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Savings or Investment. Personal Budget Management

Sorin Enache[1], Elena Enache[2], Cristian Morozan[3]

Motto: Invest in yourself!

Abstract: The studies carried out by the rating companies place our country in a not very honourable place, but actually on the contrary, according to the survey carried out about financial and banking education, which contributes to the level of well-being. We are ranked 123 out of 143 states that participated in this study. The level of financial education, the degree of "literacy" in managing one's own finances, shows us that, in Romania, four out of five people do not have even the most basic knowledge about finances. Percentage wise, financial illiterates represent 78% of the population. The completely unfavourable context should make both decision-makers and strategy makers think, as well as every citizen. We consider it appropriate to briefly present some of the financial instruments that could ensure a better life at retirement age.

Keywords: savings; pension; investment; personal budget; management

JEL Classification: G11; J32

1. Introduction

It is common to say: "I have worked for this state for 40 years, I expect them to give me a proper pension!" Nothing more fake! Everywhere in the world, the state pension has become a subsistence pension. For this reason, every person must ensure that at retirement age they have an income close to their last salary. How? This is the question we intend to provide some answers to.

In order for a person to want to choose from a variety of answers, it is necessary to explain it to them simply, in their own understanding that feathering one's own nest can be done in two ways: by saving or by investing.

The major difference between "saving" and "investing" is the efficiency, the benefit at the end of the chosen period. For the savings products, the yield is moderate, because the risk is moderate. With investment products, we can associate the idea that those who don't risk, don't win. The risk can be high, the gain or losses can be commensurate.

A financial consultant can tell a person which solution is best for them, after taking their "robot portrait", after analysing the person's income and expenses, lifestyle and standard of living, stability of income sources, etc.

As *savings products* there are:

- Private pensions (Pillar II and Pillar III);

1 Associate Professor, PhD, Faculty of Economic Sciences and Business Administration, "Danubius" University from Galaţi, Romania, Address: Blvd. Galati, no. 3, Galati, 800654, Romania, Tel.: 0722510217, Corresponding author: sorin.enache@univ-danubius.ro.

2 Professor, PhD, Faculty of Management-Marketing in the Economic Affairs Brăila, "Constantin Brâncoveanu" University from Pitești, Romania, Address: Bascovului 2A 110095 Pitesti, Romania, Tel.: 0722692193, E-mail: e_enache2005@yahoo.com.

3 Associate Professor, PhD, Faculty of Management-Marketing in the Economic Affairs Brăila, "Constantin Brâncoveanu" University from Piteşti, 0720527152, cgmro@yahoo.com.

- Bank deposits;
- Deposit certificates;
- Government/municipal bonds;
- Treasury certificates (through ANAF) and treasury bills (through BNR);
- Life insurance with capital accumulation.

As *investment products* there are:

- "Unit-linked" type investment component life insurance;
- Shares of companies listed at Bucharest Stock Exchange;
- Investment funds, whose activity field is to identify ways of earning from investments and placing money in saving/investment instruments.

The first option proven by practice is to access, depending on the possibilities, one or all alternatives to the public pension:

- the Mandatory privately administered pension (Pillar II);
- the Optional privately administered pension (Pillar III);
- Life insurance.

2. The Public Pension System

2.1. Today's Realities

The current pension system is known as "pay-as-you-go". It was designed and launched in Germany by Chancellor Otto von Bismarck in 1863 and was often compared to a classical pyramid, with the large base at the bottom (Figure 1).

