HISTORICAL DEVELOPMENT AND CHARACTERISTICS OF PENSION SYSTEMS

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Abstract

This study examines the development of pension systems based on the main classical models: capital-covering, cost-covering and mixed. Particular attention is paid to the types of pension savings, whereas analyzed in detail are corporate pension funds, independent pension funds and funds providing one-off lump sum at a certain age and upon retirement due to old age or disability. Presented are possible pension schemes and pension plans.

Keywords: pension systems, pension plan, pension scheme.

1. INTRODUCTION

According to the Social Security Code, servicemen born after 31 December, 1959 are entitled to additional lifetime pension from a universal pension fund upon reaching certain age for entitlement to retirement pension. Based on this, pension insurance of servicemen is made in accordance with the applicable law. They are insured for additional mandatory pension insurance in a universal pension fund.

Provisions of the Social Security Code create an obligation for pension insurance in an occupational pension fund only for persons working under the conditions of first and second labor category. The scope of the Ordinance for Categorization of Labor at Retirement does not cover servicemen as persons working under the conditions of first or second labor category. The labor of servicemen at retirement is equated to that of first category of labor. Because of this fundamental difference, servicemen are not insured in an occupational pension fund, but in a universal one.

The presently in force Law on Defense and Armed Forces in paragraph 44 of the transitional and final provisions regulates the creation for a military pension fund to pay pension supplements to the pensions of servicemen.

Numerous researchers share the view that in social security there exist two main principle models - the model of Bismarck and the Beveridge model.

With the model of Bismarck, so named because it was introduced during the reign of Germany by Otto von

Bismarck, was virtually introduced compulsory insurance for a predetermined set of persons against the occurrence of the risks of labor. The sources of funds for the formation of the insurance fund were revenue contributions from the insured persons, the state and the employers, and disbursement of funds from this fund was conducted in ways borrowed from existing contractual arrangements. Solidarity on occupational principle and linking benefits to the contributions, made it possible to maintain to a large extent the standard of living after retirement to the level where it was before. It was Bismarck who passed a law on mandatory health insurance, according to which all workers with pay below the established minimum shall be insured against health risks through the introduction of contributions from the employers and from the workers themselves into a special fund.

The „Beveridge" model, named after its founder Lord William Beveridge, based on which the security system in England was built in the 40s of last century, was preceded by the adoption of the pension for old age, due to the significant influence of classical liberalism in England at the end of the 19-th century. The gradual emphasis on the social functions of the state, with the passage of time made possible the application of the model, characterized by national solidarity, state governance, centralization, funding from government transfers and payment of equal benefits, independent of salary. This model has a public element, while allowing for participation in voluntary extra security (Daneva, 2010a).

Based on these classic models, the following pension models have been imposed in practice:

- Capital-covering;
- Cost-covering and
- Mixed.

According to Petko Salchev and Lidiya Georgieva, these models have different modifications and are applied in diverse ways in existing pension systems (Georgieva, 2008a).

Capital-covering pension model as a form and manner of functioning is close to private insurance systems. With it the person accumulates capital in the form of individual saving-security contributions into a personal account and upon reaching certain age, he receives a pension in the form of a life annuity. These accounts are managed by private pension companies that compete with each other. These companies operate much like mutual funds because they invest accumulated capital in securities on stock markets. The capital model assumes workers to set aside money from their salary, which instead of being paid as pensions to the non-working and inactive are invested in investment instruments. Upon the occurrence of disability the disabled person receives the contributions made, together with the yield on investments. As explained above, while the individual is young and can work he can set aside funds, that are invested (or saved in the form of money), and when he falls in disability, he can benefit from these investments and savings.

Cost-covering pension model, in which pensioners receive pensions from public insurers (the state) is primarily socially oriented. The funds for pensions are based on the labor income of people of working age in the form of pension insurance contributions. Against these contributions they obtain the promise (security) to receive a pension when entering into retirement.

