

An appraisal of a quarter-century of structural pension reforms in Latin America

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This article gives a comparative description of three different general structural pension reform models applied in 12 Latin American countries, analysing their key concepts. In its main part, it analyses and suggests policies to deal with the 11 challenges that must be faced in such reforms: the decline in labour force coverage; the growing failure to pay contributions; the faults due to imperfect competition among pension fund management companies; the continuing high level of administrative costs; the accumulation of capital, yet without solid evidence that this has had a positive impact on national saving; the high and prolonged fiscal cost of the transition; the potential development of the capital market but a lack of diversification in the investment portfolio; the variable real returns on investment; the lack of evidence that pensions are higher under the private than under the public system; the accentuation of gender-based inequities, and the erosion of solidarity.

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I

Introduction

In mid-2004 there were 12 Latin American countries which had carried out or approved structural reforms of social security pensions whereby the former “public” systems were totally or partially “privatized”. Such reforms have already been operating for 23 years in Chile and between 6 and 12 years in six other countries. There is no other region in the world, including Central and Eastern Europe, which has witnessed changes of such scope and depth (Müller, 2002). The Latin American reforms have not only influenced similar processes in various other countries, but have also been reflected in the agendas of international and regional financial organizations such as the World Bank and the IDB, as well as posing challenges for international and regional bodies specializing in social security, such as the International Labour Organisation (ILO), the International Social Security Association (ISSA), the Inter-American Conference on Social Security (CISS), and the Ibero-American Social Security Organization (OISS). A recent book noted in this respect: “Never in the history of social security has so much been changed in so little time” (Madrid, 2003, p. 13).

First of all, this article gives a brief comparative description of the three different general models applied in the region, together with the diverse features of the reforms in the 12 countries, according to the

legislation in force. Using the statistics available for nine countries and sometimes for all 12, the central part of the article analyses and suggests policies that could be used to deal with the 11 challenges that the reforms must face: the level of labour force coverage; the degree of compliance in the payment of contributions; the faults due to imperfect competition among the management companies; management costs; the accumulation of capital and its impact on national saving; the fiscal cost of the transition; the development of the capital market and the degree of diversification of the investment portfolio; the real returns on investment; the level of pensions; gender-based inequities, and solidarity.

Generally speaking, the countries have adjusted the reforms to their financial, economic, social, political and social security conditions. Some, however, have mechanically copied a presumed universal model which cannot work due to the lack of some essential elements. Countries which have not yet committed themselves to a particular reform process should carefully study the experience of the 12 countries which have made structural reforms in this respect (with all their successes and failures) before deciding whether to make structural or parametric reforms and, if they decide on the former, before seeking to apply a generic model they should adapt it to their own conditions.

II

The key concepts involved, and a general description of the reforms

1. Public and private pension systems

Public and private social security pension systems are defined in this study in the light of their four fundamental

□ This article is an updated summary of part of the author’s monograph entitled *Las reformas de pensiones en América Latina y su impacto en los principios de la seguridad social* (Mesa-Lago, 2004a), and was presented at the Seminar “Lecciones y desafíos de 23 años de reformas estructurales en América Latina”, Santiago, Chile, 22-23 April 2004, which was organized by the ILO, the Ministry of Labour and Social Security of Chile, and Fundación Chile 21.

elements: contributions, benefits, system of financing, and form of management. The public system is characterized by: undefined contributions, defined benefits, an unfunded (pay-as-you-go) or partial collective capitalization (PCC) system of financing, and public management. In contrast, the private system is characterized by defined contributions, undefined benefits, a full individual capitalization (FIC) system of financing, and private management, although this can also be of other types: private, public or mixed (Mesa-Lago, 2004b).

2. Structural and non-structural reforms

Structural reforms completely transform the public system, replacing it wholly or partially with a private one. Non-structural or parametric reforms seek to strengthen the public system financially in the long term by raising the age of retirement or the level of contributions, applying stricter calculation formulas, or other measures.¹

The 12 structural pension system reforms in Latin America follow three different models: substitutive, parallel or mixed systems. The first part of table 1 shows the countries applying each of these models, the date when the new system came into operation, and its

four basic characteristics. The second part of that table shows the countries that still have public systems and their four basic characteristics.

The substitutive model has been applied in six countries: Chile (which pioneered this approach, in 1981), Bolivia and Mexico (1997), El Salvador (1998), the Dominican Republic (implemented gradually between 2003 and 2006) and Nicaragua (where its initiation was postponed in 2004). In this model, the public system is closed down (no new affiliates are allowed) and replaced by a private system; its four basic characteristics are those already mentioned, except in Mexico, where its management is multiple, and the benefits may be defined or undefined.² Of 22

TABLE 1

Latin America: Models and characteristics of pension reforms, 2004

Model, country and date of initiation of reform	System	Contributions	Benefits	System of financing	Management
<i>Structural reforms</i>					
Substitutive model	Private	Defined	Undefined	Full individual capitalization	Private ^a
Chile: May 1981					
Bolivia: May 1997					
Mexico: September 1997					
El Salvador: May 1998					
Dominican Republic: 2003-06					
Nicaragua: 2004					
Parallel model	Public or Private	Undefined Defined	Defined Undefined	Unfunded ^b Full. indiv. capitaliz.	Public Private ^a
Peru: June 1993					
Colombia: April 1994					
Mixed model	Public and Private	Undefined Defined	Defined Undefined	Unfunded ^b Full. indiv. capitaliz.	Public Multiple
Argentina: July 1994					
Uruguay: April 1996					
Costa Rica: May 2001					
Ecuador: 2004					
<i>Parametric reforms or unreformed</i>					
Brazil ^c	Public	Undefined	Defined ^d	Unfunded or collective partial capitalization	Public
Cuba					
Guatemala					
Haiti					
Honduras					
Panama					
Paraguay					
Venezuela ^c					

Source: Prepared by the author on the basis of the legislation of the 12 countries.

^a Multiple in Mexico, the Dominican Republic and Colombia.

^b In Peru, Argentina and Uruguay, but collective individual capitalization in Colombia and Costa Rica.

^c Parametric reforms recently introduced or under way.

^d Defined contribution in part of the private sector programme in Brazil (notional accounts).

¹ For more on reform policies, see Madrid (2003) and Mesa-Lago and Müller (2004).

² In Mexico, all those who were insured when the reform was enacted have the right, when they retire, to choose the best pension between

that offered by the public system of defined benefits (now closed) and that offered by the private system, based on individual accounts. This concession has given rise to serious uncertainty about the fiscal cost of the transition, and was being debated in 2004.

countries which have carried out structural reforms of the pension system, only one outside Latin America has introduced a substitutive system (Mesa-Lago and Hohnerlein, 2002).

The parallel model has been applied in two countries: Peru (1993) and Colombia (1994). In this model, the public system is not closed down, but is reformed (completely in Colombia and only partially in Peru), a new private system is established, and the two systems compete with each other. The public system has its four typical characteristics, except that in Colombia the system of financing is partial collective capitalization instead of an unfunded system. The private system also has its four typical characteristics, except that in Colombia the management is multiple. No country outside Latin America has followed this model, possibly because of its complexity.

