Economics

Pension System in the South Caucasus: Challenges and Reform Options

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ABSTRACT. The countries of the South Caucasus, like other countries, are trying to change publicly managed solidarity pay-as-you-go (PAYG) pension system by the hybrid (PAYG and mandatory savings) pension system. This is due to the fact that financial unsustainability of the old PAYG systems and factors such as aging, rising longevity, declining fertility rate, reducing active population, labor migration caused financial difficulties and led many countries to rethink their pension schemes. Armenia (since 2006) and Azerbaijan (since 2014) started reforming the existing old PAYG pension system to the multi-pillar mixed model. Georgia is the only country in the South Caucasus region where the old PAYG pension system still operates. The government of Georgia proposes to shift to a hybrid pension model in 2018. This paper considers the main features and trajectories of development of the pension systems in South Caucasus countries. Considering that solidarity (PAYG) pension system plays an important role in poverty reduction and serves a valuable welfare distribution function, its reject will have many undesired social consequences. Therefore, it is advisable to introduce a more sustainable pension system. One possible solution is the introduction of publicly managed solidarity PAYG and the accumulated mandatory savings (Fully Funded) hybrid pension model. Any decision about possible reforms should be based on comprehensive analysis and study of international experience. © 2018 Bull. Georg. Natl. Acad. Sci.

Key words: pension systems, South Caucasus

Typology of Pension Systems

The historical development of pension systems led to complex systems across the world, making it difficult to classify them consistently. Among the social welfare systems two types of pension system can be identified: Bismarck and Beveridge systems [1, 2].

Under the Beveridgean system, social security benefits ensure each citizen with basic income, a flat-rate pension (potentially meanstested) independent of his or her profession and

earnings during active employment. This system was put in place in Denmark, Ireland, the Netherlands and the United Kingdom in various forms. Today it largely corresponds to a system of a flat rate or social allowance for PAYG systems [1].

Under the Bismarckian system, pension benefits are earnings-related and professionrelated. This system has been followed in Germany, Belgium, Sweden, France, southern and eastern European countries [1].

Pension Systems	Advantages	Disadvantages	
Pay-as-you-go (PAYG)	Simplicity and transparency	Budgetary burden	
pensions	Low administration costs	No "choice"	
	Progressive redistribution	Over-commitment to a specific level o	
	Wide coverage	pensions	
	Do not inhibit the mobility of labor	Resistance to tax funding	
	Low risk		
	Higher returns from professional equity	Regressive impact on the distribution of	
Fully-funded (FF)	investment	income	
pensions	Saver has independence and choice	High administrative costs	
	Increases savings and growth	Limited coverage	
	Promotes the development of financial markets	Uncertain return (high risk)	
	Effective	Need for a social security safety net	
	Corporate governance	In some cases limits mobility of labor	
	Automatically adjusts the level of pension to	(occupational pensions)	
	available returns		

Table 1. Advantages and disadvantages of PAYG and fully-funded pension systems

According to OECD classification, the pension schemes are mainly classified on the basis of a three-pillar system [3].

1st Pillar: Avoiding poverty in old age which covers mandatory public PAYG pension plans. The PAYG pension scheme is based on a "pay as you get paid" principle. It is a state social security system functions the intergenerational solidarity principle, i.e. those currently receiving income financially support those who worked in the past, with the promise that, in turn, they will be supported by future generations. The goal of PAYG pension plan is to ensure a minimum standard of living for all pensioners. This plan contains strong redistributive element.

2nd Pillar: Occupational schemes, which covers the employment-related pension plans: either earnings-related PAYG Defined Benefit (DB) plans (public or private), or occupational DC (Define Contribution) schemes.

3rd Pillar: Individual plans, which covers personal savings plans consisting of voluntary contributions by individuals. They are often privately managed, but can be a part of voluntary extra contributions to occupational schemes.

Typically, the public pension system is based on the PAYG idea, meaning current payment of pensions from contributions collected from present incomes of working population. On the other hand, there are private pension systems based on the accumulation and investment of individual savings, also called fully funded. Consequently, there are three different types of pension systems in the world:

- Pension System based on a Solidarity Principle: the payments made by employees, employers and individual entrepreneurs (taxpayers) to the State budget. The pensions are directly financed from the state budget.
- Pension System based on an Accumulation Principle: this model comprises individual character of pension, the amount of pension is in correlation with contributions to pension funds and pension funds' investment strategies.
- Mixed Model of the Pension System: this model means combination of the both abovementioned models.