Mixed pension models include elements of the two basic models: cost covering and capital-covering. Based on this a two-pillar and a three-pillar model are created. In the two-pillar model, core element (first pillar) is the cost-covering system and the second is the capital system, whereas the latter is of mandatory nature. The second pillar of this type of systems contains different types of security based on capital principle. In the three-pillar model essential is the cost-covering system element, while the other two pillars (one mandatory and the other voluntary) are based on the capital system. The third pillar - the voluntary pension security is based on personal contributions or contributions from the employer.

On the base of these three models Ivanka Deneva reviews the various pension systems (Daneva, 2008b). In her research she examines the pension system as mandatory and as voluntary. The legislation in most cases includes two mandatory fields (with redistributive and insurance part) and a voluntary part. The redistributive component is designated to provide an absolute level of minimum living standard. Security components are designated to achieve the target standard of living upon retirement, the level of which is based on the standard of living in the years before retirement.

National pension systems are typified by a multi-pillar structure with sources of retirement income originating from the state, from savings of the employer and / or the person in the form of contributions to the pension system.

In the basis of the model of the World Bank, which found practical application in many countries of Latin America and Central and Eastern Europe lie the so called three columns (pillars). She describes the first pillar as „unattached to the contributions state pension”, the second pillar as „mandatory contribution” and the third pillar as „voluntary contributions”.

The first pillar comprises the managed by the state funds for public pensions that are part of the social security system. In general, it aims to provide a minimum income based on solidarity and is financed on a redistributive principle without constructing large reserves. This pillar can be in turn: with basic pension schemes; individual targeted programs for retirement income; minimum pensions under plans relating to income; social assistance. The system of social security is constituted first because it has to provide coverage for age and is based on the terms of solidarity, common governance and therefore on redistributive basis, which means that reserves need not to be proportional to future obligations. Solidarity cannot be applied without a limit, but it is normal a certain redistribution from the richest to the poorest to be applied. At certain top limits, however solidarity must be limited to an approach that is close to capitalization to be used.

Second pillar in almost all countries with supplementary pensions are usually called the occupational pension schemes (with increasing capitalization organized according to the workplace) which are implemented in different forms in different countries. In most cases these are supplementary pensions provided to the staff through the companies, whereas they may be managed by the companies themselves or by other institutions. This pillar aims to provide future income to supplement the one from the first pillar, and thus to achieve adequate replacement rate of the revenue from earned income.

This pillar is built on the basis of defined pensions and on the basis of defined contributions. It exists in most countries, whereas more weight is given to schemes with defined pensions. In the schemes with defined pensions the amount of pension received depends on the number of years in which contributions are made and the individual employment income during the service. More relevant among the countries in Latin America, the Caribbean, Eastern Europe and Central Asia are the defined contribution schemes. With them each worker has an individual account in which contributions are accumulated and invested, and so the accumulated capital is usually converted into retirement income upon retirement; lump withdrawal of the accumulated funds is rarely allowed. Normally the capital is used to purchase an annuity (guaranteed lifetime pension payment) under certain conditions, such as indexation of pensions, rights of heirs, etc.

A third variety of pension schemes of the second pillar are the point systems under which workers receive pension points based on their individual earnings for each year of payment of contributions. Upon retirement the amount of pension points is multiplied by the value of a pension point to be converted into a regular pension payment. This form of the second pillar is applied in Croatia, Estonia, Germany, Norway and Slovakia.

A fourth form of second pillar schemes applied in Italy, Latvia, Poland and Sweden are the „contingent (fictitious) accounts”. Each worker has a fictitious account into which contributions for the entire service are accumulated. The amount in the accounts is indexed with the so called rate of return that can be subject to either the nominal increase in salaries or the growth of gross domestic product. Upon entering retirement age the funds accumulated in the fictitious account are converted into annuities, which in turn depend on the lifetime of the generation to which the retiree belongs. Through these personal fictitious accounts it is intended to create a link between the received retirement pension and the contributions made during the working life (Salchev, Georgieva, 2008c).

The „defined credits” scheme has more elements of defined pension than of defined contribution plan. The mandatory contributions in occupational plans in Switzerland look like defined contribution plans, as individuals and their employers must contribute a certain level of contributions (in %) which depends on age. The government establishes a minimum return that the scheme must pay and mandatory annuity returns in accordance with any accumulated funds are converted into a stream of pension payments.

