SERIE FINANCIAMIENTO DEL DESARROLLO

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"PENSION SYSTEMS IN LATIN AMERICA: DIAGNOSIS AND REFORM ALTERNATIVES"

CASE STUDIES IN LATIN AMERICA AND THE CARIBBEAN CONCLUSIONS AND RECOMMENDATIONS

Santiago, 3-5 December 1990 and 22-23 August 1991

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CONTENTS

I. INTRODUCTION

The governments of the region have requested ECLAC assistance in the diagnosis and study of available reform alternatives for their pension systems. Nine case studies were subcontracted through the joint ECLAC/UNDP project "Finance Policies for Development" (RLA/90/001), covering Bolivia, Brazil, Costa Rica, Chile, Ecuador, Guatemala, Mexico, Uruguay, and Venezuela.

The studies of Costa Rica, Chile, Ecuador, Uruguay, and Venezuela were analyzed in a regional seminar held in ECLAC Headquarters, December 3-5, 1990, and have been published in two books by the project administration. The Chilean case study has been published separately because it examines an experience of interest throughout the region, namely, the only experience of transition from a pay-as-you-go system to one of capitalization. The studies of Bolivia, Guatemala, and Mexico were analyzed in a seminar in the same place, August 22 and 23, 1991, and are currently being published.

All studies were prepared by expert consultants from the respective countries and were coordinated and published by the Regional ECLAC/UNDP Joint Project, "Financial Policies for Development".

Brief summaries of the studies, are found at the end of this report. In earlier Chapters, the conclusions, general recommendations and some specific issues arising from the diagnoses and reforms of the pension systems studied are discussed.

II. CONCLUSIONS AND RECOMMENDATIONS

1. In spite of the importance of the exercise of systematizing and evaluating information about the operation and reform of pension systems, the participants highlighted the difficulties inherent in that task which stem from the sensitivity of the matter, given that the same instrument serves multiple objectives and the results produced depend on the socio-economic and institutional context in which it is used.

2. The design and evaluation of pension systems is highly sensitive to the objectives mentioned and to those for which they were created. Although they were created originally as mechanisms for accumulating savings to finance pensions, those systems are currently used for redistributive purposes in the effort to achieve universal pension coverage, incorporating both the formal sector and those informal sectors which do not contribute to pension financing. Today, the potential effects of the systems design on savings and the development of capital markets are also being studied.

3. Among the most common problems which have weakened pension systems in Latin America are:

i) A decline in the ratio of contributors to beneficiaries in the different programs;
ii) Strong incentives for under-declaration of income during large part of the active life of wage earners, because pensions are calculated only on the basis of wages received during the final years of work;
iii) High administrative costs, limiting efficiency and competitive capacity;
iv) Unfinanced increases of benefits;
v) Ineffective solutions, given their partial or indirect nature, or their inherent inefficiency.

4. In order to determine the reforms necessary for existing pension systems, it is important to have a clear idea of the finance regimen within which they operate (most of which are pay-as-you-go) and the means and timeliness by which their current financial and actuarial disequilibria should be corrected. To the degree to which those disequilibria are reduced with respect to the system's capacity, the corrections will require less drastic changes in contribution rates and/or in pension benefits. Moreover, while the corrections are being implemented, the fiscal deficit will be lower in the event that the option is taken to change to a system based on capitalization.

5. Different factors were mentioned as causes of the financial and actuarial deterioration of pay-as-you-go systems:

i) Changes in the demographic structure of the population covered by the system;
ii) Effects of the economic cycle on the labor market and, therefore, on potential contributors;

iii) Use of reserve funds to cover transitory fiscal deficits, which are not repaid by the State;
iv) Use of funds for social security purposes other than pensions;
v) Evasion and corruption;
vi) Insufficient development of financial instruments for investment of potential system surpluses so as to avoid their erosion during periods of high inflationary pressure;
vii) Under-declaration of income while seniority in the system is accumulated;
viii) Pre-defined benefits which bear no relation to changes in contributions made.

6. Three alternatives for pension system reform were considered: i) improvements in pay-as-you-go systems, designed to avoid the vices of the past, ii) introduction of a system of capitalization in order to establish a correlation between services and contributions through the careful investment of the funds accumulated during the active life of participants; and iii) the implementation of some type of mixed regimen so as to provide for a minimum universal pension and additional pensions based on supplementary, voluntary contributions.

7. Reforms undertaken for the purpose of correcting existing pay-as-you-go systems should be based on adequate actuarial programming of income (on the basis of contributions and investments) and expenditures (on the basis of benefits/services). In order to guarantee post-reform solvency, the vices of the past must be eliminated, avoiding the use of reserve funds for other purposes than those for which they were originally created, together with guaranteeing a continual influx of funds with as predictable variations as possible. In this regard, various considerations were suggested:

i) Seek mechanisms which will broaden coverage, with a view toward achieving universality;
ii) Reduce late payments through a system of sanctions;
iii) Legislate against the use of funds for purposes other than for pensions;
iv) If reserve funds exist, design investment mechanisms which will avoid erosion due to inflation and will promote their capitalization in positive real terms;
v) Design mechanisms of actuarial programming which will be as transparent as possible, making informed discussion of changes in contribution rates and in benefits possible;
vi) Promote the unification and homogeneity of the multiple regimens which currently exist.

