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Challenges of Georgia's Pension System

Abstract: In 2018, a mandatory funded pension model (second pillar) was introduced in Georgia. At present, the Georgian pension system has three pillars, but the reform does not apply to current pensioners. If society does not trust all three pillars, the chances of reversing the pension reform will rise for two reasons. First, the replacement rate from the first pillar (state redistributive pension) is much lower than in any of the OECD member states. Second, for the majority of participants of the second pillar, pension payments will start in 20-25 years' time. Such a long period creates uncertainty for many about whether long-term economic growth will be achieved, which in turn would make possible an adequate level of retirement income. This paper attempts to identify means of increasing replacement rates for the state redistributive pension and coverage of the voluntary funded third pillar. The research provides recommendations to enhance the Georgian pension system.

Keywords: Georgia, pension, pension pillars, pension replacement rate, reform

Introduction

At independence, Georgia¹ inherited the Soviet pension system. According to the World Bank (1993), pensions equaled 55% of a worker's salary the year prior to retirement or the same share of the average of the worker's final five years' salary, whichever was more favorable for a pensioner. Pensions were financed through social contributions. The pension age was 60 for men and 55 for women (Urotadze, 2018).

From 1992, because of economic crisis, revenues to finance pensions diminished. Therefore, pensions were not paid regularly (The World Bank 1993). It became impossible to have a pension system with the goal of maintaining an adequate standard of living relative to income before retirement. From 1993, pensions did not depend on the wage a person had before retirement. Rather, a flat rate equivalent to USD 0.50 was introduced, without

¹ Georgia declared independence from the Soviet Union on April 9, 1991.

automatic inflation indexing. Therefore, the benefit rate depended on the will of the government. To ease the burden on the budget, the pension age increased in 1996 and became 65 for men and 60 for women. In August 1998, pensions rose to GEL 14 (USD 11). The rate did not change until 2004, and declined in terms of purchasing power due to inflation (Urotadze, $(2018)^2$. The reason for inability to raise pensions was that due to poor governance, "in all years since 1998 onward, major gaps in the state budget appeared between projected tax revenues and actual revenues. By the end of 2003, the aggregate internal debt accumulated as the government consistently failed to pay salaries and pensions to public sector employees and pensioners" (Papava, 2013). After the government change in November 2003, the new government managed to improve tax administration. Substantial increase in tax revenues enabled them to pay off all internal debts (Papava, 2013). Since 2004, the pension benefit rate increased gradually (Urotadze, 2018), but pensioners relying solely on benefits still live on the verge of the international poverty line the World Bank set of USD 1.90 per day. From 2004 to 2007, the national poverty rate was increasing every year; It reached 2004 level only in 2011 (Geostat, 2019a). Income inequality was also steadily increasing in those years (Geostat, 2019a). The government pursued liberal economic policies (significant tax cuts, deregulation) and sought to limit its role in combating poverty. After the government change in 2012 the budget has become more socially oriented (see chart 2), but within the same liberal tax policy that was pursued by the previous government. From 2015 and onwards, the growth rate of social expenditure has declined. It contributed to an increase in the national poverty rate in 2016, which was declining steadily from 2011. The poverty rate decreased only slightly in 2018.

The old age pension has a substantial impact on the poverty level in Georgia (UNICEF 2017; Kakulia, Kapanadze, Kurkhuli, 2017). Following figures are also important in assessing the role of the pension: From 2011 to 2014 pension increased by 87,5%, while the poverty rate decreased by almost 14% for the same period. From 2015 to 2018 pension increase was much more modest – 20%, as well as the decrease in poverty rate – 1.5%.

