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CAPITAL FUNDED MODELS OF PENSION INSURANCE ON SELECTED EXAMPLES PART 1

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Abstract

This study on the capital funded models of pension insurance will present the economic concept [in theory] and the Chilean and Argentinian concepts of pension insurance implemented in those countries. On the one hand, extremely similar to each other, and on the other differing with so many detailed solutions that it might as well be said they are completely dissimilar. If we chronologically consider the Chilean system as the primary one, than the Argentinian system is its mirror image, however, reflected in the funhouse mirror.

Both solutions have aroused and continue to arouse many emotions. They have become the basis for formulating very general, almost axiological conclusions, as well as detailed legal, economic, sociological and other analyses. These are model examples of the so-called

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capital funded models in pension insurance, which were in their heyday not so long ago, and at present raise more and more skepticism.

However, they cannot be omitted when looking into the future functioning of the public pension systems, particularly due to the fact that they are constantly changing in pursuit of the target model, which will perhaps become the future universal model of the retirement security for the citizens of the globalized world.

Keywords

Social insurance, pension insurance, capital funded model, PAYG, South American pension insurance models

1. The standard model – an economic model

Hereby, a certain attempt shall be undertaken to collect the statements following from many speeches, studies and scientific papers, which sought to present the desired insurance model from the economic sciences' point of view that in the first place takes into account the solvency of public finances and the budgetary needs. Undoubtedly, it would be legitimate to ask the question, who serves whom? Does the pension insurance serve the citizens, or do the citizens serve the budget? Is social insurance still an insurance in the reinsurance, compensatory understanding of the notion, or only in the accumulative one, ensuring additional revenues to the system of public finances.

The basic assumption of this standard model is the financial self-sufficiency. The amount of financial resources obtained for the insurance fund is at least as large as the current expenditure needs, and even some part of means remains and constitutes a reserve for the more difficult times.

According to that concept the insurance system is independent of the state budget and the budget does not have to subsidize the system. Of course, it pays the social security contributions for the employees of the state apparatus, of different kinds, but this is provided for in the means intended for the social securities, whereas, there is no need to pay extra money to the inefficient insurance fund, because it has a sufficient amount of monetary means to meet its obligations with regard to persons who have already acquired the right to pension benefit.

This means that the resources of the insurance fund are calculated in a way that ensures solvency of the insurance system. Of course, this raises specific difficulties in the classification of the expenses by function in the insurance system, because this means that the size of contributions, on the one hand, and the size of pension benefits, on the other hand, must be calculated in such a way so that a balance is achieved. The room for maneuver is therefore very limited and is reduced to balancing between a possibly large, but not overwhelming for the employee and the employer, size of contribution, and a possibly small, however, not a degrading pension benefit.

It should be noted that although a distinct preference for the capital funded model can be observed, however, at least theoretically, the PAYG model is not *a priori* rejected, under the condition that financial self-sufficiency is maintained, which makes it unnecessary to supplement the resources of the insurance fund for the payment of due benefits with the budgetary means. However, higher mobility, credibility, foundation on an independent market and desired service by private entities that are immune to political pressure and operate according to market principles, i.e. rational principles, are stressed.

However, there are many voices that claim that the desired effects which a particular pension model should achieve depend not so much on whether it is a PAYG, capital funded, mixed or any other model, but on the economic essence of its functioning. The preferred model should operate according to a simple dependence, in which the sum of pay outs from the system equals the sum of payments made to the system increased of the funds obtained from the interest.

M. Góra is of the opinion that the pension scheme dictates only the principles on the basis of which the distribution of the subsequent GDP takes place between the working generation and the generation of the retired persons. Therefore, such a pension system should be designed that the costs necessary for achieving the assumed social objectives caused the smallest tax distortions, maintaining the economic neutrality of the functioning of the pension system. This allows the persons that compulsorily function in the pension system to be subject to burdens that they are relatively able to accept[1]. From the economic point of view, the common, i.e. mandatory pension system is a necessary evil that is justified only by the social objective that it achieves, and substituting the mandatory pension system with

[1] Or as M. Góra defines it – „they have no compelling reasons to feel they are being robbed", M. Góra, *System emerytalny*, Warszawa 2003, pp. 14–16.

a voluntary one, is not the solution to the problem, because this means the resignation from the achievement of the social objective for the purposes of which it was introduced[2].