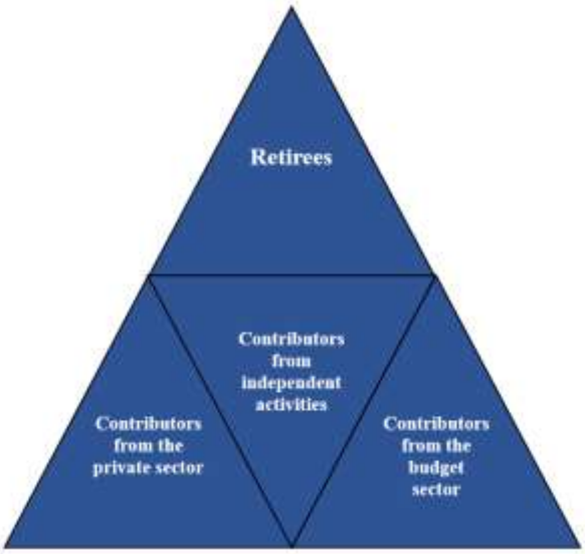

Figure 1. Ideal Pension System
Source: the authors

Its creator thought that this is what a system based on intergenerational help should look like: children who have become active adults support the generation of grandparents and parents, and in turn they will be supported by their children who have become active adults.

It is necessary to specify that the children's workplace must be in Romania, because through their contribution, they feed the national pension fund.

The higher the number of contributors, the lower the pressure on the pension budget and the beneficiaries' pension can increase.

In conclusion, the pyramid was designed so that the base supports the top! This would have been the ideal pyramid.

Unfortunately, in Romania, the pyramid turned into a rectangle!

RETIREES		
Contributors from the budgetary sector	Contributors from the private sector	Contributors from independent activities

Figure 2. The Current Pension System in Romania
Source: the authors

The numbers change, but the basic idea stays the same. There are more retirees than employees, and the percentage deductions from low wages are not enough to pay the pensions.

According to the statistical data published by the National Institute of Statistics, in the last quarter of 2022, the average number of pensioners in our country was 4,992 million people, down by 4,000 people compared to the third quarter of the same year. The average monthly pension (which is calculated considering the pensions of all categories of pensioners) was 1,866 lei, up with 0.5% compared to the previous quarter. *The ratio of the average number of state social security pensioners to that of employees was 8 to 10* (https://economedia.ro/).

Obviously, the question is: how did it get here? The explanations are multiple, in summary it is about:

- The waves of retirements that took place after the Revolution of December 1989. Taking advantage of certain advantages of the moment, many employees who would normally have been active on the labour market, retired. We mention:

- 1990, May, before the first democratic elections in post-communist Romania;
- 1992, when the law on early pensions appeared;
- year 2001, April 1 – the introduction of the Pensions Law no. 19/2000;
- 2020 – the year with the highest correction index – 1.41.

- Special pensions, with all the well-known problems;

- The scandal of disability pensions.

- Negative birth rate;

- The closing of large industrial units, some of them, it is true, energy-consuming, but nothing was built in their place as a viable alternative. Super and hypermarkets are built on their land, where wages are low;

- Encouraging departures to work abroad;

- The invasion of imports that dramatically affected domestic production;

- The harmful influence of politics in any field of activity.

The State Social Security Budget (SSSB) is fed from the contributions of all persons who are employed with an individual employment contract; the contributions of people carrying out independent activities; the people's contributions which are voluntarily insured in the public pension system through an insurance contract.

The Contribution for Social Security (CSS) is 25% of the gross salary starting from 2017, out of which:

- 21.25% - is distributed to Pillar I, the public pension, respectively feeds SSSB;

- 3.75% - distributed to Pillar II.

It should be noted that Pillar I is not a pension fund but a redistribution system!

The public pension system operates on the basis of the State Social Insurance Budget, which is approved every year by law by the Romanian Parliament. For the year 2023, Law no. 369/2022 was voted and issued (http://www.mmuncii.ro). We extract some data:

- the average salary used to base the budget - 6,789 lei;

- death benefit - 6,789 lei;

- the death benefit for a family member who did not receive income - 3,395 lei;

- the value of the pension point – 1,785 lei;

- correction index – 1.41.

2.2. Types of Pensions

The types of normal pensions for the support of which it is necessary to fullfil SSSB are: the old age pension, early pension, partially early pension, disability pension (grade I, II and III), heir's pension.

The following so-called other benefits are added to them: the death benefit, the treatment tickets and the financing of the companion's allowance in the case of pensioners in the first degree of disability.

The retirement criteria and conditions on which the system currently operates are:

Age: Men - 65 years; Women - growing up to 63 years;

Full contribution period: Men - 35 years; Women: it is increasing up to 35 years;

Minimum contribution period: Men and women: 15 years.