At present, pensions are financed through general taxes, from the state budget. The goal of the system is to decrease the poverty level. In 2019, the flat pension rate was GEL 200. From the start of 2020, the pension rate increased to GEL 220, and from July 2020 the rate will increase to GEL 250 for persons aged 70 and older (2020 State Budget Law of Georgia 2019). Since 2015, pensioners who live in mountainous regions have received an additional 20% of the flat rate (Law of Georgia On the Development of High Mountainous Regions 2015). The pension replacement rate (the ratio between pension benefits upon retirement and pre-retirement earnings) was 17% in 2019, which is much less than in the Organization for Economic Co-operation and Development (OECD) and European Union (EU) countries. The OECD reported rates of 53% and 58% for the OECD and EU, respectively, in 2017.

 $^{^2}$ For a more detailed overview of the Georgian pension system see Urotadze (2018).

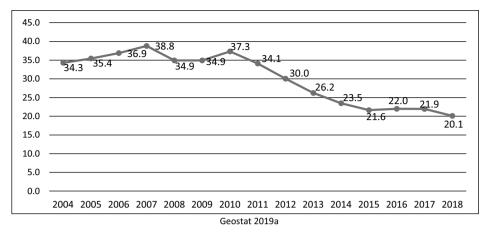


Chart 1. Share of social expenditure in government expenditure (%)

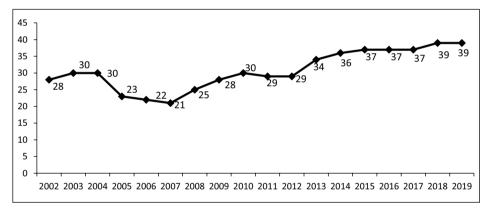
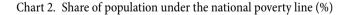


Chart is designed according to data of Ministry of Finance of Georgia (2020a)



A voluntary funded pension system was established in 1998, but has received little attention from the public and business. One of the reasons is a lack of regulatory incentives (e.g. tax benefits) (Urotadze, 2018).

In 2018, pension reform was carried out, introducing a mandatory, defined contribution funded pension model. The argument for the reform was that due to the aging population structure, it will become much harder to maintain an adequate level of pension benefits through the redistributive, 'pay as you go' system. It is expected that the reformed pension system will increase the replacement rate and save a significant amount of state budget resources in the future, as the pension rate will not depend solely on the state budget. The pension age in the mandatory funded pension system is the same as for the state pension: 60 for women and 65 for men. Only disabled persons have a right to withdraw savings before retirement. There are strong financial incentives to encourage participation in the system: contributions, investment return, and pension payments are tax-exempt. Income tax is paid after making a pension contribution. Employee contributions are deducted from the tax base. Employer and employee both pay in contributions of 2% each. The state pays a matching contribution, which amounts to 2% for those employees whose yearly income is below GEL 24,000, and 1% for those, whose yearly income is from GEL 24,000 to 60,000. For those, with incomes above GEL 60,000 no matching contributions are paid (Law of Georgia On Funded Pension, 2018).

As a result of the reform, the Georgian pension system has three pillars (which is quite common, as efficient pension systems throughout the world are multi-pillar). The first pillar is the mandatory state redistributive pension system, where pensions are paid to current pensioners from general taxes. The second pillar is the mandatory funded pension. The third pillar is the voluntary funded pension.

Georgia's population is aging. The number of elderly people and their share in the total population is projected to increase in the future (Figure 1). There will be a sharp increase in the old-age dependency ratio (number of persons aged 65 and older per 100 persons of working age (15 to 65)) from 21.5 in 2015 to 41 in 2060 and 50 in 2090 (United Nations, 2019).

