AMERICAN UNIVERSITY OF ARMENIA

ARMENIAN GOVERNMENT POLICIES AND REFORMS IN PENSION SYSTEM

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ABSTRACT

Pay-as-you-go pension systems were often introduced with little or no analysis of the medium and long-term effects on the elderly, on workers and on the public finance. Once schemes are introduced, it will be difficult to cope with shortage of funds to cover pension expenses because of the impact on the pension system of factors such as demographic aging, increasing ratio of pensioners to workers, etc.

But the true costs of the pension scheme only become clear in the medium- to long-term as the system matures. The current system although protects retirement funds from financial-market risks, but the replacements rates for the beneficiaries of the solidarity component will result in larger deficits of the solidarity system. In this case improvements of the exclusively solidarity system through continuous increase in pensions will be accompanied by continuous unrecoverable deficits.

It is clear that pension reform in Armenia is necessary, including linking benefits to lifetime earnings and contributions to the pension system. The new suggested model of pension reform can ensure higher replacement rate for contributors, higher pensions and also have positive effect on the RA economy, capital markets through investment of the huge amount of money to be accumulated in pension funds.

List of Abbreviations

RA - the Republic of Armenia
PAYGO - Pay-as-you-go Pension System
SPSS - Social Protection Systems Strengthening Project
SSSS - State Social Security Service
GDP – Gross Domestic Product
GOAM – Government of Armenia
PRSP - Poverty Reduction Strategy Paper
PROST – Pension Reform Options Simulation Toolkit
AMD – Armenian Dram
DB **-** Defined-Benefit Model of Pension System
DC **-** Defined-Contribution Model of Pension System
MLSI - Ministry of Labor and Social Issues
SSIF - State Social Insurance Fund
LI - The Labor Inspectorate
STS - The State Tax Service
MF - Ministry of Finance
ME - Ministry of Economy
CDA - The Central Depository of Armenia
FMSS - The Financial Markets Supervision Service
AM - Pension Assets Managers
OECD - Organization for Economic Cooperation and Development

Introduction

In recent years pension reform has become an indispensable issue in many countries because of demographic aging, early retirement, poor administration, which are a real burden for government budgets and can threaten to macroeconomic stability and retirement income security. Taking into consideration the experience of other countries in introducing pension reforms and based on necessity to raise sufficient funds for paying it aging population Armenia also decided to implement privatization of the pension system based on mandatory pension funds (RA Government Decree, 2008). If the Social Protection System does not undergo needed change then it cannot further support satisfactory level of pensions, because of shortage of funds, especially with the growth of life expectancy and the increasing ratio of pensioners to working population.

The idea of pension reform in Armenia was introduced back in 2006 by the Government Orders about "Pension system reform program", but its preparation and implementation were a continual process. The government policies were leveraged by donor support from the World Bank, USAID, providing technical assistance and continual advice on the process of improving pension system in the RA. For example, USAID Social Protection Systems Strengthening Project (SPSS) in Armenia started in 2006 (USAID, 2006).

The pension system in Armenia is transferring from PAYGO (pay-as-you-go) system to funded system, which is not a total shift from one system to completely different one. Of course, there are some radical changes, like the privatization of pension funds, but the new components (new pillars) are added to the existing ones. This means that the state will continue to support certain categories of people left outside labor market and also groups pf citizens meeting specific eligibility requirements set forth by the legislation who pay mandatory social contributions. And the money for these purposes shall come from the state budget; from mandatory social contributions, which will be consolidated with the income tax and become unified tax. But the funds for the new pillars shall come from the people themselves, i.e. each person shall pay mandatory and/or voluntary social contributions according to his/her salary. And this contribution will be paid back to him/her after retirement, when he/she will qualify for pension (Central Bank of Armenia, 2008).

In contrast to the current PAYGO system, the multi-pillar pension system is expected to safeguard against the costs of an aging population, protect from political risks, and facilitate individual decision making in the process (Holzmann, 2009). Pension systems must be fiscally and politically sustainable to achieve their objectives. Unsustainable pension systems can be an obstacle to fiscal stability, economic growth, and poverty reduction.

Pension is a mechanism to reduce the risk of old-age poverty and to smooth lifetime income to maintain living standards in retirement (Holzmann et al, 2003). So the pension reform has the aim to increase living standard of old-aged and to reduce the poverty. But at the same time, introduction of the reformed pension system has other important financial and economic benefits that will be discussed in last sections of this paper. Funded pillars on pension system are expected to increase savings, facilitate development of capital markets, improve labor flexibility and bring to greater worker participation in the pension system.

This paper starts with discussing the importance of pension system and its role in the development of the society. There is also shift to the historical perspectives of the pension system: where is it comes from, what is a welfare state and who are the first implementers of the pension system. Then is describes in detail the types of pensions in the Republic of Armenia and a comparison of Armenian pension system with some other countries' pension systems. It then addresses the major elements of the policy reform in Armenia and provides conclusions and policy recommendation for the government on how this process can be improved and facilitated.

Research Questions and Methodology

The research questions of this paper are chosen in a manner to reveal the main purposes of this essay. The research questions of this paper are as follows:

1. Why does Armenia need a pension reform?
2. What are the differences of the new system compared with the old one?
3. Does the reformed pension system satisfy the needs of future Armenian pensioners and does it guarantee better living conditions for them?

The methodology is based on collection of primary and secondary data. Primary data analysis includes study of legal documents, such as the Republic of Armenia "Law on State Pension", etc.; while the secondary data analysis includes the study of books, reports, publications, etc. The purpose of this research is mainly descriptive. The methodology of this study mainly relies on unobtrusive research, which includes:

1. Content analysis-study of books, USAID reports, reports of Central Bank of the Republic of Armenia, World Bank publications
2. Analysis of existing statistics -- this is a supplemental source of data, such as report on nationwide baseline survey of the Armenian General population, Report on Focus Group Discussions on Pension Reform, both conducted by the Turpanjian Center for Policy Analysis for the USAID, Social Protection Systems Strengthening Project

Chapter 1. General Review of Social Welfare System and Historical Perspective on its Origin

1.1. Background, Definitions and General Description of Pension System

To understand what pension is, how it emerged and how it works we need to look far back and to understand why there is a need for pension system. To start this explanation there is a need to see what an idea of welfare state is.

Welfare state is a model of state in which the government plays a key role in the protection and promotion of the economic and social well-being and welfare of its citizens (Britannica Online Encyclopaedia, 2009). It is based on universal principles of equal opportunity for everyone, equitable distribution of wealth, and public responsibility for those unable to avail themselves of the minimal provisions for a decent life. In fact these principles are rooted on the ideas of Enlightenment and developed by great philosophers Didraut, Voltaire, Rousseau and others. The general term may cover a variety of forms of economic and social organization.

According to Einhorn and Logue (1989), the fundamental goals of the welfare states are development and improvement of social policies and social securities. The first stage of this was social regulation to protect society and private property from economic crisis. The second stage was the development of social insurance: the risks of losing income because of unemployment, illness, or old age could be compensated by savings. The state began to subsidize and regulate such social insurance and with the help of labor unions made employers to pay part of the insurance fee. This was the initial form of "social security". In case of loss of income the families would receive small pensions (Einhorn and Logue, 1989).

Most advanced nations are not true welfare states, although many provide at least some social services or entitlement programs. These goods and services are generally available only to certain people who meet eligibility requirements. However, those that meet the prerequisites are entitled to benefits as a right (Einhorn and Logue, 1989). This type of system is frequently referred to as a "safety net," which is designed to help the most vulnerable. While some nations believe that creating a welfare state is the proper role of any government, few have managed to create efficient systems. They are unable to provide equal welfare for all their citizens, often leaving those most in need with the least.

1.2. Origin of Welfare State

It's interesting also to mention that even before the governments started to conduct any elements of social welfare policies, the church was already doing it. The church concentrated its attention not only to the saving of soul, but also did not neglect the body: almost all modern social programs and institutions can be traced back to the activities of church as a caretaker of orphans, the poor, the sick and the elderly (Einhorn and Logue, 1989). The rising role of the state shifted those activities from religious institutions to political ones.

The origins of the modern welfare state lie in the political struggles of the late nineteenth century when the guilds and later labor movements began to rise. Their primary goal was the protection of economic security of their members by means of mutual insurance against economic loss caused by accident, unemployment, illness, or death. When guilds dissolved, their role passed to new rising labor movements. According to Einhorn and Logue (1989), the Scandinavian countries (Denmark, Norway, and Sweden) have the strongest labor movements and therefore the best developed welfare states. This relationship helped the Scandinavian countries to implement most successfully the idea of modern welfare state by developing a "security net" of transfer payments: unemployment, disability, and sickness insurance, old age pensions, family allowances, special payments to those temporarily in need (medical and dental care), social services, home assistance for the sick, disabled and elderly, child and after-school care, etc. All these provide a solid ground to support living standards of anyone forced out of the labor market (Einhorn and Logue, 1989). The Scandinavian model of welfare state has a very broad scope of elements, but the two basic ones are transfer payments (payments from those currently employed to those who are unemployed) and provision of certain social services based on need rather than on ability to pay. The most exciting and impressing examples of the latter are provision of hospital, medical, and dental services, formal and higher education and a wide range of social services for the elderly almost entirely without any fee.

The modern welfare state was further shaped in the late nineteenth-century Imperial Germany under the reign of Kaiser Wilhelm II and the administration of Chancellor Otto von Bismarck. Chancellor Otto von Bismarck inaugurated the world's first general pension, health and disability insurance systems (Einhorn and Logue, 1989). He established the first comprehensive social insurance programs in the 1880s as part of his campaign to lessen the attraction of socialism and militant labor unions, because in the late 19th century Germany had the most powerful socialist party in the world. But it would be a mistake to interpret the birth of welfare-statism purely as a cynical political pragmatism. It was also argued for on the basis of "the social good" and a higher conception of human liberty than a mere protection of life, liberty and property by the state. The proponents of this view were known as the German Historical School.

