Abstract

In the first part of this study on the capital funded models of pension schemes, the economic concept [in theory] and the Chilean and Argentinian concepts of pensions schemes implemented in those countries were presented. On the one hand, extremely similar to each other, and on the other different 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 a mirror from the house of mirrors.

It is not an uncommon opinion that these are the only countries in which the capital funded model was implemented, but as it was concluded in the first part of the study, almost all of South America became in its own way an unusual testing ground for the implementation of the capital funded concept of pension insurance.

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Just as the Chilean and Argentinian solutions seem apparently similar to each other, the solutions of the remaining countries in the scope of pension insurance have many variations, specific only to them or to the countries on that continent.

To provide a fuller comparison, the tabular summaries will include apart from the two already described countries, the following six countries: Peru, Columbia, Uruguay, Bolivia, Mexico and El Salvador, and also the already described solutions in Chile and Argentina to facilitate a more complete and simple analysis of the presented data.

The two best known and continuously analyzed pension insurance systems in South America are, similarly as the Polish and Swedish concepts, though with a definitely different distribution of accents, the Chilean and Argentinian systems. Both are the execution of the so-called capital funded model. Both were implemented in large capitalistic countries located on the same continent. In both countries, the previous pension system were at the verge of efficiency and their economic situation, economies and budgets were also in a state requiring intervention and repair programs.

It is worth analyzing even in those cases the differences between the implementation and execution methods and procedures of those pension insurance models that are similar in assumption, and what is very important, the effects or lack of effects in those elements of both implemented models with which they differed.

**Keywords**

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

**1. South America – the incubator for the capital funded model of pension insurance**

By the end of the last century, the pension insurance reform was conducted in ten countries of South and Latin America. Apart from Chile and Argentina, the pension insurance reform was implemented also in Peru, Colombia, Uruguay, Bolivia, Mexico, Salvador, Costa Rica and Nicaragua. In all of those countries the capital funded model of pension insurance with private insurance operators was accepted\(^1\).

In the opinion of K. Kołodziejczyk, one of the main economic objectives of pension reforms in Latin America, and in particular in those countries with the longest operating systems of PAYG nature, was and still is to ensure the financial

self-sufficiency of pension insurance systems. Too high and continuously growing financial support for the PAYG system in combination with the deteriorating birth rates resulted in an increasing involvement of the state that more and more threatened to destabilize the public finances. On the other hand, the introduction of the capital funded segment was intended to relief the public finances, which would not have to contribute such significant amounts to the pension system as had been the case so far².

It was fostered by the extremely optimistic visions of the capital funded model, which in itself, and in particular through the emphasized “market relevance” understood as the proper response to the emerging ever changing challenges and needs and detachment from the “political” decisions in favour of the economic calculation undertaken professionally by the specialist, independent institutions which operate in the private sphere, were to ensure the success of the reforms and the future prosperity of the insured. Actions undertaken on such a scale are worth a closer look and an attempt to conduct at least a preliminary analysis on the selected examples.

However, before that for a complete picture of the space and conditions of the two countries pioneering in that field i.e. the already mentioned: Chile and Argentina, it is worth examining the basic data reflecting the field under discussion, the condition of pension insurance and solutions implemented in particular countries, and especially the differences between them. To make the image clearer³, a tabular comparison of the presented parameters, elements and features of pension insurance in individual South American countries will be made.

2. The structure and financing principles of the reformed pension systems in South America

In the beginning it is worth comparing the structures of individual pension systems, the pension models present in them, their forms, financing principles and sizes of benefits that are possible to be obtained with those parameters of pension models.

² K. Kołodziejczyk, Systemy emerytalne..., pp. 87–88.
³ Taken from the K. Kołodzieczyk’s work, Systemy emerytalne...
Table 1. The structure and financing of the new pension systems’ obligatory part