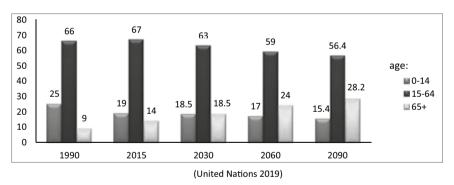


Figure 1. Age structure of Georgia's population

The largest scale of economic decline among countries of the former USSR was observed in Georgia: "in 1994 the real volume of the gross domestic product (GDP) had fallen by 72% from the level in 1990" (Beridze & Papava, 2003). The economy started to recover in 1995. It was the first year after independence with positive economic growth. Since then, negative GDP growth happened only in 2009, but GDP per capita in Georgia is still one of the lowest in Europe. Old age pension expenditures constitute 4.2% of GDP in Georgia. In OECD countries, this number reaches 7.5% on average (OECD, 2019a). This difference stems from Georgia pursuing liberal tax policies over the last dozen years. Social tax in Georgia stood at 20% when it was abolished in 2008. Income tax increased from 12 to 20% to fill the gap. However, the overall tax burden decreased significantly. Today, the tax burden is much lower in Georgia than in OECD countries (Urotadze, 2018)³. Budget resources in Georgia are much more limited than in developed countries. Therefore, it is necessary to work out an efficient design of a multi-pillar pension system to achieve a considerable increase in pension benefits given limited financial resources. As a new mandatory funded pension system was introduced very recently, a little more time is needed to assess the level of its success. Hence, this paper examines potential reforms of the first and third pillars of the Georgian pension system, with the aim of increasing the replacement rate of the state redistributive pension and the coverage rate of the voluntary funded third pillar.

1. Methodological Approach

During the research, academic literature, documents, and secondary data were analyzed. Documents and secondary data were collected from the following sources: the National Statistics Office of Georgia (Geostat), state agencies, and international organizations.

Pension policy depends largely on demographics, the fiscal situation, and economic conditions. Therefore, statistical data from Geostat, the Ministry of Finance of Georgia, the United Nation's report 'World Population Prospects 2019', and OECD data were analyzed. Among others, the following indicators were analyzed: poverty rate, average wages in Georgia by region, sector of employment, and gender; the inflation rate; age structure of the population; employment; number of pensioners; the central government budget; and the old age pension and budget expenditure to GDP ratios.

The United Nations Children's Fund (UNICEF) publishes a biennial report called 'Georgia Welfare Monitoring Survey 2017'. The first report in the series was published in 2009. Among other indicators, it examines poverty rates among different age groups and the role of social benefits (including old-age pensions) in reducing poverty in Georgia. This information is useful for deciding on an increase in the pension age, which could cause a significant increase in the poverty rate.

To design an efficient pension system, it is essential to study and compare the experience of other countries to the situation in Georgia. To fulfill this task, the following materials were used: a) Information from websites of several countries' state agencies on the pension systems of these countries; b) the OECD's biennial report 'Pensions at a Glance', which provides

³ Georgia's budget expenditures amount to 21.3% of GDP (Ministry of Finance of Georgia, 2020b). In all OECD member countries, this figure is significantly higher, e.g. in France and Finland it is 57% according to OECD data (2019b).

comparisons of pension policies in the OECD and G20 countries as well as information on recent reforms. It is an important source for keeping track of recent developments in pension systems of different countries. The report is helpful in identifying best practices, which in turn can be used during the pension system reform process. Based on the results of the analysis, the main findings and recommendations were formulated.

2. Reforming the First Pillar

Pensions in Georgia are not automatically indexed and rates and growth depend on the will of the government. In the transitional provisions of the law on Funded Pension (2018) it is stated that: "Within 9 months of the entry into force of this Law, the Ministry of Finance of Georgia shall submit to the Government of Georgia a package of legislative amendments related to the indexation of state pensions, to ensure the maintenance of the wage replacement rate." Therefore, the government took on the responsibility of maintaining the pension replacement rate for the first pillar (though the exact date of fulfilling the obligation is not set). However, the replacement rate is very low, standing at 17%, a decrease from 2016 (19.1%). A large part of the population aged 40 and older are not participating in the funded pension system, so they will only have pensions from the state budget. Hence, it is important to increase the replacement rate from the first pillar pensions to decrease the risk of poverty in old age. It is also important to introduce indexation as soon as possible so that the pension does not lose purchasing power.