In the 1880s the German state began to provide accident, health and pension insurance and became the model for the British Welfare State (Holzmann et al, 2003). Bismarck's model of welfare state included sickness insurance, workmen's compensation, and old-age pension.

Bismarck's role in modern history of welfare state is rarely spoken today. But it is undoubtedly that when on January 1, 1884, his compulsory sickness scheme went into operation, it literally started a new era, a new age in the history of Welfarism. Bismarck's fame is mainly based on his diplomatic and military successes, but everybody should consider also his idea of compulsory social insurance, which later had been adopted by many countries. The Bismarckian model was important in Europe, putting pressure on other European states to respond to increased worker demands and state imperatives for greater old-age security (Holzman, 2009).

1.3. Three Pillars of Pension System

Multi-pillar pension reform is a second phase of pension reforms after the Bismarck's model. It is a new paradigm in pension system which relies on multiple pillars of pension provision. It consists of three pillars based on different forms of income support: the first pillar consists of a publicly managed, unfunded plan; the second pillar consists of mandatory, privately funded plan; and the third pillar consists of voluntary, privately funded plan. The idea that state releases part of its responsibility for ensuring adequate pensions to privately managed pension savings account is new and revolutionary (Holzmann, 2009).

This system was first developed in Chile and implemented in 1981, under the authoritarian rule of General Augusto Pinochet, whose reputation for social care was questionable (Holzmann, et al., 2008). The partial privatization of state pension systems was not widely accepted during that period by the global social policy community. Many experts questioned whether multi-pillar systems really work to achieve the major goals of pensions, particularly protecting people from poverty. Another element slowing the acceptance of Chilean reform was the fact that it had come from Chile, which is a semi-peripheral middle-income country. However, Chile became a powerful example in Latin America and even a model case for Western European countries with long-established welfare systems, who were experimenting with multi-pillar reform inspired by the Chilean model.

In 1994 the World Bank published “Averting the Old Age Crisis: Policies to protect the Old and Promote Growth”, a major report that set forth a series of well-substantiated arguments in favor of multi-pillar pension reforms (Holzmann, et al, 2008). The report contains arguments that pension systems should ideally have three pillars: a state-managed, redistributive pillar providing a basic pension to secure against poverty; an earnings-related pension supported by mandatory lifetime contributions to individual pension savings accounts that are privately managed; and a pillar of voluntary private schemes, including supplemental industry, corporate, and mutual benefit plans. Such a support from a major international organization added legitimacy and acceptability of these proposals in countries around the world. Multi-pillar reforms had become a dominant new policy framework.

1.4. Pay-as-you-go vs. Funded Model: Advantages and Drawbacks

Pay-as-you-go (PAYGO) pension system refers to an unfunded system in which current contributors to the system pay the expenses for the current recipients. In a pure PAYGO system, no reserves are accumulated and all contributions are paid out in the same period. The opposite for a PAYGO system is a funded system, where contributions are accumulated and paid out later (together with the interest on it) when eligibility requirements are met.

The pay-as-you-go pension system is founded on the principle of contributory pensions: the contributions of the active population serve to pay the immediate needs in pensions, while opening future pension rights to contributors. This means that the contributions on wages and salaries paid jointly by employees and employers are used to pay the pensions of retired people. This system creates solidarity among generations. In contrast to this type of system, the funded pension system is based on people's own contributions made, i.e. each person makes a contribution to his/her individual account according to his salary and receives his/her contributions upon reaching the retirement age.

Switching from pay-as-you-go system to the funded model will not be appropriate for countries with fiscal imbalances. The transition will temporarily increase the fiscal deficit because the government must continue to pay pension benefits while some contributions have already diverted to private funds (World Bank, 2006). There is a need to achieve stable monetary and fiscal policies for such countries so that they can shift the pay-as-you-go system to multi-pillar model of pension system.

1.5. Types of Pensions

While speaking about pension system reform in Armenia it is important to mention all types of pensions that exists in the RA. According to RA Law on State Pension (2009), there are three types of pensions in the RA that have their own subtypes:

1. Occupational:

✓ old age (any individual who has reached 63 and has at least 10 years of length of service); this pension is granted for a life-time period;

✓ long service, which is granted to employees of civil aviation;

✓ privileged (any individual who has reached 55 and has 25 years length of service of which at least 15 years count for employment under particularly dangerous or particularly heavy conditions; or any individual who has reached 59 and has 25 years length of service of which at least 20 years count for employment under dangerous or heavy conditions);

- ✓ disability (an individual recognized as a person with disability by the state authorized body shall be eligible for a disability pension if he/she is recognized as a person with disability due to an occupational injury or disease (irrespective of his/her length of service) or due to a systemic disease, congenial disease, natural, man-made and other disasters (according to length of service by different age groups). The disability pension shall be granted for the entire period of disability;
- ✓ survivor's pension shall be granted to the following relatives of diseased individual: a child, brother, sister and grandchild under the age of 18; a disabled person aged 18 or above and has limited working capacity of a second or third category and is unemployed; parents, spouse who have reached the old retirement age
- ✓ partial pension shall be granted to the persons employed in the education sector, certain categories of workers of culture (when they reach 55) and actors of theatrical and theatrical-concert organizations (when they reach 50) who have at least 25 years of length of service, from which at least 12 count towards professional length of service

2. Social:

- ✓ old age social pension shall be granted to a person who attained the age of 65 and does not qualify for a labor pension
- ✓ disability social pension shall be granted to a disabled person who does not qualify for a disability labor pension and a person who has been recognized as a "child with disability"
- ✓ survivor's social pension shall be granted to the individuals who does not qualify for the survivor's labor pension

3. Military:

- ✓ long-term service military pension shall be granted to the military servants who at the moment of retiring from the service have at least 20 years of experience of service with the military, and who at the moment of retiring from the military because of old age, health conditions or reduction of the occupied position attained maximum age and have at least 25 years length of service out of which at least 8 count towards a military service

- ✓ disability military pension shall be granted to a military servant who has been recognized as disabled, who got disability during the course of military service or within one year after retiring as a consequence of the sickness when still in service
- ✓ losing the breadwinner or survivor's military pension shall be granted to family members of a deceased military servant or military servant who has been recognized as missing or absent or who have retired from military service and deceased afterwards because of an injury, disability or sickness that he/she got during the course of service.

Chapter 2. Necessity for Pension Reform in Armenia

2.1 Background

After getting its independence, Armenia was not capable anymore to ensure the previous amount of pensions. So during that time the average pension was only USD 5-6, which was more than 2 times below the extreme poverty line. Low pensions were the only way to keep financial viability of the pension system. The following years, to improve that deteriorated financial basis of the pension system the Government of Armenia decided to raise the rate of social contributions paid by employers (from 26% to 30%) but remain that contributions the same for employees (1%) The situation changed in 1997-1998 when according to the Mandatory Social Contribution Payments Act the social contributions "personalized" and a regressive scale of those contributions was defined for the employers depending on the amount of wages (Central Bank of RA, 2008). This alleviated the burden of contributions for employers making it 23%, but at the same time increased the contributions paid from individual wages to 3%. According to Turpanjian Center for Policy Analysis Report (2008), "All agree that the size of current pensions is wholly inadequate and that the amounts should be increased in order to satisfy the everyday needs of pensioners." But attempts to increase contribution rates for balancing growing pension expenses will lead to evasion from taxes and growth of informal economy. So the increase of contribution rate is not an option for increasing the amount of pensions. There is a need for structural change which can be provided by multi-pillar pension reform.

The analysis of Armenia's socio-economic situation (which will be described below) discovered serious problems in the pension system, which paved the way for Armenia's policymakers to think seriously about the implementation of necessary steps to improve our pension system and to create a solid ground for our future pensioners, so that their pension be much more than today's miserable pensions.

2.2 Social Expenditure

According to Central Bank of Armenia (2008), as at 1 January 2007, the total number of citizens included in all pension programs was nearly 570,000. The majority, or 60%, are old-age pensioners. The next largest group is the group of disability pensioners with around 120,000 citizens. The third important group of pensioners is the group of military personnel, with more than 52,000 persons.

Until 2008 the expenditures on pension programs in Armenia were financed from two main sources: directly from the state budget and from the budget of contributory resources of the pension fund, or an extra-budgetary entity. Another source of revenue for the pension fund is transfers from the state budget. In 2007 they constitute more than 20% of total revenues (Central Bank of Armenia, 2008).

Starting from January 2008 the State Social Insurance Fund was reorganized into the State Social Security Service (SSSS) under the supervision of the Ministry of Labor and Social Issues, and as a result of restructuring the extra-budgetary account of the Fund was closed and financial resources from the mandatory contributions were combined with general revenues of the state budget (State Social Security Service, 2008). As a result starting from January 2008 the funding of the pension system was provided only from the state budget.

According to Central Bank of Armenia (2008), "In 2000-2006, the volume of social expenditures in the budget increased form 36.1% to 42.2%. The ratio of social expenditures to the GDP remained unchanged. Total social expenditures include spending on healthcare, education, etc., but the expenditures on pensions constitute the largest part of total social expenditures (from 36% to 41%). The replacement rate, however, declined by 22% in the same period." To prevent the decline of replacement rate, which has been a result of growing share of pension expenditure, there is a need to shift the pension spending from budget to self-funding. These changes have reflected the inability to finance prior commitments and the need to make pension systems more sustainable. The changes reveal a move toward a greater role for a privately managed funded component and the conversion of the pay-as-you-go components into ones that are more self-sustaining and transparent (Holzmann et al, 2003).

