Abstract

Government's policy in financing social sphere is becoming more and more topical. In this regard, managing pension system effectively, conducting research basing on “income distribution through the time” principle in its financing is of particular significance. In this article the possibility of applying the experience of European Union countries in the level of coverage of population by the pension plan and its development in Uzbekistan.

Keywords: Pension System, Social Insurance

1. Introduction

Pension system was established as a branch of the institute of social protection within modern economy. The average life expectancy of people, a significant increase in the number of people compared to the ones who are capable of working, and, a constant development of the social criteria of living arise the necessity of progress in all institutions of social protection, particularly pension system.

Nowadays, in Uzbekistan 11 percent of the population is covered by the pension system, which means that the influence on the pension system is not significant. The same indicator is represented 27 percent in Russia and 25 percent in Europe (Islamov and Shadiev, 2004). Currently, it is important to study experience of the developed countries and to assess the opportunities of application of it in Uzbekistan analyzing the existing situation in the area in order to reform the pension system.

The countries of European Union are experiencing certain difficulties in the pension system. In general the pension system formed on the basis of employers insurance premiums and voluntary insurance premiums in addition to state retirement allowance works in European Union countries. Although voluntary pension insurance is promoted through a variety of tax incentives or similar encouragements, public pension expenditure growth trends are observed. In European Union countries, the share of public pension expenditure to GDP is expected to grow from 9.5 percent in 2015 to 11.7 percent in 2050. This situation can be explained by two factors: decrease in the birth rate and increase in average life expectancy. Provision of pensions of pensioners is covered by the various reforms carried out in the countries of the EU. In this regard, measures to increase the retirement age and pension contributions can represent an example of that.

Today, more than 2 million 873 thousand people are over 60 years old in our country. During the years of independence our people, average age grew from 67 years in 1990 to 73.5 years, to 75.8 years among women, while the birth rate decreased from 34.5% to 23.2% in 2010.
At the same time, the development of the "income distribution through the time" principle is of great significance. For this reason, the issues dealing with financial regulation of the development of social protection of the citizens being retired are topical.

Therefore, this research is aimed at revealing and evaluating such indicators as the level of coverage of population by the pension system in Uzbekistan and its task of social protection.

2. Literature Review

The reformation of the state pension provision system is becoming one of the pressing issues and Holzmann’s reforms (1997) state that pension system is essential in many countries. He stated that leaving the state pension ignored by the state will generate a secret financial debt in the future.

According to Poteraj (2008), reforming the pension system is carried out in the European countries by means of growing pension contributions or increasing retirement age. However, pension contributions increase labor costs, and will have a negative impact on the competitiveness of economy. Therefore, this figure cannot be increased significantly. Increasing the age of retirement is also widespread among the EU countries, which is to be restricted, according to him.

According to Grech (2010), reforming most of pension systems is carried out in rather limited sustainability, by means of reducing the principle of the government’s expenditure dealing with social protection. But, if the system cannot cover pension expenses because of enlarging number of pensioners, it leads to increasing the risk. Hence, the government has to increase social expenses by means of converse reforms.

Ionescu’s study (2013) reveals that, if in Europe the share of the people who are older than 65 years reaches 25 percent, in subsequent 20-30 years dependency rate will exceed 40 percent. In the most of countries the replacement rate maintains very high, about 60-70 percent. In order to fix the mentioned problems dealing with the development of the pension system in the country, this scientist draws attention to: developing private pension provision; mixed managing system of government and private system; decreasing payment of social protection systemically.

Legros (2013) thinks that such indicators as the increase in the number of those who are able to work, the growth in the labor phase and retirement are of great significance in reforming the system of pension provision, otherwise the government can decrease the replacement rate.

Mahler et al. (2014) think developed pension system should provide three main goals. They are providing employees with pension security, providing stability of fiscal policy, providing increasing (ensuring) productivity of labor force. They state that collective defined-contribution plan should be implemented covering optimal aspects of defined-benefit and defined-contribution pension systems to attain the aforementioned goal.