The state pension amounts to GEL 220 per month, and from July 2020 will amount to GEL 250 for persons aged 70 and older. This is USD 2.55 and 2.9 per day, respectively. It is not significantly higher than the international poverty line the World Bank sets of USD 1.9 per day. Without automatic indexation, there is a risk that the government in a given year does not prioritize raising pensions. This could cause an increase in poverty among the elderly population. During the last ten years, state pensions were not raised in 2010, 2017, and 2018. In the same years, inflation (according to Geostat (2019b)) was 7%, 6%, and 2.6% respectively. This decreased the pension replacement rate in these years, and contributed to an increase in the extreme poverty rate (calculated biennially by UNICEF (2017)) of pensioners in 2011 to 8.1% (compared to 7.3% in 2009) and in 2017 to 3.7% (compared to 1.7% in 2015). With the indexation rule, the government will be obliged by law to raise pensions in line with wage growth. If the pension is indexed to inflation, then the replacement rate will continue to decline as the price growth rate is slower than the wage growth rate in Georgia according to Geostat data (2019b, 2019c).

Participants in the mandatory funded pension system will get both state and private pensions. The replacement rate from receiving both types of pension provision (assuming an effective investment policy and stable economic growth) will be higher than among older generations who are not participating in private pension provisions. If this is the case, it would be possible to change the indexation rule through increasing pensions according to the increase in the consumer price index rather than wages for pensioners aged 60 to 65. The money saved could then be directed toward older pensioners. It will be less painful for politicians to implement this than increase the pension age. Old age pensions have a significant effect on poverty reduction not only among pensioners, but among the entire population. According to the abovementioned UNICEF report (2017), 3.7% of pensioners and 5% of the total population live in extreme poverty (under \$1.25 per day). Without pensions, these numbers would rise to 34% and 16.5% respectively. The study implemented in 2017 by Georgian Foundation for Strategic and International Studies (Rondeli Foundation) with the support of Friedrich-Ebert-Stiftung (FES) also indicated that the poverty level would have been much higher without pensions and its impact on poverty level has increased substantially in 2014-2016 compared to previous years (Kakulia, Kapanadze, Kurkhuli, 2017). According to the same study, pensions have a strong impact on the reduction of income inequality: the Gini index without old age pensions for 2016 instead of 0.3996 would be 0.4920 (Kakulia, Kapanadze, Kurkhuli, 2017), which would have placed Georgia among 20 countries with largest income inequality pursuant to the World Bank data. Hence, besides political infeasibility, the raising of the pension age will decrease the number of pensioners and increase the poverty rate and income inequality. Therefore, it is important to reform the first pillar and maintain its sustainability without raising the pension age at least in the short- and medium-term.

Between September 2012 and April 2013, the state pension in Georgia differed according to age. Those who were older than 67 received about 14% higher pensions than younger pensioners. In April 2013 pensions again took a flat rate as they increased for pensioners younger than 67. This kind of differentiation was reintroduced in 2020, but it is temporary and can be changed in any year. To save budget resources, it might be beneficial to impose this principle permanently (as another alternative to increasing the pension age). Elderly people aged 70 and older could receive 15-20% higher pensions, but this should not be a one-off increase. The difference should be permanent, and subject to indexation according to average wage growth. This increase will affect 53% of the pension age population (Geostat, 2019d), will not affect budget expenditures negatively, and the government will not have to seek an additional source of income (increase debt, privatization, etc.), as the rate of increase in tax revenues far exceeds this amount. It is important that the amount of pension shall differ by age, because the ability to work decreases as health conditions deteriorate for older pensioners, thus increasing the risk of falling into poverty.

Early retirement and the postponement of retirement are quite common in pension systems throughout the world. For example, in Estonia, "a person is allowed to retire early, i.e. three years before the retirement age... In such case, the amount of pension is decreased by 0.4% for each month retired early. The early old-age pension is established for life and it will not be recalculated later into old-age pension... in case of the deferred pension, the pension is increased by 0.9% for each month by which the person defers applying for his or her pension" (AS Pensionikeskus, n.d.). There is no maximum retirement age in Estonia

(OECD, 2017). In Switzerland, the maximum retirement age is 70 for men and 69 for women. The normal retirement age is five years lower for both men and women. The first year of deferral increases the pension by 5.2%, and the fifth year by 7.5%. The cumulative deferral amounts to 31.5% for a five-year period (OECD, 2017).

