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**ANALYSIS OF THE URUGUAYAN WELFARE
SYSTEM AND OF THE PECULIARITIES OF ITS
NEW MIXED REGIME***

I. Introduction

Uruguay has been defined as one of the pioneer countries in Latin America in the development of its Social Security and, as such, has had a gradual and disperse evolution with a high level of stratification. In spite of the above, it was possible, in general terms, to overcome one of the characteristics of the region, the low scope of the population coverage.

The State of Well-Being developed in the first half of the XX century, was that which adopted the first stages of social security, and which integrated the structural elements of solidarity which are still present. The cost of the process of universalization of the coverage on the matter of long term risks, the generous fringe benefits and

* Article prepared by the Banco de Prevision Social of Uruguay (BPS).

the poor administration of the funds, soon provoked financial unbalances that affected both the financial structure and the financial system, and propitiated a series of malfunctions in the financial, social and administrative order, which lead to question its fundamentals¹.

In this study, we will try to describe these malfunctions which, in a certain way, were the starting point of the road towards the welfare reform carried out in September 1995. We will also analyze the basic characteristics of this reform and its effects on the most significant variables of the system.

II. Financial malfunctions

A correct and continuous operation of a social security system requires self-financing, so that the total annual expense may be covered by the affected income collected. Additionally, it is convenient to have available a small fund to act as an eventual reserve that may be used if for any reason current quotas fall temporarily below the present disbursements to cover benefits.

Consequently, the basic symptom of a financial crisis is to report a current annual deficit that requires contributions from the reserve fund for annual disbursements.

This is evident in a pure inter-regional transfers system. In systems such as the Uruguayan state system, in which any deficit is covered with the general budget, the crisis is reflected in increments in the government subsidy, which may be less evident for the public in general.

II.1 FINANCIAL ASSISTANCE OF THE GOVERNMENT

In the following chart, the historical evolution of the financial assistance of the Government to the BPS in constant values, at 1985 values, can be appreciated:

Year	Assistance as % of the G.D.P.
1989	2.78%
1990	1.96%
1991	2.51%
1992	3.03%

Although the increment of assistance would not seem to be relevant, it should be borne in mind that during the period there was also a sustained increment in the rates of contribution of affiliates, and even the creation of a tax on the liabilities themselves.

II.2 EVOLUTION OF THE RATE OF EQUILIBRIUM, AND THE DEMOGRAPHIC AND ECONOMIC RELATIONSHIPS OF THE SYSTEM

In view of the high level of contributions in our country, it was considered advisable to analyze the evolution of the rate of contributions that made it possible to balance the system financially.

In this sense, as can be visualized in the following chart, between 1988 and 1991 it was necessary to increase 10 points of contributions to finance annual disbursements.

¹ Camacho, Luis. *Synthesis of the development of the Uruguayan social security*.

Year	Rate of Equilibrium
1987	29.87%
1988	31.67%
1991	41.13%

According to projections made in the year 1992 for the regime provided for in Act 9, the evolution expected of the three basic variables of the equation, was the following:

Year	Assets-Liabilities	Passivity-Salary	Rate of equilibrium
2000	2.139	83.56%	41.47%
2010	2.224	86.71%	41.39%
2020	2.142	88.02%	43.62%
2030	1.963	88.24%	47.72%
2040	1.777	88.42%	52.82%

The assets/liabilities ratio through the year 2010 registered slight increments that were reverted as from that year, as a consequence of the finalization of the effects of the so called Institutional Act No. 9 (1979) in relation to the increase in retirement ages.

As from that moment, due to the predictable unfavorable changes in the rate of dependency, the assets/liabilities ratio evolved in a negative manner for the financing of the system.

With respect to the passivity/salary ratio, its sustained growth was the consequence

of the application of the new norm for the revaluation of benefits.

The evolution of both ratios had direct incidence on the rate of contribution that balances the system, in the sense that it was estimated that after the second decade of the coming century, it would present a sustained growth, reaching an unprecedented level in the last years of the projection.

II.3 FACTORS OF NEGATIVE INCIDENCE ON THE ASSETS/LIABILITIES RATIO (DEMOGRAPHIC)

a. No affiliation to the system

The "no affiliation to the system" was found mainly within the ambit of the small enterprise or in the informal sector of the economy, as well as in rural and domestic labor.

In spite of the fact that it does not correspond to the sectors with a higher incidence, the level of evasion was considered very significant, as can be seen in the following chart:

Sector	Evasion 1988	Evasion 1995
Civil and Students	0%	0%
Industry and Commerce	25%	25%
Rural	37%	21%
Domestic Service	77%	71%
TOTAL	30%	27%

We can see that evasion, although showing a slight decrease of 3 points, remained at fairly high levels: 27%. The decrease in this type of evasion was observed in rural and domestic labor, while in the Industry and Commerce sector it remained unchanged.

b. Liberality in the granting of pensions

The liberality with which benefits were granted in the past, constituted a factor that increased passivities, in many cases artificially. This, additionally, was accompanied by weak controls of labor activity that lead to the granting of passivities exclusively with proofs of a testimonial nature.