2.3 Wage and Pension

According to the Report of the Central Bank of the RA (2008), the real wages from 2000 to 2006 grew 2.7 times, the per capita GDP grew 3.0 times, but the pensions grew only 2.3 times. In 2007 the newly appointed government increased the basic pension for 60% as of 1 January 2008 (from AMD 4250 to AMD 6800) and the value of one year of contributory service for 71% (from AMD 230 to AMD 395).This numbers show that the PAYGO system is heavily dependent on political decisions, and pension changes considerably from one election to another. So if policymakers adopt wrong decisions, not grounded on economic estimates the whole army of pensioners would suffer from it. This makes us think that the new multi-pillar pension system is more preferable than PAYGO system in the RA, so that it eliminates arbitrariness of the policymakers to decide the size of pensions depending on political goals to be achieved.

During the Soviet rule there was no major difference among salaries, and there was almost no unemployment. So the PAYGO was completely sufficient for the common perception of equity in Communism. Even the years after the collapse of the Soviet Union the major complaint of pensioners was not the unequal pension benefits comparing to contributions, but the low level of pensions. But in a free market the income differences are substantial and the pension benefits are assessed on the income earned. There are already future pensioners who in the last years alone have made payments into social security fund far exceeding the benefits that under the currently existing system they will be paid when retiring. The inequity gap grows wider and wider. In the future when the members of the current labor force retire and the changed pension system continues involving inequitable practices, or when people see that they cannot benefit from contributions to social insurance fund a huge wave of dissent will rise. There is only one way to prevent this: to choose the right scenario for the reforms (International Center for Human Development, 2008).

2.4 GDP and Living Standard

The significant gap between the average growth of annual GDP and wage rates and pensions had a negative impact on the living standard of pensioners. According to the Central Bank of the RA (2008), pensioners are one of the most vulnerable groups of the population in the country in terms of living standard. Pension is the main source of income for more than 83% of the elderly. To overcome this problem the GOAM in 2005-2006 elaborated Poverty Reduction Strategy Paper (PRSP), which among its main goals set up to increase pensions, but the precondition of maintaining the financial sustainability of the current pension system made it impossible to increase pensions. However, in 2008 the pensions were increased by about 60%, but this was not a real support to people whose main source of income was pension.

2.5 Population

Another reason for reforming the pension system is unfavorable perspectives of the demographic growth. The population of Armenia has had a declining trend since 1990 (Central Bank of Armenia, 2008). The main reasons of this trend were changes in the natural growth of the population and emigration. Starting from 2004 a modest increase in the number of population was recorded, but still much lower than the figure for 1990.

For the pension system reforms changes in the age structure of the population are extremely important. Those changes in Armenia indicate the rapid aging of the population. According to Central Bank of the RA (2008), calculations made by using the World Bank pension forecast computer model showed that the proportion of the age group of 63 and over in the entire population will amount to 15.6% in 2021 and will reach 26.7% in 2080.

Rates of aging of the population in Armenia are impacted by different factors, such as higher life expectancy, rapid decline of birth-rate, emigration of working-age population from the country. According to Central Bank of Armenia (2008), in 2005 the average life expectancy amounted to 76.5 years for women and 70.3 years for men, but in 1990 this number was 73.4 and 67.9 years respectively.

The second indicator of aging population is a declining trend of the birth-rate, which is recorded since early 1980s. It was slowed down after the 1989 earthquake as a result of the compensation phenomenon, but from early 1990s the birth-rate started to decline again. According to forecasts by experts of the USAID-funded project "Strengthening the Social Protection System" (2008), during post-war period there was a significant increase in fertility and these people now are still in the labor force. But starting from 2015 relatively low number of children born in 1990s will enter the labor force and new pensioners will be the larger number of children born in the postwar period. Low birth rate will obviously result in the decline of the number of population and higher proportion of elderly with their corresponding demands from the social insurance system. At the same time, as a result, the number of new entrants into the labor market will also decline, causing a decline in the number of people who make contributions to the social insurance system. This process is mitigated by the fact that the labor market is quite flexible and the decline in the number of workers can be compensated by high wages which will enlarge the contribution base.

Due to ageing of population quick growth of retirees vs. contributors of the system does not allow to ensure "generosity" of the system anymore, and the dependency ratio of the elderly is expected to increase drastically. The deterioration of population's composition is primarily reflected in population's dependency ratio. Increase in the ratio shows how much more retired citizens are dependent on the number of the working-age population. According to World Bank forecasts by using PROST, starting from 2012 the dependency ratio will steadily increase, and in 2080 it will exceed by 2.5 times the projected level of 2009 (Central Bank of the RA, 2008). Even if we take only this one factor, it is enough to say that shifting to funded model will bring more satisfactory conditions for the future retirees.

The third indicator of aging population is migration. Since 1990s, the external migration balance of the country is negative (emigration exceeds immigration). This is a result of the political and socio-economic situation in the country.

According to Central Bank of Armenia (2008), in this and forecasted situation, pension system reforms become an urgent issue for Armenia, and the situation will become even more critical beginning from 2015, when one pensioner will depend on 0.98-0.73 worker who makes social contribution payments. And at that time any increase of pensions will not resolve the strategic issues of ensuring financial sustainability and pension adequacy. Radical reforms of the current pension system are needed, which need to be planned seriously and implemented phase by phase in accordance with two important objectives: ensure significant increase of pensions in the short term, and ensure the link between contributions made from individual's incomes and pensions in the long term (Central Bank, 2008).

2.6 Labor Market

According to the Mandatory Social Insurance Contributions Act (1998), social contributions are made by the following entities: employees (3% of wage), employers (according to the defined rates), individual entrepreneurs (5000 AMD each month) and notaries public (chapter 1, article 3, paragraph 4). The employer's mandatory social contribution rates are as follows: for the monthly wage up to 25,000 AMD the amount of social contribution should be 7,000 AMD, for the monthly wage from 25,000-100,000 AMD the amount of social contribution should be 7,000 AMD plus 15% of the amount over 25,000 AMD, and for the monthly wage above 100,000 AMD the amount of social contribution should be 18,250 AMD plus 5% of the amount over 100,000 AMD. This means that the employer's social contribution rates are regressive and decrease as wages increase.

Within the context of pension reforms, there are certain problems related to the registration of those employed and self-employed in agriculture. They are exempted from taxes and conditionally can be included in the informal segment of the economy. According to the current legislation, they are not included in the list of entities subject to mandatory social contribution payments.

According to the assessment of the Central Bank of Armenia (2008), nearly 53% of the employed are currently left out of the pension system registry, since they are employed in agriculture or have hidden employment. These are citizens who, according to the legislation or due to the situation in the labor market, refrain from making income tax and social contribution payments. But these citizens currently receive and in the future will also receive pensions. So this is an obstacle to ensure the sustainability of the current pension system.

If changes are not implemented into the current system of retirement income, a shrinking number of workers will be burdened with the responsibility of providing for an increasing number of elderly.

2.7 Unified Tax System

The Government of Armenia in its way to pension reform decided that the current mandatory social contributions and income taxes will be joined into one unified income tax (Draft Law on Unified Income Tax, 2009). Since 2004 the function of levying mandatory social contributions was transferred to the RA State Tax Service. Beginning from January 2008 these contributions are directly paid to the state budget of the RA. According to the Draft Law of the RA on Unified Income Tax, the unified income tax shall be calculated at the rate of 26 percent. But in case of receiving lump sum amounts of voluntary funded pension, the unified income tax shall be calculated at the rate of 35 percent.

According to the Article 26 of the Law of RA on the Unified Tax, “From the moment of enforcement of this Law the employers shall be obligated to increase the salary and equal incomes paid to individuals to the extent that following enforcement of this Law the actual income of the individuals after withdrawal of unified income tax should not be less than the amount (after withholding of unified income tax and mandatory social contributions) actually paid to them on the basis of employment or civil-legal agreements in the course of the month following the month of enforcement of this Law.”

Actually, the pension reforms will open up the door for those who work in the shadow economy eliminating it and creating the desirable tax collection in a more efficient way, which is a favorable outcome for each tax administration The first advocates of these reforms will be the firms which are legitimately registered.

2.8 Social Security and Social Insurance

The pension policy is indivisible from the state social policy. Therefore it is developed regulated and supervised by the state authorized body, the Ministry of Labor and Social Issues, which is developing the social policy, preparing legal framework and drafting pension programs. The goal of the developments of the legal framework regulating pensions was the transformation of pension or social security into pension or social insurance. *The latter* guarantee the realization of each citizen's right to pension when reaching retirement age, or in case of the loss of the breadwinner, disability, etc (RA Law on State Pension, 2009). This is the most common type of pension paid to Armenian citizens. The insurance pension consists of basic pension and insurance component. The size of the basic pension is defined by the legislation and cannot be smaller than its previously defined size. According to Article 16 of Chapter 4 of the RA Law on State Pension (2009), the insurance component is also defined by the legislation, but its calculating formula is as follows :

$$\mathbf{I = (n \times V) \times C}$$

Where:

I –insurance component; **n** – years of insurance rate; **V** –value of one year of insurance rate;

C - the personal coefficient of the pensioner, which equals =**0.04 x n**

All types of insurance pension are interconnected and have the same elements. They are different only by: eligibility criteria (age, length of service, etc.), conditions for pensioner's registration, methodology used for pension calculations. The following elements, which were defined by the Law on State Pension (2009), will be included in the formula and applied after the individual registration system is fully operational:

$$\mathbf{I = (n \times V) \times C + A/E}$$

Where:

A –the whole amount in individual accounts after the introduction of personified registration,

E –average life expectancy of men and women at the time of retirement in months.

Therefore the formula currently used for insurance pension calculations is the following:

$$\mathbf{MP = B + n \times V \times C}$$

Where: **MP** is the monthly pension; **n x V x C** is insurance component

Pension security covers the citizens who do not participate in insurance programs and are not entitled to pension insurance, for example, the people who have never worked or have not accumulated the defined contributory service, etc (RA Law on State pension, 2009). Pension security is different from the insurance pension in two main aspects: it does not have an insurance component and it is totally covered by the state budget (although after SSIF restructuring the pension insurance also covered by the state budget). The amount of social pension is defined by the legislation.