In Georgia, due to limited budget resources and an aging population, the introduction of early retirement is not desirable. The state pension is already near the international poverty line, and reducing pensions for each month/year of early retirement will have a negative effect on elderly peoples' social conditions. While they would improve in the short-term, they would worsen afterwards as they will receive a reduced pension for the rest of their lives. This would also reduce the predictability of budget expenditures, and potentially create difficulties in making pension payments for the state. It will be difficult to tell how many people will choose to retire early, and as a consequence, the rate of increase of the number of pensioners during subsequent years would be difficult to predict.

Late retirement options enable the state to pay higher pensions to those choosing deferment, as life expectancy after retirement is shorter, and hence payments continue for a shorter period of time. In Georgia, the introduction of this option would increase the pension replacement rate. Through paying higher pensions to pensioners who retire later, the state could reach a higher replacement rate without increasing overall pension liabilities. A limit on the late retirement age should be set to have a predictable number of pensioners per year and annual pension expenditures. Late retirement bonuses exist in most of the OECD countries, and the bonus does not differ by gender (OECD 2017) despite differences in life expectancy. This is a fair approach which should be applied in Georgia. If the bonus depended on gender, then women's pensions would rise at a slower rate (as their life expectancy is longer). This would create a gender gap in pensions. It would be fair to introduce an equal number of deferred years for men and women. As the normal retirement age is different in Georgia for men and women, the maximum retirement age should also be different. Establishment of bonuses for late retirement will encourage elderly people to work longer, thus decreasing the risk of falling into poverty.

As a result of the introduction of a mandatory funded pension system, people who are enrolled in the system will get different pension benefits depending on investment returns, the number of working years, and the salary they had before retirement. However, for a large share of future pensioners, this will happen only in 20 years' time or later, when those who are now younger than 40 will start to retire. In the coming two decades, the vast majority of retirees will only receive pensions from the first pillar. The pension will be the same amount no matter an individual's number of working years and salary before retirement. This could decrease trust in the system. People who worked and paid taxes for many years might consider the new system an unfair provision and want to have the same advantages as those enrolled in the mandatory pension system in terms of higher pensions based on contributions/taxes paid and length of employment. However, for current pensioners and those who are close to the retirement age, this can only happen by increasing pensions from the first pillar. This is due to the fact that current pensioners and those approaching retirement age will not have enough time to accumulate the financial resources for an adequate pension from the second pillar. At the same time, budget resources are very limited. Hence, to finance an increase in the pension, it is essential to find additional sources to fund this increase. From 2007 to 2012, pension benefits depended on length of employment. However, the amount added to the basic pension was symbolic, making little real difference in terms of quality of life (Urotadze, 2018)⁴.

First pillar pensions are usually financed through social contributions employers (and often employees) pay. But, in Georgia, under the previous government's liberal economic policies, social tax was abolished in 2008. Ten years later, social contributions have been reinstated but only to finance the mandatory second pillar. For current pensioners and those who are close to retirement age, pensions are still paid from the general taxes allocated in the budget. For the pension system to be equally fair to current and future pensioners, social contributions to finance a redistributive 'pay as you go' pension should be introduced. As opposed to in the past, differences should not be symbolic.