The third pillar consists of private savings plans and products for individuals, often with tax breaks. The funds are allocated by individuals and / or employers for old age. These are personal savings, which must be distinguished from „made due to prudence” savings for the near future. The form in which these pension schemes are organized can be as individual pension schemes and in voluntary pension funds.

2. TYPES OF PENSION SAVINGS

In his analysis Y. Hristoskov considered forms through which savings for future pensions can be accumulated: savings in corporate pension funds - trusts, foundations or associations, accounting reserves; savings in specially created independent (open) pension funds; deposits in savings funds, providing most often a lump sum upon retirement; savings in financial institutions of general kind - banks, insurance companies, mutual funds, investment funds (Hristoskov, 2010b). St. Dimitrov also offers alternative forms of saving and investing for future pension (Dimitrov, 2012a).

Corporate pension funds are highly developed in Western Europe, USA, Canada and Australia. An important condition for the development of corporate pension schemes is the separation of the pension fund form the corporative capital of the company by the employer. Most frequently the following types of pension schemes (plans) are offered:

Individual pension plans - independent funds organized by individual employers for their workers;

Multi-employer pension plans - funds organized by more than one employer for workers in a particular sector, region, etc.;

Pension redemption plans - funded mainly by contributions from the employer. Upon retirement funds are accumulated in the account of the worker and used to purchase a life annuity;

Savings pension plan - financed mainly by contributions from workers. Employers can also sponsor the plan with contributions, depending on the service of the worker;

Plan with deferred dividends - contributions are related to the company's profit or are made by decision of the employer. They can also be united in a saving plan;

Plan with accumulation of bonuses - the contributions of the employer and the worker are accumulated in a trust fund;

Plan of employee's participation in ownership - funded by employer and invested in shares of the company. Shares are allocated to the accounts of workers on a special formula.

Independent (open) pension funds were first developed in Latin America, and later in Sweden and in the countries of Central and Eastern Europe. With them the selection is made by the employee or self-employed. This type of pension funds are open to all who exercise economic activity and want to accumulate retirement savings. In fact with this type of organization of pension accumulations, two separate legal entities operate - a pension fund, in which pension funds are stored in separate accounts (batches) and a management company that actually carries out the investment of fund assets. The risk of investing in independent pension funds is borne primarily by the insured person and therefore it is important to respect the principle of individual choice and the possibility of changing the fund in case of dissatisfaction with the achieved yield or quality of services offered. Open pension funds can be arranged on either mandatory or voluntary principle. The functional model of open pension funds is as follows:

Funds providing a lump sum at a certain age and retiring for old age or disability are common in developing countries, mostly in Asia and Africa. These protection funds are usually mandatory and are based on contributions that employers levy on wages. Fund assets are invested in low-risk instruments, and the funds themselves are under heavy state control in order to avoid fraud. The main objective is to provide a lump sum which the worker receives upon retirement for old age or disability. At the same time, however, very often the funds of this type permit prior withdrawals for different purposes - marriage, unemployment, treatment and the like. In some countries with the funds accumulated in protection funds are built homes or solved important infrastructural problems of the neighborhoods in which the insured in the fund workers live. Although the paid lump sum can be substantial, these safety funds do not provide protection against inflation and protection of the heirs of a deceased pensioner.

Outside the protection of funds for lump-sum benefits fall also the ones working in the informal economy.

Retirement savings in financial institutions of general type - banks, insurance companies, mutual funds, investment funds - usually performed by personal choice and individual foresight. These institutions are dealing mostly with storing and investing pension savings, but not with granting and paying pensions. With the accumulated funds upon reaching certain old age life annuity is purchased from an insurance company. In some countries, life insurance companies offer so called pension annuities by one-time purchases. Commercial banks also offer preferential long-term deposits for the purpose of retirement savings, where pension is obtained by subsequent programmed withdrawals from the bank account.