According to Vakhshov (2003), pension fund is leading one among the social funds of the state. The market relations pave the way for the necessity to reform the pension systems in order to stimulate economic activeness of people. He also noted the significance of the development of the saving pension fund and the development of the fund’s investment activities.

3. Methodological Bases
3.1. Theoretical Bases of Pension System

In our opinion the formation of pension maintenance is divided into following types: firstly, to ensure minimum life standards and financial support of population who is unable to work; to eliminate the effects of poverty; and to maintain social equality irrespective of the capability of working; secondly, to take into account the share of personal labor of pensioners in implementing retirement supply in accordance with the incomes of the population; and thirdly, pension supply through the personal initiative. Therefore, the pension system is one of the most important elements of social protection. This system performs important functions in the
economy. Firstly, it protects from the poverty during old age. Secondly, provides with a guaranteed income on retiring, and the value depends on one’s wages. Thirdly, the income does not allow reducing the living standards as a result of inflation in the future.

In general, the world pension’s supply system is theoretically divided into two major groups (Volkov, 2009):

1. Defined Benefit (DB)
2. Defined Contribution (DC)

In the defined benefit the participants of pension supply are guaranteed with a certain amount of pensions and allowances. In the defined contribution the amount of pension payments depend on the amount of contributions paid earlier.

3.2. Pension System (Provision) in European Union Countries

In European countries the following principles form the pension provision system: the scale of population coverage by the pension provision system; the existing requirements in pension payments; and the sources of financing.

It should be noted, in European countries pension provision systems have also been formed in forms of insurance (DC) or universal (DB). Obviously, pension provision based on the insurance system is practically the same with the defined contribution system.

The studies reveal that the pension provision system established in European countries can be divided into 2 huge models (see Table 1):

- Universal (national) system of pension provision;
- Insurance pension system formed on the basis of insurance relations.

<table>
<thead>
<tr>
<th>Table 1. Main Peculiarities of Pension Provision System</th>
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<tbody>
<tr>
<td>Insurance system</td>
</tr>
<tr>
<td>Level of provision</td>
</tr>
<tr>
<td>Form of pension provision</td>
</tr>
<tr>
<td>Financing</td>
</tr>
<tr>
<td>Initial condition for the use of pension provision</td>
</tr>
<tr>
<td>Organizational form</td>
</tr>
</tbody>
</table>


It should be noted, in European countries insurance payments account for 60% of the social sphere budget (Ijaeva, 2013).

It means the formation level of the social insurance relations the realization of the pension provision. The reason is that insurance relations lead in organizing social activities in the continent. In addition, pension provision is one of the major aspects of the social sector and there are various opinions about the stages of its development.

In European countries the insurance pension provision system is formed in according with the following principles:

- Insurance of economically active population;
- Funding pension payments due to insurance premiums of workers and insured people;
- The relevance pension payments to the previous income and insurance experience of the insurer.

This mechanism was widely used in European countries such as Germany, France, Italy, Spain and Greece.
Although in these countries pension provision system operates on the basis of a unique concept, there are some other different aspects. In particular, there are financing, organizational structure and functional responsibilities among them. Therefore, the insurance pension model can be observed in a mixture form in EU countries. For example, the distribution (mandatory insurance pension), supplementary pension programs (France and Spain) and directing insurance payments to capital investments (the Netherlands) are done in forms of pension provision system.

In fact they have appeared and developed in a different way, but in practice they can be used in mixed form. As a result of the reforms carried out in the system, in European Union countries the integration of the two models can be witnessed. For instance, in a number of countries a universal pension system came into existence, fundamental economic changes contributed to the establishment of the pension insurance provision. The additional pension system in a mandatory form (Great Britain) could be a clear example of this fact.

We believe that basing on the functions of the pension system such processes as distribution of the economic value created in the country (established payment system) and saving (established payment system) emerge. Therefore, these elements should be taken into account in the development of the pension system.