In the following paragraphs, specific recommendations are given for implementing a contribution-based redistributive 'pay as you go' pension model, which could supplement the current social pensions:

a) The amount of the supplement should depend on the length of employment rather than salary/contributions paid before retirement. In Georgia, income inequality (measured by the Gini coefficient, the most frequently used measurement of inequality) is the highest in Europe (The World Bank, 2019). If the pension benefit depended on income before retirement, inequality would increase. In Georgia, there is a sharp difference in wages between regions, sector of employment, and gender (Geostat, 2019c). The average monthly wage in the poorest region is 40% of what it is in Tbilisi. In agriculture and education, wages are approximately a third of wages in the finance and insurance sector. Women receive two-thirds of men's wages (calculations are based on statistical data from Geostat).

The Georgian mandatory funded pension system is based on a defined contribution principle where the benefit depends on the contributions paid in and the investment return. Thus, the pension from the second pillar strongly depends on income before retirement. If the same principle is used in both pillars, it will increase income inequality among pensioners.

b) The pension age should be equal for men and women for the supplementary state pension based on length of employment and should stand at 65 years. Taking into consideration the growing number of pensioners that results from the population aging, this will save significant financial resources (women aged 60-65 constitute almost 20% of all pensioners)

⁴ The minimum supplement was GEL 2 for up to five working years, and the maximum supplement was GEL 10 for more than 25 working years. Further increases in the pension abolished the differences again (Urotadze, 2018).

to pay higher pensions to older retirees. The right to a flat-rate social pension for women from the age of 60 should be left unchanged. In about 20 years, the pension age for the length of an employment-based pension should be increased according to life expectancy. When participants of the second pillar (whose enrollment was mandatory) will start to retire, they will have higher pension replacement rates (assuming stable long-term economic growth and efficient management of the system), because they will get pensions from both pillars instead of only from the state pension system. Therefore, an increase of the pension age would likely face weaker resistance from society compared to the introduction of this principle before the mentioned date.

c) To acquire the right to a full supplementary pension, a maximum number of working years should be set. For example, in Romania, the full contribution period for women is 30 years and 9 months and will increase gradually to 35 years by January 2030. The full contribution period for men is 35 years (European Commission's DG for Employment, Social Affairs & Inclusion, 2019).

Due to high rates of unemployment and informal employment (Geostat, 2019e), the maximum number of working years should be lower than in Romania. Otherwise, it will be difficult for many pensioners to acquire the right to a full supplementary pension. Therefore, 25 years is more appropriate, as it was from 2007 to 2012. If the number of years is fewer, the supplementary pension would decrease accordingly.

The employment rate among women is lower compared to men at 49% and 63.4%, respectively (Geostat, 2019e). Hence, the maximum number of working years should be different (e.g. 5 years' difference: 20 years for women; 25 years for men) to reduce the gender difference in pension benefits.

d) To maintain the fiscal sustainability of the supplementary pensions, the benefit growth rate should depend on social contributions collected, rather than consumer price index or average wage growth. This would make it a defined contribution scheme, which would be free from the pressures of a population aging.

e) A decision should be taken about the level of contribution and who should pay. Tax increases can cause discontent among the population, so the rate of increase should not be too high, but significant enough to make a difference. The burden of contribution increase should not be born only by employers or employees. Both parties in the employment relationship should share social responsibility. The level of discontent might be mitigated by not placing too much of a tax burden on either side. The introduction of a 1% social contribution would lead to a 1% increase in revenue from wages, which in 2018 would have been roughly equivalent to GEL 160 million⁵. To avoid placing an excessive financial burden on the population, it would be desirable to divert part of the income tax (at least 1%, approximately GEL 160 million) to the supplementary pension scheme. This will not reduce

⁵ In 2018, income tax revenue was GEL 3,250 million (Geostat, 2019f). Hence the wages fund should have been approximately GEL 16 billion (as the income tax is one-fifth of the wages fund).

income tax revenues necessary to finance other programs/spheres⁶. If the social contribution rate on the employer and employee is at least 1.25% each, the total contribution rate would be 3.5%. In 2018, this would have been roughly GEL 560 million. It would enable an increase in the maximum pension benefits by nearly GEL 63 per month⁷, a 31.5% increase.