<table>
<thead>
<tr>
<th>Specification</th>
<th>Chile</th>
<th>Peru</th>
<th>Columbia</th>
<th>Argentina</th>
<th>Uruguay</th>
<th>Mexico</th>
<th>Bolivia</th>
<th>El Salvador</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>THE FIRST PILLAR – PAYG</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Form</strong></td>
<td>Guarantee of minimum pension / gem/ – state subsidy to the participant’s account to reach the minimum level</td>
<td>Gem</td>
<td>Gem</td>
<td>Basic pension / the same for all entitled/</td>
<td>Basic pension / independent of the account’s balance but dependent, among others, on seniority/</td>
<td>Gem</td>
<td>Benefit paid out from special funds (to all retired people)</td>
<td>Minimum pension / limited with the availability of the budgetary means</td>
</tr>
<tr>
<td><strong>Financing</strong></td>
<td>General tax revenues</td>
<td>General tax revenues plus a special tax for top earners</td>
<td>General tax revenues plus employers contributions</td>
<td>Employers contributions plus VAT revenues</td>
<td>Employer contributions</td>
<td>Income from the privatization of enterprises</td>
<td>–</td>
<td></td>
</tr>
<tr>
<td><strong>Size of benefits in approximation</strong></td>
<td>Approx. 1/4 of the average salary</td>
<td>–</td>
<td>Approx. 3/5 of the average salary</td>
<td>–</td>
<td>–</td>
<td>Approx. 2/5 of the average salary</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

**THE SECOND PILLAR – savings / capital funded system / or dependent on earnings / PAYG system/**

<table>
<thead>
<tr>
<th>Form</th>
<th>Retirement or early retirement</th>
<th>Retirement or early retirement (the second form only in the capital funded system)</th>
<th>Retirement or early retirement (the second form only in the capital funded system)</th>
<th>Retirement</th>
<th>Retirement or early retirement</th>
<th>Retirement or early retirement</th>
<th>Retirement or early retirement</th>
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<table>
<thead>
<tr>
<th>Specification</th>
<th>Chile</th>
<th>Peru</th>
<th>Columbia</th>
<th>Argentina</th>
<th>Uruguay</th>
<th>Mexico</th>
<th>Bolivia</th>
<th>El Salvador</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financing</td>
<td>Employee contribution</td>
<td>Employee contribution</td>
<td><strong>Employee contribution plus employer contribution</strong></td>
<td>Employee contribution</td>
<td>Employee contribution plus employer contribution plus state subsidy</td>
<td>Employee contribution</td>
<td>Employee contribution</td>
<td>Employee contribution plus employer contribution</td>
</tr>
<tr>
<td>Size of benefits</td>
<td>Dependent on the capital on an individual account</td>
<td>Dependent on the capital funded or on the earnings and seniority /PAYG/</td>
<td>Dependent on the capital funded or on the earnings and seniority /PAYG/</td>
<td>Dependent on the capital funded or on the earnings and seniority /PAYG/</td>
<td>Dependent on the capital funded or on the earnings and seniority /PAYG/</td>
<td>Dependent on the capital on an individual account</td>
<td>Dependent on the capital on an individual account</td>
<td>Dependent on the capital on an individual account</td>
</tr>
</tbody>
</table>

On the basis of the content of table 1, the following conclusions can be drawn:
1. There is no single model of pension security in Latin America.
2. Even models that are similar to each other differ not only with many details, but also with the solution to many crucial elements that make up the foundations of a particular model, such as minimum pension guarantee /gem/ , which is present in some of the countries and in the remaining ones the pension benefit is not guaranteed.
3. The financing of pension benefits is very diverse, from taxes, and even share in the VAT income, and even a special tax for top earners through contributions to income from privatization,
4. In insurance models, contributions are paid by various entities, like for example, employers, the insured themselves, or jointly by both groups.
5. The second pillar has a traditional, as for this solution, form of savings funded system, although in some countries it is indeed dependent of the earnings, however, in the PAYG system formula.

In order to complete the picture that shows the diversity of particular solutions, a summary and comparison of reformed pension security systems' key features must be made, for the South and Central American models, and certain similarities, but also differences which might be of crucial significance to the success of a particular pension system’s structure must be sought for.

When analyzing the content of the data from table 2, a few interesting conclusions can be formulated:
1. Apart from Chile, where the new pension system was implemented already in 1981, in the remaining countries of South America and Central America, the fundamental reforms of the pension system were implemented in majority in the years 1993–1998.
2. It is very important that contrary to the common opinion, approximately half of the countries that conducted pension systems reform did not resign from the PAYG insurance model, at least on the 1st insurance pillar.
3. An interesting solution is also the application of the PAYG model of pension insurance in the 2nd insurance pillar, which is a distinct deviation from the recommendations found in the World Bank report of 1994.
4. Rate of contribution credited to the employee’s individual account in pension fund constitutes, in the majority of countries, approx. 20% of their income.