3.3. Occurrence of Pension Provision (Schemes) in Uzbekistan and Its Theoretical Foundations

In Uzbekistan the pension system is being formed on the basis of established payment system (Defined Benefit - DB).

The Law of the Republic of Uzbekistan “On citizens’ state pension provision” adopted in 1993 is of crucial importance. This law constitutes the legal basis of the currently operating pension system. According to the law, the pensions are divided into 3 types. They are as follows:

- Pensions related to age. Men – 60 years, women – 55 years;
- Disability pensions;
- Pensions related to the loss of the breadwinner.

The Pension Fund outward the state budget shares the costs in the following order for the above-mentioned types of pensions: to pay state pensions to working pensioners; to pay state pensions to unemployed pensioners; pensions for the elderly without the right to the state pensions and disabled people; and the pensions for the burial ceremony.

Revenues of the the off-budget Pension Fund are formed in the following order in order to cover its expenses:

- fixed revenue from the Single social payment (25% of the wages fund is paid by legal entities (15% for small firms since 2015);
- citizens’ insurance payments to the off-budget Pension Fund (7% of individuals’ salaries are paid);
- mandatory payments to the off-budget Pension Fund (1.6% of the sales revenue of goods is paid).

In the pension system for self-employed people there are different rates of mandatory insurance payments. Article 311 of the Tax Code clearly defines these circumstances. We can see them below:

- Individual entrepreneurs have to pay compulsory insurance payments on the amount not less than the minimum wage per month.
- Members of the peasant farm in case they are established by a legal entity or not have
to pay established voluntary insurance payments on the amount of not less than four and a half times the minimum wage. While calculating the amount of insurance contributions the work experience of the farm member is considered as a year.

- Family members carrying out activities in the form of a family business without forming legal entity have to pay the following amounts of insurance: (i) a member of the family registered as an individual entrepreneur - the amount not less than the minimum wage per month; and (ii) other members of the family (with the exception of people under the age of eighteen) - 50 per cent of the minimum wage per month.

4. The Analysis of the Current State of Pension Provision

4.1. Financial State of Pension Provision in European Countries and Ways of Its Implementation in Uzbekistan

One of the main aspects of pension provision is the scale of population coverage. Therefore, universal pension system provides a permanent resident population in the country, moreover, in some countries such as Denmark and the Netherlands it covers not only their own citizens, but also citizens of other countries residing permanently in the country.

For example, nowadays in Great Britain the level of population coverage by pension provision is as follows (Danisehevskaia, 2010):

- state mandatory pension provision – 65 percent;
- additional pension provision system (insurance pension provided by businesses) – 25 percent;
- personal insurance pension – 10 percent.

According to the studies conducted, it could be noted that pension provision can be divided into three parts in terms of scale of the population coverage: firstly, the pension insurance is only for those who operate on a contractual basis (Denmark and Sweden). Secondly, except working on a contract basis, it includes people with private activities in addition to contractual ones (Austria, Italy and the Netherlands). Thirdly, it is the system which represents pension provision for all employed population (France, Great Britain and Sweden).

In more than 15 countries of European Union, 25 percent of population works in temporary jobs, while 20 percent works in part-time job (International Social Security Association, 2010). In turn it leads to a significant decrease in the funds coming social insurance funds.

As a result, the growing tendency of the share of public expenditure in the pension provision system is observed. For instance, in such countries as Sweden and Italy the system of conditional pension account has been established, a sharp increase in public expenditure is not observed. In this regard, it can be seen how important the establishment of the existing pension provision institution is (Table 2).

