms could either be parametric, like increasing the retirement age; or structural, implying a shift to a fully-funded pension system.

Figure 3. Effects of Retirement Age Increase



Source: Own projections based on Belstat data on current demographic trends.

Increasing the retirement age is a relatively easy way out, and Belarus is already moving in this direction: since 2017, the retirement age was set to gradually increase by 3 years to 58 and 63 years for women and men, respectively. However, Figure 3 clearly shows that this step alone is not enough. Further increasing the retirement age, especially for men, might be problematic given the low life expectancy (69.3 for men and 79.4 for women).

Healthy life expectancy for men is 62.3 years (WHO, 2022), already lower than the retirement age. Hence, while minor retirement age increases are possible in the future, at the moment the potential for such reform would be limited to women only

Figure 3 shows how two different scenarios of the retirement age increase could improve the status quo (63/58). Equalizing the retirement ages for men and women to 63/63 keeps the Social Security Fund deficit below 3% of GDP annually in the long run, while further increasing to 65/65 would keep it under 2%. However, the retirement age increases are not enough to balance the Social Security Fund in the long run and still require additional sources of financing.

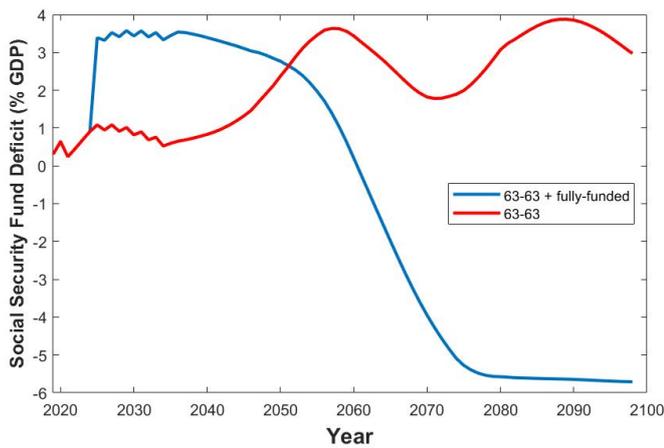
Introducing a Fully-Funded Pillar

Introducing a fully-funded pillar is not a panacea as it will not resolve the deficit problem in the next 20-30 years. However, it could provide background for a non-deficit Social Security fund in the future, as well as an increase the well-being of retirees.

When introducing a fully-funded component while keeping the pay-as-you-go system, it is important to find the optimal distribution of social contributions between pillars. Through simulations, we found that the optimal amount of contributions to the fully-funded pillar (the amount that minimizes aggregate deficits of the Social Security Fund by 2100) is one-third of total contributions. This amount is also delivering a zero-sum of discounted deficits by 2100.



Figure 4. Introducing a Fully-Funded pillar



Source: Own projections based on Belstat data on current demographic trends.

As we can see in Figure 4, introducing a fully-funded pillar in 2025 will initially deepen the deficits (since part of the contributions would now go into saving instead of financing current pensions), but after around 30 years of reform, the pension system would turn into a surplus. The surplus could be used to increase the replacement rate and well-being of retirees and pay back the debt accumulated during the initial stage of the reform.

Conclusion

Population aging makes the pay-as-you-go pension system in Belarus unsustainable. Without reform, the system would need extra financing from the budget (up to 5% of GDP annually). Alternatively, financial sustainability could be achieved at the cost of a lower replacement rate and lower well-being of retirees.

An increase in the retirement age and the introduction of a fully-funded pillar are two of the most frequently discussed options of reform. Our simulations show that none of the options could help Belarus avoid deficits in the medium run. The fully-funded system delivers long-term sustainability. However, the need to finance large deficits in the process of introducing a fully-funded pillar represents a policy challenge as the policy will deliver benefits only in the long run.

Of course, other policy options are also on the table. Belarus (after political change) could secure loans from IFIs to finance the deficit in the medium run. It could use the proceeds from privatization to cover the deficits, at least partially. The effective contributions rate could be increased by minimizing exemptions and loopholes. Finally, Belarus might decide to finance the deficit of the pension system with the budget expenditure, finding fiscal space elsewhere.

References

- Lvovskiy, Lev and Kateryna Bornukova. (2022). "Pension Reform: Options for Belarus", unpublished manuscript.
- Lisenkova, Katerina, and Kateryna Bornukova. (2017). "Effects of population ageing on the pension system in Belarus." *Baltic Journal of Economics* 17, no. 2 : 103-118.
- OECD. (2022), Gross pension replacement rates (indicator). doi: 10.1787/3d1afeb1-en (Accessed on March 7, 2022)
- WHO. (2022), Global Health Observatory: Life Expectancy and Healthy Life Expectancy, <https://apps.who.int/gho/data/node.main.688> (Accessed on March 7, 2022)
- Zviniene, Asta, and S. Biletsky. (2011). "Fiscal projections for pension system of Belarus." Washington, DC: World Bank





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