2.9 Financial Sustainability of the Pension System

This factor is very important issue in any country. It became even more serious issue for discussion when demographers all around the world recorded serious changes in demographic trends, population aging. According to Central Bank of Armenia (2008), the formula which is used for calculating the financial sustainability of the pension system is as follows:

AP x NP = AW x NC x CR

Where: **AP** – average pension

NP –number of pensioners; this component largely depends on the perspectives of the demographic situation of the country. Forecasts based on demographic trends in the country reveal that the gap between the numbers of retirement age and working age populations will become wider. This gap called “pipeline effect”, and experts forecast a serious decline in “pipeline conductivity” by 3.3 times. In 2005, the “pipeline effect” was more than 165 thousand people in Armenia (Central Bank of Armenia, 2008).

AW – average wage, from which contributions are paid; the higher the average wage, the larger are the possibilities for financing the system. The groups of wages from which social contributions are made are important components

NC – number of actual contributors; this is the number of people who actually work and make a mandatory social contributions. According to Central Bank of the RA (2008), in 2005 labor resources amounted to 2072.4 thousand people, while social contributions were made by 435.5 thousand people, or 4.8 times less. The reasons of this are various including the employment in the informal sector and agricultural employment; also from the people who are working in the formal sector 16% do not make mandatory social contributions (for example, people who are engaged in scientific or creative work are exempted from social contribution payments). As a result the pension burden is redistributed over a lower number of working-age population. More than 650 thousand people not on the list of those who pay social contributions "today" will become state pension receivers "tomorrow".

CR – current contribution rate; this component is defined by Mandatory Social Insurance Payments Act and amounts to 26.0% of the average nominal wage

The income part of the above mentioned formula for financial sustainability of the pension system is directly tied to the number of contributors and levels of their wages, which is the contribution base (**NC x AW**), and its monetary value (**CR**). The expenditure part of the formula depends on the number of pensioners and the average pension they receive, which is the expenditure base (**NP x AP**). The pension system is financially sustainable if the two part of the formula are balanced. But all of the above mentioned facts showed that in Armenia speaking about financial sustainability of the pension system is not adequate yet. The contribution base is too low to ensure higher expenditure base.

The requirement of ensuring financial sustainability of the pension system does not allow increasing the pensions only at the expense of collected mandatory social contributions. When the Government of Armenia increased pensions by 60% in January 2008, it was funded from the state revenues, because such an increase was impossible to fund from mandatory contributions without impairing financial sustainability of the Social Insurance Fund. As long as the current pension system directly financed from the state budget and does not match to contributions made from the personal income, it cannot be considered as contributory. The forecasted deterioration of the country's demographic situation will further increase the pension burden on the state budget.

Clearly, major reforms are needed, and these reforms must ensure the sustainability of retirement income systems. These reforms include steps to strengthen the link between pension benefits and contributions; and to diversify sources of retirement pension provision so that private pension funds play a larger role in securing adequate retirement income.

Chapter 3. Armenia's Multi-Pillar Pension System

3.1 Government's Intention of Pension Reform

Based on the detailed study of the situation in the country and international experience, the Government of Armenia decided that the multi-pillar pension system should be established in the country. The government has declared its political decision in its Decree No. 796-N dated 26 May 2006. The strategic objective of the Government of Armenia is to establish the pension system which will ensure some type of income for every elderly, from the minimum of the benefit exceeding the poverty line to the compensation of the wage or income before retiring.

The Armenian model of pension reform is based on numerous model scenarios developed with the support of the World Bank experts who used the PROST software. They have been presented and discussed at the open sessions of the pension system reform working group of the Government of Armenia, workshops and roundtables (Central Bank of Armenia, 2008). Based on the results of the discussions, working group members expressed their common position on the main principles and parameters of pension reform in Armenia by completing a questionnaire specially prepared for that purpose. For this purpose, the Government of Armenia will introduce a new multi-pillar pension system financed from various sources (Order of the Government of Armenia, 2006).

The multi-pillar pension system of Armenia will have two components: solidarity and funded components. Each component will have its two pillars: the solidarity component will have pillars “0” and “1”, while the funded component will have pillars “2” and “3”. Pillars “0” and “1” of the unified multi-pillar pension system will address the social security issues of pensioners, while the pillars “2” and “3” will realize the pension insurance of population.

Pension programs of social security nature will be implemented by a government and will be financed directly from the state budget. Pension insurance or social insurance schemes will be managed by private entities and financed from mandatory and voluntary contributions of employees or employers. They will also be financed from the state budget of the RA.

3.2 Defined Benefit and Defined Contribution Models

Pensions system pillars are differentiated by types of pensions paid to the retired population and whether they are mandatory or not. Through studies of pension systems around the world, experts have come to a conclusion that they can be grouped into two major models:

- ✓ defined-benefit model (**DB**)
- ✓ defined-contribution model (**DC**)

The defined-benefit model (DB) is widely used in the USA, Western, Eastern and Central Europe and former Soviet Union countries. The main principle of this model is that the size of pensions is defined as a result of political debate or based on contracts (in case of private pensions), and the mandatory contribution rates are determined based on actuarial calculations (Modigliani and Muralidhar, 2004). The main alternative within this model is the PAYGO pension scheme. Payments are not usually personified and are collected in the state budget. And the beneficiaries of the defined pensions are not those who make contributions at the given point in time, but those entitled to pension as defined by the legislation.

According to Central Bank of Armenia (2008), defined-benefit pension systems can be state, private or mixed, and according to this are classified into the following types:

- ✓ State pension systems based on the DB model, when state pensions can be the same for all citizens or differentiated by social, professional, age, or income groups, length of services, marital status, number of children, etc. The state pension system in its own turn has its subtypes which are as follows:
  - ❖ Base pension; this is an instrument of social protection in state pension systems. This pension is allocated to all citizens of the country entitled to pension, regardless of their former and current level of earnings. It is specially used in former socialist countries and a number of developed European countries.
  - ❖ Targeted pension; this type of state pensions is used as an instrument for mitigating income inequalities and from this point of view it is similar to social assistance benefits. It is commonly used in almost all European countries. The size of targeted pension differs depending on the following circumstances: Is the pension the only source of income for the citizen, Does the pensioner have any savings, Does the pensioner have any income generating property.
  - ❖ Minimum pension; this is an important instrument of poverty reduction used in state systems. This system is used in countries of the Middle East, North Africa,

Eastern Europe and Central Asia. Only certain groups of population (the most vulnerable) are entitled to this pension.

- ✓ Private pension systems based on the DB model, when private financial institutions define their own pension insurance conditions; the rates to be paid and the amounts of pensions.
- ✓ State-private pension schemes based on the DB model, when the state purchases annuities from private financial institutions for certain social groups of population, in order to provide them with pensions in cases defined by the legislation.

The defined contributions model (DC) is a relatively recent introduction into pension systems of countries. This system is also called funded model. This model is common in Latin American, Eastern European and Baltic states. The main principle is that the mandatory contribution rate is defined by the legislation as a result of political debates, and the amounts of pensions are determined based on the volume of actual accumulations and incomes from their investment and dividends received (Modigliani and Muralidhar, 2004). Payments are accumulated in individual accounts opened for that purpose and can be used in investment portfolios. The accumulated amounts grow throughout years and are paid to the given person when he or she reaches retirement.

Depending on how the system has been introduced and in which direction it has developed, the DC model currently has the following applications:

- ✓ The DC model is the only pension Security System operating on private bases with strict regulation and supervision of the state. Here the DC model operates in parallel to and is complemented with a wide range of state social assistance programs (poverty benefits, social pensions, etc.), which are designed to support those outside the private pension system. This system is mostly used in Latin American and Caribbean countries, Australia and Iceland.

- ✓ The DC model operates in parallel to the state pension security system covering certain professional or age or income groups of population. Funds which belong to the DC model may also be state managed (provident funds). This type of pension system is more widespread in Western Europe, the USA, Canada, Singapore, Thailand, and Malaysia.
- ✓ The DC model is incorporated into the existing pension system of the country and is the indispensable component of the unified system. This pension systems are called "multi-pillar” and are regulated by the general pension security law of the country. The rules for mandatory participation of citizens in various pillars of the pension system are defined by the legislation. This totally new approach is widely used in many Eastern European, Baltic and CIS countries currently engaged in radical pension reforms.

The Defined Contribution model is used as fully-funded private pension insurance, whose pensions are formed by the amounts accumulated by the employee during his years of service and revenues and dividends received from those amounts. This model called “personified,” because the pensioner himself/herself "finances” his/her pension.

According to Central Bank of Armenia (2008), the DC model can be introduced based on two principles mandatory and voluntary, and depending on where this model is introduced (state or private), the rules for implementing the principles are different and are grouped into the following categories:

- ✓ Mandatory introduction of the DC model as the dominant direction of pension security policy in the country, in which case other pension security programs, like state social security programs or individual pension schemes, are used as an addition to the dominant direction,

- ✓ Mandatory introduction of the DC model as an additional direction of pension security policy in the country, in which case it is used as “an addition” to the dominant state pension security of the defined-benefit model. This is solve two important problems: ensure pension adequacy and create possibilities for receiving additional pension.
- ✓ Voluntary introduction of the DC model as an additional direction pension security policy in the country, in this case it is used as “an addition” to pension system model operating in the country.

Armenia now is in a stage of transition from DB model to DC model. The Government of Armenia plans to introduce the DC model in the country within the framework of its government program for 2008-2012 (RA Government Decree, 2008). In the RA the functioning state pension system type is base pension, whose main purpose is to secure social protection. This pension is allocated to all citizens of the country entitled to pension, regardless of their former and current level of earnings. Armenia does not have targeted and minimum types of state pension, and in my opinion it can’t at this current point because, as there are too much people whose income is less than the minimum consumption basket, the social expenses of the Armenian state budget will not be able to appropriate enough funds to support all the vulnerable groups of population in the visible future.