The mixed system has been applied in four countries: Argentina (1994), Uruguay (1996), Costa Rica (2001) and Ecuador (as of August 2004 it had not yet come into operation because of an unsettled legal action against its applicability). This model combines a public system, which is not closed and provides a basic pension (first pillar) with a private system which offers a supplementary pension (second pillar). The public pillar has its four typical characteristics, as does the private pillar, except that the management of the

latter is on a multiple basis in all four of the countries. This is the most widely adopted model outside Latin America and is applied in at least 12 Western and Eastern European countries (Mesa-Lago and Hohnerlein, 2002; Müller, 2002).

The other eight Latin American countries have kept their public systems, with the characteristics detailed in table 1. Brazil made parametric reforms in 1998-1999 (including a system of financing based on notional accounts in the general system for private workers), and another parametric reform of the system for public employees is currently in the process of approval in Congress (Schwarzer, 2004). Venezuela approved a structural reform (total substitution), but this was abolished by the present government, which approved parametric reforms in 2002 (LOSS, 2002). In Panama, workers, employers and the government agreed to carry out a parametric reform with the aid of the ILO in 1998, but the government whose term of office ended in 2004 postponed its application, aggravating the actuarial imbalance and giving rise to an accounting imbalance for the first time (Mesa-Lago, 2003a). Structural or parametric reforms have been considered in Guatemala, Honduras and Paraguay. There has been no public discussion on reform in Cuba and Haiti, but the first of these countries is considering a parametric reform, which had not yet been approved as of March 2004.³

III

The beneficial effects of structural reforms

Structural reforms have had many beneficial effects, including:

- i) the unification of different systems in a number of countries (Bolivia, Costa Rica, Chile, El Salvador and Peru), which strengthens unity and makes possible portability, although segmentation persists in other countries (Argentina, Colombia and Mexico);
- ii) equalization of conditions of access and rules for the calculation of pensions in most of the systems (except for the armed forces in all countries except Costa Rica), which has had a positive impact on equality of treatment;
- iii) the introduction in some countries of access conditions (such as retirement ages) which are

- more in keeping with life expectancy at retirement, thus strengthening long-term financial sustainability;
- iv) the establishment of a much closer relation between contributions and the size of the pension, as well as opening up the possibility for middle- and high-income groups to save substantial sums that could enable them to receive higher pensions;
- v) State guarantees for the payment of pensions currently being paid in all countries, as well as recognition of the contributions made under the public system and a minimum pension in the private system, in most of the countries;

³ See Mesa-Lago (2003b, 2004a and 2004c).

- vi) elimination of the public system's monopoly position and the introduction of competition (although in many countries this is not functioning properly);
- vii) substantial accumulation of capital in the pension funds (although this must be balanced by the fiscal cost during the transition);
- viii) increased efficiency in key aspects such as registration, individual accounts, the provision of periodic information to insured persons, and rapid processing of pensions;
- ix) the possibility introduced in Chile for insured persons to select an investment fund of their choice from among various alternatives; and
- x) the creation of technical bodies endowed with relative independence for regulating and supervising the pension system (although this aspect varies among the countries).

With respect to the elimination of the public system's monopoly position and the introduction of private actors in pensions management, it may be noted that the importance taken on by the private sector vis-à-vis the public sector varies considerably from one country to another, because of the different reform models adopted. At the end of 2002, 100% of insured persons were enrolled in the private system (or the private component of a mixed system) in Bolivia, Mexico and Costa Rica; between 91% and 98% in Chile, El Salvador and Peru; and 80% in Argentina (table 2, last column). Changing from one system to another depends not only on the virtues of the private system but also on other variables:

- i) the insured person's freedom to choose whether to stay in the public system or move to a private or mixed system, as well as that person's age and income in some countries;
- ii) the legal benefits and incentives provided by the State to encourage change, as well as the publicity made;
- iii) the rate of return of the public system as compared with the rate of return on investment (returns on capital) in the private system, and
- iv) the length of time the reform has been in effect.

In Bolivia, Costa Rica and Mexico there was no freedom of choice, as the law obliged all insured persons to move to the private system. Furthermore, in the six countries which adopted the substitutive model, as well as in two of the countries with a mixed model (Costa Rica⁴ and Ecuador), new insured persons entering the labour force are obliged to enroll in the private system or component. When the reform has

already been in effect for a long time (as in the case of Chile, where it has been in operation for 23 years), the obligation to enroll imposed on those entering the labour market, together with the gradual retirement of those insured persons who stayed in the public system, means that a high proportion of affiliates are in the private system. In El Salvador, Nicaragua and the Dominican Republic, the younger affiliates of the pension system, who were in the majority, were obliged to move to the new system (which largely explains the enrollment figure of 91% in El Salvador).

In Chile and Peru, there were strong incentives to make the change, as contributions under the private system were lower than in the public system; furthermore, it was laid down that insured persons who moved to the private system could not return to the public one. In Argentina, those entering the labour market are free to choose between the public and mixed systems, but workers who do not take a decision are automatically assigned to the mixed system and those who move from the public to the mixed system cannot return to the former, so that 80% are in the mixed system.⁵ Publicity has also been a crucial factor in the change, since the private system has promised higher pensions and lower management costs than those of the public system, as well as protection against government interference.⁶ In contrast with the other seven countries, the public system in Colombia (parallel model) still has 55% of the total insured population, while that of Uruguay (mixed model) has 49% (table 2), since the public sector has been strengthened. In Colombia, insured persons are free to change from one system to the other every five years.⁷ In Uruguay, the government gave insured persons over 40 a time limit for choosing between the reformed public system and the mixed system, and most of them preferred the former; furthermore, only those with more than a certain level of income can join the mixed system.

⁴ Costa Rica is a unique case, because there the law obliges all insured persons (both at the time of reform and in the future) to enroll in the mixed system, so that all of them are in both the public system (the first and most important pillar) and the private system (the second pillar, which provides a supplementary pension).

⁵ Because of the economic crisis in 2001-2002 and the subsequent deterioration in the pension fund, a debate is currently under way in Argentina on whether the mixed system should be retained or whether those enrolled in it should be able to return to the public system.

⁶ See sections 4 and 9 of chapter IV below.

⁷ Initially, they were allowed to change every three years, but in 2002 this period was extended to five years, and moreover affiliates are not allowed to change during the ten years before retirement (LRP, 2002).