3. Reforming the Third Pillar

In 1998, the voluntary funded pension system (VFPS) was established. However, it is poorly developed and regulated (slightly over 1% of the workforce is insured). There are no tax benefits in the system. There are no legal limitations on early withdrawal of pension assets. Thus, there are no long-term funds, which hinders investments in long term instruments. For all practical purposes, asset management is not conducted. Pension assets are almost entirely invested in bank deposits and the investment return rate coincides with the interest rate on short-term bank deposits (Urotadze, 2018).

To raise interest for asset managers in VFPS, it is necessary to have long-term funds. Hence, there is a need to incentivize long-term savings and discourage early withdrawal of pension assets. At the same time, the limitations should be less strict compared to the mandatory funded pension system (MFPS). Therefore, it is desirable to introduce financial incentives - tax incentives and non-tax incentives, such as matching contributions and fixed subsidies.⁸ The financial incentives should be the same as in MFPS (see page 2). However, the contribution rates in VFPS are not set. Therefore, a maximum threshold might be put in place for the right to apply these incentives. This is important to ensure that the amount of tax revenue is stable. For example, the financial incentive may not be given for contributions higher than 2%.

A retirement age should be set which is lower than in the state pension system, for example, in Estonia, the normal retirement age is 63 (it is set to gradually increase to 65 by 2026) in the first pillar 'pay as you go' system and in the second pillar MFPS. In the third pillar, it is 55 (tax incentives apply to the payments only after the person has become 55 years old) (AS Pensionikeskus, n.d.). In the future, it might be beneficial to increase according to life expectancy. The United Nations (2019) suggest that life expectancy in Georgia is expected to rise considerably in the coming decades. Consequently, pension savings will have to be paid for a longer period (if the pension age in the third pillar remains unchanged), which will decrease monthly pensions.

⁶ For the period from 2014 to 2018, income tax revenues increased by GEL 328 million on average (Geostat, 2019f).

⁷ This number comes from dividing GEL 560 million by the number of pensioners (745,000) taken from Geostat (2019g).

⁸ Designs of financial incentives are given in an OECD report (OECD, 2018).

In setting limits for early withdrawal, it would not be advantageous to follow Estonia's example. In Estonia, participants can receive payments from the VFPS whenever they wish, but if they decide to withdraw savings before normal retirement age, they do not receive tax benefits (AS Pensionikeskus, n.d.). In Estonia, even without the third pillar, there is a much higher pension replacement rate than in Georgia. Hence, it is more important for Georgia to try to keep persons in the third pillar up to the retirement age, but to also impose a limited number of exceptions for withdrawing savings early. New Zealand's private funded pension saving scheme KiwiSaver might serve as a better example. You can withdraw your savings to purchase your first home, provided that you are a KiwiSaver member for three or more years and you leave a minimum balance of \$1,000 in your account. Other exceptions include, significant financial hardship and serious illness (Inland Revenue Department of New Zealand, n.d.).

To attract more participants to the third pillar, they should be given the right to freely determine the contribution rate, change the size of the contribution at any time, and suspend contributions temporarily. The same regulations are in Estonia's third pillar (a participant in the second pillar mandatory funded pension does not have the right to receive payments before retirement). This will likely be an advantage compared to MFPS, where the amount is fixed at 2%. An employee who is ready to contribute less should be free to do so in the third pillar. This may increase willingness to participate in VFPS for those who refused to participate in MFPS.

