

Секція: Гроші, фінанси та кредит.

Sydorchuk A.A.

candidate of economic sciences, associate professor

Department of Finance named S.I.Yuriy, of

Ternopil National Economic University

Ternopil, Ukraine

DEVELOPING SECOND LEVEL THE PENSION SYSTEM OF UKRAINE

One of the *pressing questions* on the modern stage there is an increase the balancing of financial resources state pension insurance, forming of that must be base do only on the internal sources (insurance fees). Using of financial resources should be correlated with the volume of their insurance fees of the Pension Fund of Ukraine. Since the deteriorating financial condition of state pension insurance was due to a low ratio of internal and external financial resources, reduce the load on the Pension Fund of Ukraine (e.g. the reduction of its costs) be considered as a possible reserve for an efficient use of its financial resources. Actually, this problem and designed to solve the pension reform in Ukraine on generally - the transition from solidarity to an individually-funded pension system, from one to three levels pension system.

The proposed model of balancing financial resources of the state pension insurance will secure the pensions for future retirees within the planned second level new pension system of Ukraine. In other words, we are talking about a situation where pension fees (as part of a salary) are going to accumulate during the work activity period of employees and taking into account the value of accumulated pension and rate of return on its use. It should be noted that the articles of economists [1, p. 12; 36; 2, p. 18; 3, p. 15; 4, p. 64] considered modeling the budget Pension Fund of Ukraine (PFU) for using it in the conditions of existence of solidarity of generations in financing future pensions.

They are not intended to define under which quantitative options PFU will function under conditions of only the cumulative basis.

We suggested that the base conditions of the economic-mathematical models are:

- 1) a time pensions three times smaller than the period of payment of her insurance fees: 35 years of insurance will relate to 15 years pensions;
- 2) PFU accumulated under conditions of pension fees only in the form of deductions from wages of workers without existing charges on a payroll from employers;
- 3) the variants of pension fee rates in the range of 7 (as provided for by the state) to 10.5% and variations in investment income accumulated during the work activity ranging from 3% to 6.5%.

The budget PFU accumulated over conventional conditions can be mathematically expressed by the formula (1). With the existence of return (%) on the income received fund for its resources in the first year of accumulating will be:

$$B_1 = B(1+r) \quad (1)$$

where B_1 – financial resources of PFU for the first year;

B – financial resources of PFU provided that is investment income;

r – investment rates on the accumulated financial resources PFU.

Subject to the payment of pension fees and the immutability of other factors (the rates of investment income, pension contributions) the accumulated budget of the PFU (B_{total}) equals:

$$B_{total} = \sum_{i=1}^T B(1+r)^i \quad (2)$$

where t - the period of pension fees.

Using formula (2) and taking into account the baseline, model 1 shows a possible correlation between the percentage obtained in future pension and wage fund in the economy. Noted that the pension contribution rate will vary between 7% and 10.5%, investment income - from 3% to 6.5% and the wage fund in the economy is taken at 2014-2015 years.

The model (option 1) with the existence of the payroll fund in the economy 636.7 billion UAH (index 2014-2015 years), the rates of pension contributions of wages in PFU at 7% (which was to be introduced since 2016) and investment income on accumulated funds PFU of 3%, the annual budget accumulated PFU after 35 years period of insurance will be 2032.7 billion UAH. With its use for 15 years, excluding investment income on the balance of unused amounts and incurred administrative and management costs fund, the annual cost of PFU will equal 135.5 billion UAH. However, the average pension will amount to 29.1% of payroll. The calculated data leads to the conclusion that the greatest correlation between the size of received pension and wages (92.5%) can be achieved by paying 10.5% pension fees and accrual annual rate of return on the accumulated contributions of 6.5 %.