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Tomasz Sowiński

4  Averting the Old Age Crisis: Policies to Protect The Old and Promote Growth, World Bank 1994.
5  Which the majority of the European countries that reformed their insurance systems abided by.
Table 2. Selected features of the reformed systems of pension security

<table>
<thead>
<tr>
<th>Specification</th>
<th>Chile</th>
<th>Peru</th>
<th>Columbia</th>
<th>Argentina</th>
<th>Uruguay</th>
<th>Mexico</th>
<th>Bolivia</th>
<th>El Salvador</th>
</tr>
</thead>
<tbody>
<tr>
<td>The role of the PAYG system</td>
<td>Gradually</td>
<td>Maintained</td>
<td>Maintained</td>
<td>Maintained</td>
<td>Maintained</td>
<td>Gradually</td>
<td>Eliminated</td>
<td>Gradually</td>
</tr>
<tr>
<td>eliminated</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rate of contribution crediting the employee's individual account in pension fund (as a % of income) where:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>– employee</td>
<td>10</td>
<td>8</td>
<td>10</td>
<td>7.1</td>
<td>12.3</td>
<td>8.5</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>– employer/the state</td>
<td>10</td>
<td>8</td>
<td>2.5</td>
<td>7.1</td>
<td>12.3</td>
<td>1.1</td>
<td>10</td>
<td>3.3</td>
</tr>
<tr>
<td>Eliminated (obligations taken over by the State Treasury)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>5.2/state subsidy</td>
<td>2.2</td>
<td>6.7</td>
</tr>
<tr>
<td>Pension funds fees and commissions costs and disability and family insurance costs (as % of income) **</td>
<td>2.3</td>
<td>3.7</td>
<td>3.5</td>
<td>3.3</td>
<td>2.7</td>
<td>4.5</td>
<td>2.5</td>
<td>3.2</td>
</tr>
<tr>
<td>Limitation of the contribution assessment basis</td>
<td>In advance or in arrears</td>
<td>In advance or in arrears</td>
<td>In advance or in arrears</td>
<td>In advance or in arrears</td>
<td>In advance or in arrears</td>
<td>In advance or in arrears</td>
<td>Only in arrears</td>
<td></td>
</tr>
<tr>
<td>Vesting criteria:</td>
<td>60/65 years</td>
<td>65 years</td>
<td>57/62 years</td>
<td>60/65 years</td>
<td>60 years</td>
<td>65 years</td>
<td>65 years</td>
<td>–</td>
</tr>
<tr>
<td>– retirement age (women/men)</td>
<td>20 years</td>
<td>20 years</td>
<td>20 years</td>
<td>35 years</td>
<td>35 years</td>
<td>25 years</td>
<td>–</td>
<td>25 years</td>
</tr>
<tr>
<td>– contribution period*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recognition of the contributions made in the old system</td>
<td>Compensatory coupon (4% of the real interest rate)</td>
<td>Compensatory coupon (0% of the real interest rate)</td>
<td>Compensatory coupon (3% of the real interest rate)</td>
<td>Compensatory benefit</td>
<td>Only partially included when calculating the pension from the new system</td>
<td>Transfer of means saved in the system implemented in 1992</td>
<td>Two types of compensatory benefit</td>
<td>Compensatory coupon reg. Transfer Certificate (price indexed)</td>
</tr>
</tbody>
</table>

*In the transitory period the vesting criteria for benefits may be diverse

**Data on fees and provisions of pension funds and disability and family insurance costs are from 31 December 2000.

divided in various proportions between the employee and the employer, and sometimes even the state.

5. The lowest contributions are in Argentina and amount to 14.2%, divided equally at 7.1% between the employee and the employer, and the highest rates, in the amount of 24.6%, also divided equally at 12.3% between the employee and the employer are in Uruguay.

6. Pension funds fees and commissions costs and disability and family insurance costs amount to between 2.3% and 3.7%, only in Mexico they amount to 4.5%.