The pension system reform working group of the Government of Armenia has selected this DC model which will be incorporated into the existing pension system of the country and will make it important component of the new unified pension system. This pension system is called "multi-pillar” and would be regulated by the legislature of our country: Law on Personified Record Keeping, Law on State Pensions, Law on Unified Income Tax, etc. This type of pension system reform helps to keep the components of the previous pension system and at the same time introduce the new components that will serve as mechanisms to increase the pensions in the country reaching their level to that of the minimum consumer budget.

3.3 Types of Reforms

Based on the initiation and implementation, either radical or partial, pension system reforms can be grouped into the following main dimensions:

1. Radical restructuring of state pension system through full privatization of insured pillar: The main type of this reform is called “Chile Model”, but there are other models of pension system privatization as well. The “Chile Model” was first developed and implemented in Chile during 1981-1983 (Corbo and Schmidt-Hebbel, 2003). Its main character is mandatory insurance. Conceptual approach of this model is that the state shall care only for the needy and vulnerable population and ensure them with old age targeted minimum pension. Working class representatives have to ensure their old age income themselves through savings. Theoretical mechanism of using the model is the transformation of mandatory pension system into complete privatization of the insured pillar of the system.
2. “Relieving” of state pension system through modifications in the formula for the calculation of pensions or pension entitlements. This is also called “parametric reform”, because it is related to revision of important pension parameters within the current system (Holzmann et al, 2003). Conceptual approach of such reforms is that the state shall care for the improved quality of life and health maintenance of the aged contributing to the increase of their working years. This dimension encourages the aged people to work and to be involved in gainful activities. The purpose is to focus

on those groups of the elderly that are really incapable to work. Economic mechanisms of reform lead to the increase of retirement age, modification of pension calculation formula with the objective of decreasing its amount (so that pensions become less attractive), etc. Armenia also used some features of this type of reform by increasing the retirement age in 1996, completely changing the pension formula and introducing the new principle of indexation, when linking with the salary was replaced with pension indexation (Central Bank of Armenia, 2008).

3. Introduction of private pension schemes parallel to state pension system encouraging people's participation in these schemes. Conceptual approaches for this dimension are similar with the previous one, but the difference is that by keeping the size of state pensions low the state encourages public participation in private pension schemes. Some countries also use provision of tax privileges for participants, provision of targeted loans from the accrued amounts, etc. This dimension of reforms is prevailing in many countries of Western Europe, and it is usually implemented parallel to parametric reforms (Central Bank of Armenia, 2008).
4. Development of new multi-pillar system on the basis of state pension system through improvements of the current system and introduction of new pillars. This is a completely new approach and was developed by the World Bank to provide technical assistance program for structural and institutional reforms in former Soviet countries. Conceptual approaches for this dimension are related to the fact that all members of the society are exposed to at least one case of inability: old age. Older share of the population is exposed to health deterioration due to old age, inability to take care of themselves, and other conditions. Consequently, threats posed for the society members that are incapable to work shall be distinguished and managed in a

differentiated manner. This is laying grounds for the concept of multi-pillar pension insurance system. Economic mechanisms of this dimension differ by their pillars.

Armenian pension reform is based on this last dimension: establishment of a new unified multi-pillar system by improving the current system and implementing the new pillars. Study of all of the above mentioned types of reforms and their applications in different countries revealed that there are two approaches for the modification of the existing system:

- Improvement of the existing system for putting the pension types in order, bringing them in consistency with the methodological requirements, clarifying sources of funding, ratio and parameters of pension payments. This approach was used in East European countries.
- Restructuring of existing system, which means to change DB solidarity system into insured pension through introduction of national accumulation model. This was implemented by Poland, Latvia, Russia. Armenia also tried to move in this direction in terms of legislation, however, this is not completed yet.

3.4 Pillars of New Pension System

Armenian pension system will be divided into the following elements:

1. the state pension (Pillars "0" and "1")
2. the mandatory funded pension component (Pillar "2")
3. the voluntary pension component (Pillar "3")

Pillar" 0" or Social Pension

Social pension will protect from extreme poverty Armenian citizens who are incapable to work. According to Law on State Pension (2009), the residents of the Republic of Armenian who reach the age of 65 will be eligible for the social pension, if they do not have any length of service, or have up to 10 years of length of service, or have never accumulated contributions. The social pension will be equal to 80% (instead of current 100%) of the basic pension defined by the legislation for the given year. This is done to encourage people to give up informal employment and seek formal employment. The basic pension will be indexed with the annual growth of average salary. But it can be terminated if the person relinquishes Armenian citizenship, changes place of residence, or circumstances of survivor social pension recipient change, or person with disability who receives disability social pension becomes recognized as capable to work.

The types of social pension are old-age social pension, disability, social pensions and survivor social pension.

Pillar "1" or Employment Pension

Employment pension is a component of mandatory social security policy and provides mainly universal types of pensions to all persons satisfying specific requirements at the expense of mandatory social contributions paid to the budget. "1" pillar will ensure compensation for years of service of individuals who has reached the age of 63, have 10 years of service and have become eligible for old-age, disability or survivor pension (Law on State Pension, 2009). Employment pension will be equal to the sum of the basic pension and the value of one working year multiplied by length of service. The amount payable for each year of service is defined by the Armenian legislation and indexed to consumer price index.

This pension will compensate years of service for people above 40 by ensuring income exceeding poverty threshold by at least 1.5 times (Central Bank of Armenia, 2008).

The types of employment pension are retirement, incapacity to work or disability, and survivor employment pensions (Law on State Pension, 2009).

Pillar "2" or Mandatory Funded Pension

The second pillar is the core essence of the multi-pillar pension system, since the system is called "multi-pillar" just because of the introduction of the mandatory funded pillar. Mandatory funded pension is a component of the mandatory pension insurance policy and provides pensions corresponding to the amount of contributions made at the expense of social contributions of the population from their incomes.

The people who participate in this pillar are Armenian residents (i.e., all persons residing and/or engaged in economic activities in the Republic of Armenia regardless of their citizenship) from 16 years of age to 40 on 1 January 2010 (mandatory), Armenian residents aged 41-62 years (voluntary) (Law on State Pension, 2009).

Mandatory cumulative contributions amount to 10% of the salary (5% or half of which is paid by the state). This rate is defined based on the need to ensure the necessary replacement rate in the future and the aim to have enough scale of funds, in order to ensure high effect from that scale. If the salary is lower than AMD 500,000, then the state will participate in the amount of 5%, whereas for salaries higher than AMD 500,000 the state will participate only by AMD 25,000 monthly (Law on State Pension, 2009). Hence, the accumulated contributions made by persons having higher salaries will exceed the 5% of their salary.

Although the second pillar of the multi-pillar pension system is voluntarily for those aged 41-62, however the exit from the system or termination of contributions is forbidden.

With participation in this system the individual takes responsibility to make payments defined by the legislation (5% of income).

Pillar "3" or Voluntary Funded Pension

Voluntary funded pension is a component of the voluntary pension insurance policy and provides pensions at the expense of insurance payments made by the population on an individual or corporative basis. The contributors to this pillar could be all working-age residents of Armenia (Law on State Pension, 2009). Sizes of contributions are determined by private entities of the pension industry based on actuarial calculations. Voluntary funded pension will be an additional source of income for elderly people.

The specific aspect of this pillar is that any Armenian citizen, regardless of age and participation in the other pillars of the multi-pillar pension system can enter the "3" pillar but in contrast to the previous case he/she is eligible to stop making contributions at any time.

Each pillar of Armenia's pension system model will address a specific key issue. "0" and "1" pillars will apply the DB model, while "2" and "3" pillars will apply the DC model. Social and employment pensions will not be linked to the personal incomes of beneficiaries and will be paid from the state budget based on the solidarity principle. On the contrary, funded pension will be directly linked to the contributions made from personal incomes, i.e. these pensions will be formed based on the self-financing principle.

The main objective of solidarity component is annual increase of pensions so that in 2012 an average employment pension becomes equivalent to 100 percent of the minimum consumer budget; in 2018 basic pensions and in 2021 social pension equivalent to 100 percent of the minimum consumer budget (Central bank of Armenia, 2008). The Parametric objectives of "0" and "1" pillars are as follows: faster increase in the size of average pension compared to average wage; faster increase of the level of basic pension compared to the increase in working year value; ensure a social pension comparable to the minimal consumer budget in 2012, which will raise pensioners out of poverty.

The main objective of funded component is to link pensions with personal incomes. The system will come into force on 1 January 2010 for Armenian residents of the age of 16-40 on a mandatory basis by Scheme I, and for Armenian residents of the age of 41-62 on a voluntary basis by scheme II. I scheme has two components: unified tax and accumulations in individual accounts at the rate of 10%, half of which is paid by the state. II scheme has two components as well: unified tax and accumulations in individual accounts at the rate of 5% of the income without state participation (Central Bank of Armenia, 2008).

The Pension Reform in Armenia was planned in detail, taking into consideration various questions, such as: In terms of public funding should the preference be given to strengthening of 0 and 1 pillars or to promoting introduction of the 2 pillar during the development of multi-pillar pension system? Should participation in the 2 pillar of pension system be voluntary or mandatory? Should all citizens or specific age groups participate in the 2 mandatory pillar of pension system? Etc. There were many questions and the answer of which gave the Armenian peculiarity of the multi-pillar pension system. For example, Why Armenia has chosen 10% for second pillar, because according to calculations 10% of the salary was defined as the required accumulation amount which should ensure higher replacement rate than the person might have if he had stayed in the solidarity system during 25 years of employment .Why the transition age is 40? The transition age of 40 enables persons of this age to work for 23 more years and get higher average pension than 41-year-old persons who remains in the solidarity system (Central Bank of Armenia, 2008). All the described policy measures are strongly interconnected and only by using the entire set of those measures the pension reform will become complete and achieve its targeted objectives.