The contribution period is obtained out of the years when people actually worked:

- under normal working conditions:

- in superior conditions: exceptional/special (former group II and group I of work).

How is a pension calculated?

Equation 1 Formula for pension calculation

$$\text{Proper pension} = \text{Annual average score} \times \text{Pension point value}$$

The annual average score is calculated as follows:

The *monthly score* is calculated by dividing, as the case may be, the gross salary, the insured monthly income that was the basis for the CSS calculation, by the average gross salary reported by National Institute of Statistics.

Equation 2 Formula for monthly score

$$\text{Monthly score} = \frac{\text{Gross monthly salary earnings}}{\text{Average gross salary earnings}}$$

The monthly score can be adjusted with timeframes worked in the I, II work group, prior to 01.04.2001.

Also, in the case of disability pensions, using the potential internship means increasing the monthly score depending on the established degree of disability.

Annual score = sum of monthly scores divided by 12 (the number of months in a year).

Average annual score = the sum of the annual scores divided by the number of years corresponding to the full contribution period.

If the insured person also contributes to a private pension fund, the monthly score is corrected with the CSS quota actually paid to SSSB.

The value of the pension point is established by the SSSB Law.

A few final clarifications are needed:

- a person can accumulate the pension with aa salary income only if they are a beneficiary of an old-age pension;

- as an exception to this rule, third degree disability pensioners can also accumulate this pension, but on the condition that they are employed with a partial work contract, for a maximum of four hours per day;

- The other categories of pensioners who are beneficiaries of early, partially early, disability first and second degree and their pensions, cannot accumulate this benefit with a salary income. Instead, they can carry out independent activities without appearing in the Declaration 112 that is submitted monthly to the National Agency for Fiscal Administration.

The suggested solutions for increasing the sustainability of the public pension, which are discussed and analysed in more and more debates, but which are difficult to materialize could be:

- the return of the Romanian people from abroad, correlated with government measures to create new jobs;

- the increasing of the retirement age, but this measure should be optional, considering the population's sickness degree;

- the increasing of the employees' salaries.

3. Alternatives to the Public Pension

Three privately managed pension schemes currently operate in Romania:

- Pillar II – the privately administered compulsory pension, regulated by Law no. 411/2004;

- Pillar III – the optional privately administered pension, regulated by Law no. 204/2006;

- Pillar IV - Occupational pension, regulated by Law no. 1/2020;

In addition to the basic laws, there are other regulations supported by normative acts (Government Emergency Ordinances - GEO, Government Decisions - GD, Financial Supervisory Authority norms) that complement and modify them for their improvement, protection of the population and their permanent updating.

The most well-known prudential measures imposed by the Romanian Government regarding the investment policy carried out by the administrators of private pension funds are those related to the regulation of private pension funds. According to the stipulations of GEO no. 38/2019, administrators of private pension funds can invest assets in the following financial instruments:

- stocks and bonds - max. 15%;

- securities traded on the profile market -10%;

- purchase/rental/sublease of movable goods – 3%;

- purchase of stocks/bonds in commercial companies from Romania/EU/EEA – max. 10% of the assets' value.

Until retirement, the amounts accumulated in the insured's account are prudently fructified under the direct supervision of the FSA - Financial Supervisory Authority.

Table 2. Statistics at 31.12.2021

Characteristics	Pillar II + Pillar III	Pillar II	Pillar III
Administrators	10	7	8
Pension funds	17	7	10
Depositors	4	4	2
Auditors	5	5	5
Participants	8.360.000	7.790.000	570.000
Net assets (lei)	92.480.000.000	89.070.000.000	3.410.000.000

Source: Financial Supervisory Authority - Sector of the private pension system, Directorate of Intermediary Supervision and Control

The value of the total assets under administration at the level of the entire private pension system stood at 92.48 billion lei (18.5 billion euros), increasing by 18.5% compared to December 2020, and the share of these revenues in GDP is 8%.

3.1. The Mandatory Privately Administered Pension

The mandatory privately administered pension is an arrangement based on contributions and individual accounts, through a mandatory membership, where the amounts accumulated in the accounts are managed by private administrators.