<table>
<thead>
<tr>
<th>Countries</th>
<th>2010</th>
<th>2015</th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
<th>2050</th>
<th>2060</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. France</td>
<td>14.6</td>
<td>14.4</td>
<td>14.4</td>
<td>14.9</td>
<td>15.2</td>
<td>15.1</td>
<td>15.1</td>
</tr>
<tr>
<td>2. Germany</td>
<td>10.8</td>
<td>10.5</td>
<td>10.9</td>
<td>12.0</td>
<td>12.7</td>
<td>13.0</td>
<td>13.4</td>
</tr>
<tr>
<td>3. Italy</td>
<td>15.3</td>
<td>14.9</td>
<td>14.5</td>
<td>14.5</td>
<td>15.6</td>
<td>15.7</td>
<td>14.4</td>
</tr>
<tr>
<td>4. Netherland</td>
<td>6.8</td>
<td>6.8</td>
<td>7.4</td>
<td>9.1</td>
<td>10.4</td>
<td>10.4</td>
<td>10.4</td>
</tr>
<tr>
<td>5. Sweden</td>
<td>9.6</td>
<td>9.7</td>
<td>9.6</td>
<td>10.1</td>
<td>10.2</td>
<td>9.9</td>
<td>10.2</td>
</tr>
<tr>
<td>6. Great Britain</td>
<td>7.7</td>
<td>7.4</td>
<td>7.0</td>
<td>7.7</td>
<td>8.2</td>
<td>8.2</td>
<td>9.2</td>
</tr>
<tr>
<td>7. EU27</td>
<td>10.8</td>
<td>10.9</td>
<td>11.1</td>
<td>11.9</td>
<td>12.6</td>
<td>13.1</td>
<td>13.2</td>
</tr>
</tbody>
</table>
Based on different pieces of research, it must be noted that, significant economic and demographic changes have an influence on the scale of pension plan. Thus, decision on the retirement age is considered important. It is permitted in some European Union countries to carry on working after reaching retirement age. In turn, it contributes to increase in pension of those who work after retirement. On the other hand, in some cases, it leads to increase ratio between those who are capable of working and the retired.

It must be also emphasized that, in modern economic conditions, decrease in rate of birth and increase in life expectancy causes certain difficulties within pension system. In particular those who are over 65 represent 16% of population (it was estimated to 18.2% in 2013)\(^1\), the studies conducted by the UNO the same indicator reaches 25% in 2030, 28% in 2050. Nowadays in Europe, one can find 4 employees for every person who is over 65, this indicator will amount to 2.4 in Great Britain, 2.3 in France, 2 and 1.5 in Germany and Italy respectively causing difficult situation.

Between 1960-2000, life expectance in European Union increased by 4 years, while the same indicator is expected to reach 8.5 years among men and 6.9 among women. Besides that, birth rate for every woman is even lower than the criterion of 2.1. For example, the highest level of this indicator is 2.0 in France. The average level of it in EU is 1.4. The same figure amounts to 2.5 in Uzbekistan (International Social Security Association, 2010).

In EU countries, similar occurrences in social sphere cause financial difficulties. This, in turn, increases the volume of public expenditure on pension system (Table 2). In particular, the growth in the proportion of the retired in the total number of population leads to instability within the system, the need of the elderly for medical service is expected to double. This requires complex financial reforms to develop social life.

In our opinion the retirement age being fixed is one of the major indicators in holding reforms in pension plan. In this regard it is necessary to apply new methods or to introduce additional social protection mechanisms in the given direction of social protection.

The tendencies of solving certain problems by means of increasing the retirement age within the pension plan. For instance the pension reforms approved by the Lower Chamber of France indicate that the retirement age will grow 60 to 62 in 2018. The age to be provided with complete pension is expected to increase from 65 to 67 (Muravleva, 2011).

Studies reveal that the average retirement age 63. The public expenditure in this direction is expected to grow in the coming years. This is in turn; it directly connected with the growth in the proportion of the retired people compared to the total number of employees.