7. In all of the countries the contribution assessment basis is limited in advance and in arrears, only in El Salvador the contribution assessment basis is limited only in arrears.

8. In the majority of countries becoming entitled to pension benefit is dependent on 2 factors, namely:
   a) retirement age, which is usually around 65 years,
   b) contribution period, which in turn ranges from 20 to 25 years, and only in Argentina and Uruguay it is 35 years,

On the basis of the above examples, a certain illusiveness of the homogeneous views related to the pension reforms implemented in the South and Central America can be very clearly observed. Whereas, the fact of illusiveness of the implemented solutions provides opportunity for tracking and analyzing and comparing the effects that were achieved in individual countries. It is exceptionally valuable for the research on the new pension insurance model.

Table 3 presents a comparison of solutions which encompass the key decisions of employees who participate in the pension insurance system in the individual countries of South and Latin America under research. Decisions concerning the entry to the reformed pension system or exit from the capital funded segment, of those who as a result of legal solutions or their own decisions have found themselves in that segment. Those decisions are considered in four groups of employees, namely:

1. employees who enter the job market,
2. employees who participated in the old system,
3. self-employed,
4. employees participating in the capital funded system, who would like to return or make a transfer to the PAYG system.

For the first group of employees all countries envisage the obligatory entry to their insurance system. In some of them [Peru, Columbia, Argentina, Uruguay]
Table 3. Crucial employees’ decisions (entry to the reformed pension system; exit from the capital funded segment)

<table>
<thead>
<tr>
<th>Specification</th>
<th>Chile</th>
<th>Peru</th>
<th>Colombia</th>
<th>Argentina</th>
<th>Uruguay</th>
<th>Mexico</th>
<th>Bolivia</th>
<th>El Salvador</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees who enter the job market</td>
<td>Obligatory entry into the capital funded system</td>
<td>Obligatory entry, free choice between the PAYG and capital funded systems</td>
<td>Obligatory entry, free choice between the PAYG and capital funded systems</td>
<td>Obligatory entry, free choice between the PAYG and capital funded systems</td>
<td>Obligatory entry only for employees of relatively top earnings</td>
<td>Obligatory entry into the capital funded system</td>
<td>Obligatory entry into the capital funded system</td>
<td>Obligatory entry into the capital funded system</td>
</tr>
<tr>
<td>Employees who participated in the old system</td>
<td>Voluntary entry, free choice between the PAYG and capital funded system</td>
<td>Voluntary entry, free choice between the PAYG and capital funded system</td>
<td>Voluntary entry, free choice between the PAYG and capital funded system</td>
<td>Voluntary entry, free choice between the PAYG and capital funded system</td>
<td>Obligatory entry &lt;40 years /high earnings/ and voluntariness &gt; 40 years</td>
<td>Voluntary entry</td>
<td>Obligatory entry &lt;36 years and voluntary entry &gt;36 years, but not less than 55 years – men or 50 years – women</td>
<td>Voluntary entry</td>
</tr>
<tr>
<td>Self-employed</td>
<td>Voluntary entry into the capital funded system</td>
<td>Voluntary entry into the capital funded system</td>
<td>Voluntary entry into the capital funded system</td>
<td>Obligatory entry, free choice between the PAYG and capital funded systems</td>
<td>Obligatory entry years /high earnings/ and voluntariness &gt; 40 years</td>
<td>Voluntary entry</td>
<td>Voluntary entry</td>
<td>Voluntary entry</td>
</tr>
<tr>
<td>Possible return of the capital funded system participants to the PAYG system</td>
<td>No</td>
<td>Only until 01 June 1996 with reference to: the age /55 years – men, 50 years – women/ or no entitlement to compensatory coupon</td>
<td>Yes, possible change of capital funded option to PAYG option (and vice versa) once in three years</td>
<td>Only until 15 July 1996, i.e. for two years after the implementation of the pension reform</td>
<td>No</td>
<td>Yes, but those that enter the job market deprived of that choice</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

employees have the freedom to decide between the PAYG and the capital funded models of pension insurance, but in the remaining countries, the entry into the capital funded model of pension insurance is obligatory.

For the second group of employees, who have previously participated in the old system of pension insurance, the majority of countries provide a freedom of choice between the PAYG and capital funded model. In Uruguay and El Salvador it depends on the length of membership period in the old system of pension insurance, and only in Bolivia it is absolutely obligatory to enter into the new system based on the capital funded model of pension insurance.