There is a lot of truth in the above statements, although they have a certain logical flaw, namely they refer to the known models of pension insurance *a priori* assumed by the author, and what is more in their extreme and let me call it "orthodox" forms. It is even stranger that he himself is the coauthor of the definitely complex pension system, in which there are many unusual and often legitimate solutions that effectively achieve the assumed objectives, including the social ones.

It could be stated on the basis of the above disquisition that proposing the right pension model is more than simple. Correct specification of the accumulation of financial means coming from the generation of professionally active people and their correct redistribution give a chance for some success and achieving of assumed economic effects, and thanks to that also the social objectives.

Unfortunately, the proper functioning of a specified pension model is not like building Lego structures with the help of the attached precise instruction. It rather resembles an attempt to construct a palace from demolished farmhouses and with the help of a randomly chosen team of people, none of whom holds an engineer's or builder's licence.

It is enough to supplement the above described economical idyll with the demographic issues and the fast decrease of the generations replacement ratio, and the entire constructed palace will turn out to be a house built of cards coming from different decks.

The American continent, and especially South America, has become an amazing test ground for implementing pension insurance, and that is why it is worth looking more closely at this model of pension insurance on the example of the South American countries, a model that is almost the same, but instead in as many, often much dissimilar variations, as many there are countries on the South American continent. And all of this even seasoned and enhanced with a South American temperament.

A better example than the models of pension insurance from South America presented below seems difficult to find. It also makes it clear that the standard can be sometimes so far detached from reality that it can even deny it.

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2 *Ibidem.*

2. The Chilean concept of pension insurance

The initial pension scheme implemented in Chile was based on the PAYG model. It was supplemented with several pension subsystems dedicated to different professional groups. The budgetary subsidies were being permanently increased in order to ensure payouts of pension benefits, which were in turn reduced and their valorization was frozen. All of this finally led the finances of the pension system and consequently the state finances to a great collapse. On the eve of the reform the hidden debt of social securities in Chile was approx. 80% of the GNP[3].

Chile decided upon a very radical change of the pension system (from the traditional one of a PAYG character to a fully capital funded system based on individual capitalisation accounts. In was introduced on 1 May 1981.

The solution was considered quite revolutionary. It also became the object of close attention due to its initial success. At that time, many countries had difficulties in terms of financing pension benefits. In the opinion of José Pi?era, the creator of the Chilean pension reform, even a thorough reform of the old pension insurance would not allow to implement its basic objective, which was the social solidarism, and moreover, maintaining its element would generate and favour social inequalities and inefficiency. The problem was solved by referring to the ideology that emphasized the distinct relation between the personal contribution and the obtained reward, and also gave the insured a freedom of choice and decision[4].

The pension system in Chile was based on capital funded pension funds managed by private pension funds (Administradoras de Fondos de Pensiones, AFP – also called the administrators of the fund). It is a solution with defined contributions. The size of the benefit is specified only when the person retires. Participation in pension funds is mandatory for the majority of employees.

Pension funds are managed by AFP. The basic income of AFP are fees for conducting the individual capitalisation accounts and the revenues from their own reserves for capital expenditures. Each AFP is obliged to invest its reserves for capital expenditures into the same assets as does the pension fund administered by it. The means of the pension fund are deposited with the depositary. This allows to

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3 The author obtained the basic data from the work: Karoń T., *Zasady funkcjonowania chilijskiego systemu emerytalnego,* Przegląd Ubezpieczeń Społecznych i Gospodarczych 1998, No. 9/12, pp. 8–11.

4 K. Kołodziejczyk, *Systemy emerytalne w Ameryce Łacińskiej. Od repartycji do kapitalizacji*, Poznań 2004, pp. 60–61.

separate the fund assets from the assets of the insurance company. Pension funds and AFP are separate legal persons. Each AFP can administer a single pension fund. Members of a pension fund can freely transfer means between any funds[5]. Apart from the fact that they can belong to only one AFP, they also have the right to pay additional voluntary contributions collected on a separate account.