8. The introduction of a system of capitalization to replace a pay-as-you-go system demands consideration of a series of collateral effects prior to recommending its implementation:

i) The creation of conditions for strengthening and expanding the capital market;
ii) The creation of incentives for the development of an insurance market;
iii) The generation of consensus on the importance of adequate macroeconomic stability;
iv) The political will to assume the deficit created by the discontinuation of the previous system;
v) The continued responsibility of the State for supervising the stability and

solvency of the system, together with ensuring a minimum and honorable level of pensions;

vi) The promotion of the supervisory objective of ensuring that funds are not concentrated in high risk investment instruments;

vii) The search for mechanisms which will ensure that the system is not discriminatory and will increase its coverage, eliminating the reasons for which different segments of the labor market do not participate in the system.

9. Recognizing that the economies of the region are characterized by large population segments which face budget restrictions when making savings decisions throughout their active years, the participants highlighted the need to broaden existing pension system coverage. It was thought timely to propose the establishment of a mixed system, involving an obligatory system designed to ensure basic social security benefits, which would be complemented by a voluntary system of capitalization, designed to grant benefits proportional to contributions.

10. Given the requirements of equity, it is necessary to increase the population coverage of existing pension systems. The same principle requires the identification of sources to finance the system. In that regard, the need to distinguish between two instruments was mentioned: the fiscal budget, with its component of social expenditure which is financed out of more general taxes, and social security with its pension system financed by contributions from salaries. On the basis of equity, the first of these instruments was thought to be more appropriate for facing the problems involved in population coverage and for the purpose of granting pensions to those who had not contributed to the system (subsidies).

11. The effects on savings which will arise from the imposition of an obligatory pension system are unclear. The impact will depend on the behavior of different population groups with respect to voluntary savings. If that behavior is short-sighted, then the obligatory nature of the system will mean net savings for the individual and will also mean net savings for society only if, other factors remaining the same, those contributions are accumulated in an investment fund which is not totally redistributed. If behavior tends toward voluntary savings, the imposition of obligatory savings will have net effects which are difficult to ascertain with precision.

III. MULTIPLE OBJECTIVES AND ONE INSTRUMENT: THE DILEMMA OF PENSION FUNDS

Three objectives are most often suggested for the design of pension systems which were originally created in order to ensure financing for at least a minimum level of income for persons during their old age. According to the demands of equity criteria, the funds obtained have been used for other purposes, often in redistributive programs and to finance extraordinary social expenditures. Currently, there are those who suggest that a change in the ownership and administration of those funds could transform them into a potential source of private savings for the financing of development.

From that perspective, pension system reform is not extraneous to the proper areas of concern of ECLAC and the governments of the region. The countries of the region face growing demands for old age pensions, require considerable increases in savings in order to grow, and have significant social gaps.

Between 1950 and 1990, the number of persons in the region in their working years, per person over 65 years of age, fell from 17 to 12, while, among dependent persons, that is those who are not in their working ages, the proportion of those over 65 rose from 7% to 11%. In the next 30 years, it is expected that the number of persons in their working years, per person over 65 years of age, will decline from 12 to 8 persons, while the proportion of elderly among dependent persons will increase from 11% to 22%. Those demographic trends have become manifest in sharp declines in the ratio of contributors to beneficiaries in pay-as-you-go pension systems.

In order to recover 5% annual rates of growth, ECLAC estimates that the rate of investment must rise from 16% to 22% of the product, involving resources of more than 70 billion dollars, annually. ECLAC studies conclude that the success of finance policy cannot be made to rest on the response of voluntary savings to market incentives. In that context, it is suggested that pension systems can play a fundamental role.

Between 1950 and 1980, the proportion of active persons involved in modern or formal activities, among whom it is easier to operate a pension system, rose from 52% to 57% of the work force. The remainder are occupied in traditional agricultural activities (self-employed, farmers and un-paid family members) or in non-agricultural informal activities or domestic service, among whom the verification of compliance with labor laws and, especially, the withholding of pension system contributions, is more difficult. The trend mentioned above reverses during the 1980's (at least in non-agricultural activities), when formal employment lost ground to the informal sector and, occasionally, to unemployment. There is clear evidence that the weakening of formal activities makes broader pension system coverage more difficult to implement.

Pension systems tend to cover workers in the modern sectors of the economy. For the purpose of redistributing income, governments have had recourse to accumulated pension funds, channeling them to groups with political influence, groups of persons living in poverty, and/or to finance free health insurance. Since most systems are based on pre-defined benefits, those diversions of funds have often meant that levels of expenditure bore no relation to contributions, obliging the use of fiscal funds to absorb that deficit, with subsequent deleterious effects on macroeconomic stability and public savings.

With respect to that situation, the participants concluded that, in several countries of the region, pension funds are in crisis in the sense that one, sole instrument (or source of financing) has been used for multiple purposes, through recourse to those funds not only to finance old age, infirmity and death pensions but also growth and progress toward greater equity. Scarcity of funds to meet those three objectives simultaneously and reluctance to fix priorities have meant that systems have entered into crisis, especially by not being able to provide the benefits promised originally.

The challenge for the region is to search for a pension system design which will offer the possibility of transforming contributions into sources of long-term savings and to administer them as investment in physical and human capital so as to obtain significant real returns for contributors. Only in that way will it be possible to achieve the three objectives: to finance pensions, invest in growth and redistribute by investing in persons.