TABLE 2

Latin America (nine countries): Distribution of affiliates in public and private or mixed systems, 2002

Model/Country	In both systems (thousands)	Public system		Private system	
		Thousands	% of total	Thousands	% of total
<i>Substitutive</i>					
Chile	6 879	171	2	6 708	98
Bolivia	761	0	0	761	100
Mexico	29 421	0	0	29 421	100
El Salvador	1 087	94	9	993	91
<i>Parallel</i>					
Peru	3 134 ^a	140 ^a	4	2 994	96
Colombia	10 460	5 744 ^b	55	4 716	45
<i>Mixed</i>					
Argentina	11 316 ^{cd}	2 210	20	9 106	80
Uruguay	1 216	600 ^{de}	49	616	51
Costa Rica ^{de}	1 175	1 175	100	1 175	100
<i>Total</i>	<i>65 468^f</i>	<i>1 153</i>	<i>15.2</i>	<i>56 490</i>	<i>84.8</i>

Source: Asociación Internacional de Organismos de Supervisión de Fondos de Pensiones (AIOS, 2002a and 2002b); Administración Nacional de la Seguridad Social, Argentina (ANSES, 2002); Banco Central de Uruguay (BCU, 2002); Comisión Nacional del Sistema de Ahorro para el Retiro, Mexico (CONSAR, 2002 y 2003); Superintendencia de Administradoras de Fondos de Jubilaciones y Pensiones, Argentina (SAFJP, 2003a and b); Superintendencia de Administradoras de Fondos de Pensiones, Chile (SAFP, 2003a and b); Superintendencia Bancaria de Colombia (SBC, 2003); Superintendencia de Banca y Seguros, Peru (SBS, 2002); Superintendencia de Pensiones, Costa Rica (SP, 2002a, 2002b and 2003); Superintendencia de Pensiones, Valores y Seguros, Bolivia (SPVS, 2002 and 2003), and Superintendencia de Seguridad Social, Chile (SSS, 2002).

^a Author's estimates.

^b January 2003.

^c Includes the undecided.

^d All the insured persons in the second pillar (private system) are also in the first pillar (public system).

^e No figures available on the number of affiliates in the public system; the table shows the number of active contributors, but the total number of insured must be greater.

^f Costa Rica is counted only once.

IV

The challenges that structural reforms must face

Structural reforms have failed to bring about some important beneficial effects that they were supposed to generate.⁸ This section will analyse 11 challenges that those reforms face, using legal information from the 12 countries studied and statistics from the nine countries which have already made these reforms. Policy recommendations for dealing with those

challenges will also be formulated, and issues which call for further research will be identified.⁹

1. Decline in labour force coverage

Before the structural reforms, Latin American public systems could be classified in three groups, according to the time when the pension system was introduced

⁸ There is a worldwide debate on the supposed effects of structural pension reforms. See Orszag and Stiglitz (2001), Barr (2002) and Mesa-Lago (2002 and 2004b).

⁹ For greater details, see Mesa-Lago (2004a).

TABLE 3

Latin America (12 countries): Percentage of labour force covered by both systems (public and private) before the reform and in 2002, and sectors difficult to cover, 2000
(Percentages)

Model/Country	Coverage before the reform: Contributors and year	Coverage in 2002		Self-employed workers ^a	Incidence of poverty ^b
		Affiliates	Contributors		
<i>Substitutive</i>					
Chile	64 (1980)	111	58	15	21
Bolivia	12 (1996)	23	11	46	61
Mexico	37 (1997)	72	30	20	41
El Salvador	26 (1996)	40	19	31	50
Dominican Republic	30 (2000)	31	30
Nicaragua	16 (2002)	...	16	35	68
<i>Parallel</i>					
Peru	31 (1993)	28	11	38	48
Colombia	32 (1993)	59	24	36	55
<i>Mixed</i>					
Argentina	50 (1994)	69	24 ^d	18	25
Uruguay	73 (1997)	77 ^e	60 ^e	19	10
Costa Rica	53 (2000)	65 ^f	48 ^f	18	21
Ecuador	21 (2002)	...	21	34	61
<i>Average^c</i>	38	63	27	...	42

Source: Mesa-Lago (2004a).

^a Percentage of the employed urban labour force made up of unskilled low-productivity self-employed workers in 1999-2000.

^b Percentage of the total population in 2000; in Ecuador and Uruguay, percentage of the urban population.

^c Weighted by the author, using the population with pension coverage; the poverty figure is that estimated by ECLAC for the region as a whole.

^d Excludes part of the active contributors in the public system.

^e Public system, year 2000.

^f June 2003.

and the degree of coverage of the labour force (Mesa-Lago and Bertranou, 1998): i) the pioneers, where coverage ranged from 63% to 81% in 1980 (Uruguay, Argentina, Chile and Costa Rica);¹⁰ ii) the intermediate countries, where coverage ranged from 26% to 42% (Mexico, Peru, Colombia and Ecuador), and iii) the latecomers, where coverage ranged from 12% to 20% (Bolivia, El Salvador, Nicaragua and the Dominican Republic). Reformers assert that the private system offers two types of incentives for affiliation which do not exist or have deteriorated in the public system: ownership of an individual account and the principle of equivalence (a close relation between the contributions paid and the amount of the pension

received); they also assume that these incentives will also lead to an increase in labour force coverage.

Table 3 shows the percentage of the labour force covered by the two systems (public and private), although it excludes some groups of insured persons with separate programmes, such as the armed forces in all countries except Costa Rica, public employees in some countries (the employees of most of the provinces of Argentina, for example) and other small groups. If these groups were included, the percentage of the labour force covered would increase. In its two central columns, the table gives two estimates of coverage in 2002 based on total affiliation, that is to say, all the workers who have enrolled in the system, and active contributors (affiliates who paid a contribution in the last month). It may be noted that the coverage based on total affiliation is approximately twice as large as the coverage based on active contributors.

¹⁰ Costa Rica belongs to the second group in terms of the date of establishment of its system, but to the first group in terms of labour force coverage and degree of development of the system.

Among the pioneering countries, Chile has 111% labour force coverage if the total affiliation is used as the basis, which shows that this leads to over-estimation of the coverage; moreover, that figure excludes a further 26% of the labour force made up of 3% insured under the armed forces programme and 23% of the population estimated as not having any insurance coverage, so that this would give a total of 137%. If the number of active contributors is used as the basis, however, labour force coverage in Chile drops to 58%.

The estimates of coverage based on the number of active contributors before the reform and the number in 2002 show that coverage has gone down in all countries. Thus, the weighted average of coverage in nine countries decreased from 38% before the reform to 27% in 2002 (table 3). This comparison over-estimates the coverage before the reform in most of the countries, however, because it does not take account of whether the contributor was active in the last month, as the 2002 figures do, but is based on longer periods (Mesa-Lago, 2004e). Nevertheless, two normalized statistical series for Chile based on the number of active contributors indicate that coverage diminished from 79% in 1973 to 62% in 1975 and 58% in 2002 (Arenas de Mesa and Hernández, 2001; SAFF, 2002a; table 3). A similar series for Argentina shows a decline from 35% in 1994 to 26% in 2002 (Hujo, 2004). A serious challenge is that coverage goes down to half if only active contributors are considered, and to one-third in the case of Argentina, because of the severe crisis in that country. This means that it is essential to develop more accurate statistics on coverage than the existing ones, in order to determine more exactly who is covered and who is not, as well as the characteristics of the latter, in order to design mechanisms for increasing the level of inclusion. The most serious challenge faced by pension systems, whether public or private, is how to stop the fall in coverage in the formal sector and how to extend coverage in the informal sector. In the last 25 years, Latin America has witnessed an ongoing increase in informal employment, and this is getting even worse with the transformation of the labour market (greater labour flexibility) due to globalization and growing worldwide competition (Bertranou, 2001). The informal sector grew from 42% of Latin American urban employment in 1990 to 47% in 2001, due to the reduction in formal employment and the growth in self-employment activity and employment in micro-enterprises and domestic service (ILO, 2002b). Independent or self-employed workers,