**Table 3. The proportion of those who receive pension from retirement fund in the total number of population in Uzbekistan, (%)**

<table>
<thead>
<tr>
<th></th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total number of pensioners</strong></td>
<td>10.8</td>
<td>10.1</td>
<td>9.6</td>
<td>9.5</td>
<td>9.4</td>
</tr>
<tr>
<td><strong>The people over 60</strong></td>
<td>7.5</td>
<td>7.2</td>
<td>7.2</td>
<td>7.2</td>
<td>7.2</td>
</tr>
</tbody>
</table>


In Uzbekistan the proportion of those who receive pension from the public retirement fund in the total number of population fell in 2014 compared to the same indicator in 2010. It is explained with the fact that the number of people receiving pension for disability and the loss of breadwinner decreased. However it can be observed that the number of the people receiving on reaching the age remains constant. It can be explained with the fact that the retirement age hasn’t changed and the average life expectancy is not increasing sharply in Uzbekistan (Table 3).

In this regard it must be noted that the coverage by the pension plan will completely different in 2050. That is because the number of retired people is expected to grow by that time (Figure 1).

\(^1\)Eurostat Regional Yearbook, 2014.
In addition to that, between 2006 and 2010, the proportion of those who are under the age of being capable of working decreased to 2.6 percent or 235.4 thousand people. As a result of that, proportion of able bodied population decreased by 3.5 percent. This is in turn one of the factors adversely influencing the coverage level of the pension plan.

Figure 1. The structure of Uzbek population with regard to age
We believe that it is necessary to increase the retirement age gradually in the future, taking into consideration the increase in the proportion of the retired people in the total number population in Uzbekistan in 2013-2050 (Figure 1).

The fact that in 2014 the retired people were paid over 11 trillion 618 milliard Uzbek soums of pension, over 105 milliard Uzbek soums of allowances in Uzbekistan is clear cut example of that. It represents 8% of the GDP. If this indicator amounts to 8 now, one can say that this expenditure will increase according to Figure 1.

We think that the significant part of the population is represented by the retired people in developed countries as well. That’s why the efforts dealing with optimization of the expenditure on the pension plan in the countries of European Union.

We believe that considering the experience of Germany is of crucial importance. If the ratio of the 65 year-olds and even older people to able-bodied was 16/100 in 1950, this indicator is expected to reach 67/100 in 2050. In turn the development of this complicated situation can lead to economic instability (Gora, 2014).

It must be emphasized that due to getting retired before reaching the age of 65, the pension will be reduced by 0.3 percent for every month for the period before reaching the age. If one is retired at the age of 60, the amount of pension will be reduced by 18% (0.3 multiplied by 60 months) and when one is 65 years old the reduction will be removed. This rule is also applied to government employees as well (Table 4).

**Table 4. Payment project in public pension plan in Germany**

<table>
<thead>
<tr>
<th>Age</th>
<th>62</th>
<th>63</th>
<th>64</th>
<th>65</th>
<th>66</th>
<th>67</th>
<th>68</th>
<th>69</th>
</tr>
</thead>
<tbody>
<tr>
<td>By 1992</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>107.2</td>
<td>114.4</td>
<td>114.4</td>
<td>114.4</td>
</tr>
<tr>
<td>After 1992</td>
<td>89.2</td>
<td>92.8</td>
<td>96.4</td>
<td>100</td>
<td>106</td>
<td>112</td>
<td>118</td>
<td>124</td>
</tr>
</tbody>
</table>


Although there are opportunities to receive pension payments before reaching the established age, the payment of a complete pension is only provided on reaching the retirement age.

It is essential to mention that, in case of retiring on reaching the established age (65), pension payment is increased by 0.5 % per month for each month of work.

On such occasion, the growth in the proportion of the people of the retirement age in the total number of population in our country by 2050 makes it essential to modify the direction of expenditure and classify incomes (Figure 1).

Therefore, we think that the following items should be taken into consideration:

- To set in classified percentage a share of sum, discounted for each month until achievement of the required retirement age in establishing pension in accordance with age (For cases, provided in article 14 of the Law of the Republic of Uzbekistan “On state pension plan of citizens”);
- To set raise amount of pensioner’s pension in percentages in relation to extra worked months, but not in relation to the amount of average salary (in accordance with article 27 of the same law).

It contributes to using funds of pension system in an effective manner. We consider that these measures provide the reasonability of expenses, on the other hand, further development of social protection of population, especially senior generation.