The pension benefit entirely comes from capital accumulated on an individual investment account. The account is activated when the person retires. Benefits can also be paid out as annuities for the fund member in case of their disability or for their successors in case of their death.

The participant of the pension fund who has reached the required retirement age, can choose one of the forms of pension benefits: programmed schedule of payouts, life annuity or a temporary salary with a delayed life annuity.

A good solution is to provide the possibility of managing the achieved surplus by the member of the pension fund, including its withdrawal, when they collect means defined as ELD – *Excedente de Libre Disposición* (which are sufficient to ensure pension benefit above 120% of the minimum pension and above 70% of the average participant salary from the period of the last 10 years)[6].

The Chile pension system creates the possibility of individual selection of options and variants proposed in the pension insurance and of the entity that manages the pension fund for the insured. It is based on a decentralized management and indicates a direct relationship between contributions and benefits. It imposes great responsibility on the government and the regulatory authorities. The government's task is to maintain the macroeconomic and price stabilization in the long run, thus protecting the real value of the accumulated reserves[7].

The disadvantage of the Chile system is that it is based only on a single model of monetary funds management. Lack of diversification of the disposure of means, both with regard to deposits and the risk, creates a certain illusion in terms

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[5] The only limitation concerns the frequency of transfer - max. twice a year.

[6] In the opinion of T. Karoń the programmed payouts have two advantages in comparison with the life annuities. In case of an early death the amounts remaining in the account are inherited by the successors, they enable participation in higher return on capital, achieved by the investments of the fund. In turn, annuities offer a long-term protection against inflation excessive longevity, but they can be based on more conservative real rates of return and life table. T. Karoń, *Zasady funkcjonowania chilijskiego...*, p. 9.

[7] T. Karoń, *Zasady funkcjonowania chilijskiego...*, p. 11.

of choice and safety[8]. It can be assumed that the Chilean system of pension insurance, based only on the capitalization of contributions, has brought also other tangible benefits, such as capital injection into the market and development of own economy. Its further success is dependant also on the long-term stability of the market and economy both in Chile, as well as at its strategic partners. The countries that utilize similar, however, not as extreme solutions on the European market, prefer the diversified forms of pension insurance financing[9].

The financing of the pension insurance in Chile has stabilized, although initially it required a significant involvement of the state, which had to finance their natural deficit, caused by the cutting off of the current means inflow from contributions and their transfer to the new, individual capitalisation accounts. This was tantamount to termination of the system based on the distribution between the generations.

The Chilean government allocated all of monetary means obtained from the privatization and the means obtained from the emission of the government stock, the so-called discretionary coupons, which constituted the object of the pension funds deposits. In effect this delayed the necessity to pay debts and transformed them into long-term liabilities. The public finances were disciplined by reducing the expenditures and the level of pension benefits was stabilized[10]. However, it should be noted that it was implemented in the atmosphere of the totalitarian state coercion. The assumptions and structure of the system were not subjected to a real, social debate, and the costs of its implementation, for the state, as well as for the individual citizens, were huge and perhaps disproportionate to the effects achieved.

Unfortunately, when Chile regained the possibility to self-determine and restore the democratic system, the pension system that had been constructed for so long and with such costs, underwent a rapid degradation, not to use the word – dismantling. At present, it seems that the Chilean pension system can be again considered to be in the state of a deepening financial crisis.

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8 Similar conclusions can be also found in D. Stańko's study, *Reforma systemu emerytalnego w Chile. Siewy i zbiory*, Fundusze Emerytalne 1998, No. 1.

9 T. Sowiński, Finanse ubezpieczeń emerytalnych, Warszawa 2009.

10 T. Sowiński, *Finanse ubezpieczeń...*, pp. 318–320.

3. The Argentinian version of the capital funded concept of pension insurance

The pension system in Argentina[11] was formed essentially after 1944. It became universal because apart from the employees of the public sector and the army, also the employees of the private sector and the self-employed people were included in it. The number of socio-professional groups covered by the system grew gradually. At the beginning of the 80's it covered approx. 80% of the professionally active part of the society.