In recent years, a number of problems have arisen regarding the fact that young people who have been employed have not been informed about this obligation to join a pension fund and the allocation has been randomly carried out. In order to avoid these situations, there has been an amendment to the Labour Code according to which the employer is obliged to inform the new employee about the provisions of Law 411/2004 and that the person can choose the fund to join. People who have joined this scheme pay nothing from their net income. It is, in fact, a redirection of part of the CAS, more specifically of 3.75% to a private pension fund, and the difference of 21.25% goes to the State Social Insurance Budget.

Although since 2016 the contribution to Pillar II was supposed to reach 6%, through political measures this percentage was stopped and even decreased.

Regarding the age distribution, this is: up to 35 years - 38%, and over 35 years - 62%.

Transferred contributions - Since the beginning of 2021, transfers to private funds totalled 9.77 billion lei, up with 9.7% compared to 2020. The average contribution per participant was 204 lei, 6.3% higher compared to 2020.

Net personal asset payments - Between January and December 2021, net personal asset payments were made for a number of 19,000 participants and beneficiaries, totalling 288 million lei, out of which almost 86% as a result of the opening of pension rights, 14% - participant death and as a result of acquiring a degree of disability, and implicitly the request for the disability pension.

The structure of investments made from privately managed pension funds - Investments made by managers of privately managed funds were made in the following financial instruments: government securities - 68%; shares - 26%; bank deposits, corporate bonds, municipal bonds, equity securities, bonds issued by foreign non-governmental bodies, commodity funds and precious metals - 10%.

Rate of return – for all privately managed pension funds - 2.89%.

The analysis of these figures shows that the yield of Pillar II is good even during the pandemic period, being above the inflation rate, because the investments were made in bonds.

Suggested solutions to increase the yield of Pillar II:

- the increase of the contribution allocation percentage to the mandatory pension at the expense of the state pension. A first measure that the Romanian Government announced in 2022, stating that starting from 01.01.2023, the contribution will increase from the current 3.75% to 4.75%, did not happen. The contribution remained the same;

- once salaries are increased, the amounts directed to the mandatory pension will also increase.

3.2. The Optional Privately Administered Pension

On 31.12.2021, *ten voluntary pension funds* were registered in the Electronic Register of the FSA. These funds were managed by *eight private pension fund management companies*, and the asset storage and custody activity were carried out by *two depositaries*.

The total value of the net assets of voluntary pension funds was 3.4 billion lei, up by approximately 16% compared to December 2020.

The number of participants was 564,000 people.

The average contribution for 2021 was 207/participant, up by 29% compared to December 2020. *Contributions transferred* to the optional pension system were 430 million lei, 16% more than the same period of the previous year.

The weighted average rate of return of all voluntary pension funds was 6.42%, lower than in December 2020 (8.35%).

The average value of an account was 6,047 lei, 9% higher than the previous year.

The payments made amounted to almost 100 million lei to a number of 10,000 participants and beneficiaries. Out of this total, 93.18% is related to the opening of the pension right, 6.82% as a result of the death of the participants or their disability.

The voluntary pension funds investment structure

Just like in the case of mandatory and optional pensions, the mainly used financial instruments were government securities and shares.

The investments of optional pension funds in government securities represented 61%, down from 2020, and in shares 29%.

Along with these placements, another destination was in corporate bonds and DCIB (Depositaries Collective Investment Bodies) participation titles.

Also, the Law on the payment of the amounts accumulated in the taxpayers' account has not yet been finalized. Currently, in adulthood, with retirement, people can opt for the following payment options for the amounts accumulated in their account: payment of the entire amount; staggered payments over a maximum of five years.

But in the case of high inflation like that in 2022, what recommendations can be given? Specialists say: paying the sums in full and placing them in an investment fund; periodic payments and placing them in financial instruments with a safe return.

The annual sociological research carried out by RIES - the Romanian Institute for Evaluation and Strategy, at the request of NUIRS - the National Union of Insurance-Reinsurance Societies on "Risk perception and insurance culture in Romania" - 2021 showed that one in five respondents saves more than in the previous year, and the investments are made 50% in bank deposits, 27% in life insurance, and the investment on the stock market is below 10% (https://unsar.ro/).