The competitiveness of alternative forms of use of disposable income largely depends on the state guarantee on them, the regime of taxation and benefits for the customer. These forms include: savings in a bank deposit; investing in collective investment schemes; direct investments in securities; investing in real estate; buying „Life" insurance; participation in voluntary health security; provision of food vouchers and goods by employers for their employees; consumption of goods and services. Bank deposit has the most significant development among the alternative forms of investing and saving. Very strong factor in increasing confidence in the banking deposit is the amount of the guaranteed amount of deposits in banks. Investing in a mutual fund, investment company and joint-stock company with a special investment purpose is associated with the stock prices on the stock markets and favorable tax regime. The profit from the purchase and subsequent sale of shares of investment companies and units of mutual funds is tax exempt. In recent years, significant has been the development of the activity of providing food vouchers from employers. This activity benefits from favorable tax regime and mandatory security. A second prerequisite is to reduce direct labor costs due to the reduction in the amount of required contributions and corporate income tax.

A review of the available literature shows that key players in retirement savings are pension funds. Various classifications of pension funds are known in practice depending on the applied criteria (signs). Detailed classification of pension funds was made by Y. Hristoskov (Hristoskov, 2010c) and S. Dimitrov (Dimitrov, 2012b).

Yordan Hristoskov classified pension funds according to the following criteria (Hristoskov, 2010d):

According to the access to them;

According to the financial organization;

According to the organization of the investment portfolio

According to the access to them pension funds are divided into:

Closed pension funds, which are meant for employees of an employer or group of employers, for employees from a particular occupational group in a particular sector, region and others. As a rule, occupational (corporate) pension funds are closed funds. The initiative for the establishment of closed pension funds comes from the employer and the conditions for the participation of employees are governed by a collective labor contract or agreement;

Open pension funds, in which by a personal choice are involved workers, employees, self-employed, are of a universal type. The initiative for the establishment of open funds as non-bank financial institutions comes from the business and the conditions for participation shall be governed by the regulations of the funds as well as the insurance contracts between the fund and its members. Open funds of mandatory type are established by private economic entities in the order and manner prescribed by law and under the strict control of the state. Here public-private partnership is implemented in the greatest extent.

According to the financial organization pension funds are divided into two major groups:

Fund with fully funded plan (premium covering fund) - the pension fund assets are equal to or greater than the present value of all future obligations;

Fund with partial (incompletely) funded pension plan (pension covering fund) - the pension fund assets are less than the present value of future obligations. This means that at the dissolution of the fund they are not sufficient to cover all current and future defined pensions as they fall due.

Pension funds with defined contribution, where the obligation to the insured is determined by the amount of accumulated funds in their individual account (contributions plus income generated by capitalization). The rating of this type of pension funds is determined by their success in the investment policy and the quality of administrative services for the insured. During the period of accumulation the risks with the pension funds with defined contributions are fully paid by the insured. The amount of the contribution paid by the employer, the employee or the self-employed is determined in advance with the insurance contract.

According to the organization of the investment portfolio pension funds can be:

Pension funds with a common portfolio - all assets of the pension fund are collected in a single portfolio. Usually the portfolio of such a fund is diversified by investing in different instruments - risk, moderate risk and conservative. Assets themselves are valued daily or at another period of time and the insured get information for the amount of available funds in their accounts by direct assessment in money or indirectly by the number of owned pension shares and the value of a pension share.

Pension funds with segmented portfolio (multi-funds) - the pension fund assets are segmented into several sub-funds with different profiles - risk, moderate risk, moderate (balanced), conservative, strongly conservative, etc. Every insured selects one or more of the possible segments and diversifies the available funds in his account, as well as new coming contributions to this (or these) segments. Usually younger participants in funded pension security chose the risk segment because accumulated funds in their account are small and they have in front of them a long horizon of accumulation in case of unfavorable choice. Conversely, older insured persons in an capital fund prefer conservative portfolios because they have accumulated large sums in their individual accounts. They avoid risk due to impending retirement.

Pension funds with individual portfolio - here each insured chooses in which instruments to invest his assets. He personally gives orders to sell or buy some or other securities and is personally responsible and takes the risk of these investments. The operation of such funds requires well-developed information and communication infrastructure, because the insured must be able to give their orders at any time and from anywhere in the globe. Possession of extremely high investment culture is mandatory for participation in such pension fund.