The traditionally constructed method of financing pension benefits based on the distribution between generations started to loose stability due to the deterioration of the demographic balance, characterized by an increasingly lower birth rate and increasingly longer life duration of the insured. This distinctly distorted the proportions between the number of people professionally active who paid the contributions and the number of people who obtained the pension benefits.

In consequence, a disproportion grew between the obtained monetary means and the necessary payouts.

There were attempts to address the problem pro tem, by supporting the system with the revenues independent from the state budget. However, this did not prevent the pension system from a collapse, which manifested itself in the dangerously excessive use of state subsidies and the violation of the state budget stability. Also the size of pension benefits was lowered from the level of more than 80% of the former earnings to the level below 40%.

In 1986 the so-called state of emergency was introduced in the system of social securities. This allowed to reduce the amount of state debt with regard to the retired people. This happened, however, first of all, through the reduction of the calculation basis for pension benefits. Also new taxes were imposed to repair the state's finances. However, it did not produce the intended effects. All the undertaken actions did not produce the expected effects and the situation continued to worsen.

At the beginning of the 90's of the 20th century, it became universally believed that the partial modification of the Argentinian pension system was inefficient and that it was necessary to introduce comprehensive, radical changes that could in the

11 On the basis of: G. Jóźwik, *System emerytalny w Argentynie*, FE 1998, No. 2, pp. 31–37.

long run heal the pension insurance finances, and also the disturbed stability of the state finances.

The new pension system entered into force on 1 July 1994. Its structure was based on two pillars. The first pillar is an entirely public one of a PAYG character, and the second pillar is based generally on the capital funded pension schemes managed by private entities. Except for the military and the police, the pensions system is mandatory for all social and professional groups, and those groups, which had not been covered by it in the initial phase were being gradually included.

The first pillar of the pension insurance in Argentina is public, managed by the state agency (ANSeS). It has a PAYG character with a defined benefit. It offers three types of pension benefits together with their full target handling: basic pension, compensatory pension and old-age pension.

The basic pension (*prestacion basica universa* – PBU) is 27.5% of the average remuneration of the people paying contributions[12]. The condition for obtaining PBU is reaching the retirement age, which, similarly as in Chile, is 65 for men and 60 for women, and an active membership in the system for a minimum of 30 years. With each additional year of paying contributions, but no more than 45 years, the amount of benefit increases of 1%, i.e. maximally PBU can amount to 42.5% of the average remuneration of its participants.

The compensatory pension (*prestacion compensatoria* – PCU) covers the group of people who have obtained the pension rights according to the rules of the old system. They obtain 1.5% of the average remuneration from the last 10 years of employment for each year, however, not more than 52.5%.

Old-age pensions (*prestacion for etat avansada* – PA) are intended for people who, in accordance with the rules of the “old” system have already obtained the right to pension benefit, by meeting the three conditions:
1) are 70 years old or older,
2) have paid pension contributions for the minimum of 10 years,
3) do not qualify for the basic pension – PBU.

[12] This is an initial dependency, which was to be constant as an assumption. In 1997 a change was made in the record that referred to it, and the competences to determine the size of that dependency were handed over to the state.

The PA pension benefit amounts approx. 20% of the average remuneration. ANSeS pays out also the disability pension to persons who have remained in the public system. The contributions are paid by the employers in the amount of 16%.

Contributions are collected in the same way and by the same institutions that collect taxes, and next they are transferred to relevant entities that manage the first and the second pillar. In the first pillar the ANSeS income apart from the contributions consists also of the budgetary subsidies and the defined tax revenues.