The model (option 2) has been proposed as a simulation of this situation at the economy when the rate of pension fees during the insurance period with wages of individuals will be unchanged - 7%; payroll will remain at 2014-2015 years - 636, 7 billion UAH. Only rates will on investment income are variables. Based on the assumption that using the funds must be lower interest rates than deposits, we consider rates is range from 6.5 to 10%. Highest ratio between the amount pensions and wages will be achieved by 10% annual investment income on accumulated over 35 years fees to the PFU in conditions constant rates of pension fees and changes in investment incomes in the range of 6.5% to 10% per annum. Under such circumstances, as in option 1, excluding investment

income on the balance of unused amounts and incurred administrative and management costs fund, the level of pensions obtained during for 15 years will amount to 139% of the resulting income. Rejecting the extreme values of the model and considering the average values of the set parameters, we can conclude that if in conditions the 8-8.5% of investment incomes and 7% insurance fees everybody may in the future count on a pension that is equal 86-97% of its earnings during the period of work activity.

Balancing the financial resources of the state pension insurance can be achieved by viewing the source of financing current expenditure on maintenance of the PFU.

Art. 87 Budget Codex of Ukraine determined that the expenditures undertaken by the State Budget of Ukraine include expenditures on public administration, including the legislative and executive powers [5]. The legal status of the PFU equals to that of the State Committee of Ukraine.

In this point, the provisions of Art. 87 Budget Codex of Ukraine come into contradiction with existing legislation, defining features of the administrative expenditures of state funds, including the PFU. In particular, Art. 72 and 73 of the Law of Ukraine "On Compulsory State Pension Insurance", which provided funding for administrative expenses of the PFU due to insurance pension contributions [6]. Thus, the existing practice of current maintenance and logistical support of the PFU due to insurance fees is contrary to the provisions of the Budget Codex of Ukraine and must be changed.

The next step, which is going to balance the financial resources of the state pension insurance, it's a need to introduce uniform requirements for formation of financial reserve PFU funds. In practice is no single methodological approach to the formation of financial reserves state pension insurance, as evidenced their different volumes during the period reviewed, the absence of mandatory their creation.

Extrapolation of Art. 14-3 of the Budget Codex of Ukraine to PFU activity, we suggest that the amount of reserve cash should not exceed 2% of the expenditure budget of the PFU. It is to provide seven-days requirements to finance insurance payments. Thus, maintaining the reserve of circulating cash at end of period (year) should become mandatory.

The proposed measures will enable to obtain a controlled and certain construction of the system of state pension insurance.

Literature

1. Березіна С. Б. Методи прогнозування надходжень і витрат на пенсійне забезпечення в залежності від динаміки і розподілення ВВП : автореф. дис. на здобуття наук. ступеня канд. екон. наук : спец. 08.02.03 «Організація управління, планування і регулювання економікою» / С. Б. Березіна. – Науково-дослідний економічний ін-т Міністерства економіки України. – К., 2000. – 17 с.

2. Овсиенко Ю. В. Пути реформирования пенсионной системы / Ю. В. Овсиенко, Е. М. Олевская, В. П. Русаков, Н. Н. Сухова // Экономика и математические методы. – 1998. – Т. 34. – Вып. № 4. – С. 5–22.

3. Піскуненко В. Моделювання пенсійного забезпечення в Україні / В. Піскуненко // Економіст. – 2003. – № 4. – С. 12–16.

4. Ржевський С. Математичні моделі перспективної солідарної системи пенсійного забезпечення / С. Ржевський, Г. Верещагіна // Економіка України. – 1999. – № 4. – С. 61–66.

5. Закон України «Бюджетний кодекс України» : № 2542-III від 21 черв. 2001 р. [Електронний ресурс] / Верховна Рада України. – Режим доступу : <http://zakon.nau.ua/doc/?code=2542-14>

6. Закон України «Про загальнообов'язкове державне пенсійне страхування»: № 1058-IV від 09 лип. 2003 р. / Верховна Рада України // Відомості Верховної Ради України. – 2003. – № 49–51. – ст. 376