Advantages of PAYG Pension Schemes

The PAYG schemes have a number of advantages. The PAYG schemes make it easier to redistribute resources between generations. The people who lived during unfavorable economic conditions deserve support from later generations.

PAYG pension system was introduced in 2006 to reduce Georgia's substantial poverty. The oldage average pension increased from 14.3% of GDP per capita in 2006 to 26.5% in 2013. However,

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sustainability of this system largely depends on such factors, as demographic, that are beyond the government's control [4]. These demographic dynamics affect the stability of the PAYG system. In the Caucasus region the economic restructuring of the 1990s resulted in a dramatic decline in both the number of contributors and the level of contributions collected [5]. Population aging is becoming one of the "mega trends" of the new century. The growing number of elderly in society means more pension beneficiaries and more pension expenditures, while declining birthrates leads to a decreasing workforce and fewer pension contributors. This was exacerbated by significant migration of younger workers, further reducing the domestic labour force [6, 7]. The change in the structure of employment, from large state enterprises to small private firms, increasing levels of self-employment and employment in the informal sector was accompanied by widespread tax evasion, affecting both contributors and contributions [8]. Due to the increasing number of beneficiaries and falling contributors the number of pension beneficiaries per pension contributor in the South Caucasus region reached high level [9, 10].

It should be noted that from year to year the share of pensions is increased in the state budget. For example, in Georgia in 2013 the total share of pensions in the state budget was 13.1%, in 2014 – 14.6%, in 2015 14.5% and in 2016 15.5%.

Therefore, three main points are emphasized: 1) the challenge of population aging and its implications for the maintenance of adequate and sustainable pensions, 2) financial sustainability as "a necessary precondition for an adequate provision of pensions in the future," and 3) "the modernization of pensions systems," related to the labor market: part-time, temporary, self-employed and mobile workers [11].

To maintain system stability in spite of demographic changes, governments can either increase taxes to fill the gap, or decrease the pension benefit levels to keep pension expenditures in line with pension revenues. Alternatively, retirement age can be adjusted [10]. In Georgia retirement age was raised to 65 for men and 60 for women. In Armenia retirement age is 65 for men and 63 for women. In Azerbaijan retirement age is 63 for men and 60 for women.

Fully Funded Pension Schemes as an alternative

In contrast to the PAYG system, a fully funded social security system has certain advantages: intergeneration transfer risk passes from the government to individuals' accounts. Fully funded pension scheme implies individuals saving for their own retirement. Contributions made by workers are saved and invested in various asset. The savings increases the long-term capital available for investments and therefore contributes to economic growth. It is also known to be more effective, as savings grow over the investment period due to investment returns and generate higher levels of benefits for the same level of contributions [10].

Capital market development is another benefit created by introducing a funded pension system. This will bolster the development of stronger financial institutions (stock exchanges, clearing houses, investment management companies...), lead to a wider variety of financial services being offered (pension savings management, IPOs, bond placements, etc.), and all of them will represent the positive spillover from the funded pension system [10, 12].

Pension System Reforms in the South Caucasus Region

Given falling contributions and constrained government expenditure, the South Caucasus countries reformed their pension system. Armenia is changing the existing PAYG pension system to the multi-pillar system. The pension system in Azerbaijan can be considered as a mixed model (PAYG and fully funded pension schemes). Georgia's current pension system is operating, for the most part, on a PAYG basis. The government of Georgia proposes to shift to a hybrid (mixed) pension model in 2018.

Georgia

Georgia established Social Pension System in 1995. The amount of pension depended on the annual income of the pension fund. The income source for the pension fund was contributions from the companies and employees. The next reform started in 2004. Government decided to finance Social Programs from the common budget income. As a result of reorganization, two new agencies

the state will have to make monthly payments into the new pension fund:

- Employed people 2% of their salary will be transferred to the pension fund;
- Employers 2% of salaries they pay will be transferred to the pension fund;
- State 2% of income tax revenue received from every employed citizen will be transferred to the fund.