The private pensions market represents the most important component of the non-banking financial market, with a share of 8% in GDP in 2021. Important is not only the quantitative side, but also the contribution to the development and economic growth of Romania (by 0.2 pp annually) by ensuring the financing of both the state and the companies, by supporting consumption, as an effect of the payment of private pensions to the population.

The private pension system supports the local economy, having a high resistance to crises, thanks to the diversity of the investments and the prudent management of the portfolios by the administrators.

4. Unit-linked Life Insurance

Life insurance is the best financial planning tool invented by the human mind.

No matter what the future holds for us - pleasant or unpleasant events - life insurance ensures that we or our family will have more options, being able to choose how to continue our lives.

People buy life insurance for two reasons:

a) Care for their future and that of their families – the insured sum for cases of death;

b) The desire to obtain a personal gain - the evolution of the client's account.

Life insurance does not guarantee anyone that by completing it they will not die. It only guarantees that the insured person's plans for their family will not perish with them.

Life insurance has two components:

a) Life insurance *is complementary to social insurance*, to protect people against the temporary loss of working capacity due to accidents, diseases or old age. *This results in the protection component of the insurance.*

b) Life insurance also *allows investments* that insurers make in different financial instruments. *The result is the investment component of the insurance*.

These two components vary depending on several variables: the age of the client at the time of contracting, their profession, the business they are developing, if they are married, if they have children, etc.

In order to conclude a life insurance, one starts from a thorough analysis of the "*daily family basket*" according to the following equation:

Equation 3 Formula for daily family basket

$$\text{Necessity} = \text{What Do I Need} - \text{What I Have}$$

Life insurance holders are not alike and there is no standard profile of them. Life insurance practice has proven that depending on these customers' type, life insurance products are positioned in a pyramid that looks like this:

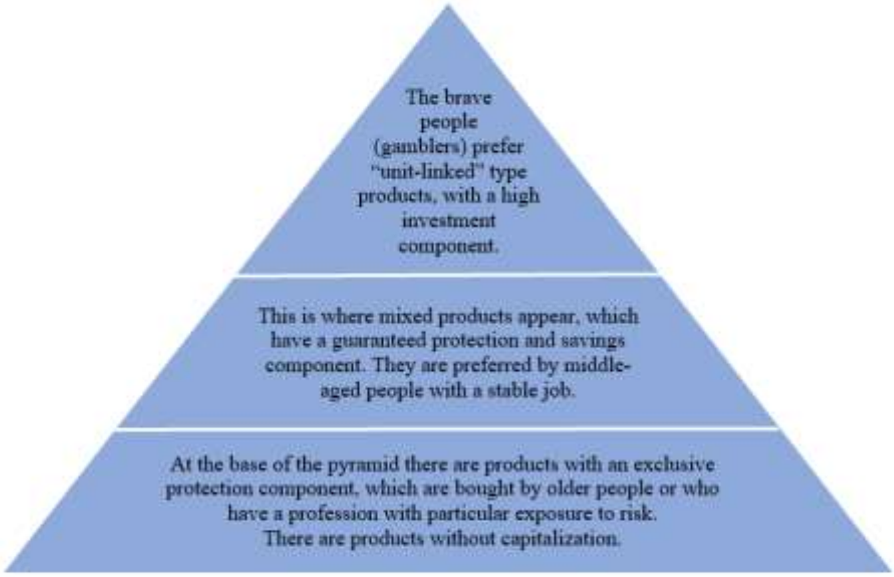

Figure 3. Life Insurance Products
Source: the authors

The benefits of life insurance are:

- instantly created property;

- the paid allowance represents a sum of money created at an uncertain moment;

- financial support in case of disability;

- a life insurance helps in adulthood, it can turn into a life annuity or over a period of time;

- securing the children's future.

Unit-linked life insurance

This insurance is an investment product, whose major advantage is the expected profit, superior to traditional products.