the main component of the informal sector, are on the increase in the region, but their insurance coverage is far below that of dependent (salaried) workers; the percentage of independent workers in the total labour force is lower in the countries in the pioneering group and higher in the intermediate and latecomer groups, which makes their inclusion even more difficult in the countries of the latter two groups. Furthermore, the enrollment of independent workers is voluntary in all the countries except Argentina and Uruguay.¹¹ A legal mandate calling for coverage would not necessarily solve the problem in most of the countries (especially those in the intermediate and latecomer groups), because of the high percentage of independent workers, their unstable employment and low incomes, the lack of employers' contributions, and serious obstacles in the areas of registration, collection of contributions and compliance. Other groups which it is difficult to incorporate are peasants and agricultural workers without a steady employer, domestic servants, workers without contracts, and unpaid family members.¹²

The protection of the poor sectors through the granting of social assistance pensions is another challenge for the reforms. In 2000, the average proportion of the total population of the region below the poverty line was 42% and showed an upward trend. The State grants social assistance pensions to the population not covered by social insurance in Argentina, Costa Rica, Chile and Uruguay, which are the countries with the broadest coverage and lowest incidence of poverty (10%-25% of the population) in the region, as shown in the last column of table 3. But these pensions are not necessarily guaranteed to all those who need them, because they are subject to the fiscal resources available, and there is a waiting list in most of these countries. As a percentage of the total population, the number of social assistance pensions was very small in 2000-2001 (ranging from 0.9% in Argentina to 2.3% in Chile), but it has been shown that these pensions have a notable positive impact in the reduction of poverty and indigence (Bertranou, Solorio and Van Ginneken, 2002). The 2001-2002 crisis in Argentina, however, reversed these advances in that country: in 2002 the Ministry of Labour, Employment and Social Security estimated that the incidence of

¹¹ Colombia, Costa Rica, Ecuador and the Dominican Republic have laws making it compulsory for independent workers to enroll, but they have not yet been implemented.

¹² See Mesa-Lago (2004e).

poverty had risen to 50% of the population and 22% of pensioners (MTESS, 2003).

The other eight countries do not currently grant social assistance pensions of the conventional type, and all of them have a low level of coverage (difficult to extend) and high levels of poverty (between 30% and 68% of the population). The reform in Bolivia included the creation of a social assistance programme (Bonosol) which was to provide one annual flat sum to Bolivians over 65, to be financed from a collective capitalization fund fed with the dividends from privatized enterprises, but that sum was paid only for a few months in 1997; the programme was then replaced with Bonovida, which provided one flat sum at the end of 2000, and finally the Bonosol programme was reintroduced in 2002 and granted 420,000 benefits in 2003 (Mesa-Lago, 2004a). The reform laws approved by Costa Rica in 2000, Ecuador in 2001 and Colombia in 2002 provide for social assistance pensions, but as of mid-2004 they had not yet been implemented or there was no information that effective protection was being given; in the Dominican Republic, a “subsidized” non-contributory pension has been announced for indigents, disabled persons, unmarried mothers and the destitute unemployed and was due to be put into effect in 2004 but was not.¹³ The World Bank is now giving strong support for a “first pillar” to prevent poverty through an unfunded public system that supplements but does not distort or take the place of the private system (Gill, Packard and Yermo, 2003).

Whatever their type or model, pension reforms should give priority to the extension of coverage of independent workers who are difficult to incorporate. Social security should adapt to processes of change in the labour market and new ways of incorporating informal workers should be designed. It is of fundamental importance to give priority to the prevention of poverty, for which purpose countries should study the possibility of granting social assistance pensions focused on the elderly poor; it has been estimated that this would cost only a tiny fraction of the gross domestic product (GDP).

2. The growing level of failure to comply with the payment of contributions

Most of the structural reforms have eliminated or reduced the compulsory contributions by employers and have increased the workers' contribution. Argentina, Costa Rica, Ecuador and Mexico have not legally changed the respective contributions of workers and employers, but Argentina halved the employers' contributions, through exemptions and bonuses, and in 2001 it also halved the workers' contribution, although this has been increasing again since 2003. Costa Rica reassigned the existing contributions to other programmes. Ecuador raised the workers' contribution for those earning more than a certain level of income, and Mexico increased the State contribution based on the payroll. Chile, Bolivia and Peru eliminated the employer's contribution, while six countries increased the workers' contributions: Bolivia, Colombia, El Salvador (almost fivefold), Nicaragua, Peru and the Dominican Republic. Uruguay slightly reduced the employer's contribution and correspondingly raised that of the worker. Only three countries have increased the employer's contribution: Colombia, Nicaragua and the Dominican Republic. In most of the countries, the elimination or reduction of the employer's contribution has led to an increase in the worker's contribution and/or the fiscal cost.¹⁴

It is argued that the ownership of individual accounts and the principle of equivalence in the private system will also encourage prompt payment of contributions, since the higher the total amount of contributions (and the higher the return on the individual accounts), the greater will be the accumulated fund and hence the higher the pension.¹⁵ On the other hand, increasing the worker's contribution could lead to disincentives for enrollment and compliance with payments. Table 4, which is based on the percentage of total affiliates who were active contributors in 1998-2003, suggests that the disincentives have been stronger than the incentives in this respect. According to this table, the lower this percentage, the greater the degree of non-compliance; with one exception, there has been a downward trend in the degree of compliance in all the countries. In 2003, the degree of compliance ranged from 33% in Argentina (the lowest because of the

¹³ Workers' Protection Law, Costa Rica (LPT, 2000); Definitive Social Security Law, Dominican Republic (LDSS, 2001); Social Security Law, Ecuador (LSS, 2001) and Pension Reform Law, Colombia (LRP, 2002).

¹⁴ LPT (2000); Law on the System of Saving for Pensions, in Nicaragua (LSAP, 2000); LSD (2001); LSS (2001), and Mesa-Lago (2004a).

¹⁵ For a critical analysis in this aspect, see Uthoff (2002).

TABLE 4

Latin America (9 countries): Percentage of total affiliates who are active contributors^a in the private systems, 1998-2003

Model/Country	1998	1999	2000	2001	2002	2003
<i>Substitutive</i>						
Chile	52,8	53,4	50,9	53,7	51,0	49,1
Bolivia	... ^b	... ^b	... ^b	47,0	46,9	44,5
Mexico	63,4	60,2	57,9	44,7	41,7	40,6
El Salvador	67,2	63,7	55,2	53,2	47,6	45,0
<i>Parallel</i>						
Peru	45,6	45,7	41,7	41,2	39,4	39,2
Colombia	51,8	50,7	49,4	48,7	47,6	47,7
<i>Mixed</i>						
Argentina	48,9	44,3	39,1	29,0	33,2	33,5
Uruguay	67,4	58,7	53,9	53,2	45,1	52,7
Costa Rica				... ^c	... ^c	74,2
<i>Average^d</i>	<i>57,9</i>	<i>55,5</i>	<i>51,0</i>	<i>43,5</i>	<i>42,1</i>	<i>41,8</i>

Source: AIOS (1999-2003a); for Colombia, SBC (1999-2003).