While implementing pension system reform it is very important to keep comprehensiveness and consistency. Countries in transition passed the road of pension system reforms in different manners: implementation of multi-pillar pension system through initially designed and approved unified law (like Hungary, Kosovo, Poland, etc.), multi-pillar pension system implementation through initially designed and approved separate laws (like Baltic states); and implementation of multi-pillar pension system in non-coordinated manner and discrete steps (like Russia). Armenia took the path to implement the pension system reform which is closer to Baltic states, i.e. through the implementation of multi-pillar pension system through initially designed and approved separate laws (Law on Personal Recordkeeping, Law on Unified Income Tax, Law on Fully Funded Pension, etc.).

All countries that have implemented reforms are obliged to address coverage of the population by "old" (solidarity) and "new" (accumulation) systems. Various countries have different approaches to this issue. They are mainly the following:

- ✓ At a certain period everybody mandatory moves to the "new" system while the "old" one is preserved for social protection of current pensioners. For example, Kazakhstan and Kosovo have chosen this way. It should be stated that both countries do not have a problem of ageing population;
- ✓ At a certain period a specific group moves to the "new" system mandatory and the other group voluntarily, while the other age groups mandatory remain in the "old" system. Almost all transition countries in Eastern Europe implemented such a reform. The age-group that should be mandatory covered by the accumulation system is between 30 to 40 and the age for voluntary coverage is 50;
- ✓ At a certain period a certain age group mandatory moves to the "new" system, while the others mandatory remain in the "old" one. Romania, Bulgaria and Russia adopted this approach.

- ✓ At a certain period one age group is mandatory covered by the “new” system and the others voluntarily chose between the “new” and “old” systems. Accumulation system is mandatory for all new employees in Estonia, Slovak Republic, Hungary, Macedonia. The remaining groups of employees have to decide within a defined period whether to stay in the “old” system or move to the “new” one;
- ✓ At a certain defined period the mandatory accumulation system becomes functional where every person is “welcome”. Lithuania has adopted this route. There are no time-limits for the transition process, i.e. employees may decide to quit the “old” system any time they want.

Chapter 4. Governance of Multi-Pillar Pension System

4.1 Necessary Changes for Pension Reform

Before the introduction of multi-pillar pension system almost all the transition countries implemented institutional reforms for bringing the pension system inherited from social regime in consistency with the requirements of market economy, and parametric changes for bringing types of pensions and forms of their allocation, calculation and payment in consistency with economic and financial-budgetary capacities. Armenia is not an exception.

4.2 Institutional Framework of the System

When implementing pension reform, there is a need to pay special attention to institutional setup. To chose this or that method is related to the development level of existing institutions and capacity building options. According to Central Bank of Armenia (2008), usually, countries choose one of the following management models:

- ✓ PAYGO system is managed by state authority, while accumulative system is managed by private structures.
- ✓ Pension insurance contributions are collected by specifically established state funds and distributed by the structures of PAYGO and accumulation system.
- ✓ Pension insurance contributions are collected and managed by state authority and transferred for private management in a procedure set out by the legislation.

In the case of Armenia, out of the above mentioned types of management models the first is applicable. The state budget will manage and finance social, basic and employment pensions paid from the state solidarity component, while the financial institutions will manage mandatory funded and voluntary funded pensions paid from privately funded component.

The entities participating in the process of pension collection and distribution are:

1) *Ministry of Labor and Social Issues (MLSI)*, which will create a methodological basis for pension policy and ensure the implementation, monitoring and oversight of that policy (Central Bank of Armenia, 2008). To ensure the proper implementation of these functions, the Social Insurance and Pension Insurance Department of the MLSI will be reorganized in line with the scope of the pension policy implemented by the MLSI.

2) Another important entity that participates in pension reform is the *State Social Security Service* (SSSS), former State Social Insurance Fund (SSIF). The main functions of SSSS are calculating, allocating and preparing the payment request of state pensions, advisory services on allocation, calculation, payment of pensions (through banks and Haypost), financial management of state pension demand. The SSSS will also instruct the Treasury on the

amounts calculated according to lists of pensioners which will be transferred to the respective branches of Haypost or commercial banks (Central Bank of Armenia, 2008).

The regional offices of social services, which were ensuring the payment of pensions, operating under the control of *Marzpetarans*, will be merged with regional offices of the SSSS and be included in the system of MLSI. The reorganized State Service of Social Security will perform the functions currently assigned to the regional offices of social services, as well as the ones laid down in its Charter. Within the pension reform the SSSS will be responsible for: calculation, granting and payment of state pensions, registration of state pension beneficiaries and maintenance of the administrative registry, education of citizens on the pension legislation, in particular, granting, calculating, paying pensions, and other issues.

3*) The Labor Inspectorate* (LI) of the MLSI will check the documents submitted for assignment and payment of pensions, i.e. checking inaccuracies and reliability of documents presented for allocation and payment of pensions. It will also apply administrative sanctions in case of administrative violations (Draft Law on Fully Funded Pensions, 2009).

During implementation of this function, the Labor Inspectorate will cooperate with the SSSS. In cases of inaccuracy or doubts with regard to the reliability of documents submitted by employers or beneficiaries for assignment and payment of pensions, the SSSS would ask the employer or the beneficiary who has submitted documents for additional information. If doubts are not eliminated by the information and there is a lack of reliability, the available information is transferred to the LI for further inspections at the given employers organization and receiving conclusions regarding clarification of circumstances and the situation (Central Bank Report, 2008). This cooperation will eliminate the need for establishing separate structural units with unnecessary, duplicated functions and will reduce the number of units conducting inspections at employers' organizations.

4) *The State Tax Service* (STS) of the Government of Armenia will administer individual registry of unified income taxpayers, checking and identification of information, supervision over collection of unified income tax. It will also be responsible for personified record keeping of persons who pay taxes and pension contributions. The STS will also perform reconciliations of individual accounts of contributors in cooperation with the SSSS.

When the personified system of unified tax payments is introduced, the current Social Contributions and Income Control Department of the STS will be renamed and reorganized into a specialized inspectorate using the capacity of regional tax inspectorates.

According to central Bank of Armenia (2008), the individual registry of unified tax payers means: 1) Receiving monthly individual reports from employers on employees' incomes, mandatory social contributions and taxes paid, 2) Entry of individual reports' data into the database and checking the data, 3) Provision of information on mandatory cumulative individual payments to the CDA, 4) Supervision over the process of collection of the unified tax and mandatory cumulative contributions, 5) Registration and identification of the paid unified tax and the amounts transferred to cumulative individual accounts, 6) Public advice to Armenian citizens on the unified tax and mandatory cumulative contributions.

5) *The Ministry of Finance and Ministry of Economy* (MF, ME) will ensure development of the financial, economic and fiscal policies, and funding of state pensions in accordance with the approved pension policy. Based on the payment request submitted by the SSSS, the Treasury of the MF will finance the payment of state pensions to organizations in charge of delivering services of payment of state pensions. Based on the information received from the STS, the Treasury will transfer the mandatory funded contributions to the CDA account in the Central Bank of Armenia.

6) *The Central Depository of Armenia* (CDA) will be the body responsible for centralized administration of the funded component. According to the Draft Law on Fully Funded Pensions (2009), the functions of CDA will be:

- ✓ Managing and keeping individual pension accounts,
- ✓ "Transferring pension accounts" to asset managers,
- ✓ Implementing programmed withdrawal
- ✓ Issuing, valuation and redemption of pension units in accordance with the choice of investment portfolio,
- ✓ Acting as an intermediary between beneficiaries and asset managers,
- ✓ Random selection of asset managers for those participants who have not chosen their asset manager,
- ✓ Receiving information from asset managers and providing the information to beneficiaries and vice versa
- ✓ Custody.

Operations of the CDA are supervised by the Financial Markets Supervision Service to reduce the risks and possibilities for fraud in CDA information technologies and operations. Supervision has the following aims: compliance with Armenian legislation, compliance with agreement between the Government of Armenia and the CDA, compliance with FMSS regulations (Central Bank of the RA, 2008).

7) *The Financial Markets Supervision Service* (FMSS) will be separated from the Central Bank and will be responsible for financial system regulation and supervision. The functions of this entity will be regulation, license, monitoring and supervision of the activities of financial institutions of the pension system, such as assets managers, private pension insurance companies, etc. The FMSS will be responsible for introducing the funded pension component institutions. Regulatory and supervisory functions should be defining licensing

requirements, issuing, suspending and voiding accreditations, defining prudential requirements for market, liquidity, operational and other risks within the framework defined by the law, Defining information disclosure requirements, protection of consumers' interests.

8*) Pension Assets Managers* (AM) are commercial organizations registered in Armenia, which operate according to Armenian legislation regulating professional activities of commercial organizations and the securities market, agreements made between AM and CDA, policies and rules developed by the Financial Market Supervision Service of Armenia.

The number of AMs will be from 3 to 4 at the initial stage (Central Bank of Armenia, 2008). The preference will be given to organizations who have the international experience, corporate governance traditions, international rating in the area of assets management, and also availability of adequate resources. The preliminary selection of AMs and negotiations with them will be implemented by the Central Bank of Armenia or the Ministry of Economy, while the FMSS will be responsible for licensing and supervision of AMs.

4.3 Asset Management Process

The asset management process starts with the collection of contributions and information. Employers send information on employees making mandatory cumulative contributions to State Tax Service of the Government of Armenia and the information is entered into the database. Employers calculate the unified tax and the mandatory cumulative contribution and transfer calculated amount to the treasury (Central Bank of Armenia, 2008). The employer also calculates the contribution of state's participation.

The employer shall present monthly and annual information about salary, paid taxes and funded contributions to the employees (Draft Law on Fully Funded Pension, 2009).