Adriana Mladenova classifies the pension funds as public and private pension funds (Mladenova, 2008d). According to her the thing public and private pension funds have in common is that both accumulate funds which are used for payment of pensions and act on funded principle. Their aim is to provide in one form or another pensions to future generations. The main difference between them is the ownership of the funds - with the private funds the ownership on the funds is of the beneficiaries and they have the right to dispose of them under pre-set rules, while ownership of the funds of state pension funds is of the public institution that administers them - be it social security institute or the government. In this way the state funds are dependent to a larger extent on political decisions and influence.

In private pension funds ownership of the funds remain in the hands of the workers and they have incentives to pay the full amount of their contributions and to not hide their income. Managing funds from the private sector reduces the political risk that exists in state social security. At the same time, with the accumulation of funds in the hands of the state lies the danger of attracting interest of certain groups, attempts to redistribute resources from rich to poor or to political forces and organized groups, the occurrence of restrictions - e. g. not to invest in companies in the tobacco industry, etc. The private sector, in the presence of competition and freedom of contracting is characterized by more innovations in creating new products and services.

Sovereign wealth funds accumulate assets that are managed directly or indirectly by the government. The accumulated funds are used to achieve the national targets. These funds can be financed by 1: reserves of foreign currencies; 2: the sale of natural resources such as oil; 3: general tax revenues and other budget revenues.

Potential targets that determine the existence of these funds may be different: for example, obtaining greater return on state reserves, security of funds in the budget when the natural resources run out or prices fall, implementing political priorities of government programs, etc. Often the purpose of creation of these funds is to neutralize the negative effects of business cycles and economic fluctuations, resulting from changes in the prices of natural resources. Therefore, the resources in these funds are mostly invested in foreign assets.

A kind of variation of these funds are the so-called public pension reserve funds or silver funds which are intended to finance the state pension system based on cost-covering principle. They are grouped into two types:

Funds that are the property directly of the government or the so-called sovereign pension reserve funds. They are not part of the social security system and are funded through direct fiscal transfers from the government. Their aim is to help funding pensions in a particular future period. Most countries have no right to withdraw assets from these funds for several decades.

Social security pension funds. Strictly speaking, not all pension funds of the second type can be classified as sovereign wealth funds, because some of them are legally independent of the government and their balance sheets are not integrated into the system of national accounts. These funds are generally financed by residual income from social security contributions paid by the workers and are not used for paying pensions in the current year. It is possible that these revenues will come from the state budget in the form of targeted transfers to the social security system. These funds can be managed by social security institute or an independent public body.

The purpose of public funds is to provide partial coverage of the deepening deficit of public cost-covering pension systems in the conditions of an aging population. In reality, however, they do not lead to a lasting solution to the problems of the pension system, but to temporarily smoothing the negative fiscal impact of the internal imbalance of the system.

In connection with pension funds, different concepts are used in the literature, such as: capital funds, capital schemes, funds on capital principle, security on capital principle, private pensions, private pension plans, private pension funds, supplementary mandatory pension funds, voluntary pension funds, pension funds from the second pillar, pension funds from the third pillar, individually funded pension funds, fully funded plans, personal plans, employer plans, plans based on defined contributions, plans based on defined pensions. Differences in definitions of these concepts need to clarify their essence. Pension funds have different characteristics depending on the legislation, regulations, pension systems and practice in their respective countries. There are capital funds with mandatory participation and voluntary participation. There are funds that are managed by private organizations and funds managed by the state. In some countries, pension assets are part of the balance of the sponsor of the plan. In some cases, pension funds are not legal entities separate from the financial institution that manages them. Classification of private pension plans was drawn up by Stanislav Dimitrov (2012c).

3. PENSION SCHEME, PENSION PLAN AND PENSION FUND

Often in the literature three concepts are used - pension scheme, pension plan and pension fund. Between these three terms there exist some differences. Pension scheme is regarded as a more general concept to a pension plan.

The pension scheme is a set of basic principles and assumptions for the formation of a pension plan. An example of a pension scheme is the insurance for voluntary pension with personal contributions on the basis of pre-defined contributions. In Bulgarian law there is a definition of the pension scheme (Social Security Code, SSC). According to the SSC pension scheme is a concrete financial mechanism for determining pension obligations and benefits calculated by statistical (actuarial) methods.