According to what was expressed by Camacho², the passivities corresponding to those who did not contribute to the system represented approximately 18% of the total of the benefits.

c. Aging of Population

The phenomenon of the aging of population is evident, with intensity, in the Uruguayan case, which is transformed in a transcendental variable for social security, due to its influence on the assets/liabilities ratio.

The variables that unchain the situation mentioned above, are found in the decrease of the birth rate concomitantly with a stabilization of the mortality rate. The combination of both variables causes that the life expectation increases as can be appreciated in the following chart:

Life Expectation at Birth		
Year	Men	Women
1990	69.24	75.73
2000	70.02	76.53
2020	71.30	77.85

The aging of population leads also to the gradual decrease of the ratio between active age people and the elder people. Using as a definition of the dependence ratio the ratio existing between the population older than 60 years and the Economically Active Population, we can visualize this phenomenon in the following chart:

Dependence Ratio					
1955	1965	1975	1985	1995	2025
0.188	0.200	0.235	0.262	0.280	0.298

11.4 FACTORS THAT HAVE INCIDENCE ON THE PASSIVITY/SALARY RATIO (ECONOMIC)

a. Sub-Declaration

Sub-declaration is the income that the BPS does not receive as a consequence of the fact that the assessable amounts declared are lower than the retributions subject to contributions, and therefore the

² Camacho, Luis. *Financial Restructuring of the Welfare System*.

contributors pay less than they should. This type of evasion is difficult to detect due to the existence, in the majority of situations, of an implicit agreement between employer and dependent. The employer is benefited because it saves the corresponding employers contribution, and the worker who is far from retirement is not affected because, in the regime prior to the amendments, only the retributions of the last years of activity were computed for the calculation of the basic retirement.

For the purpose of visualizing the magnitude of the evasion to the BPS, it was estimated for 1990 that the evasion corresponding to "no declaration" reached 173 million dollars and, to "sub-declaration" 120 million dollars, while in 1992 the former reached 193 million dollars and the "declaration" evasion 161 million.

Evasion	1990	1992
No declaration	59%	55%
Sub-declaration	41%	45%

Additionally, it was possible to detect that part of the problem was the high rates of contribution of the system, the evolution of which can be visualized in the following chart:

Type of contribution	1990-1992	1993-1995
Employers contribution	16.5%	14.5%
Personal contribution	13%	13%

b. Revaluation of benefits

Historically, the revaluation regime was used as a variable for adjustment of the system. It served to permit the authorities to postpone the negative effects of their financial malfunction through the postponement or decrease of the adjustments that should have been made as a consequence of inflation.

The following chart shows the evolution of the index of revaluation of passivities, where the loss in the value of retirements is unmistakably visualized:

Year	Rev. index	Year	Rev. Index
1962	97.06	1977	30.08
1967	41.17	1982	32.29
1972	35.49	1987	26.13

The abusive use of the level of benefits as a variable for adjustment without complying with the obligations towards beneficiaries, lead them to a true 'rebellion', which received the solidarity of an important majority of the population. That was the main cause of the constitutional reform of 1989, which had as an objective to put an end to the policy followed up to that time on the matter of revaluation; as from November 1989, passivities were revaluated on the occasion of the increase in the number of public employees and according to the variation of the I.M.S. of the immediately preceding period.

III. Social malfunctions

The Uruguayan social security has contributed, undoubtedly, to improve the living conditions of the population. However, its origins and the patterns of development are more linked to the relations of power in political, economic or labor union terms, than to objectives related to the distributive justice. This tendency becomes manifest in two aspects:

III.1 EXISTENCE OF REVERSED SOLIDARITY

Following Saldain[≈], this phenomenon becomes evident when the inequalities existing at the level of the global society are aggravated by social security.

Social security programs act by reassigning resources via active to passive affiliates. Moreover, they can be reassigned between the same class of affiliates by means of differential treatments with respect to quotas or by establishing ceilings on benefits.

The objective of these reassignments is no other than the search for redistribution of income from those that are well-to-do, to the neediest.