Pension systems can contribute to savings only under very special conditions which are obtained when families actually face savings decisions short-sightedly throughout their life cycle. In that case, a pay-as-you-go system only increases private savings when the fund created by the first generation of contributors is not totally consumed in the pursuit of redistributive objectives. The introduction of an obligatory system of capitalization may increase private savings even more given that the funds accumulated by the first generation of contributors are saved in their entirety. Closely associated to this is the issue of the property rights of contributors, which is one of the most troublesome elements involved in the question of the use of pension funds for either redistributive or investment purposes.

IV. PRINCIPLES FOR THE DESIGN OF PENSION SYSTEMS

The main argument raised to justify obligatory forms of savings is the shortsightedness of families, that is, their lack of foresight with respect to the income level of family members at retirement age and/or the discounting of future income at interest rates which exceed the social discount rate. In order to institutionalize those savings, the countries of the region have implemented social security savings systems since early in this century.

The fact of making contributions obligatory (forced savings) for persons during their active years, in order to finance their consumption needs when elderly, places fundamental responsibility for the design, stability, solvency and organization of any pension system on the State.

Three values are at stake in the design of pension systems. One of these is *equity*, which involves the search for a balance between the resources necessary to satisfy the needs of persons at retirement age and those which active persons are able to provide (taxpayers/salary withholding) and/or the State (general taxpayers). Equity must be respected by implementing mechanisms of solidarity among those in conditions to save for their old age, either by intergenerational (pay-as-you-go systems) or intragenerational (capitalization systems) means. However, that respect can also be achieved through mechanisms of subsidiarity, when the State provides minimum pensions for persons who face liquidity problems during their active years and cannot save.

The second value is *solvency*, given that the system must be financially and actuarially sound, which involves the search for intertemporal equilibrium between income (contributions, subsidies, and returns on investments) and expenditures (pensions and other benefits). This value is respected by implementing appropriate financial and actuarial practices for income and expenditure flows and, as well, for the investment of system funds.

The third value is *property*, around which the system should be organized, in the effort to balance the rights and obligations of participants through socially acceptable reglamentation.

According to recent studies performed in the region, the majority of systems are either suffering important crises or will enter into crisis in the near future. This situation leads to participant distrust arising from important discrepancies between contributions and benefits; problems of system insolvency and, therefore, pressure on fiscal budget stability; and legal conflicts regarding the rights and obligations of system participants.

V. THE PRINCIPLE OF EQUITY: COVERAGE AGAINST RISKS, SOURCES OF FINANCING AND PROGRAMME SEPARATION

The risk of entering old age with no income is only one of the many risks faced by workers during their life cycle. Social security systems have been designed to cover diverse risk alternatives. At first, those risks were exclusively those faced by worker contributors, then those of their immediate families, and, finally, those faced by population segments (including independent workers) which, subject to severe liquidity restrictions during the active years, never contributed to any social security system but were open to risk in their activities.

Arising from a concern to insure against the risks faced by workers, social security coverage, in most countries of the region, began by copying European models of insurance or social security. According to that criterion, systems financed by salary withholding, worker, employer and State contributions were created. With slight variations from country to country, those systems progressively covered risks of: i) accidents at work and professional infirmities; ii) non-labor related accidents and illnesses and worker maternity; iii) maternity and illnesses of dependent family members; iv) *old age and infirmity pensions for workers*; v) *pensions for surviving family members*; and vi) family allowances and unemployment subsidies.

Given the characteristics of the countries of the region, their social security systems have very limited population coverage. Among the main obstacles to extending the coverage of those systems as originally designed are the structure of the labor market, with large segments of independent workers (agricultural farmers sectors and non-agricultural informal sectors) and low wages. Both obstacles restrict worker integration into the system, as contributors and/or as beneficiaries. On the one hand, it is difficult to identify them institutionally and, on the other, they generally face liquidity restrictions which do not allow them to contribute.

To resolve that dilemma, social security systems grant the State a subsidiary role so that it can offer adequate coverage against certain risks to broader sectors of the population. Thus, risk coverage is extended to include: i) universal family allowances; ii) *social assistance* (pensions for non-contributors or persons without resources or otherwise ineligible); and iii) national health systems or public health care programs.

Most of the studies and the debate during the seminar emphasized the importance of distinguishing between social security and pension systems given that they involve the principle of equity, around which the latter should be constructed. In that regard, the need was stressed to distinguish two criteria which should not be confused in the design of social security systems and, within them, old age pension systems. First, there is the criterion of defining and granting security benefits against risks only to those families which have contributed to the system, on the basis of a program of payments and benefits established actuarially. Second, there is the criterion of defining and granting security benefits against risks by transferring resources from those who are richer in order to guarantee minimum incomes for all families, especially those who qualify as poor.

The first criterion provides financing to cover risks throughout the life cycle of the participants and is the reason social security or social insurance systems exist. In that case, equity and solidarity exist among the participants in the system, while solvency requires that benefits be established according to contributions or vice versa. When a fund has been accumulated, ownership is individual or is held in common, although only among participants.

The second criterion uses system funds or others from the fiscal budget for redistribution among non-contributors and is the reason social security systems exist. In this case, equity and solidarity may be operative toward those outside the system, while solvency will require adjusting expenditures to income. When a fund has been accumulated, ownership tends to be in common, within which the entire population has rights, irrespective of whether or not individuals have contributed to the system.