Table 2. Share of pension population, average pension and pension age in the South Caucasus region

	Number of	% of	Average	Pension Age	
	pensioners	population	pension	men	women
Georgia	867,000	22%	70 euros	65	60
Armenia	451,900	15%	80 euros	65	63
Azerbaijan	1,299, 946	13	95 euros	63	60

were formed: Employment and Social Care Agency and Healthcare and Social Programs Agency. By the end of 2010 the above mentioned agencies merged and a new Social Service Agency was created. Social Service Agency is a governmental agency under the Ministry of Labor, Health and Social Affairs of Georgia [13]. From 2008, the only source for the pension system is the annual state budget. In 2010, there was a reform of taxation system in Georgia. In the new edition of Tax Code, Income Tax united Social Tax and other taxes in itself [14].

In the mid-1990s, spending on public pensions as a share of GDP decreased: 1.7% in Georgia, 2.5% in Azerbaijan and 3.1% in Armenia [15]. The level of public pensions does not afford older people an adequate standard of living. The social pension is lower than minimum old age pension.

Old age retirement pensions in Georgia have been set at 180 GEL (70 euros). Pensions for work experience do not exist in Georgia. The government of Georgia proposes to shift to a savings system, which is more in line with practices in developed countries. The base part of the pension will be annually indexed. Both working citizens and their employers will contribute to the fund. According to the pension reform project, citizens, employers, and

It is assumed that those who will retire in the next 10 - 15 years will benefit most from these changes [16].

Armenia

Like many countries, Armenia is changing its existing PAYG pension system to the multi-pillar system. In 2005-2006, Armenia has launched a new phase of pension reforms. Moving from "Solidarity pensions" to defined contributions mandatory funding and voluntary (complementary) pension funding, the pension system in Armenia became a multi pillar and incorporates the following components:

Pillar 0 – Social Pension: providing social pension to those individuals who have reached 65 and whose length of service is up to 10 years.

Pillar 1 – Contributory State (Employment) Pension: continue providing pensions both to the current pensioners and those people who will not be obligatory participants of the mandatory funded component. The mandatory participants of the funded component will be only entitled to receive a base pension from this pillar. Under this component, pensions will be paid to individuals with more than 10 years' length of service.

Pillar 2 – Mandatory Funded Pension: providing mandatory funded pensions to 172 Tengiz Verulava

				Funded (voluntary) pension
		Funded		
		(mandatory)	Funded	
		pension	(mandatory)	
	Pension for years	Pension for years	pension	
	of service	of service		
Social Pension		Basic Pension		Social Pension
0 Pillar	I Pillar	II Pillar	II Pillar (voluntary)	III Pillar
		(mandatory)	·	

Table 3. Components of Armenian multi-pillar pension system

individuals born on and after January 1, 1974, as well as individuals above 40 who will voluntarily join the mandatory funded component and make mandatory funded contributions.

Pillar 3 – Voluntary Funded Component: providing voluntary funded pensions without any age restrictions to those who will join this component and make voluntary funded pension contributions.

Under the new system, young employees will be forced to save an additional amount out of their income, which together with contributions from the state will be managed by private funds until the workers' retirement [17].

According to the law, employees born after 1974 should contribute 5% of their salary to the pension fund they have chosen. Government adds up amount equaling to 5% of the employee salary. So the total contribution equals 10% of the salary base of those under the framework of this new pension scheme. According to the new law on Accumulated pensions, the minimal pension in the country will be equal to the minimum wage, while the basic pension will total 150% of the minimum wage.

Old age retirement pensions in Armenia have been set at 41,000 drams (80 euros). Officers in the army receive around 87,000 (170 euros). Former high - placed officials can earn up to 1 million dram (1940 euros).

Azerbaijan

The pension system in Azerbaijan can be considered as a mixed model, which consists of two elements:

- A notional defined contribution (NDC) social insurance program: implemented in 2006, is financed by an employee contribution of 3% of gross earnings and an employer contribution of 22% of payroll.
- A non-contributory social assistance program: funded by general revenues, provides benefits to non-working men aged 67 or older and women aged 62 or older who are not eligible for the earnings-related pension.

New pension reform began in 2014 in Azerbaijan, the aim of which was transfer to the savings pension system. From 2006, every worker has an individual account to which a portion of his or her salary is transferred. The base pension is supplied by the government to those who worked for 12 years and are of retirement age. The rest is dependent upon the savings acquired by the individual. There are allowances and bonuses for those who received a higher education, or for those, for example, who worked in a dangerous setting. However, those who retired before 2006 can only count on the base pension.

The average pension in Azerbaijan is 177 manat (95 euros), the maximum - for those who have been deemed "national heroes" - is 1300 (715 euros).