^a Affiliates who have paid contributions in the last month (December), except in Mexico, where the period considered was the last two months in 1998-2000; in 2003, the period considered was the month of June.

^b Up to 2001, contributors were considered to be those who had at least one contribution registered since the beginning of the system.

^c The system began in May 2001, and up to 2002 contributors were considered to be those who had at least one contribution registered during the last year.

^d Average estimated by the author, using the total number of affiliates and the total number of contributors.

crisis) to 74% in Costa Rica (the highest level, but this could be due to the way the period of contribution was defined). The weighted average of total affiliates who were active contributors in the nine countries went down from 58% to 42% between 1998 and 2003: in other words, 58% were not active contributors in 2003. In Chile, the level of fulfillment decreased steadily from 76% in 1983 to 49% in 2003, and in Argentina it sank from 73% in 1994 to 33% in 2003 (SAFP, 1983 and 2003; Hujo, 2004).

The foregoing shows that not only have the reform's presumed incentives to improve compliance with payments not worked, but the level of non-compliance has actually got worse. More research into the causes of such non-compliance is needed in order to be able to design suitable remedies, but in any case pension reforms should carefully weigh the implications of eliminating or reducing the employer's contribution in order to avoid a situation where the financial burden on the insured persons (or the fiscal cost) increases, with all its adverse effects. It should be borne in mind that

this problem is also faced by the public systems, and is largely due to the growing proportion of the labour force transferring from the formal to the informal sector because of the growing flexibility of labour and the greater use of subcontracted labour without a contract on a part-time or other basis. Non-compliance increases in proportion as affiliates change from formal employment with insurance coverage to jobs that do not have such coverage.

There is also evidence that evasion and arrears (payment delays) by employers have risen to significant levels in some countries. In Chile, for example, employers' arrears of insurance contributions increased six-fold between 1990 and 2002, amounting in the latter year to US\$ 526 million, or 1% of the total value of the pension fund, 43% of which was unrecoverable because of the bankruptcy of the firms involved (Mesa-Lago, 2004a). More effective measures must therefore be taken to reduce evasion and arrears by employers: the legal figure of social security offences should be established, with severe penalties for offenders, there should be tighter inspection, using electronic means, in order to detect delinquent employers promptly, and specialized fast-moving courts should be set up with jurisdiction over this problem. Costa Rica has the fullest and strictest legislation on failure to comply with such payments, and the highest percentage of affiliates who pay their contributions punctually. Two different forms of collection are used by the countries: in Argentina, Costa Rica, Ecuador, Mexico, the Dominican Republic and Uruguay, collection is centralized, while in Bolivia, Chile, Colombia, El Salvador, Nicaragua and Peru it is carried out by the pension fund management companies; there does not appear to be a relationship between the form of collection and the degree of compliance. Finally, the World Bank notes that once they have earned the right to a minimum pension, most insured persons stop contributing because they prefer other alternatives that are less risky, have a lower cost, and provide greater liquidity, such as investing in a dwelling, a family enterprise, life insurance, and the education of the children (Gill, Packard and Yermo, 2003). If this type of conduct is indeed observed, ways should be explored for changing people's attitude through incentives and disincentives.

3. Serious flaws due to competition among pension fund management companies

The whole basis of the private system is competition, because this does away with the monopoly situation of

the public system and, it is hoped, will promote greater efficiency, thus giving rise to two beneficial effects: reduction of the management costs and a better rate of return on investments. It is assumed that the management companies will compete for affiliates and that the latter will have the necessary information and skills to choose the best companies, i.e., those charging the lowest commission and offering the highest rates of return, because this will mean that the insured person's individual account and his/her pension will be higher. There is evidence, however, that competition is not working, or working imperfectly, in most of the countries.

Competition depends to a large extent on the size of the market of insured persons: the more there are of these, the more pension fund management companies there will be, and vice versa. Thus, in mid-2003 Mexico had 30 million insured persons and 12 management companies, Chile had 7 million and seven companies (only six since March 2004), Peru had 3 million and four companies, El Salvador had 1 million and three companies (in mid 2004 only two were left), and Bolivia had 809,000 insured persons and two management companies¹⁶ (table 5). Costa Rica, however, with 1 million insured persons, has nine management companies, the highest number after Argentina and Mexico, which have 30 and 9 times as many insured persons, respectively. This may partly be due to the fact that Costa Rica, like Colombia and Uruguay, has a multiple management system rather than only private companies, and also in Costa Rica the system has only been operating for a few years. Historical statistics show that in all the countries the number of management companies first of all rises and then falls due to mergers: in Argentina the number of companies went down from 25 to 12; in Chile from 21 to 7; in Mexico from 17 to 12; in Colombia from 10 to 6; in Peru from 8 to 4; in Uruguay from 6 to 4, and in El Salvador from 5 to 2.

Countries with a very small number of insured persons should not automatically copy the systems of big countries, because there is a serious risk that competition, which is the essential basis of the private system, will not work in these conditions. Small countries will also have to decide whether there should

TABLE 5

Latin America (9 countries): Competition among management companies in the private system, 2002-2003

Model/Country	Affiliates (thousands), 2003	Number of management companies, 2003	Percentage of affiliates in the three largest management companies, 2002
<i>Substitutive</i>			
Chile	6 883	7 ^a	79
Bolivia	809	2	100
Mexico	30 381	12	44
El Salvador	1 034	3 ^b	100
<i>Parallel</i>			
Peru	3 100	4	76
Colombia	5 013	6	66
<i>Mixed</i>			
Argentina	9 275	12	57
Uruguay	626	4	87
Costa Rica	1 104	9	82

Source: Data on affiliates and number of management companies were taken from AIOS (2003a) and SBC (2003); concentration of management companies: BCU (2002), CONSAR (2003), SAFJP (2003), SAFF (2003), SBC (2003), SBS (2003), SP (2002b and 2003) and SPVS (2003).

^a Went down to six in March 2004.

^b One of the management companies went bankrupt in 2004.

only be private pension fund management companies, as in half of the countries, or multiple management types, as in the other half, because the latter system will make possible greater access of the administrators to the market. Another important issue is that of exclusive dedication, that is to say, that the management companies can only operate in the management of pension funds and will have to create their own nationwide infrastructure (buildings, equipment, personnel), which is extremely costly. It has therefore been suggested that countries which have a very small number of insured persons should consider the possibility of allowing the management companies to use the infrastructure of other institutions such as banks, insurance companies or financial establishments, subject to the necessary caution and separation of interests, in order to reduce costs and facilitate greater competition. This measure was incorporated in the pension reform of the Dominican Republic, and at the end of 2002 there were six pension fund management companies already approved and three more pending, in spite of the small number of insured persons (Mesa-Lago, 2004a).