In the Uruguayan social security, although there were important elements of solidarity, there were also a great number of factors that generated what has been called "reversed solidarity", among which we can underline:

a. Form of calculation of retirement

Considering the retributions of only a short period for the determination of retirement,

would permit that certain activities and managerial levels could sub-declare their retributions during a long time without affecting their retirement. (It is not possible to apply this circumstance on operating levels and on certain activities with a lower remuneration).

b. Different age for retirement between men and women

In our country, the minimum age for retirement was 60 for men and 55 for women, while at those ages life expectations were respectively 16.95 years and 25.35 years. Undoubtedly, the contributions/retirement ratio was frankly favorable for women without it being apportionable from a strictly professional point of view.

c. Special retirement regimes

In the common retirement system, the general regime and that corresponding to politicians and teachers that have preferential treatment as regards retirement ages and computation of services, lived together and had a similar contributions system. Being included in the same fund, in the last instance workers in the general regime were paying for those with preferential treatment, even those workers of the most modest condition as domestic or rural labor.

d. Special contributions regimes

This category includes the rural regime, the implied employers contribution regime, as well as the regimes corresponding to those sectors exempted from employers contributions such as teaching, cultural, sporting, cooperative, beneficial institutions and others.

[≈] Saldain, Rodolfo. *The structural adjustment policy and its implications for Social Security in Latin America.*

Social security must not be used as a mechanism for the promotion of specific areas or sectors for which the direct subsidies of the National Treasury must be used.

The factors described lead to the loss of transparency of the system as a whole and constituted "a fertile field" where all pressure groups considered they had the right to a treatment similar to those contemplated by the reversed solidarity.

III.2 EXISTENCE OF INDIVIDUAL INEQUITY

Even though the development of social security has basically responded to the objectives of the "bismarckian" model of social security, in fact it is treated as a system of taxes and transfers and is interpreted as one of the many governmental programs.

In this case, there is no reason why the passivities received by an affiliate should keep a relationship with his contributions.

In consequence, the income and expense aspects of social security are evaluated separately. This model implies that income is structured on the basis of usual considerations of a taxation policy, while benefits should be distributed in accordance with any judgment of value that society wishes to use.

This conceptual frame is opposed to the objective of individual equity, that would search that retirements are proportional to the previous income of the worker, to the quotas paid during his activity.

From the political viewpoint, the key agreement that preserves the dignity of

beneficiaries is the financing of the system on the basis of direct contributions. Likewise, this type of financing offers an institutional brake against the temptation of making excessive promises with respect to the expansion of benefits and beneficiaries without providing the necessary resources.

IV. Administrative malfunctions

Historically, the administration of the governmental social security has presented enormous deficiencies. It has been characterized by its high costs, limitations in the training of its cadres and in the technification of its functions, bureaucracy, absence of efficient directors and, in addition to the above, has not been free of the existence of different degrees of corruption.

More and more, different malfunctions with respect to the administration of governmental regimes were clearly visualized, such as those relative to the methods of the taking of decisions, to the hiring standards, to reality and to the internal hierarchy and promotion systems which have little relationship with productivity or competence, to the general lack of dynamism and of innovation spirit, and to the confuse definition of social objectives, which make it difficult to identify the optimum efficiency and responsibility criteria.

According to Saldain⁴, the deficiencies mentioned above, together with other factors, have had as consequence the absence of effective controls on the compliance with the obligations of

⁴ Saldain, Rodolfo. *The structural adjustment policy and its implications for Social Security in Latin America.*

contributors and the granting of fringe benefits on the basis of troublesome bureaucratic negotiations with the consequent institutional discredit.

The aforementioned malfunctions, were determinant in provoking in the collective conscience, a strong negative evaluation of the governmental social security system.

V. The reform of the social security regime

In the light of the above described situation, two types of approaches were presented which were not exclusive:

- a) To reform partial aspects of the system, with the purpose of limiting financial, social and administrative malfunctions.
- b) To reformulate the system in general and the IVS risk in particular. With this solution it became necessary to redefine the objectives of the system and to analyze the ideal instruments for its operation.

V.1 REFORM OF PARTIAL ASPECTS OF THE SYSTEM

In this point, the idea was to correct some aspects of the basic malfunctions found in social security.

V.1.1. IMPROVEMENT OF THE ASSETS/LIABILITIES RATIO

1. Acting on the assets, efforts were made to decrease evasion by capturing those who were not covering their quotas, by means of a deep administrative reform in the collections and inspections

sectors, accompanied by a firm will to provide them with reliability and transparency.

2. Acting on the liabilities, with the improvement in controls and the requirements for the granting of benefits. It was necessary to create administratively information systems that would permit granting benefits on the basis of information relative to the institution, without need to resort to uncertain procedures.
3. Eliminate advanced retirement regimes, which would permit, in addition to reducing the reverse solidarity, to decrease the number of retirees of the system.

The critical situation lead to the adoption of adjustment measures such as the increase in the age of retirement and the modification of replacement rates to the effect of encouraging postponed retirement.