Social security systems in Latin America have evolved in the effort to broaden risk and population coverage so as to increase equity. In that effort, they have encountered serious problems of solvency and left the rights and obligations of contributors unclear. The problem lies in whether equity should be sought through solidarity among system contributors only or between contributors and those outside the system. In the second case, it is worth asking if the distributive policies promoted by social security ought to be financed exclusively by taxes on wages or by other, more general taxes. The answer lies in dealing with the different programmes of the social security system and exploring the way to reform them individually.

VI. THE PRINCIPLE OF SOLVENCY: A CONFLICT BETWEEN EQUITY AND FINANCING

There is a growing conviction that equity is an objective which must be considered in the restructuring of social security systems, including pension systems. Evaluations of social security systems from that perspective conclude that, historically, they have not achieved equity, given that they only serve the interests of workers in the modern sector of the economy and those with power to exert pressure, ignoring the needs of the poor. Increased system equity requires broader population coverage.

There have been two types of experience in countries which have been pioneers in the development of their security systems by broadening population coverage. First, there is the experience of those countries which extended system coverage, while maintaining the original cost structure. Those attempts have not been economically viable because they have entailed the use of an extremely high percentage of GDP for those ends. Second, there is the experience of those countries which extended coverage with lower cost structures but only by sacrificing the quality of the benefits provided.

The fundamental problem resides in the amount required to finance the needs of that segment of the population which does not contribute to the financing of services. When financing is insufficient to allow for extension of coverage within existing cost structures, then the objective of achieving equity ceases to be viable or is achieved by sacrificing service quality. In the specific case of pension financing, the solution is to be found by answering three key questions: Who pays for pensions? Who benefits from the pensions? and Who needs pensions? Only by answering those questions will it be possible to resolve the conflict between the principle of equity and that of solvency in the design of pension systems.

The debate during the seminar demonstrated the importance of those questions. In the first place, most pensions are financed by deductions, in the form of taxes, from wages, theoretically being a cost for the worker who will eventually be a pension beneficiary. However, that affirmation must be nuanced because, in most countries, practices exist through which contributions are not those which correspond to the wage level of each worker. In some countries, maximum taxable wages are low, which, in turn, lowers the benefit-contribution ratio, when distributive ends are pursued. Those same maximums hinder efforts to broaden the tax base. In several countries, those maximums are not indexed so that system income is eroded in periods of inflation. In other countries, the system defines benefits which are not associated to the contributions made, generating additional incentives to under-declare wages. As well, the "malpractice" of under-declaring wages while seniority is being accumulated and over-declaring during the period in which pensions are calculated in relation to wages was mentioned.

Second, the seminar studies emphasized that pension systems distribute benefits unequally. Within the systems themselves, differences arise between system participants because the action of privileged groups and special pension regimes have, for years, created great differences among the pensions provided by the diverse institutions of the system. At the level of the society as a whole, there are differences between participants and the rest of the population, given that the second group receives services which are very inferior to those provided for participants.

Finally, two groups of beneficiaries must be distinguished: those who arrive at old age with no resources for survival because they were not savers or did not have the capacity to save and those with rights to a pension because they made the effort to save. In the case of the first group, the system may be unjust insofar as it rewards those who made no effort to save when they could have done so ("free riders"). However, the principle of equity must also prevail in the effort to correct income distribution discrepancies through a subsidy for those who experienced such income restrictions during their active years that they were unable to save. In the case of the second group, the operative principle is that of property, specifically ownership of the fund to which participants contributed during their active years. The solution lies in the character of the contributions. If they are considered obligatory savings, then the person who accumulated those savings should have a right to them. If they are considered taxes, then those contributions become common property and the State will determine their use. Systems were created on the basis of obligatory savings but have evolved into taxes on labor.

In synthesis, the need for pensions was originally proposed for workers who participated in the systems, in the eventuality of old age and infirmity. Later, they were broadened to cover the needs of their families in the event of the death of the participating worker. They were financed by the contributions which workers made during their active years, either through a pay-as-you-go or a capitalization system. However, successive extensions of benefits, in order to lower retirement ages, cover different cases of infirmity and increase the number of family members who would qualify as survivors, put pressure on system solvency. Those factors, together with the desire to finance pensions for persons outside the system (non-contributor pensions or those granted to persons with no resources or otherwise ineligible) led to situations of crisis for numerous systems in Latin America. The root of the problem does not lie in the conception of pension systems but rather in the use of an instrument originally created to promote obligatory savings for contributor pensions, with defined benefits, to fulfill other objectives (of equity through solidarity or subsidiarity) which should properly be achieved through the use of other instruments, basically the fiscal budget.

VII. THE PRINCIPLE OF PROPERTY: OBLIGATIONS AND RIGHTS AMONG PARTICIPANTS

The successive pressures on pension systems, arising from efforts to respond to demands for improved services which were not met with greater contributions, led to a situation in which the majority of countries began to use pay-as-you-go systems.

There are three finance regimes: complete capitalization (uniform average premium), partial capitalization (staged average premium) and pay-as-you-go. The first of these maintains equilibrium indefinitely, with a fixed premium based actuarially on estimates of future obligations. The second maintains equilibrium for shorter periods, fixing a premium for each period and increasing it for successive periods. In pay-as-you-go systems, calculations are annual and require more frequent contribution increases.

The characteristics of the first regimen are that the premium is fixed; all participants know their costs beforehand; there are no transfers between generations; each generation finances its own pensions; and a significant fund is accumulated which must be invested appropriately. In the second regimen, fewer reserves are necessary, reducing the need to invest large sums efficiently; cost are shared among generations; and frequent actuarial balances are necessary to justify premium adjustments from one period to another. Finally, pay-as-you-go systems require very low reserves; investment is nill or of little importance; and the system depends on intergenerational transfers for financing.