Pension schemes can be organized into a pension fund, but also may not institutionally be formed in a fund. An example is the organization on the principle of accounting reserves.

The pension plan is a legally binding agreement, which aims to ensure retirement income (with the purpose of tax benefit, with the purpose to generate income after retirement age or under arrangements for social benefits). The pension plan is the specific calculation of the security of a person or group of persons. In addition to old age risk coverage and the payment of income upon retirement, the pension plan may include payment of other benefits, such as benefits for disability, illness and benefits to heirs.

The pension fund is the totality of assets that have the sole purpose of funding pension benefits. The assets have been purchased by contributions to pension plans solely for the purpose to finance pension payments. Members of the pension fund have guaranteed receivables from fund assets. The pension fund is structured as an organization with a special purpose (trust, foundation, corporate structure) or legally separate entity governed by a special intermediary (managing company, pension company, pension administrator, pension association) or other financial institutions managing on behalf of the members of the fund. The pension fund is typically managed by financial institutions such as security, insurance, banking organization or company, dealing with professional management of investment portfolios. When it is a legal entity, the fund may be passive or active. The difference between the two is the presence of independent governing bodies. The pension fund may be managed by a public or private institution.

4. PENSION SCHEMES OF DEFINED BENEFIT AND DEFINED CONTRIBUTION

Depending on the mode of financing of social security payments pension schemes of defined contributions and pension schemes of defined benefit are considered. Pension scheme of defined (predetermined) contributions (DC) is a scheme under which the plan sponsor pays a certain amount of security contributions, whereas he has no obligation to pay contributions for a certain minimum predetermined period or certain minimum pre-accumulated amount. Usually under these schemes the amount of insurance benefit depends on the accumulated funds or acquired rights of the insured person. The accumulated funds are in direct proportion to the period of insurance, the amount of insurance contributions, the amount of fees in favor of the administrator of the plan, the amount of income distributions. The insurance benefit is agreed in the pension contract to be concluded upon retirement of the person.

Pension scheme of defined (predetermined) benefits (DB) is a scheme in which the amount of insurance benefits is predetermined, i. e. yet with the conclusion of the insurance contract. There are three main types of pension schemes of defined benefit: traditional, mixed and hybrid.

With the traditional scheme benefits are bound by the salary, the length of insured service of the person in the company or other factors.

The mixed scheme includes two different elements of the organization. One is based on the defined benefit and the other - on defined contributions, but both are part of the same plan.

In the hybrid scheme benefits depend on the profitability related to contributions. Yields can be recorded to the pension plan, for example as a fixed number bound to the market benchmark, bound to the growth of salary, the profit growth of the sponsor of the plan, etc. It can also be bound to the actual income from management of the assets related to this plan.

5. PUBLIC AND PRIVATE PENSION PLANS

The nature of the institution that manages the pension plan is the criterion for distinguishing public and private plans. Public pension plans are administered by public, state or municipal body. In most cases, public pension plans operate on a cost covering principle. In some countries (South Korea, Norway, Sweden) elements of the public pension system function on the capital principle.

Private pension plans are administered by an institution other than the public, state or municipal body. Administrator of a private pension plan can be the employer from the private sector, private pension fund or retirement security service provider, which is a private organization. Private pension plans can supplement or completely replace public pension plans. Often private pension plans apply to employees of the public sector.

This definition is a consensus in view of the fact that the term „private” can refer to different aspects of a pension plan:

- Members: pension plan for employees of the private sector;
- Managing institution: a pension plan managed by institution other than public, state or municipal body;
- Control of financial flows: a pension plan in which security contributions and insurance benefits are not under governmental control;
- Investment mode: a pension plan whose assets are invested in securities from the private sector;
- Legislation: a pension plan that is governed by private commercial law;
- Obligations: pension plan, whereby the obligation for control and / or certain guarantee, rests with a private institution (employer, financial company, trust, foundation, etc.).

6. OCCUPATIONAL AND INDIVIDUAL PENSION PLANS

Depending on the leading role of the sponsor of the plan, occupational and individual pension plans are considered.