V.1.2. IMPROVEMENT IN THE PASSIVITY/SALARY RATIO

1. Acting on the rate of replacement, future average passivities would be depressed. It should be borne in mind, if we consider that the system operates as a social security in which individual equity is important, that evidently, when an increase in life expectation occurs, the retiree will receive his passivity during a longer number of years. This means that it will unavoidably be paid by a third party. Consequently, to maintain equity it is possible, in this case, to decrease the rate of replacement without breaking any principle.
2. The period considered for the purpose of calculating benefits was increased, bearing in mind that these formulas will

not damage the affiliate at the moment of retirement, which permitted:

- a. to improve the individual equity of the system, because it links the amount of the benefit to that of the contributive effort during his active life.
- b. to neutralize evasion by sub-declaration, because this avoids the possible agreement between the worker and the employer to decrease the salaries declared.

V.2. REFORMULATION OF SOCIAL SECURITY

It was understood that there were three basic pillars that had to be considered when reformulating the social security of the country.

1. Assistance function

Consisted in implementing certain social aid measures to the effect that no one in the country will be under a vital minimum; the base of this level would be given by the present non contributive pensions for old age and disability.

2. Welfare or Mandatory General Coverage Function

This regime would be of a professional nature, with benefits that in general will keep a certain relationship with the levels of contributions, which are the basic support of the system.

In the Uruguayan case, this pillar is constituted by the inter-generational solidarity regime, corresponding to a defined benefits system.

In a brief description, we can say that this regime (provided for in Law 16713, approved on September 3, 1995 and enforced on April 1, 1996) covers in a mandatory manner all the active affiliates of the Banco de Prevision Social (BPS), by its computable assignments of up to \$5,000⁵ per month.

The resources of this regime will be the following:

- a. Retirement employers contributions on the total of assignments up to \$15,000⁶ per month.
- b. Personal retirement contributions on assignments up to \$5,000 per month.
- c. Contributions allocated specifically to the regime.
- d. If necessary, the Central Government will aid the BPS financially.

The old age, disability and survival benefits payable by the BPS are retirement, the transitory subsidy for partial disability, pensions, the subsidy for funeral expenses and the old age and disability pension.

To establish the bases for common retirement, 60 years of age are required and a minimum of 35 years of service with effective contributions (in the event of non dependent workers) or with registration in the labor history (in the event of dependent workers).

⁵ Value as of May 1995, established in Law 16713. Value as from 1/1/2003: \$10,908.

⁶ Value as of May 1995, established in Law 16713. Value as from 1/1/2003: \$32,725.

For the determination of the amount of the pension, the basic retirement salary will be the average of the updated assignments computable for the last ten years of services registered, limited to the best 20 incremented by 5%. To this basic salary will be applied, in the event of common retirement, a percentage of 50%, to which will be added 0.5% for each year exceeding 35 years of services at the time of establishing the bases (with a ceiling of 2.5%) and, additionally, for each year of deferral of retirement after 60 years of age and after having established these bases, 3% will be added per year with a maximum of 30%, or 2% if the bases had not been established.

There is a minimum retirement of \$550⁷ for sixty years of age, which is increased by 12% per year of age, and a maximum of \$4,125⁸ (independently of the benefit that might correspond according to the mandatory individual savings regime).

3. Individual saving

This regime, in the Uruguayan case, is complementary to the previous regime and is also mandatory, for those of a given level of income: it corresponds to the mandatory individual saving sub-system with a defined contribution.

This regime covers affiliates of the BPS in the following situations:

1. For the range of assignments higher than \$5,000 and up to \$15,000 per month.
2. For the range of assignments up to \$5,000 if the option of article 8 of the Law has

been applied (contribution for 50% of the assignments up to level 2).

The individual savings accounts provided for, will have the following resources:

- a. Personal contributions on assignments higher than \$ 5,000 and up to \$15,000.
- b. Special employers contributions for service allowances.
- c. The voluntary deposits of the affiliate.
- d. The monthly profitability of the welfare savings fund corresponding to the participation of the individual savings account in the total fund.

The contributions mentioned in a) and b) will be collected in a form nominated by the BPS which must carry out the closing and send the report of the mandatory contributions to each administrative entity, as well as the list of the affiliates covered, the contribution salaries and the individual values deposited.

Access to retirement benefits of the mandatory individual savings regime is governed by the same requisites applicable to the inter-generational solidarity regime.

Common retirement benefits, old age retirement and survival pension derived therefrom, shall be financed with the balance accumulated in the individual savings account of the affiliate in the administrative entity (AFAP) on the date of retirement.

The initial assignment of retirement shall be determined on the basis of the balance

⁷ Value as of May 1995, established in Law 16,713. Value as from 1/1/2003: \$1,200.

⁸ Value as of May 1995, established in Law 16,713. Value as from 1/1/2003: \$8,999.

accumulated in the individual savings account, of the life expectation of the affiliate or of the respective interest rate.

VI. Financial effects to the welfare reform in the short term

The application of the new norms resulted in specific and tangible changes in the short term.

Due to the reality of our country in which welfare regimes have a long tradition, this did not affect retirements and pensions in the course of payment, nor the rights acquired by the affiliates who had the retirement bases on the date of enforcement of the reform law.