Pension programs which involve long-term expenditures can use any of those three methods. However, to the extent to which they depend on fixed premium capitalization regimens, they must avoid expanding services without adjusting contributions; they must demand total and prompt payment of the contributions programmed; they must invest the reserve funds efficiently; and must perform periodic actuarial balances. Most countries have been unable to fulfill these requirements for a variety of reasons. Among these are: i) legislative branch pressure to improve services without increasing contributions; ii) payment evasion and delay, State debt and negative investment performance, all factors which deteriorate projected income; iii) unforeseen demographic change, especially increases in life expectancy for retired persons without changes in retirement ages; and iv) unequal adjustments of services with respect to the wage levels on which contributions are made.

In terms of the principle of property, the dilemma lies in determining the rights and obligations of system participants. Rights can be defined in relation to the services to which participants have access or to the ownership of the funds accumulated. In the case of pay-as-you-go systems, rights depend on intergenerational solidarity and their profitability does not depend, to a great extent, on capitalization because only eventually will reserve funds be accumulated. Thus, the issue of fund ownership is minimized, and the concern remaining is that of the capacity of the system to provide the pensions as promised. In that case, participant concern turns on the seriousness of the system for the delivery of the services promised and participants will demand State guarantees for those services. It becomes an obligation for the State, as guarantor of the system, to ensure that the contributions of the generation making payments, duly administered, will cover the service costs incurred by the beneficiary generation.

Together with their concern with rights to services, capitalization systems are characterized by the accumulation of funds, the ownership of which may be common or individual. In the first case, the owner community may limit coverage to participants or extend coverage to the whole population, with the State as administrator. In the second case, the funds belong to each contributor, individually. The precise definition of property rights with respect to those funds is basic for investment decisions and administration according to the ends for which the system was created. In view of the fact that the State has made payment obligatory in order to ensure the savings which will be necessary to finance pensions, it must also assume, in both cases, the responsibility for regulating and supervising investments and the administration of those funds in function of the objectives of the system.

When system objectives and participant rights are not clearly defined, administration objectives become unclear and it is difficult to avoid the use of funds for other purposes. Finally, if carried to extremes, most systems come to operate as pay-as-you-go regimens.

In fact, most systems have come to finance services on a pay-as-you-go basis, delegating the costs of financial and actuarial disequilibria to future generations. Those which constitute exceptions find themselves in an intermediate situation, using regular premium regimens, with relatively frequent actuarial exercises and periodic premium readjustments.

VIII. FOUNDATIONS FOR PENSION SYSTEM REFORM

The discussion about the diagnoses of existing pension systems in Latin America and their prospects for the future allowed for the identification of several important elements to be considered in the event that the decision is taken to reform them.

In the first place, pension programs must be distinguished from other social security programs: health, maternity, unemployment subsidies, family allowances, and for accidents. Once that is done, it will be possible to define programme objectives, their finance regimen and administrative structure, all exclusively in function of providing infirmity, old age and death pensions.

Second, it is necessary to make the diverse existing systems homogenous so as to create a direct association between the pensions granted and the characteristics of those who will be eligible for them. Those characteristics may correspond to participant efforts to save (contributions) or to situations of unsatisfied basic needs on reaching a certain age (poverty).

Third, systems must define mechanisms of solidarity and the means for financing them which will serve as the basis for achieving objectives of equity. Among system participants, the criterion should be one of equilibrium between the effort made and the pension received. This means that it will be important to measure the effort made throughout the contributor's active life and not only during the last years prior to retirement. For those whose efforts do not attain eligibility for a minimum pension, the system must provide mechanisms for solidarity and the means for financing them. In that regard, the following sources of financing can be distinguished: workers' contributions; employer contributions; State subsidies, and returns on investments. To face the needs of groups marginated from the systems, the State should provide gratuitous pensions financed out of the fiscal budget.

Fourth, systems should define their finance regimen and perform actuarial exercises in accordance with the requirements of each system. In pay-as-you-go systems, corrections of contributions and services must bear direct relation to the effects of demographic changes, economic cycles and variations in employment and salary levels on system solvency. In systems of capitalization, there must also be provision for the adequate investment of the funds accumulated. Once these criteria have been met, it remains for the State to provide adequate regulation and supervision of pension system administration in order to avoid evasion, delay, under-declaration, excess services, and the other vices which will cause system failure for reasons apart from system design itself.

Fifth, systems should define the nature of contributions and services. It is necessary to clarify whether contributions constitute a form of obligatory forced savings with respect to which individuals will have property rights or whether they are taxes which create worker rights, as citizens, once they have acquired the characteristics making them eligible for infirmity or old age pensions or for family members in the event of their death. Those rights must be clearly defined because they are the basis for the design of State and participant regulatory and supervisory mechanisms with respect to the administration, solvency and efficiency of the systems.

This implies that systems are not inherently good or bad because they pursue different objectives, are based on different finance regimes or are constituted by either common or individual ownership of funds. It is possible to design systems which are perfectly coherent with their objectives, are financially solvent and are respectful of the ownership rights of participants. Problems have arisen from successive changes of objectives, in finance regimens and in services (rights) of participants, without modifying contributions (obligations). Several examples mentioned in different studies illustrate this point. The lack of corrections, coherent among each other, so as to maintain system financial and actuarial solvency, has led to the diverse crises in Latin American and Caribbean pension systems.