¹⁶ The Bolivian Government initially divided up all the insured persons between the two companies according to affiliates place of residence and prohibited them from changing from one company to the other until 2002; as of mid-2004 a planned third management company had not yet started operations.

Even in countries which have a considerable number of management companies, competition may be affected by excessive concentration. The last column of table 5 shows the high level of concentration of insured persons in the three largest management companies at the end of 2002. It may also be noted that Mexico has the lowest level of concentration because the law provided that no management company could have more than 17% of the total number of insured persons in the first four years of the reformed system, and not more than 20% since the end of 2001. It may be argued that if the three largest companies are the best, then such concentration is not negative, but a study on Chile shows that, consistently over time, it is not the three largest management companies which charge the lowest commissions and provide the highest rates of return.

There are three reasons why insured persons choose these three companies, even though they are not the best: i) most of those persons do not have the information or the skill to make a suitable choice; ii) they are influenced by the publicity campaigns of the management companies, which usually project an image of security and solidity, but do not provide insured persons with simple comparative information on commissions and rates of return so that they can identify the best management companies; and iii) many insured persons are enrolled by sales representatives or promoters, who receive a commission from the management company every time they transfer an affiliate to them and who are therefore interested in changing affiliates from one company to another without this necessarily being in the affiliates' best interests.

The World Bank has found serious flaws in pension fund competition: i) the industry is oligopolistic and has a captive clientele whose contributions are retained until the insured persons retire; ii) there is a high and growing degree of concentration which is already a source of concern and may be even more so in the future; iii) in order to reduce operating costs, the restrictions on the number of times per year that an insured person can change his management company¹⁷ have institutionalized what was already a *de facto* oligopoly and reveal collusion and the development of

¹⁷ In six countries (Bolivia, Costa Rica, El Salvador, Mexico, Nicaragua and the Dominican Republic) affiliates can only change once per year, and in three countries (Argentina, Colombia and Uruguay) they can change twice per year. Chile and Peru are the countries with the greatest freedom to change.

a powerful cartel; iv) the evidence in Latin America clearly shows that competition among management companies for relatively small market shares only generates higher commissions, and v) the pension fund management industry in the region is anything but a good example of competition (Gill, Packard and Yermo, 2003, pp. 43-44, 112, 174 and 176).

In view of this diagnosis, it is essential that the bodies responsible for supervising the system should play a more active role in promoting competition in this market, reducing entry barriers, and encouraging the formation of new management companies, as well as strictly regulating the work of promoters and establishing rules to ensure truthful publicity. The supervisory bodies and/or associations of management companies should assign more resources to improving the information provided so as to make it understandable to affiliates, publishing lists of management companies in the mass media, listed according to their levels of commissions and net rates of return, and educating users so that they can make an informed rational choice. The possibility should be studied of reducing concentration by imposing a percentage ceiling on the affiliate shares of management companies, as is done in Mexico.

4. High management costs

Competition is supposed to reduce management costs, but it has already been seen that in many countries proper competition does not exist. The management cost has two components (the commission and the premium), and is usually fixed on the basis of the insured person's wage (as a percentage or a flat rate) or, in some cases, on the basis of the balance in the individual account or the return on investment. The commission is paid to the management company for its management of the individual account, the investment of the funds, and the handling of the old age pension, and is paid entirely by the insured person (except in Colombia, where the employer shares in its payment). Part of the commission consists of the premium which is passed on by the management company to a private insurance company in order to cover the insured person against death or disability risks (except in Mexico and Colombia, where this is done through the public system).

Table 6 shows the management cost (commission plus premium) as a percentage of the insured person's wage, but comparison may be a complex matter, as there may be different commissions which are difficult to unify into a single average. The lowest total cost is

TABLE 6

Latin America (11 countries): Management cost as a percentage of wages in the private system, 2003

Model/Country	Deposit in individual account	Management (commission plus premium) ^a	Total deduction	Management cost (%)	
				Deduction	Deposit
<i>Substitutive</i>					
Chile	10.00	2.26	12.26	18.43	22.60
Bolivia	10.00	2.21	12.21	18.10	22.10
Mexico	6.78	4.14	10.92	37.91	61.06
El Salvador	11.02	2.98	14.00	21.28	27.04
Dominican Republic ^b	5.00	2.00	7.00	28.57	40.00
Nicaragua	7.50	3.00	10.50	28.57	40.00
<i>Parallel</i>					
Peru	8.00	3.51	11.51	30.50	43.88
Colombia	10.00	3.50 ^d	13.50 ^d	25.93	35.00
<i>Mixed</i>					
Argentina	4.75	2.25	7.00	32.10	47.37
Uruguay	12.19	2.81	15.00	18.73	23.05
Costa Rica	4.50	^e
<i>Average^c</i>	8.52	2.87	11.39	26.00	36.21

Source: AIOS (2003a), except for the data on Colombia, which are based on SBC (2003) and on Nicaragua and the Dominican Republic, which are based on LSD (2001) and LSAP (2000), respectively. Averages calculated by the author.

^a The commission is paid to the old-age pension management company, while the premium goes to the insurance company which covers the disability and death risks (the premium is paid to the public system in Mexico).

^b In addition to the cost shown, 30% will be charged on the surplus of the annual return on the investment; the percentage for the individual account will gradually be increased to 8% over five years, the management cost will not change, the total deduction will increase to 10%, and the cost over the deduction will be reduced to 20%.

^c Unweighted average for ten countries (excluding Costa Rica).

^d 0.5% goes to the Minimum Pension Guarantee Fund, the total deduction for that Fund will increase to 1% in 2004, plus 1% more in 2005-2006 for the individual account, giving a total of 15.5% (this could be increased by a further 1% in 2008 if the economy grows).

^e There is no commission on the wages, but a percentage on the gross return on the investment.

in the Dominican Republic (2%), but in addition there may be a charge of up to 30% on the return on investment and 0.1% for the supervisory body (LDSS, 2001). The second lowest total cost is in Bolivia (2.21%), because there is no competition or publicity; for this reason, the part of the commission which goes to the management company is only 0.5%, but the premium of 1.71% is the second highest in the region. The highest total costs are 3.50% in Colombia (1.92% of commission and 1.58% of premium); 3.51% in Peru (2.27% and 1.24%), and 4.14% in Mexico (2.50% and 1.64%). In Costa Rica there is no charge based on the member's wage, but there is a commission of between 6% and 10% on the return on the fund's investments, so as to provide an incentive for the improvement of that rate of return. In El Salvador, the management cost of the public system before the reform (as a percentage of the worker's wage) was 0.5%, and this increased to 2.98% in 2003 with the introduction of the private system (Mesa-Lago, 2004a).