VI.1. NEW ACTORS

The reform, with the implementation of a mixed welfare regime, generated the appearance in the ambit of social security of new actors with important roles. Among them:

- a. The AFAP's that would be in charge of administering the funds accumulated in the individual accounts of the affiliates until the date of their retirement and that will be controlled by the Central Bank.
- b. Insurance companies that would be in charge of disability and death while active, as well as the life annuity service on the date of retirement of the affiliate.

- c. The Central Bank, which in addition to being in charge of the supervision of the insurance and securities market, will control the AFAP's.

VI.2. GENERAL INDICATORS

The changes introduced with the reform, materialized in several aspects. Two of them require special mention:

- a. affiliates who voluntarily opted for the welfare savings system, exceeded 90% of the total number of affiliates, which per se is an indication of acceptance of the new mixed system on the part of affiliates,
- b. the impact was also evidenced by the inflections in the evolution of the income and of the expense of the inter-generational solidarity system administered by the BPS which occurred after the enforcement of the Welfare Reform Law.

VI.3. INDICATORS OF THE INDIVIDUAL SAVINGS SYSTEM

Regarding the individual savings system, a key indicator for the measuring of its development is the actual coverage of the system with respect to the universe of potential affiliations⁹ (only those who were younger than 40 and had an income higher than level 1, had the obligation to become affiliated to the system, while those whose income was lower than that level, or whose age was older than 40, could do so voluntarily).

⁹ Tabare Vera Mendez. *The reform of Social Security in Uruguay.*

Available data indicate that, one year after the enforcement of the new system (April 1997), coverage reached 76% of the potential population; in April 1998, coverage reached 92.4% of the referred to population while at the close of 1998 this figure increased to 98%.

By December 2002, the new regime had more than 600,000 affiliates.

With respect to the welfare savings funds, these funds accumulated through December 2002, approximately 1,200 million dollars.

VI.4. INDICATORS OF THE INTER-GENERATIONAL SOLIDARITY SYSTEM

In the area of fringe benefits, we could observe –specifically on the matter of Disability, Old Age and Survival (DOAS)– an increase in the rhythm of growth of retirements (considered as a whole) in 1997 with respect to 1996; however, in 1998 it was evident that old age retirement grew at a slower rhythm and that retirements of other types decreased.

Considering the year 2002, as a whole, the level of expense of this type of benefits decreased with respect to the year 2001 by 10.3%. A deep observation would indicate that this result is a consequence of a decrease in all fringe benefits.

One of the results that could be considered more significant is the one that refers to Retirements, mainly bearing in mind that they absorb 72% of the passivities expense. This year they decreased by 114.8 million constant dollars which expressed in percentage terms is the equivalent of –10.9%.

In the determination of the global amount of fringe benefits, two variables converge, a physical and a monetary variable. When we speak of the former, we are referring, in this case, to the number of retirements, which in the average of the year under study decreased by 3,150 (-0.83%). If, on the other hand, we consider the variations at the end of each one of the periods under study (November issues of each year) the reduction is placed in the order of 2,050 retirements, equivalent to –0.55%.

VII. Incidence of the reform on the financing of the system

We will analyze the repercussions of the implementation of the reform from two points of view:

- a. the incidence of the global financial results, specifically on the Government's financial assistance,
- b. the incidence on the financial structure of the system.

VII.1. ON THE GOVERNMENT'S FINANCIAL ASSISTANCE

Just as presented by Camacho¹⁰, the equilibrium equation relative to the distribution regime revoked is:

$$\text{Income Year 2040} = \text{Expense Year 2040}$$

$$100 + 56 + 73 = 186 + 43$$

where each addend represents the proportion of the concept corresponding to: employers contributions (56), personal contributions (73), benefits for those who

¹⁰ Camacho, Luis. *Financial Restructuring of the Welfare System*.

contributed (186) and benefits for those who did not contribute (43), expressed in terms of the contributions of the Government (100).

The measures incorporated in the new welfare regime that modify income and its structure, as well as expense, were taken into consideration:

1. The contributions of those who opted voluntarily for the mixed system decreased by 50%.
2. A bonus of 50% in the benefits of those who opted for the new regime.
3. Variation in the benefits of those who opted for the new regime.
4. Variation in non contributive benefits as a consequence of the minimum requirements to obtain a contributive benefit.

Incorporating these measures to the relative equation, and clearing the new value of the Contributions of the Government, we obtain $(40 - 3 * X)$. If we compare this with the original value (100), the reform will produce a decrease in the contributions of the Government, which will be equal to:

$$60 + 3 * X$$

where X is the proportion of those who opted for the system.

It may be observed that the decrease in the contributions of the Government would reach a minimum level of 60% and a maximum level of 63%.

Likewise, it was demonstrated¹¹ that the average retirement of the mixed system will grow as the number of those who opt for the mixed system increases.