Various reform proposals were put forward by different authors, justified diversely according to the relative importance given to system objectives and to the sociodemographic and economic characteristics of their respective countries. Partial reforms, correcting the vices of the past and continuing with pay-as-you-go systems, were suggested. Among other elements of reform, the need to perform periodic actuarial exercises as a basis for adjustments of services and contributions; improved control of contribution collection; the creation of mechanisms to prevent evasion, delay and debt to the system; reviewing criteria for defining benefits beforehand; broadening population coverage through incentives for those with savings capacity; distinguishing between mechanisms for solidarity and finance sources for granting gratuitous pensions, were mentioned.

As well, the replacement of the pay-as-you-go system with a system of individual capitalization was discussed. Based on the Chilean experience, the importance of certain macroeconomic factors, as conditioning elements, was highlighted: macroeconomic stability; development of financial instruments (capital market); strict supervision and regulation of the administration and investment of the funds accumulated; and fiscal capacity to face the deficit caused by the discontinuation of the pay-as-you-go system. The transition redefines the role of solidarity in the system, transferring it to State subsidiarity for the fulfillment of the requirement for minimum pensions. It also redefines system profitability, which comes to rest exclusively on the capitalization of accumulated funds. Finally, it redefines benefits exclusively in terms of contributions made and their capitalization. Several issues remain with respect to the Chilean experience which were not resolved by the transition. They are related to population coverage, which continues to be limited, delays in contribution collection, the efficiency with which the system is administered, which continues to be costly, and the way thorough which participants are informed of their rights and obligations within the system.

Given the fact that, in all the experiences of the region, sectors protected by social security systems co-exist with totally unprotected sectors, the implementation of gratuitous pensions, granted through the design of mixed systems, was suggested. This would entail obligatory contributions, with the character of taxes, destined to provide basic pension benefits. Individual participants would complement their pension by voluntary capitalization, designed to provide additional benefits according to the size of individual contributions.

IX. SUMMARIES OF CASE STUDIES

1. The Pension System in Bolivia

Marcelo Mercado

In this study, the Bolivian pension system is analyzed in order to determine the economic, financial and social viability of that regimen. Moreover, the present system, which functions as a simple pay-as-you-go system, is compared with an individual capitalization model and with another alternative. In order to achieve an integral analysis of the issue, the historical antecedents of the present system are investigated. Although it is noted that Bolivian legislation has been in the vanguard of many reforms, its system, at the level of general operations, has encountered a series of problems which have led to its present state of virtual bankruptcy.

Moreover, the profound crisis of the last decade and subsequent stabilization policy have had important effects on the pension system. The rapid increase in the number of beneficiaries and decline in the number of contributors, together with an administrative crisis, led to the collapse of the basic pension system. In those circumstances, various measures, albeit partial, were taken to attempt to salvage the situation.

Thus, contribution increases between 1989 and 1990 allowed for reducing system deficits, without eliminating them completely. If that trend endures, there exists the danger, in the mid-range future, of such a severe fiscal imbalance as to endanger the macroeconomic stability recently achieved. The inviability of the present system leads to the conclusion that a model of individual capitalization could be a change which would not only face the financial but also administrative problems, together with encouraging savings and strengthening the capital market.

Although that scheme is attractive for the reasons given, the study demonstrates that a problem, as serious or even more serious than the current failure of the system, is the scant coverage of that system, which covers only 13% of Bolivia's employed population. Both the informal and rural sectors remain outside the system and it is suggested that they would be little likely to enter a scheme of individual capitalization. In that case, the study proposes an alternative solution which would attempt to ensure that all persons receive an income equivalent to a minimum wage on reaching old age. That system would be financed by an increase in the Value Added Tax, together with the study of other ways of collecting taxes from those sectors.

That proposal must be studied with great care. Together with any steps taken, it will be important to undertake institutional reforms designed to improve informational, administrative, and coordination systems and those for the training of system personnel.

2. Pension Funds in Brazil

José Marcio Camargo

The Brazilian social security system can be divided into two sub-systems. On the hand, there is the social security system directed by the State and financed by workers, employers and the government. Contributions are obligatory and are calculated on the basis of salaries, wages, and/or company sales. Firms discount workers' contributions directly and pay them to the National Social Security Institute.

A second source of financing are the voluntary contributions of independent workers and contributions from companies and workers. The contributions of independent workers are optional and are based on declared income.

There also exists a complementary system of private social security which is voluntary, operating either through open or closed societies. With respect to open societies, finances are obtained directly from voluntary contributions, while in the case of the closed societies, contributions come from workers and companies.

The study analyses the Brazilian social security system with emphasis on the pension funds of the private and closed security system, including a brief description of the country's social security system and an analysis of the private social security system. Then, a simple model is presented for static comparative analysis. This model allows the study of the private system problems.

The study concludes with reflections on private system contributions, benefits and coverage and the possibility of privatizing the entire social security system.

3. The Pension System in Costa Rica: Description, Reform Options and an Integral Proposal

Ronald Cartín

The study describes the main characteristics of the pension systems currently operative in Costa Rica and analyses possible reform options with respect to important basic characteristics of the regimens.