Commissions and premiums have displayed different tendencies over time. Commissions range from 1.45% to 2.27% (except in Bolivia and the Dominican Republic), so that they represent the main component, and while they have fluctuated over time, in most of the countries they have not shown a downward trend. Premiums range from 0.67% to 1.27% (except in Bolivia and Colombia), so that they are the lesser component, and they have gone down in almost all the countries. Commissions therefore account for most of the total cost and are the reason why this has not decreased significantly, which is one of the biggest challenges faced by structural reforms in the region. In Chile, the percentage level of the total cost rose from 2.44% in 1981 to 3.6% in 1984, but declined to 2.26% in 2003, which is only slightly below the 1981 figure, after 22 years of reform (Acuña and Iglesias, 2001).

The lowest management cost, as a percentage of the total salary deduction in mid-2003, was 18% in Bolivia, Chile and Uruguay, while the highest costs

were in Mexico (38%) and Argentina (32%). The non-weighted average of management costs as a percentage of total deductions in the 11 countries was 26% in 2003. If the management cost is calculated with respect to the deposit, however, the average cost rose to 36,21% (last column in table 6). The existing projections indicate that many insured persons will not save enough to finance their pensions, and the high management costs will aggravate this problem; if management costs were reduced, a larger portion of the contributions would be deposited in the individual accounts and could help to finance the pensions and reduce the fiscal cost of financing minimum pensions (Uthoff, 2002). Some supporters of structural reform now admit that the management costs are high and that competition alone (even if it operated effectively) would not ensure their reduction.¹⁸ Management costs are concentrated in marketing, publicity, sales representatives' commissions,¹⁹ frequent changes by affiliates from one management company to another, and staff wages.

Fixing the management cost as a percentage of the payroll does not provide any incentive to reduce that cost, and only two countries (Bolivia and the Dominican Republic) have established a low ceiling for it, which could be a possible alternative and could be adjusted if it were found that it did not offer sufficient incentives. Another option would be to fix the cost as a percentage of the balance in the individual account or the return on investment; with regard to the latter, the results obtained in Costa Rica should be carefully studied. At all events, the supervisory body must ensure that the saving through the reduction of management costs really is passed on to affiliates through lower commissions.

5. Accumulation of resources in the pension fund, yet without sufficient evidence of positive effects on national saving

It has been claimed that pension reform will promote a big accumulation of capital in the pension fund and will increase national saving (World Bank, 1994; Preamble of the Mexican pension reform law). The first column of table 7 confirms the first assumption, although there are notable differences between countries.

The amount accumulated in the pension fund varies according to the length of time the system has been in operation, the number of insured persons, the size of the economy, the level of wages, and the return on investments. The Chilean reform has been in effect for 23 years and has built up the biggest fund. In Mexico, the reform has only been in effect for 5½ years, but it has already accumulated the second biggest fund (88% of the size of the Chilean fund), because the Mexican economy is the second largest in Latin America and Mexico has the largest number of insured persons.²⁰ In Argentina, which is the third

TABLE 7

Latin America (9 countries): Fund accumulated and gross real return on the investment, 2003

Model/Country	Fund accumulated, June 2003		Average real annual rate of return (%) ^b
	Millions of dollars	As a % of GDP ^a	
<i>Substitutive</i>			
Chile	39 672	60.6	10.30
Bolivia	1 261	17.2	17.10
Mexico	34 963	5.6	10.40 ^c
El Salvador	1 309	9.2	10.86 ^d
<i>Parallele</i>			
Peru	4 541	8.2	6.57
Colombia	5 350 ^e	6.2 ^e	7.33
<i>Mixed</i>			
Argentina	15 607	15.6	10.45
Uruguay	1 149	1.7	15.00
Costa Rica	218	1.4	7.00

Source: Data on accumulation and accumulation as a percentage of GDP were taken from AIOS (2003a); in the case of Colombia, they were estimated by the author on the basis of SBC (2002). Data on the rate of return were based on BCU (2002), CONSAR (2003), SAFJP (2003a and 2003b), SAFP (2003), SBC (2002), SBS (2002), SP (2002b and 2003) and SPVS (2003).

^a The percentage of GDP represented by the accumulated fund depends not only on the amount accumulated but also on the size of the GDP.

^b From the beginning of the system up to the end of 2002.

^c CONSAR reports a net rate of return of 7.95%.

^d The author has estimated 8.36%, based on the nominal rate of return and the average annual inflation rate.

^e December 2002.

²⁰ The biggest pension fund built up in Latin America was that of Brazil in 2003 (US\$ 80 billion, or 18% of GDP), even though it is a voluntary programme providing supplementary pensions. This large figure is due to two reasons: Brazil is the largest economy in the region, and both the employer and the employee contribute to this fund.

¹⁸ See the reference to Holzmann and Valdés Prieto in Holzmann and Stiglitz (2001); see also Gill, Packard and Yermo (2003).

¹⁹ In Chile, the proportion spent on this was 26% in 1983 and 28% in 2000, according to Acuña and Iglesias (2001).

economy of the region, the pension fund in 2001 was 60% of the size of the Chilean fund after only 8½ years of operation of the reform, but the crisis reduced it to only 39% in 2003.

The foregoing figures only take account of the resources accumulated in the individual accounts, but not the fiscal cost of the transition (see section 6 below). The World Bank (1994) has maintained that pension reform will promote national saving, which in turn will boost economic growth, promote employment, and eventually make it possible to pay better pensions. Chile is the only country whose reform has been in effect long enough to test this assumption, and most of the studies made in this respect have come to negative conclusions. Holzmann (1997), in a general equilibrium econometric exercise, deducted the fiscal cost of the reform (negative) from the saving in private pension schemes (positive) and concluded that the impact of the reform on national saving was negative in 1981-1988 and that no direct positive impact could be shown in 1989-1996; he therefore warned the Latin American countries not to cherish too many hopes that the reform would increase national saving. Arenas de Mesa (1999) followed a similar methodology, but using a partial equilibrium model for 1981-1997, measuring the factors and the results in annual percentage points of GDP: the saving deposited in the individual accounts averaged 2.7% for the period, but the fiscal cost averaged -5.7%, so that the net result averaged -3%, that is to say, dissaving. Arenas de Mesa also projected that in the first five years of the twenty-first century the situation would change and saving would be slightly greater than the fiscal cost, so that the net result would be positive and would continue to grow thereafter, but as it would probably take 20 years to offset the negative balance of the previous 20 years, 40 years would be needed for there to be a net positive impact on national saving. Acuña and Iglesias (2001) deducted the “transitory deficit on social security pensions” (but excluding the deficit caused by social assistance, minimum and armed forces pensions) from private pension saving, and likewise obtained a net negative average result (-2.7%) for 1982-1997, which is somewhat smaller than that calculated by Arenas de Mesa because the latter included all the fiscal costs of the reform.

Haindl Rondanelli (1997), in contrast, concluded that the reform had had a positive impact on national saving in 1990-1994, but he based his calculations on the overall tax burden rather than the direct fiscal cost of the reform; using his own figures, if he had deducted

the average cost of the public system deficit (-4.6%) from the average private pension saving (3.1%) he would likewise have obtained a negative result of -1.5%, even excluding the other fiscal costs of the reform. Corbo and Schmidt-Hebbel (2003), taking into account only the operating deficit and the recognition bond (excluding minimum, social assistance and armed forces pensions), estimate that national saving increased by 2.3% of GDP in 1981-2001 thanks to the reform.²¹

Although an increase in national saving would be desirable and important, it should not be a central objective of structural reform, since so far there is no solid empirical evidence to back up this supposed effect.