After receiving the information from employees, the STS compares the information on payments within 15 days and sends this checked data to the CDA in an electronic format and 10% of person's individual accumulations are sent to the account of CDA in the Central Bank of the RA, who within 24 hours transfers that share to asset managers (Draft Law on Fully Funded Pensions, 2009). Based on the information that it receives, the CDA updates persons' pension accounts, which should contain the following information about the account holder: Name, surname, sex; address; passport number; date of birth; social security card number (or certificate on not having a card); bank account number; history of contributions made by the individual; current or past information on the choice made by the individual (titles of assets managers, types of portfolios, number, sum of units).

Then pension account holders receive information on asset managers and their investment portfolios from CDA or banks or post offices and make their selection (secretly, without participation of the bank or post office employee). The selection can be changed not often than once a year for free. To change the investment portfolio more than once a year is a paid service. Often change of AMs will negatively affect the quality of asset management: the frequent exchange of units will make the AMs to keep a great amount of highly liquid assets in their portfolios in the form of cash and cash equivalent assets, which increase the risk factor for pension funds. In order to prevent this tendency it is planned to have 3-4 AM in the initial phase of pension reform in the RA, not more (Central Bank of the RA, 2008).

Participants should submit the document/certificate indicating their selection to the employer, who includes that document in the employee's individual report on payment of the unified tax and send it to the STS every month.

If the information about the employees' individual account has inaccuracies, then the employee should make corrections first with the employer and then with the STS. The following are responsible for the accuracy of information included in individual reports:

- The employee is responsible for the information he/she has provided,
- The employer is responsible for calculated and paid salary and unified tax, as well as other information he might have provided,
- STS is responsible for the checks it has done,
- CDA is responsible for errors resulting from its operations.

Another important part of asset management process is assets custody, which is implemented by the CDA. This will be implemented in the following way: the information on all assets included in investment portfolios is provided to the CDA on a daily basis. The CDA conducts daily valuation of the assets and based on the results records the current values of the pension assets of each person, his/her contributions and information on investment portfolios in his/her pension account. Then this information is provided to beneficiaries.

4.4 Investment Portfolios

Investment portfolios are composed by Asset Managers. Investment portfolios are registered by the Financial Markets Supervision Service of Armenia. AMs can register three types of investment portfolios according to the level of risks (Article 42 of Draft Law on Fully Funded Pensions, 2009):

- ✓ Aggressive portfolio, which should invest minimum 50% in fixed income instruments (bonds) and maximum - 50% in equity (shares),
- ✓ Balanced portfolio, which should invest the minimum 75% in bonds and maximum 25% in shares,
- ✓ Conservative portfolio, which may invest 100% in bonds.

In the first 3-5 years of the introduction of the funded component, i.e. in the initial phase of the formation of new financial instruments and financial knowledge among the population, AMs will set up only one investment portfolio, balanced. Later, AMs should propose at least two types of investment portfolios, one of which should be balanced.

According to Draft Law on Fully Funded Pensions (2009), the participants cannot allocate their monthly contributions to more than one investment portfolio at the same time, for example invest part of the monthly contribution in an aggressive portfolio and the remaining part in a balanced portfolio. If the person did not make a selection about asset manager and/or investment portfolio, then the asset manager is selected by the CDA, and that asset manager allocates the contributions of the given participant to a balanced investment portfolio.

According to Central Bank of Armenia (2008), investment portfolios should ensure the safety of pension assets, investment diversification, maximum profitability in accordance with the safety of pension assets, adequate liquidity. Based on these principles, the pension assets in Armenia can be invested in the following categories of assets (Article 43 of Draft Law on Fully Funded Pensions, 2009): 1) Bank accounts and deposits in banks that are not under the enforcement action and are not subject to a suspension of their license, 2) Securities issued by the Government of Armenia, 3) Securities of Armenian organizations registered at the authority regulating the capital market and listed in the security market of Armenia or Organization for Economic Cooperation and Development (OECD) countries, 4) In investment companies, which are supervised by the FMSS of Armenia.

According to Central Bank of Armenia (2008), the composition of investment portfolios should have the following restrictions: 1) the maximum investment in securities issued by one issuer should not exceed 5% of the total volume of shares issued by issuers and 10% of the total volume for bonds. This restriction does not apply to investments in investment companies; 2) in the investment portfolio, the maximum share of securities issued by one issuer and/or affiliated issuers in the portfolio should be not more than 5%. This restriction does not extend to investment companies; 3) the maximum investment in foreign currency denominated instruments should be 30%; 4) investments in bonds issued by the Central Bank of Armenia and the government should not exceed 70% of the portfolio; 5) the amounts kept in bank accounts and deposits should not exceed 20% of the portfolio.

There should also be some limitations in investments, so that the risks of these assets be minimised. According to Article 44 of Draft Law on Fully Funded Pensions (2009), investment in the following instruments will be prohibited:

- ✓ Non listed securities,
- ✓ In assets which according to the law are not capable of alienation,
- ✓ Derivative Financial Instruments, if not for hedging purposes
- ✓ Property or other physical assets, if they are not listed in organized markets and/or if their evaluation is uncertain (for example pieces of art, coins, luxury cars, etc.),
- ✓ In securities issued by AMs, custodians, members of their managerial boards, as well as persons affiliated to the mentioned individuals, and in their property,
- ✓ In other assets, which in the reasonable opinion of the financial supervision authority in Armenia are risky.

The state will ensure the safety of pension assets through introduction and application of strict supervision and regulatory mechanisms. One of the main objectives of regulation is to ensure that portfolios are well diversified. Asset managers should present an investment strategy for each year to the financial market supervision service of Armenia (Central Bank of Armenia, 2008).

4.5 Management of Funds

The funded pension is the pension which consists of personal accumulations and the revenues received from their investments, which can be used by the person only based on the defined rules and forms, which defined by the state in the corresponding legislation. According to legislation the person has the rights to use amounts accumulated in individual accounts, if the person has reached the retirement age defined by the law; or the accumulated amounts were used for purchasing disability and survivorship annuities or insurance before retirement; or the person changes his citizenship.

According to Article 49 of Draft Law on Fully Funded Pensions (2009), there are three types of funded pensions:

- ✓ Programmed withdrawal, which means receiving monthly pension according to a specific scheme. In this case, the monthly pension is calculated by dividing the total accumulated amount into the life expectancy at retirement, i.e. dividing the total amount by number of months.
- ✓ Annuity; in this case all the accumulated amounts are transferred to an insurance company, which must pay a certain amount of monthly pension to the person until the end of his life. The annuity allows people to transfer the risk of living longer than average life expectancy to the company offering the annuity (National Center for Policy Analysis, 2004). The state enforces people to participate in the funded pillar in return taking responsibility to ensure conditions so that people will receive the accumulated pension until the end of their lives. For the annuity offer to be economically beneficial to companies offering them, purchasers should be persons of retirement age with varying health conditions, so that risk assessment based on average life expectancies will be effective. If the purchase of annuity was on voluntary basis, the persons who have no health problems would purchase that

annuities in expectation that they will live longer than average life expectancy, but instead the people with different health problems at retirement would not be willing to buy annuities. In other words there is an adverse selection problem, that's why the government decided that annuities should be purchased mandatory.

- ✓ Lump-sum payment; in this case the person has the right to receive his accumulated funds with single payment. These cases are defined by the legislation.

The funded pension can be used before reaching retirement only in the following cases: if the person has an illness that will have fatal outcome; or if the person changes his Armenian citizenship or has not been an Armenian citizen when he was making contributions (Draft Law on Fully Funded Pensions, 2009). In case of not having or changing Armenian citizenship, amounts accumulated by the person can be transferred to the individual pension account opened in the country of new citizenship, if a mandatory or voluntary funded system is operating in the given country, or remain in Armenia, if mandatory or voluntary funded systems do not operate in the given country. In this case, the person receives his accumulated amounts in accordance with the legislation of Armenia.

According to Central Bank of Armenia (2008), "In order to calculate annuities and programmed withdrawals, the CDA and insurance companies should use unisex mortality tables, which should be provided by the National Statistical Service of Armenia."

4.6 Taxation

Mandatory cumulative contributions are taxed at the time of collection; at the time of paying pensions they are not taxed. Revenues received from mandatory cumulative amounts are not taxed. In other words, mandatory contributions are taxed, revenues and pensions are tax exempt (Central Bank of Armenia, 2008).

Voluntary contributions are tax deductible. Voluntary pension contributions paid from the declared income are deducted from the income tax base. Deduction shall not exceed 5 percent of the declared income. The person may contribute to pillar “3” as much as he/she wants to, but any amount exceeding 5% cannot be deducted from the income tax base. Contributors for the voluntary funded pension insurance may include individuals who make contributions for themselves from their income, individuals who make contributions for another person from their income, and legal persons that make contributions for their employees.

4.7 Inheritance

Mandatory accumulated funds are inheritable. Conditions of inheritance and proportions of inherited amounts are different in various cases.

In the case where a person dies before retirement, his or her spouse and other heirs as defined by the law receive the whole amount accumulated by the person. If the person dies in the retirement age and he/she receives his/her pension in the form of programmed withdrawals then the entire remaining amount is given to his heirs in proportions defined by the legislation on inheritance of assets (Draft Law on Fully Funded Pensions, 2009).

According to Central Bank of Armenia (2008), there will be two types of annuities:

- Single life with guarantee (usually from 5 to 10 years); this is the purchase of annuity for one person only, where payments stop after the death of the person. But if the person dies during the guaranteed period, then his heirs receive certain part (25, 50, 75%) of the amount that he has not received in accordance with the contract.

- Survivor with guarantee; this is the purchase of annuity by spouses, where after the death of the person his or her spouse receives certain part of the person's monthly payments (25, 50, 75%) until his/her death. But if both spouses die during the guarantee period, then their heirs has right to receive certain part of the unpaid amount.

4.8 Perspectives for Capital Markets

The development of the capital market is a necessary condition for the success of a reform based on the accumulation of pension funds. Low risk-adjusted returns signal an inefficient allocation of a country's savings, while the good management can create higher and more secure benefits for members and provide positive externalities to the economy (Holzmann and Stiglitz, 2001). This means that besides guaranteeing higher pensions to contributors of funded system, the funds that accumulated from the multi-pillar pension system can serve as a positive externality to the economy by serving as good investment mechanisms for the development of capital markets.