Occupational pension plans are plans where membership access is tied to employment or occupational relationship between the insured person and the organization sponsoring the plan. Occupational pension plans are normally initiated by employers, groups of employers, associations of employers or industry organizations. The plans are administered directly by the plan sponsor or other independent legal entity.

With individual pension plans leading initiator of the insurance is the insured person. The insurance is most often done through personal monthly installments or lump sum contributions paid to a pension administrator who invests these contributions on behalf of the insured person. Under personal contributions are understood the contributions that are paid by the insured person, most often these are a part of his income from employment.

Individual pension plans and personal pensions shall be distinguished. Personal pensions are linked to the holder of the pension plan, i.e., the insurance is intended to pay personal pension to the plan holder. Personal pensions differ from survivors, widows, mutual and family pensions.

7. CAPITAL AND PRIVATE PENSION FUND

The private pension fund is managed by an institution other than public, state or municipal authority. At the same time there are capital funds managed by public, state or municipal authority. All private funds are organized on a capital-covering principle. One of the probable causes that no private fund is organized on a cost covering principle is the absence of a significant number of people with high incomes who voluntarily agree to participate in a joint scheme. In this context capital fund is a broader concept than private fund.

The term „capital pension fund” usually means a fund in which the insurance is made on the basis of accumulation of assets to fund future insurance obligations. In this definition it is worth paying attention to the „accumulation”. Accumulation means that money is purposefully collected for the purpose to finance future payments, and not current payments. Another definition of capital pension fund can be derived from the definition of Y. Hristoskov: „... a legal entity in which reserves are accumulated in insurance schemes with defined payments or the funds of the insured persons are kept in individual accounts”. This definition also focuses on the accumulation as an important feature of the capital fund. Another definition is a fund in which accumulated funds are personalized in order to provide benefits for old age, disability or death. In this definition the nuance is „personalized”. Usually capital funds account or record installed contributions from or on behalf of an insured person. Bulgarian legislation does not contain a definition of the concept of capital pension fund.

In the capital pension fund there is simultaneous action on the principles of capitalization and individualization. The accumulation of assets is associated with the capital principle.

The capital principle is a principle of insurance, in which the funds of pension insurance are accumulated in an individual account of the insured person and are his property. Accumulation shall not necessarily be carried out on individual accounts in order for the fund to have the characteristics of a capital one. Capitalization also exists in the public pension systems. The pension amount is determined according to the amount of accumulated in the account funds and in accordance with the general rules (the Rules) of the respective pension fund. The funds for supplementary pension security in Bulgaria operate according to this principle.

Cost-covering principle is an insurance principle, in which the contributions of insured persons enter the general fund and help to cover the cost of paying the pensions of current retirees. On this principle works the pension security within the State social security, which forms the first pillar of the pension system in Bulgaria.

The principle of individualization is associated with the personalization of the contributions, accumulated funds, pension assets and security rights of the insured persons. Individualization can be done by maintaining information in individual accounts of each insured person. It also can be done by recording the insurance contribution of the insured person - paid insurance contributions, social security income, pensionable service, virtual income from funds management.

Therefore as capital pension scheme is accepted the scheme under which pensions agreements are guaranteed by the fund with dedicated assets invested to meet the obligations of the scheme for payment of benefits at the moment they occur.

Capitalization in solidarity system is associated with the formation of reserves in solidarity system created in order to finance the system in demographic aging of the population or a mass retirement of older age cohorts. Another form of partial capitalization are the schemes of notionally defined contributions (non-financial defined contributions, NDC). With them in the public system a virtual account is created, a virtual insurance record, in which the contributions on behalf of the insured are recorded. Virtual return is also distributed to the insurance contribution. The pension is linked to the contributions of the person but does not depend solely and entirely on the funds accrued in this virtual individual account. With these schemes the risk of impairment of accrued amounts during financial crises is overcome. At the same time, there is a personal interest, as pension to some extent depends on individual virtual money of the insured person. Such schemes have been introduced in Sweden, Italy, Poland, Latvia, Mongolia and Kyrgyzstan (Terziev, Georgiev, 2018 a-h, Terziev, Banabakova, Georgiev, 2018i-t).

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