In the third group of self-employed persons, there is a general freedom of voluntary choice of a model, and in majority even of the entry to the pension system.

In turn, the return of a capital funded system participant to the PAYG system is prohibited as a rule, with few exceptions specified in detail.

Regardless of the accepted, detailed solutions in individual pension system components, whether this relates to the legal and financial structure or the obligations and rights of the insured, but also the employers, and even the countries that have conducted reforms of pensions insurance systems and models, a certain consistency in their implementation, execution and many similarities of the applied solutions in individual countries can be observed. However, it should be expressly stressed here that the sum of differences between individual solutions enforced in the countries of South and Central America may make even the pension systems that seem apparently similar to each other diametrically disparate, whether considering the management of insurance fund means [funds] or the rights and obligations of the insured, as well as the employers and the states that participate in the systems.

Also the concepts of the applied solutions are different. As has already been mentioned, it is not true that a capital funded model was introduced in all of the described countries. In many of them the PAYG model is present, even in basic segment of the pension system. In others, both are present and there is the possibility to choose the membership in either of them or there is no such choice or it is possible to be a member of both of them.
Conclusions

What is very important for the author of this work, are the relations of individual countries to their citizens and their content, and also the degree of their subjectivity in the implemented pension systems. It should be concluded with regret that unfortunately they are not the subject of insurance systems in the researched countries of South and Central America.

A certain exception in some of the countries is the group of self-employed people who in general have the freedom to choose the insurance model and for the most part even the entry to the pension system, and what is most important, the right not to enter into the pension system created by the state.

We could of course ask the question why some people can and others cannot? The answer seems simple, although bipolar.

First of all, the stereotype, naturally and in the contemporary reality groundless, that those employees who are self-employed are the wealthier ones. It does not even seem necessary to justify the absurdity of the assumption. Many times the self-employed achieve little income, much lower than does the group with average earnings and the senior public administration, and also than many specialists on the market. Not to mention that some of those people who choose self-employment are forced to do so by the employers who “optimize” the employment costs in their companies.

According to a similar common stereotype, although from an opposite perspective, people with “full time” jobs are as a rule considered to be underpaid and non-affluent.

Not investigating the validity of such reasoning, it is unacceptable and violates the principle of equal treatment of citizens, in Poland guaranteed under the content of Article 32 of the Constitution of the Republic of Poland on the equality of all citizens of the Republic Poland, and also in various forms and precise wordings present in almost all rights, liberties and freedoms charters, declarations and other documents related to all of those values for citizens, people, inhabitants of the Earth,

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6 The constatation of the author refers to the countries of South and Central America, because the considerations on that particular region are the subject matter of this study. The feature under criticism does not relate only to the described countries. It is essentially not unknown to any continent with Europe in the lead. The very fact that the “insurance obligatoriness” is one of the main features of social insurances is the best confirmation.
regardless of their race, sex, religion or beliefs, and also the economic status, which cannot be decisive in depriving people – employees – the insured, of their rights to make decisions about themselves. They have as much right to it as do the wealthier or even the rich people. Indeed, they may require help in order to fully comprehend the choices they are about to make, after all, they do not hire teams of lawyers, experts, advisors in their company, because they do not own one. And the state, instead of making the decision for them, should help them decide. An education that prepares its citizens to make proper decisions when the right time and circumstances come should be carried out broadly and as thoroughly as is possible.

Claiming that some of the citizens are unable to undertake such complex decisions is derogatory not only towards those citizens but also towards the state apparatus that professes such views or at least expresses them in practice in the content of legal acts. That manner of considering oneself better, more knowledgeable than others is unfortunately quite common among the legislators. Therefore, it is also not unfamiliar to the makers of the pension law.

The time has come to finally fully and really implement the content of Article 32 of the Constitution of the Republic of Poland and similar provisions of almost all constitutions in the world and also the charters and conventions on the citizen rights and liberties, of course not only in Poland, but the idea that they carry should constitute the basis for creating all laws around the entire globe, because, as I have already mentioned, the legal solutions which are discussed in this study are not merely a regional characteristic.

Bibliography