Unlike Estonia's private funded pension system, where only defined contribution plans are allowed (OECD, 2011), in Georgia's third pillar it is permissible to establish both defined contribution (DC) and defined benefit (DB) pension schemes⁹. As there is a very low participation rate in VFPS in Georgia, it is probably preferable to maintain the variety of choice in pension schemes to increase the interest. In both Georgia and Estonia, there are no minimum investment return guarantees for the DC schemes. Thus, the investment risk is born by an employee. In Estonia, it has not caused mistrust in the system. In Georgia, this is an issue, as there is a negative experience in relation to savings. In the early 90s, the devaluation of savings took place due to economic crisis, and the state still does not have enough financial resources to compensate the losses. This caused mistrust in long-term savings among a significant part of the population. This could hamper a substantial increase in voluntary pension savings. It might be beneficial to impose minimal guarantees to raise trust in the system and prevent the considerable devaluation of savings in case of unsuccessful investment. Minimum investment return guarantees vary. In Germany, voluntary pension plans must guarantee a nominal rate of return of zero percent on the accumulated savings at retirement, while in Belgium the guaranteed interest rate is set at 1.75% annually (OECD, 2017). Imposing this kind of guarantee can be very costly for the participants, as

⁹ In a DB scheme, the pension provider guarantees that the pension benefit based on a prescribed formula will be paid no matter what the investment return will be.

it raises administrative costs and decreases the motivation of asset managers to invest in risky assets, thus lowering the chances of high investment returns¹⁰.

To avoid these adverse effects from determining guarantees, the state could consider establishing conditional investment return guarantees. These would oblige private pension providers to offer, among others, a pension product with a minimum investment guarantee. Therefore, the participant would choose between a riskier investment portfolio with no investment guarantee and a guaranteed pension product with potentially lower but a relatively safer investment policy.

A large part of the population does not have enough financial literacy to make investment decisions. To raise trust and confidence in the system, it might be necessary to assign an undecided worker (a person who is reluctant to make his/her own decision on the type of investment portfolio) to a DC scheme with a minimum investment guarantee by default. As participants approach retirement, the life cycle approach in determining default options is used in Georgia's MFPS¹¹, but without a minimum investment guarantee.

Conclusion

State pension benefits are barely enough to avoid extreme poverty among the elderly. The country's aging population will put an additional strain on already limited budget resources. A voluntary funded pension was established in 1998, but the number of participants is very small. One reason for this is the lack of regulatory incentives. A mandatory funded pension was introduced very recently, and more time is needed to assess its success. Nevertheless, the vast majority of workers older than 40 are not participating in the private pension schemes, which means that they will get pensions only from the first pillar. Therefore, it is necessary to work out an efficient design of a multi-pillar pension system to achieve a considerable increase in pension benefits while also considering limited financial resources. In the research, the following recommendations to further enhance the efficiency of Georgia's pension system are presented:

- The pension replacement rate is very low and stands at 17%. It has declined during the last several years. Therefore, it is important to introduce automatic indexation to average wage growth as soon as possible.
- Elderly people aged 70 and older should receive 15-20% higher state social pensions on a permanent basis. It is important that the amount of state pension differs by

¹⁰ The role of guarantees in DC pension plans is examined by Pablo Antolin, Stephanie Payet, Edward R. Whitehouse and Juan Yermo: 'The Role of Guarantees in Defined Contribution Pensions' (2011).

¹¹ According to the law on Funded Pension (2018), pension assets shall be invested in an investment portfolio with three different types of risk and expected profitability. A participant shall have the right to choose an investment portfolio, but until a participant exercises this right, the pension assets shall be invested in a high, average, or low-risk portfolio depending on the age of a participant.

age, because the ability to work decreases as health conditions deteriorate for older pensioners, thus increasing the risk of falling into poverty.

- Introduce bonuses to pensioners for retiring later. It enables the state to pay higher pensions without increasing overall pension liabilities.
- Impose social contributions (paid by both employers and employees) to finance a 'pay as you go' pension, with benefits dependent on the length of employment.
- To raise interest for both employees and asset managers, it is desirable to introduce financial incentives for participation in the third pillar, set a retirement age which is lower than in the state pension system, allow numerous opportunities for early withdrawal, and let people freely determine the amount of contribution.
- Impose minimum guarantees to raise trust in the system and prevent the considerable devaluation of savings in the event of an unsuccessful investment. Private pension providers can be obliged to offer, among others, a pension product with a minimum investment guarantee.

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