On the basis of the data presented in the study, the author concludes categorically that the current pension systems cannot continue to operate as at present! This conclusion is based on three verifiable facts:

- The financial situation of the Special Regimens clearly indicates the impossibility of guaranteeing the benefits promised within the framework of current legislation;
- The financial situation of the Social Security Regimen (although not so distressing) is also delicate and is headed toward calamity, if corrective measures are not taken.
- A high proportion of Costa Rican workers find themselves without access to any pension system.

Admitting that there are many possible designs for a new global pension system in Costa Rica, one alternative is proposed, which can be described in general terms as:

- the creation of one regimen of basic protection; and
- the implementation of a system of complementary regimens.

4. Pension Reform in Chile: Results of Experience with a System of Individual Capitalization

*Augusto Iglesias**

The study describes the 1980 reform of the pension system in Chile, which established a regimen based on the individual capitalization of fixed contributions, private administration of the funds accumulated, obligatory contributions for dependent workers not affiliated to the old system, although voluntary for those who were affiliated previously and for independent workers.

The author suggests that such a solution has significant advantages over pension systems with pre-defined benefits and on-going financing and centralized administration, which today find themselves in total crisis throughout Latin America. The results of the Chilean experience since 1980, although as yet insufficient to support definitive conclusions, are auspicious. Thus, ten years after the reform, 74% of the work force is affiliated to the AFP system and funds accumulated have reached US$ 1,334,643. Competition among administrative institutions has meant increasing optimization of the services offered to affiliates and price reductions, which have amounted to 25% during the last six years.

However, several problems persist which must be faced. Coverage of independent workers is still low; collection procedures for late payments are somewhat inefficient; administration and commercial costs could be lower; and efforts must be made to improve the quality of the information on AFP management provided for affiliates.

Nevertheless, the Chilean experience makes it possible to identify the set of conditions necessary for the success of a reform program of pension systems based on individual capitalization. First, there is the issue of fiscal discipline or, in other words, ensuring the non-inflationary financing of pay-as-you-go system deficits which the reform must take into account. Second, the capital market must be regulated so as to favor its rapid and efficient growth, for which it is necessary to ensure liberty of entry and of prices in the market of financial intermediation, with maximum transparency in operations.

Insurance market regulation should also favor the free participation of the private sector, while protecting maximum transparency and efficiency in the process of reserve fund investments. Finally, norms for the regulation of private pension fund management should promote sector competition and be absolutely non-discriminatory.

* With the collaboration of Rodrigo Acuña.

5. The Pension System in Ecuador: Pension Funds as Sources of Investment (1970-1989)

Galo Abril

The objective of the study is to clarify economic-financial aspects of the social security system in Ecuador and to suggest structural changes geared to improve system efficiency within a framework of contribution to the development of the capital market.

In Ecuador, the social security system consists of three types of insurance: Obligatory Social Insurance, Company Retirement Plans, and Complementary, Additional and Special Retirements, which function simultaneously and the funds of which are administered autonomously. The first type is administered by IESS (Instituto Ecuatoriano de Seguridad Social) and the others by the private firm itself or a public entity, respectively, to which the contributors belong.

The Obligatory Social Insurance system is public and functions as a pay-as-you-go system, covering 37.8% of the economically active population. Funds destined to finance Company Retirements are withheld by the companies themselves, accumulating a reserve fund. In the author's opinion, those funds could be used by the companies as a source of working capital or for risk investment instead of conforming a financial accumulation fund. On the other hand, the funds of the additional system, administered by autonomous public companies, are invested financially, conforming a system of collective capitalization.

The study of IESS financial balances leads to the conclusion that it obtains a systematic current surplus due mainly to two factors: the relative youth of the system, reflected in the low dependence coefficient, and the increased deterioration of real benefits in comparison with real system income, produced by inflation.

From the point of view of system investments, the conclusion is reached that regulations with respect to interest rates affect the profitability of financial assets acquired by IESS negatively. Moreover, the financial practices of IESS, specifically the fact that an important amount of its funds are deposited in bank accounts which do not pay interest, act against profitability. Another factor which will affect future system solvency is the systematic delay on the part of the State in paying its contributions.

6. Current State, Financial Problems and Prospects for Pension Funds in Guatemala

Jorge Gonzalez del Valle

After 44 years of troubled and irregular history, the Guatemalan Institute of Social Security (IGSS) continues to be the keystone of social security systems in Guatemala. The apparition of private funds and mechanisms for pensions and health services, in 1970, has not diminished the socio-economic importance of IGSS, given its demographic coverage and the universality of its services.

The current challenge for IGSS concerns both the enormous necessity of reinforcing its activities in order to overcome the alarming levels of poverty in the country and the urgency to halt its progressive de-capitalization, mainly caused by the excessive accumulation of State debt. The simultaneous solution of both problems falls directly in the area of social policy, the definition of which is pending due to the peculiar political situation produced by the change in government in January, 1991.

The financial problem can be solved if, with the necessary political will, a way is found to amortize State debt, by combining partial payment of that internal debt with foreign loans destined to improve IGSS infrastructure and the transfer to that Institute of properties which would be useful for the improvement of its hospital network and other services for affiliates. However, it will also be necessary to regularize ordinary income from business and State contributions in order to increase IGSS pensions.

At the present time, IGSS patrimonial reserves and those of other social security funds do not generate a supply which would be significant in the "capitalization" of pensions, not is there a financial market which would permit the diversification of investment options. Nevertheless, to the degree that IGSS improves its financial situation, the joint reserve funds of pension funds could increase, making any capitalization project plausible, be it public or private.