Conclusion

PAYG pension system is facing challenges due to changing demographics, while the alternative Fully Funded pension system offers many benefits. However, the PAYG system plays an important role in poverty reduction and serves a valuable welfare distribution function, so its disappearance would have many undesired social consequences. Nevertheless, the changing demographics calls for the introduction of more sustainable system. One possible solution is a reform that is a mix of PAYG and the Fully Funded pension system.

ეკონომიკა

საპენსიო სისტემა სამხრეთ კავკასიაში: გამოწვევები და რეფორმის პარამეტრები

თ. ვერულავა

ილიას სახელმწიფო უნივერსიტეტი, ჯანდაცვის პოლიტიკისა და დაზღვევის ინსტიტუტი, ბიზნესის სკოლა, თბილისი, საქართველო

(წარმოდგენილია აკადემიის წევრის ა. სილაგაძის მიერ)

საპენსიო სისტემების მდგრადობა ერთ-ერთ მნიშვნელოვან გამოწვევად რჩება მსოფ-ლიოში. ისეთი ფაქტორები, როგორიცაა: ხანდაზმულობა, სიცოცხლის საშუალო ხანგრძ-ლივობის ზრდა, ფერტილობის კოეფიციენტის შემცირება, აქტიური მოსახლეობის შემცირება, შრომითი მიგრაცია უარყოფით გავლენას ახდენს სამხრეთ კავკასიის ქვეყნების ისედაც რთულ ფინანსურ მდგომარეობაზე.

სტატიაში შესწავლილია სამხრეთ კავკასიის ქვეყნების (საქართველო, სომხეთი, აზერბაიჯანი) საპენსიო სისტემები, მათი განვითარების ძირითადი მახასიათებლები და გამოწვევები.

1994 წელს მსოფლიო ბანკმა თავის ანგარიშში წარმოგვიდგინა საპენსიო სისტემების კლასიფიკაციის სამი ძირითადი სახე: სოლიდარული (სახელმწიფო) საპენსიო სქემა; სავალდებულო დაგროვებითი შენატანების სქემა და ნებაყოფლობითი საპენსიო სისტემა. ძველი, სოლიდარული (Pay-As-You-Go - PAYG) საპენსიო სისტემის ფინანსური არამდგრადობის გამო, ბევრმა ქვეყანამ განახორციელა მისი რეფორმირება. სომხეთში ხორციელდება სოლიდარული (PAYG) საპენსიო სისტემიდან წლიდან მულტიპილარულ (სოლიდარული, დაგროვებითი და ნებაყოფლობითი) სისტემაზე გადასვლა. საპენსიო სისტემის რეფორმა აზერბაიჯანში 2014 წლიდან დაიწყო, რომლის მიზანია ჰიბრიდული (შერეული) მოდელის ჩამოყალიბება (სოლიდარული და დაგროვებითი საპენსიო სქემები). საქართველო ერთადერთი ქვეყანაა კავკასიის რეგიონში, სადაც ისევ მოქმედებს ძველი, სოლიდარული საპენსიო სისტემა. 2018 წლიდან საქართველოს მთავრობას განზრახული აქვს ჰიბრიდულ (შერეული) საპენსიო მოდელზე გადასვლა.

სამხრეთ კავკასიის ქვეყნები მსგავსად სხვა ქვეყნებისა, ცდილობენ სოლიდარული (PAYG) საპენსიო სისტემიდან გადავიდნენ შერეულ (ჰიბრიდულ) საპენსიო სისტემაზე. აღნიშნული განპირობებულია იმ გარემოებით, რომ სოლიდარული (PAYG) საპენსიო

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სისტემა დადებით როლს თამაშობს სიღარიბის შემცირებაში. ასევე მნიშვნელოვანია, რომ მისთვის დამახასიათებელია კეთილდღეობის განაწილების ფუნქცია. აქედან გამომდინარე, სოლიდარობის სისტემის სრულიად უარყოფა გამოიწვევს არახელსაყრელ სოციალურ შედეგებს. შესაბამისად, მიზანშეწონილია სოლიდარული (PAYG) და დაგროვებითი საპენსიო სისტემის შერეული (ჰიბრიდული) მოდელის დანერგვა. შესაძლო რეფორმების ნებისმიერი გადაწყვეტა უნდა ეფუძნებოდეს საკითხის ყოვლის-მომცველ ანალიზს და საერთაშორისო გამოცდილების ღრმა შესწავლას.

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