The second pillar of pension insurance in Argentina is of capital funded character. It is a defined contribution model based on the individual capitalisation accounts. Similarly as in Chile they are managed by private pension funds (AFJP – *Administradoras de Fondos de Jubilaciones y Pensiones*). Dissimilar, in turn, from the Chilean system, the second pillar in Argentina, apart from AFJP, is based on PAP (*Prestacion Addicional de Permanencia*), that is a public component handled similarly as the first pillar by ANSeS. The second pillar is compulsory with the possibility of free choice, in the first place, between AFJP and PAP, and in case the private sector is chosen, one has the freedom to select any administrator admitted to the market, and next, similarly as in Chile, one has the right to change the pension companies that manage the assets basically without limitations, but not more often than twice a year.

One cannot transfer to the AFJP private sector. PAP differs from the private sector in that it is system with a defined contribution specified with reference to the achieved income. An employee who chose the PAP public sector, can change it into a AFJP private sector, however they cannot change it the other way round. If the insured has not declared their membership in the specified time, they are assigned by law to the private sector.

A single administrator (similarly as in Chile) can manage only a single fund. Assets and accounts of the fund are separate and its property is deposited with a depositary. AFJP are obliged to accept the formula of a joint stock company. Argentina has established very high financial requirements for private insurance companies, on the one hand, trying to enhance the safety of the contributions, and on the other, to prevent the fragmentation of the pension market[13]. AFJP are most often established by trade unions, corporations and (unlike in Chile) banks. The contribution to the second pillar is 11%, from which approx. 7.5% is subject

[13] At the moment of pension reform implementation, there were 26 private pension fund companies in Argentina. Their number was reduced to 16.

to capitalization. The remaining 3.5% are the costs of the functioning of the system (provision). The pension benefit from the second pillar is of complementary nature in relation to the pension obtained in the PAYG system from the first pillar. AFJP in Argentina within the framework of the second pillar offers three types of benefits for the insured (exactly the same as are offered in the first pillar in Chile), that is a programmed schedule of payouts, purchase of an insurance policy that ensures a life annuity or an option comprised of the former and the latter.

Despite the fact that the pension system in Argentina was implemented at the time of crisis, the entire sector achieved the real rate of return in the amount of 10% after three years of functioning and became profitable. Profitability was also reached by more than a half of AFJP.

Its shortcomings may include the relatively high functioning costs of the second pillar, which are 3.5% from 11% of the means coming from the contributions (i.e. approx. 30%), significant means involved in marketing and low stability (faithfulness) of shareholders.

The reform of the pension insurance have had a beneficial impact on the economy in Argentina. The saturation of the securities market with capital increased. The demand for instruments issued by the state increased, which allowed the government to finance the reform and helped overcome the economic crisis[14].

The reform of pension insurance in Argentina was way more radical than in Chile. The PAYG model was still retained in the first pillar, entrusting a state institution with high independence with its management. However, the supervision and control, and in particular the possibility of influencing its functioning is easier in a system constructed in that way.

The second capital funded pillar supplements the level of benefits from the basic pension. Additional effects of the pension reforms implementation in Argentina (as well as Chile), and in particular their positive impact on the system's solvency, the size of the pension benefits, the guarantee of their maintenance and on the stabilization of the state budget and a distinct economic growth.

Unfortunately, both in Argentina and in Chile, the amendments to the pension insurance law became more frequent and numerous over time. This resulted in a distinct reduction of practically all indicators that had been formerly presented so positively. In addition, there was a significant transfer of financial means,

14 G. Jóźwik, *System...*, p. 37.

especially those collected in the 2nd pillar, and invested by the foreign pension institutions outside of Argentina, which also weakened the recapitalization of the internal market.

The lack of acceptance of the introduced changes by the Argentinian society is symptomatic. Discontent with the offered benefits, as well as lack of consent to draining the financial means invested abroad off the market. The deteriorating condition of the Argentinian pension system only exacerbates that situation.