These two attributes analyzed before will have as a result that the number of those who opted for the system will grow faster than the contributors, and therefore X will tend, in the long term, to be placed at levels close to 100%.

In this case (X=1), the values that we would obtain from the equation would be the following≈:

$$\text{Income Year 2040} = \text{Expense Year 2040}$$

$$36.83 + 56 + 36.50 = 118.58 + 10.75$$

Under these circumstances, the incidence of each type of change would be the following:

1) Retraction of Contributive Fringe Benefits	28%
2) Elimination of Non Contributive Fringe Benefits	32%
3) Contraction of the Distribution System	10%
4) Compensatory effect of 1) and 3)	-7%
	<u>63%</u>

¹¹ Camacho, Luis. *Basic models for the financial analysis of a mixed welfare system. Evaluation of results for the Uruguayan case.*

From the above discrimination can be observed that the contraction measures have a net incidence on the decrease in the Contributions of the Government by only 3%. In this respect, the measures that affect directly both contributive and non contributive benefits have a more important relevance.

We will analyze separately each one of these measures.

Retraction of the expense of a Contributive origin

The most important changes produced in this area can be typified as follows:

1. In general terms, the rates of replacement applicable on the Basic Retirement Salary to obtain the corresponding benefits were decreased.
2. The period that serves as a basis for the computation of the Basic Retirement Salary was increased.
3. The number of years of minimum activity required to generate the retirement base was increased. In the previous regime, 30 years of service were required, while in the new system it is necessary to compute at least 35 years of registered activity.
4. The minimum retirement age of women was increased from 55 to 60 years, while the age of men was not changed.

As a result of the incidence of these four measures, the benefits of a contributive nature would suffer in the long term a decrease in the order of 15% with respect to those pertaining to the revoked regime and the Contributions of the Government would decrease by 28%.

Retraction of the expense of a Non Contributive origin

With these measures, the idea was to attack the lack of equity of the previous system, trying to avoid that those who do not contribute are measured in equal conditions as those who contribute.

In this area, two important changes have taken place:

1. The requisites to recognize the computable activities have been increased.
2. The minimum age to be entitled to a non contributive welfare benefit of an Old Age pension has been increased.

The application of the first measure, would cause that benefits of this type would disappear from the contributive regime, and therefore the decrease in the contributions of the Government will be equal to 42.9%.

However, we must include in the analysis of the benefits that will be generated in the non contributive regime by those who would not obtain their retirement in the contributive regime.

It has been estimated that the global level of said benefits would represent only 25% (which implies a drop of 75%) of those obtained in the previous regime, and therefore the contributions of the Government would decrease by 32%.

Contraction of the Distribution System

We refer to the event of a reduction in the number of affiliates or of a decrease in the salaries computable in the distribution system, that would result in a generalized decrease of resources and benefits and,

hence, of the Contributions of the Government.

The contraction that would result in the distribution regime would have the two following attributes:

1. Decrease in computable salaries and personal contributions by 50%. In the new regime, this situation covers approximately 90% of the affiliates.
2. Decrease in computable salaries for retirement purposes by 25%. This percentage arises from the application of a 50% bonus to a basic salary decreased by 50%.

Employers contributions on the total salary are maintained as an exclusive resource of the distribution regime.

The application of both measures will cause a decrease in the Contributions of the Government of up to 10%.

The bonus granted has more relevance in a context where integration is no longer mandatory and, hence, it will be necessary to establish an incentive for the option through the only means available which is the referred to benefit.

It can be appreciated that the deficit foreseen would decrease in relation to that which would be obtained in the previous regime in a manner proportional to the growth in the number of those who opt for the mixed regime. This means that the performance of the system will improve with the growth of those who opt.

VII.2 THE FINANCIAL STRUCTURE OF THE SYSTEM

Two types of basic changes in the composition of the sources of financing are to be expected:

1. First, the financial structure of the distribution system will be modified as a consequence of the decrease in the Contributions of the Government and in personal contributions.

Under these circumstances, the Contributions of the Government would represent 29%, personal contributions 28% and employers contributions 43%, which indicates the relevant participation of the employers contributions, to the detriment of the Contributions of the Government.

According to the values resulting from the equations presented, we have the following chart:

2. Second, it is convenient to appreciate the relative importance of current resources allocated to both sub-systems.

	Before	Struct.	Now	Struct.
Contributions of the Government	100	44%	37	29%
Employers Contributions	56	24%	56	43%
Personal contributions	73	32%	36.5	28%

The distribution system, when considering the level of the resources allocated to both sub-systems, even in the extreme event that 100% of the affiliates should opt for the mixed regime, would have a participation not lower than 78% of the total, because 129.5 will register in the solidary sub-system while only 36.5 corresponding to the personal contribution group would register in the savings sub-system.