There is a separate pension systems for self-employed people in the countries of the European Union. But in our country, there are private entrepreneurs, farmers, and those who run their family business among the payers of obligatory payments into the public pension fund. The people of those categories are also provided with pension in accordance with general rules.

European experience shows the pension system of the self-employed people operates separately. One of the advantages of this, It excludes the situation when those who paid different amounts of insurance payments are provided with the same amount of pension. The reforms carried our country reflect studying this experience and applying it.
It must be particularly underlined that the tendencies of transition from the system of Defined Benefit to the system of the Defined Contribution in the countries of European Union. It is necessary to hold similar reforms in our country as well (Eichhorst et al. 2011).

The adoption of the Resolution of the Cabinet of Ministers of the Republic of Uzbekistan No.90 on April 14, 2015 “On the measures to introduce the individual accounting the data dealing with the citizens’ insurance payments to the off-budget pension fund under the Ministry of Finance of the Republic of Uzbekistan” contributes to the further implementation of the reforms in the area.

In accordance with it the obligatory insurance payments of the payers to the pension fund are reflected in their personal accounts. That’s why it is necessary to re-develop payments in terms of the payers of pension contributions.

Therefore, it is important to review orders for calculation of pension payments for self-employed people.

5. Discussion

In our opinion, at the moment of retirement of the people, amount of appointed pension does not depend on his/her work experience, but on insurance experience. The principle of “the unity of generations” disappears, and the principle “income distribution through the time” emerges and develops. Hence, as the insurance experience hasn’t been paid enough attention, the pension fund has experienced certain financial complexities.

We may notice an evidence of this opinion in the following words mentioned by Vakhobov (2012, p.12.): “Availability of many preferences in the pension system, payment of premiums paid in addition to pension, calculation of pension amount not on insurance experience, but on work experience cause deficiency in pension fund”.

We believe that certain problems occur while dealing with the coverage of the retired people by the pension plan of the country. The following aspects can be referred to them:

- high death indicators of population capable of working,
- large share of the population incapable of working,
- significant level of preferences (especially in regard with age) dealing with the public mandatory pension plan,
- problems dealing with the permanent employment of the population capable of working,
- significant increase in unofficial salaries in economy.

We think that it is essential to take measures extendedly in order to increase the scope of the coverage by the pension plan. Particularly, if increase in the indicators of people’s health and forming healthy life style are related to the growth in budget funds, then consequently the increase in the life expectancy by a year contributes the growth in the number of people of the retirement age. This, in turn, arises the necessity to meet the needs of the retired people for finances and medical services.

6. Conclusion

6.1. Reform Factors

We think that it is necessary to pay attention to the following factors in holding reforms in pension plan: (i) indicators of the coverage of the pension plan, (ii) adaptability of payments of pension plan (taking into consideration inflation rate and purchasing power), (iii) conducting payment of contributions to pension fund in accordance with the share of payers, (iv) diversification of gaining incomes in the system of pension plan (public and private insurance), and (v) introducing special pension system for self-employed people.
6.2. Reform Conditions

We believe that it is necessary to evaluate the opportunities dealing with the coverage of the pension system and to pay particular attention to the indicators increasing the attractiveness of it. In turn, it is explained with the assessment criteria of the system creating the conditions for the development of the activity in the area. They are (i) taking into consideration of international standards of minimum criterion of social protection; (ii) solving the problems which are relevant to the progress of the mandatory social insurance; (iii) the completeness and stability of the legal base of the mandatory social insurance; (iv) scientific validity of insurance tariffs; (v) developing the mechanism of collecting insurance contributions; (vi) continual payment of insurance payments by insurers; (vii) existence of an opportunity to check the amount of the pension by the person who benefits from that; and (viii) using efficiency of the mandatory social insurance reserves.

In conclusion, for improving the country’s social security institute it’s important to pay attention to financial reforms. In this regard, the pension system is considered to an important link in the area. Therefore, for the development of the pension system it’s important to take into consideration the ideas and views which are mentioned.

References