Paradoxically, from the social point of view, what can be considered the disadvantage of the Chilean system is the orthodox meticulousness in implementing the system, which involved financial, but also social costs, understood as restriction of the civil liberties and not so much a state coercion, which is, after all, a characteristic feature of the public pension insurance, but rather the coercion resulting from the totalitarian nature of the state and disregard for the public opinion, as well as the social costs of the implemented solution. In turn, for the Argentinian system a completely opposite situation was the disadvantage, and that was an extreme lack of consistency in the preparation of the structure of the insurance system, as well as in its implementation and perseverance in observing the assumptions that were the condition for its success. The effect was similar in both cases. Despite a preliminary, as it turned out, apparent success, the democratization processes in Chile involved also the withdrawal from the heavy and costly to implement insurance system. Unfortunately, there was no concept on how to leave it, as well as no concept for a system that could replace it, which resulted in its slow dismantling and reemergence of the problems with financing the system

In case of Argentina the problem was lack of consistency in implementing the system. A certain amount of "backdoors" and exceptions from the main concept, which, on the one hand, were to convince some of the people reluctant to that concept, and on the other, be some kind of a "safety valve" for the implemented system, resulted in a situation opposite to the previously intended and in effect contributed to its failure.

In the second case, many other controversial and not thoroughly thought through solutions could be added, with an excessive transfer abroad of the invested means coming from the pension system topping the list. This resulted in two crucial faults that burdened the entire system. The first one is draining the financial means off the market and no support effect of the domestic economy, and in consequence the economic growth, which is clearly presented by the experts as the advantage of the capital funded model of pension insurance. The second one is the discouragement of the society with that solution, which results in a highly uncomfortable situation for the government, the proposals or actions, related to even the best repairs of the system, of which are inhibited, because they are a priori rejected by the public opinion, even if they were essentially legitimate. That effect of "fatigue" is practically impossible to overcome and the only way out seems to be proposing a completely new solution and subjecting it to a long and tedious reconciliation procedure, which will have all the features of the authentic, open and sincere public consultations, open to proposals and possible modifications to the design of the new solutions. It seems to be the only legitimate way out, and it is difficult to imagine a different one in a democratic society.

4. Conclusions

None of the presented models of pension insurance proved itself in its entirety, but also none of them was completely discredited. The above statement refers to the private and financial sphere of those models, however, it is not the author's intention to comment on the social and political situation of the both presented countries, and in particular Chile, where the pension system based on the capital funded concept of pension insurance was implemented in conditions that are far from democratic, to say it delicately. Although, even those circumstances have their significance, because it is hard to imagine that such a system would be accepted by a society of any of the European countries in comparable circumstances. Of course, the theoretical considerations on the economic model are omitted here. I allowed myself to call it like that, because it is difficult to see, over the Matrix-like flashing rows of digits, the human in it, whom it is supposed to serve, at least in the assumption.

The implications for Europe and the EU are such that the excessively theorized models, which seemingly even meet all the standards indicated by the experts, may turn out to be unacceptable for the society that they are supposed to serve. When introducing a new system and even a new model of social securities, we must consider the necessity of conducting meticulous and lengthy public consultations, because only through the public acceptance for the proposed pension system, especially as a result of its long-term implementation, its success can be ensured. The Chilean example, in turn, proves that even the best solutions, although I do not consider that system to be the best, will not be met with public acceptance if the costs of their implementation are too big; especially in case of multi-generational solutions this may simply turn out to be impossible.

The previous experiences and analyses of the conducted reforms indicate that the extremely optimistic predictions referring to the capital funded solutions in terms of pension insurance, with the reforms in the countries of South and Latin America as examples, have turned out to be quite far fetched from the reality. There are even some opinions that claim that those optimistic assumptions of their proponents did not fulfill even in the slightest, and the transition from the PAYG system to the capital funded system became the source of significant obligations for the state, and in particular, in the short and medium transitional period[15].

Therefore, it would be good for some of the theoreticians and experts to notice that they are not constructing a robot for household cleaning but an almost "living" system, which has to adjust itself to the lively and diverse or even downright whimsical society. This might be the biggest challenge for every new concept of pension insurance. What is important is not economy, mathematics or the legal and financial correctness, but the so-called "human factor", without which there will be no success of any model, no matter how perfectly is seemed to be developed.

15 J. Bravo, A. Uthoff, *Transitional Fiscal Costs and Demographic Factors in Shifting from Unfunded to Funded Pension in Latin America*, Serie Financiamiento del Desarrollo 1999, No. 88, p.8.