VIII. Incidence of the reform on macro-economic aspects

At this point we will analyze the incidence that the welfare reform may have had on the distribution of income, as well as on the labor market and on public expense¹².

VIII.1 EFFECTS ON THE DISTRIBUTION OF INCOME

Every social security system, far beyond its specific savings and insurance objectives according to its design and manner of implementation, generates re-distributive effects –whether intended or not– among individuals.

Inter-generational redistributive effects

Distribution systems, by nature, permit distributions of income among generations, because there is no direct relationship between what each individual contributes and the benefits he receives, while a capitalization system does not affect the distribution of income because there is an equivalence between contributions and the benefits received.

A mixed system, to the extent that it combines a distribution regime and a capitalization regime, will have more or less relevant redistribution effects.

These redistributive effects will depend on the average retirement obtained in the savings system. In general terms, Camacho¹³ mentions that in the event of a

massive option of affiliates for both sub-systems and with levels of the actual interest rate on salaries exceeding 3%, the replacement rate that a generation would obtain in the new regime would be higher than that which a generation governed by the previous system would obtain.

It can be asserted that, under these circumstances, the new generations would have a positive redistribution effect with respect to generations covered by the previous regime.

Intra-generational redistributive effects

The most relevant changes that may be observed in the solidary system are those associated to the increase of the minimum retirement, to the obligation to save at a given salary level, due to the inclusion of bonuses and to the particular treatment of the employers contribution.

In the first place, the establishment of a minimum retirement independent of the level of the contributions of the affiliates, would permit redistributing part of the income of those who have higher income in favor of those who have lower salaries.

Another re-distributive aspect is that derived from the change of destination of part of the personal contributions of affiliates with higher income. In the previous regime, there was no ceiling for contributions, and therefore the contribution on higher level salaries had a re-distributive nature. The new regime changes this approach, because the contributions of the salaries higher than the first level are destined to the savings regime.

¹² Anna Caristo. *Macro-economic effects of the Welfare Reform.*

¹³ Camacho, Luis. *Basic models for the financial analysis of a mixed welfare system. Evaluation of the results for the Uruguayan case.*

If we consider the cases in which there is a bonus in the computable salary, as a consequence of opting for the mixed regime, it is possible to verify that for those who exercise the option there is a small redistribution of income from the affiliates that did not exercise the option, because a higher retirement is obtained for each point of contribution.

Redistributive effects in the savings sub-system

In the new system, the AFAP's destine part of the contributions of the affiliates to the payment of a collective insurance premium to cover disability and death contingencies during active life. In the event of the occurrence of the contingency, the AFAP delivers additionally, as complementary payment to the Insurance company, the balance of the savings account of the affiliate. Under these conditions, there is a strong redistribution of the eldest affiliates to the youngest, as a consequence of high levels of the balance of the individual account.

Additionally, this insurance is mandatory through the date of retirement of the affiliate, and therefore there would also be a redistribution of income from those who retire later to those who retire at younger ages.

Finally, if we take into consideration the case of an affiliate who retires at an older age, a situation that might occur is that, as a consequence of the high balances in the savings account that remains at the disposal of the insurance company in case of occurrence of the contingency covered, it would not have been necessary to pay an additional monthly average pure premium during all his labor life. This would imply that, as the system ripens, there might be a strong transfer of resources from

affiliates to the insurance companies. Inasmuch as in both sub-systems the same bases are established, redistributions will occur within the retirements of the savings system. The insurance company, when determining the amount of the life annuity, will make its actuarial calculations as from an average type of family situation. This is why bachelors will receive a retirement lower than that which they would receive in the case of an individual coverage. The reverse situation would be that of those who have a wide family nucleus with minor children.

VIII.2 EFFECTS ON THE LABOR MARKET

The distribution systems have strong distorting effects, because the relationship between contributions and benefits of the worker weakens, introducing an implicit burden.

In this sense, workers try to reduce the load of said implicit burden by working less or by turning to the informal labor market. Additionally, employers contributions, when not absorbed by the worker nor by the employers, increase the cost of labor and may induce to adopt less intensive labor technologies or transfer operations to the informal market.

Composition of the formal and informal sector

The empiric evidence has proven that pension reforms towards capitalization systems present their more important effects on the change in the structure of formal and informal employment of labor markets, more so than in any other of the aspects mentioned.

In a consultants report made within the frame of the PRSS¹⁴, one of the aspects

¹⁴ Labadie y Caputti. *The effects on the labor market of the reform of Social Security.*

remarked is that the instrumentation of labor history together with the pillar of individual saving is going to affect the behavior of workers because it provides the welfare system with an increased transparency. It causes that the affiliate will perceive an increased link between contributions and benefits which would result in an increase in the coverage of the system, decreasing informality.