According to Holzmann et al (2008), pension reforms can have four main outcomes on the development of capital markets: larger capital markets, improved regulations, greater transparency, and better corporate governance practices.

1) The larger size of the capital market. The size of capital market will grow as financial savings increase. Financial savings can grow because of an increase in total savings and of a change in the composition of savings. But even if the reform does not have significant effects on the total level of savings, it can affect the volume of savings intermediated through the capital markets and the composition of those savings. There should be an expectation that the accumulation of pension funds will have a positive effect on the level of trading in the capital market. Also with the growth of the size of the market, new funding possibilities will emerge.

The aim of pension fund investment is to maximize the long-term return on social security savings. Life insurance companies that sell life annuity pensions to pensioners of the new social security systems need to invest their reserves in financial assets with duration similar to that of the flow of pensions that they have to pay out over time. Consequently, the existance of pension funds encourages the demand for long-term financial instruments, thereby creating the conditions for the development of that specific market (Holzmann et al, 2008).

2) Improved regulations in the financial market. The demand for financial instruments will serve as a driving force for legislators and authorities to introduce changes in the laws and regulations specific to the capital market. These changes shall include modification of the tax system concerning issuance and acquisition of financial assets, improvements in trading mechanisms, such as stock exchanges, and changes in bankruptcy laws and other regulations that provide protection for investors.

3) Greater transparency in the capital market. The participation of pension funds in the capital markets should be accompanied with the increase in the quality and timeliness of the information available to investors (Holzmann, et al, 2008).

4) Better corporate governance practice. The participation of pension funds as shareholders or bondholders may also serve to improve corporate governance standards of the companies in which they invest. This is a result both of the direct demands made by the pension funds on the managers and controllers of such companies, and of a decision on the part of the issuers themselves to create conditions that make it attractive for the pension funds to invest in the securities that they issue.

The accumulation of pension funds may have a significant impact on the development of capital markets and thereby on economic growth and the welfare of individuals. According to Corbo and Schmidt-Hebbel (2003), a study of the Chilean case estimated that during the period 1980-2001 almost 5 percent of the growth of GDP is explained by the impact of the pension reform on the capital market. But the magnitude of these effects is different in various countries that began social security reform. The differences are explained mainly by the characteristics of pension fund investment regulations in each country. Some countries have forced the funds to invest mostly in government debt securities, in others, to invest in equity securities is prohibited or restricted.

Conclusion

In conclusion I would like to briefly summarize responses to research questions, which were reflected in the chapters above.

Responding to the first question, Armenia needs pension reform because the current pension system is not capable anymore to guarantee sufficient amount of pensions (which in some cases is the only source of income for pensioners) because of aging population, immigration of working age population from the country, decreasing ratio of working age population to pensioners, poor administration, etc. All these factors make almost impossible to further increase pensions in current pension system without hurting its financial sustainability, which is already in poor condition because the contribution base is much lower than the expenditure base.

Responding to the second research question briefly, the major differences between the new pension system comparing with the existing one are as follows:

a) the current system is defined-beneficiary model or PAYGO system, where each person pays mandatory social contribution to the state budget and receives pension from the state budget after retirement; the new pension system is defined-contributory model or funded system, where person opens individual pension account, makes monthly contributions to that account and after retirement receives the entire amount of money back together with some income received from the use (as an investment) of his contributions by the pension fund;

b) in the new system each person will be responsible for his/her own pension and there will be a link between the amount of income that person earns and the amount of pension that he/she receives; this link is absent in the current system where the amount of pension is determined mainly according to the number of years that person worked;

c) in the current system once the person makes mandatory social contributions the money are transferred to the state budget and the property right is transferred from that person to the state, while in the new pension system each person opens an individual pension account making monthly payments to that account until the retirement age; payments accumulated on that account are considered his/her own personal property; even if the person dies before the retirement age the money on his/her account can be received by his/her heirs according to law, as any other personal property;

d) another difference is that in the new system there is more transparency than in the current one: in the current system the person makes mandatory social contributions to the state budget and does not know exactly where these money go, while in the new system the person not only can be aware where his money goes until retirement, but also during the whole process he/she can have options to choose and change investment portfolio and/or asset manager. The new system is much more transparent, because each person can receive monthly statement reporting how much income his/her investment brought or how much money were accumulated in his/her personal account, etc.

It is more difficult to answer to the third research question, because the research done through this paper reveals that the pension system reform in Armenia is still at the stage of inception and it will take decades of consistent implementation before a complete evaluation is possible. This research only gives simple evidence that the current system is not capable anymore to guarantee reliable amount of pension, but the new one has many advantages over the current one.

Besides all the former mentioned advantages that multi-pillar pension reform can provide, there are some risks as well connected with the implementation of pension system reforms. Part of them arise from the policy choices, i.e. risks concerning long-term projections, political decisions, defined parameters and adopted principles, the other part is related to contributory pension system because it is connected with the pension assets investment, i.e. with financial risks. Therefore to decrease the risk of policy choices, the assumptions and projections were made at maximum prudent level; in order to decrease financial risks portfolio diversification and the mechanism of investment restrictions will be used.

According to Holzmann, et all (2007)," The World Bank strategy argues that the adoption of a multi-pillar system can increase national savings, therefore improve economic growth." Most governments encourage their citizens to save for retirement. In PAYGO system the contributions are immediately paid to current pensioners: there is no opportunity for savings. But the funded model creates reserves, which become savings for the retirement, but at the same time they serve as investments. According to calculations of the Central Bank of Armenia (2008), in 2015 the pension assets will amount to $945.8 million. For Armenia this will give good chances not only to improve the well-being of senior citizens, but also to invest these funds into different income-generating financial instruments, at the same time promoting and developing financial markets of the country. So these funds should not be kept frozen, but they should work to contributors' benefit.

Policy Recommendations

1. One very important aspect of funded system is that it accumulates huge amount of savings on personal accounts, which can be invested in different ways. In my opinion the best way to use these funds would be to cover the state budget deficit by lending these funds to GOAM. For many years the Government of Armenia used to cover its deficits by borrowing from the World Bank, International Monetary Fund or bilateral sources. Instead of borrowing from international financial institutions or foreign governments the GOAM can borrow internally from the pension funds, cover some part of its deficit and pay interest to its own citizens. However, caution should be taken not to make the pension

funds a reserve fund of the Central government for permanently covering of deficit: decisions on how to invest capital of pension funds should be made professionally and based on the best interests of the accountholders. These conditions should be ensured through legal acts and appropriate procedures. Of course, government borrowing from international financial institutions has many advantages (like grace period, longer maturity, low interest rate), but ultimately this creates some dependency from IFIs or foreign governments. If Armenia for some reason becomes unable to pay back its debt to these organizations or foreign governments, they may claim repayment in forms of infrastructure or strategically important state property, which will endanger national security and harm the nation more than the devaluation of their savings[1]. Another advantage of using these funds to cover government expenses is that the capital will stay inside the country and stimulate the growth of the national economy instead of going out for the purchase of foreign/international securities, this way helping a foreign economy. Finally government securities are the safest, because Government is the most reliable borrower. This is also very important financially, because when the GOAM borrows from the IFIs in foreign currencies, it usually carries the risk of currency exchange rate fluctuations. Use of domestic sources for covering the budget deficit will eliminate the problem with AMD exchange rate fluctuations.

2. It is advisable to give more thorough consideration to taxation aspect of introducing multi-pillar pension system in the RA. Chapter 4 states that contributors to the voluntary funded pension could be done not only by individuals themselves, but also people can make contributions for other individuals from their own income. This scheme enables people to make charity to those most in need. As these contributions are tax-deductible

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[1] A typical example is Armenian property-for-debt agreement with Russia, when Russia canceled Armenia's $100 million foreign debt in exchange for gaining ownership of five state-run enterprises (Armenia's largest thermal power plant in Hrazdan, an electronics factory in Yerevan and three research institutes). Generally, there is nothing wrong with privatizing state-owned enterprises to foreign investors, however, it potentially leaves place for foreign political dominance through increased economic presence.

there is certain risk for creating pockets of tax avoidance. The risk is that some people may see it as an avenue of tax avoidance by contributing to other people accounts with the expectation to receive back part of that amount as a kick-back (some kind of money-laundering) and at the same time reducing the amount of their taxable income. But at the same time this can be an advantage, because even if people will do so, nevertheless this will overall increase the amount of pension assets and consequently give impetus to the RA economy.

3. Next recommendation is connected with public awareness. In comparison with other reforms, the pension reforms are long-term and democratic. Any program of reforms is destined to fail if it does not enjoy broad participation and support of the people. Pension reform relates to every one. Therefore the GOAM with the support of international organizations and civil society should promote the reform in all possible ways. It is important to raise citizens' interest to and awareness of this issue, raise their understanding of finances and increase access to information. It is advisable to conduct professional training of the workforce, introduction of modern IT technologies, improvement of knowledge to make concepts and process of the reforms understandable.
4. It is equally important to increase not only the public awareness of pension reform to the population as a whole, but also make it very clear specifically to employers. According to Turpanjian Center for Policy Analysis Research (2009), the employers are also not well aware about the pension reform and what new opportunities will emerge with the introduction of the new pension system. After discussing and clarifying some aspects of the funded pension model during those surveys, employers understood that being engaged in formal economy is beneficial not only for employees, but for them as well.
5. Shifting to privately funded pension system has an advantage of eliminating the government interference and corruption, although the system still carries corruption and

inefficiency risks even if managed privately. So for the multi-pillar pension system the essential mechanisms are strong regulation and oversight of the pension funds, asset managers, and other financial intermediaries. Government should provide a solid ground for such kind of regulation and oversight, because the participants bear the risk of financial failure.

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