7. The Pension System in Mexico

Carlos Soto Pérez

The main objective of the study is to describe the steps taken to improve the position of the Mexican Institute of Social Insurance (IMSS) as the mainstay of the Mexican Social Security System. According to the author, this leaves little room for the introduction of complementary or substitute systems.

Domestic savings can be stimulated by encouraging the development of complementary benefits plans, which would necessarily evolve into a mixed system: collective and with solidarity, on the one hand, and private and individual, on the other. In that context, there would be room for introducing, as an alternative, a system of obligatory savings through individual, independent accounts.

The author argues that it would not be prudent to introduce changes rapidly. In the case of the Mexican Pension System, guarantees for financial equilibrium must be introduced by stages, in reasonable time periods. It will be necessary to create awareness in the population with respect to the importance of being able to count on a reliable social security system. To that end, permanent informational campaigns must be implemented and a body of material related to this issue must be introduced into primary, secondary and higher level educational curricula. In that way, the true objective of social security will come to be understood: to fulfill the desire of achieving security for individuals and their families.

Thus, in Chapter I, the Mexican Pension System, its legal and statistical coverage, financing and pension benefits are described. In Chapter II, reference is made only to IMSS, with emphasis on the last two reforms produced by the Social Insurance Law, itself a product of the social policy adopted by the State in that area. Pension costs are also projected for the 1980-2030 period.

In Chapter III, the complementary mechanisms to the pension regimens established in the Mexican social security system are sketched, ending with a list of several measures which could be taken to promote the adequate development of that type of mechanism.

Finally, in Chapter IV, the issue of the prospects for the Mexican Pension System is treated, with several suggestions about granting benefits, which is some cases are too generous and, therefore, very costly.

8. The Pension System in Uruguay

Hugo Lacurcia

The study describes and evaluates the present pension system, including a synthesis of institutional evolution, past and estimated demographic trends and the basic characteristics of the current system. The analysis introduces the equation of financial equilibrium for the Infirmity, old age and survival system (IVS), reaching the conclusion, on the basis of an analysis of system projections, that the present regimen must be totally, or at least partially, reformed.

The study also analyses two extreme reform or adjustment options. One option would involve severe adjustments of the present system without abandoning the pay-as-you-go regimen. However, those adjustments would be so profound that their political viability must be questioned. The other option is to reform the system totally, substituting the financial pay-as-you-go regimen with a system of capitalization. The new regimen would include both present and future contributors to the system. However, it would seem that such an alternative would not be viable either because, following the Chilean model, simply in the area of recognizing the rights of current affiliates, a public debt would be generated which would practically be equal to the total Uruguayan foreign debt.

In its third section, the study analyses the capital market, measuring its size both in absolute terms and relative to other macroeconomic variables. The characteristics of diverse financial instruments are also analyzed. The conclusion is reached that the current structure and range of Uruguayan capital market instruments would not be able to absorb a supply of funds such as would be produced by a social security regimen shaped by a capitalization system.

Next, a third option is analyzed, based on a mixed solution which would maintain the present system with severe adjustments for current contributors and I.V.S. risk persons in the passive sector, while creating a new system —based on a system of capitalization— for those entering the labor market. By way of complementing the analysis, the study presents estimates of the eventual size of that fund and its possible influence on the capital market through its use of investment instruments.

In its final section, the author proposes a system with the following characteristics: it would be a substitute for the present system, with private sector participation, strong supervision, voluntary inscription, collective capitalization for the risks of infirmity and survival, with pre-defined benefits, minimum quotas but no maximum limits, and with a State regimen for minimum services. Nevertheless, the author foresees points of conflict which suggest the gradual implementation of the new system.

9. The Reform of the Social Services System in Venezuela

Gustavo Márquez

The study describes the present pension system, analyzing the incentives for reform promoted by different agents, evaluating the macroeconomic impact of an eventual reform, and suggesting emphasis on the regulation of fund administrators as an important component of the new system.

The study highlights the dual character of the present regimen which mixes pension financing and that of other social services in the same fund. Among those social services are included the pensions granted to persons fired from their jobs which traditionally encouraged high job turnover, conspiring against the accumulation of human capital and generating impoverishment of the population in the long term. That same factor works against political support for eventual reform of the system, given that blocking immediate access to those funds would affect the short-term interests of workers and employers. In that sense, it would be necessary to develop unemployment insurance which would replace the current function of the system's social services.

With respect to macroeconomic concerns, the reform would require important levels of fiscal discipline which, in the light of recent experience, is difficult to foresee. At the same time, given the volume of resources which the system would generate, it is estimated that they would reach an amount around 100% GDP within 35 years, meaning that the development of the capital market must be given high priority in order to guarantee positive profitability, in real terms, to ensure workers' pensions.

In summary, the author highlights two factors which must be analyzed separately in the discussion of the reform of the social security system: on the one hand, its role as a Pension Fund; and, on the other, its current relationship with other aspects of labor law.

Having clarified that point and with respect to the pension system, the author suggest making progress toward a regimen of capitalization through the creation of a Superintendency for the future pension fund administrators for the purpose of regulating their activities. The author places special emphasis on regulation based on very simple rules and linked mainly to investment portfolio distribution among the diverse types of investment instruments. The author is especially inclined to favor a flexible instrument, such as a risk classifying commission, instead of a guarantee or insurance fund.