Offer of employment and decision to retire

In particular, the reform changed the conditions of the access to common bases retirement in the solidarity system, modifying minimum retirement ages for women, and increasing the minimum years of service that must be registered, as well as the manner of the calculation of the basic retirement salary, and the rates of replacement. If these changes induce the postponement of retirement to continue receiving activity salaries and improving the value of the passivity, a certain effect could be expected on the offer of employment.

The studies made in this respect, would conclude that the effects on the postponement in the age of retirement would not be too important in the case of men, and that a higher incidence could be expected in the behavior of women.

Another element to be considered is that in cases where retirement was granted at minimum legal ages (for instance, rural and domestic dependents) and hence, where the postponement of retirement and the consequent maintenance of existing jobs would be expected, in reality in the previous system it could be observed that

opting for retirement did not assume the cessation of the labor activity, but only stopping to contribute to the welfare system, and therefore the fact of postponing the age of retirement would have no actual effects on the total offer of employment in these cases but, probably, would cause an increase in the formal offer to the detriment of the informal offer.

VIII.3. EFFECTS ON THE FISCAL DEFICIT OF THE GOVERNMENT

One of the motives handled in the reform of the welfare system was the existence of a growing deficit, which also involved growing transfers of the government. The reform tried to revert this situation in the long term.

Cost of transition

In the Uruguayan case, the reform implies a partial substitution of the public distribution system for a savings system, and therefore assumes a decrease in income and expense, although at a different rhythm. Income will be reduced first as a consequence of the decrease in contributions, generating an initial increase in the deficit, but in the medium and long term benefits will decrease, exceeding the decrease in income, which would produce the expected reduction of the fiscal deficit.

A report prepared by the PRSS¹⁵ sets forth the importance of knowing not only what happens with the primary deficit, but knowing also the evolution of the global deficit of the government, which includes the interests account.

¹⁵ Forteza, Alvaro. *The fiscal effects of the reform of Social Security.*

The study indicates that if the increase in the primary deficit registered in the first years of the transition is moderate, the improvement produced after the initial deterioration would be enough to cover interests.

These results would lead us to conclude that the cost of transition could be within manageable levels.

Levels in the ripening of the system

The studies carried out coincide to indicate that the long term financial deficit will be lower than that which would have existed if the previous regime had been maintained.

According to studies made at the AEA¹⁶, it can be concluded that the effect of the reform in the long term would be a reduction of the financial deficit in the order of 3% of the GDP. This result would be the consequence of the contraction of the system in force before the reform and, of the reduction of expense for benefits of former evaders.

IX. Final considerations

The most important financial repercussions are due to the reforms operated on the basic variables of the previous distribution system, such as the adjustments in the rates of replacement, in the computation period of the Basic Retirement Salary, the increases in the minimum retirement ages for women and the minimum number of years of activity required.

The requisites imposed by the reform for the recognition of the years of activity also

acquire relevance, because it is to be expected that as from its full application only the retirement of affiliates contributing to the system will be generated.

The contraction of the distribution system, as a result of the bonuses granted to those who opt for the mixed regime, will not generate directly significant savings as compared to the previous system. However, this contraction is what makes possible the creation of a savings sub-system without generating in the long term financial difficulties for the distribution sub-system.

Likewise, the mixed regime that was created was structured in such manner that the distribution regime will be maintained as the principal pillar, while the individual savings regime is visualized as complementary with a mainly voluntary registration.

From an economic point of view, important intra-generational and inter-generational redistributive effects are identified, which are generated both by the changes introduced in the solidarity pillar and by the specific design of the individual savings pillar.

Inter-generational redistributions will depend on what happens with retirement of the individual saving pillar, which in turn is a function of the rate of interest obtained by the AFAP's.

The intra-generational redistributions will depend on age, sex and income stratum. In general, it can be asserted that the reform introduced an increased neutrality with respect to the high income strata and maintained positive redistributions in the low income strata.

¹⁵ Forteza, Alvaro. *The fiscal effects of the reform of Social Security.*

In the savings sub-system, it is also possible to implement redistributions of income as a consequence, among other, of the Collective Insurance that covers the death and disability contingencies of active affiliates. Also, due to the particular manner in which old age benefits are granted in the new mixed system, redistributions will be effected among retirements under the savings system according to the manner of calculation of life annuities.

The effects of the Uruguayan reform on the labor market, are that informality tends to decrease and that probably the offer of employment will change with the change in the age of retirement mainly in the case of women.

From the point of view of the fiscal deficit, a cost of transition occurs that would generate a service of interests within manageable margins. In the long term, the primary fiscal deficit would improve, reaching a drop of approximately 3 percentage points of the GDP.

At present, the reform is going through a period that assumes the improvement of administration and of the Inter-Institutional coordination, as well as the development of a regulatory frame that will incorporate the national and international experience.

It should be pointed out that one of the most important restrictions foreseen is the dimension and scarce depth of the domestic capitals market, which makes essential the expansion of the possibilities of investment for the welfare savings funds.