The investment risk belongs to the client, who determines both the funds in which their money will be invested (low, medium or high risk) as well as the fund allocation (x% of the premium in fund 1, y% in fund 2, z% in fund 3).

Age of the insured:

- minimum age: 16-18 years;

- maximum contract limit: 60 years;

- maximum limit at expiration: 65 years.

Duration of the contract:

- minimum: 5 years;

- maximum: 30-35 years.

Risk coverage:

- in case of the insured's death, the beneficiaries will receive the insured sum plus the account value;

- there is also an instant protection in the case of death from an accident that comes into force at 00:00 o'clock on the day following the payment of the first installment of the insurance premium.

In a life insurance, the size of the insurance premium is not linked to the insured amount as in the case of non-life insurance. It's really the starting point in the negotiation: how much can the person pay? This is natural because the life and health of people cannot be evaluated in money.

The level of the insurance premium and the *frequency of its payment* can be changed in compliance with a minimum term imposed by the insurer.

Additional premiums (top-ups) are accepted at any time during the contract.

What effect does paying the insurance premium have for the insured?

Part of the premium goes to the insurance (protection) fund, and the other part is invested. The approach is based on the insured's age at the time of contracting: the younger the insured, the larger the portion allocated for investments because, statistically speaking, the risk of death is lower for young people.

As the age increases, it is preferable that the protection part increases.

What does investment mean?

Investment means buying fund units, which represent the smallest division of an investment program. Basically, the insured is a "small player" on the capital market for the following reasons:

- when paying the insurance premium, the insured buys fund units;

- when he/she wants to fully or partially redeem he/she will sell the fund units;

- buying and selling will be done at the price of that day.

That is why it is good for the insured to continuously study the evolution of his account, the trend of fund units, the method of allocation, etc.

An example of strict actuality is the following:

If an insured person had checked their account over the last six months of 2020, in the midst of the coronavirus pandemic, he would have noticed that the evolution of his account was completely unsatisfactory: not even the paid amounts were covered, i.e. the price of fund units is very small. At first glance this seems to be disappointing!

But, the insured being a small player in the capital market, he/she should not be scared, but on the contrary they should invest, that is, to buy fund units increasing their investment, because this economic situation is temporary, and in a relatively short period of time the price of fund units will increase.

Another important element is the account value, which is calculated as follows:

Equation 4 Formula for account value

$$\text{Account value} = \text{The total number of fund units} \times \text{The selling price of a fund unit}$$

Example of investments by fund category:

- low-risk fund (80% treasury certificates, deposit certificates, treasury bills and 20% government securities, bonds);

- medium risk fund (70% government securities, bonds and 30% shares listed on the stock exchange);

- high risk fund (70% shares listed on the stock exchange and 30% treasury certificates, deposit certificates and bank deposits).

The financial consultant's offer varies depending on the "robot portrait" of the client/insured:

- if the interlocutor is a person who has a stable job, as well as his wife, and it is found that he does not like the risk, then the optimal option would be to have the larger allocation on fund 2;

- if he is a young entrepreneur, then the highest allocation percentage would preferably be on fund 3;

- there can also be mixed options.

If the life insurance contract was concluded in lei, then an important element appears, namely the adjustment according to inflation.

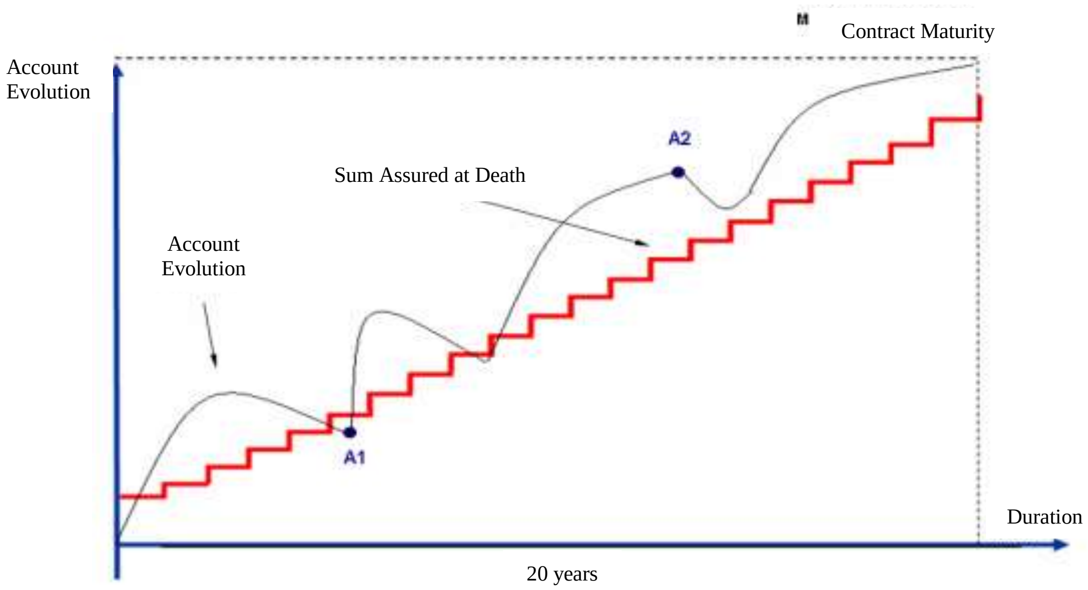

Figure 4. Redemption of Insurance
Source: the authors

The redemption of the contract can usually be done starting from the third year of insurance, from installment payments and additional payments.

Redemption can be total or partial. In the case of partial redemption, the value of the account will be reduced by the amount withdrawn, up to a certain minimum level, minus the redemption fee.

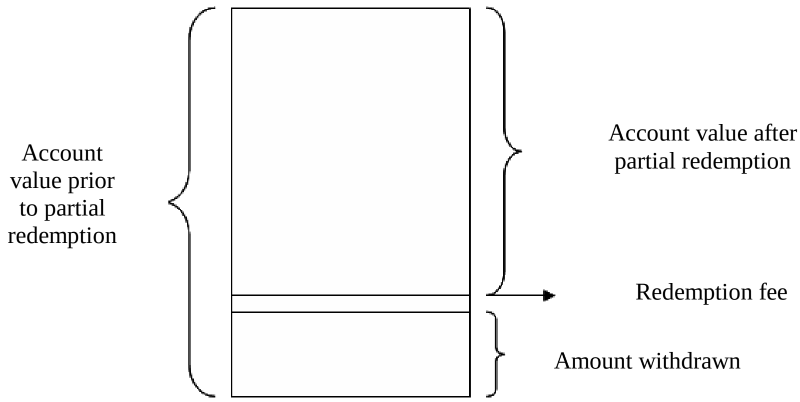

Figure 5. Partial Redemption
Source: the authors

Additional insurances can complete, compared to the basic one that only covers the risk of death. They cover the following risks:

- death by accident – double the insured amount is paid;

- hospitalization due to accident;

- surgical interventions from the accident;

- immobilization in a plaster cast;

- permanent disability from the accident;

- serious diseases: cerebrovascular accidents, cancer, heart attack, chronic renal failure, open heart operations.

The insurance premiums related to additional insurances are deducted, reducing the accumulation units, so the protection increases and the investment decreases at the same time.

Expiration/maturity of the insurance contract

The insured can opt for the payment in one installment of the entire amount accumulated in their account, the transformation of the accumulated amount into a life annuity or an annuity for a certain period of time.

The value of the annuities is determined according to the investment performance, i.e. the size of the client's account value.

Here are some features that make the "Unit - Linked" type of insurance appreciated as one of the most valuable discoveries in the field of life insurance.

5. Conclusions

Today, Bismark's pyramid is completely out of balance. It is rather a rectangle, where the sides (the number of pensioners and the number of taxpayers) are equal. For this reason, the replacement rate, calculated as a percentage ratio between the first pension and the last wage income, is approximately 55%.

In order to have a decent living, the only solution available to a citizen who responsible for his/her future is to access alternatives to the public pension: the privately administered mandatory pension, which can bring an income of 10%, the privately administered optional pension which will contribute an extra 5-10%, and life insurance with another 10%.

In this way, life after productive activity will be able to be supported with income close to salary!

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