6. Substantial and prolonged fiscal cost of the transition

It is claimed that the fiscal cost of the reform will gradually decline and will finally be eliminated in the long term. This cost is difficult to measure and compare between countries, because of the different components included and the different methodologies used, but according to rough estimates, in 2000 this cost (as a percentage of GDP) was 6% in Chile (after 20 years of reform), 4.5% in Argentina and Uruguay, 2% in Bolivia and 1.5% in Colombia; it was not possible to obtain figures for Mexico and Peru (Mesa-Lago, 2004a). The World Bank has projected a fiscal cost for Argentina, Bolivia and Colombia in 2040 which is far above the projections made by those countries before the reform; for Mexico and Peru, the Bank's projections indicate a growing fiscal cost between 2001 and 2040, and only in Uruguay are the Bank's projections for 2040 lower than those made by the country before the reform (Gill, Packard and Yermo, 2003). The policies adopted by the countries to tackle this fiscal cost have been very different: Chile took suitable measures, it generated a fiscal surplus before the reform, and its economic policies have had a good deal of success in the long term, but Argentina did not make any provisions for the situation, its projection of the fiscal cost was only half the actual cost, and its economic policy caused the crisis of 2001-2002.

There are three components of the fiscal cost during the transition, and all of them are financed by the State, with few exceptions: the deficit of the public system, the recognition bond, and minimum pensions

²¹ For other opinions, see Kiefer (2004).

TABLE 8

Latin America (12 countries): Fiscal cost of the reform in the 12 countries which have adopted it, 2004

Model/country	Financial responsibilities of the State		
	Covers public system deficit	Pays recognition bonds	Guarantees a minimum pension
<i>Substitutive</i>			
Chile	Yes	Does not have a ceiling, is adjusted to inflation, earns 4% real annual interest, requires previous contributions	Yes
Bolivia	Yes	Does have a ceiling, is not clear whether it earns real interest, requires one month of previous contributions	No
Mexico		No	Yes
El Salvador		Does not have a ceiling, is not adjustable to inflation, earns real interest equal to the rate of inflation, requires previous contributions	Yes
Nicaragua		Does not have a ceiling, is not adjustable to inflation, does not earn interest, requires one year of previous contributions	Yes
Dominican Republic		Does not have a ceiling, is adjustable to inflation, earns 2% real interest, requires previous contributions	Yes
<i>Parallel</i>			
Peru	Yes	Does have a ceiling, is adjustable to inflation, does not earn interest, requires 4 years of previous contributions	No; since 2002 only for affiliates since 1945
Colombia		Does have a ceiling, is adjustable to inflation, earns 3% real annual interest, requires 3 years of previous contributions	Yes (with limitations)
<i>Mixed</i>			
Argentina	Yes	Does not have a ceiling, is adjustable to inflation, requires 30 years of previous contributions (is paid by the first pillar (the public system))	Yes (paid by the first pillar (the public system))
Uruguay	Yes	No	
Costa Rica	No	No	
Ecuador	Yes	No	

Source: Prepared by the author on the basis of the legislation of the 12 countries.

Fuente: Elaboración del autor sobre la base de la legislación de los 12 países.

(table 8). In addition, in some countries the State grants certain guarantees and social assistance pensions which further increase the fiscal cost. Since the present section, which is based on Mesa-Lago (2000), refers to legal and not statistical aspects, it gives information on the 12 countries which have adopted pension reforms.

Of the 12 countries considered, Costa Rica is the only one where the State does not have to pay the deficit of the public system, because the system of financing, based on partial collective capitalization, is capable of financing that deficit. This fiscal burden varies in line with the implicit pension debt, that is to say, the present value of long-term obligations, which

includes the payment of currently payable and future pensions. In unfunded or partial collective capitalization financing systems there is always an implicit pension debt, but the reform model adopted may make that debt explicit, generating an immediate fiscal cost corresponding to the total debt, or it may postpone all or part of the debt. In the substitutive model, the public system is closed completely, and the whole of the implicit pension debt immediately becomes explicit, so that pensions currently being paid and those generated by the few persons who remain in the public system have to be financed by the State. This is because 100% of the insured persons (Bolivia and Mexico) or 91%

to 98% of them (El Salvador and Chile, respectively) have moved to the private system and ceased to contribute to the public system, which is left with almost all the pensions but no contributors, or very few, thus generating a deficit. In the parallel model, the implicit pension debt becomes explicit in the private system but not in the public one, whose implicit pension debt is postponed; as the public system still has insured persons who pay contributions (much more in Colombia than in Peru), the fiscal cost is reduced, at least for a time. In the mixed model, the implicit pension debt becomes partially explicit in the second pillar (private system) but not in the first pillar (public system), in which it is postponed.

In 8 of the 12 countries the State has to pay a recognition bond (or certificate of recognition or compensatory benefit, or the like), equivalent to the value of the contributions accumulated in the public system, to all the insured persons who have transferred to the private system. Four countries do not give such bonds: Mexico (because of the choice given to insured persons when they retire, as already explained) and Costa Rica, Ecuador and Uruguay (because in a mixed model the insured persons do not move, but remain in the first pillar, which pays them a basic pension). In 2002, the bond given in Bolivia was limited; in Peru it had been given to only half of the insured persons who changed from one system to the other, and in El Salvador its calculation and issue were five years behind (Mesa-Lago, 2004a). No information is available for Ecuador.

In 10 of the 12 countries the State guarantees a minimum pension to all affiliates of the private system whose individual account is insufficient to finance a pension of that level: the State has to pay the difference. In order to be eligible for a minimum pension, prior contributions for a minimum of between 20 and 35 years are required. Bolivia does not guarantee a minimum pension; Peru has only been granting it since 2002, and even then only to persons who were already insured before 1945, and El Salvador places considerable restrictions on eligibility (Mesa-Lago, 2004a).

In four countries (Argentina, Colombia, Chile and Uruguay) the State offers a further two guarantees: if a pension fund management company cannot guarantee the minimum rate of return on the individual account, the State makes up the difference, and if a management company or insurance company goes bankrupt, the State assumes responsibility for the payment of the pensions in question (in Uruguay, these guarantees are given only to persons insured in the public management company,

which partly explains why it has 38% of the total number of insured persons). In the Dominican Republic, the law makes the State responsible for any fault or non-fulfillment that occurs in the private system.

In all the countries there is a trade-off over the fiscal cost. The State tries to reduce this cost, either by not granting recognition bonds or minimum pensions, or by granting them, but subject to restrictions (not providing for readjustment, imposing a ceiling, or demanding prior contributions, for example). These cuts have been made in the various countries after the experience of the Chilean system, which has been the most generous of all, but has also been the most costly from the fiscal point of view. Reducing the fiscal cost adversely affects the welfare of the insured persons, however, since they do not receive recognition bonds or minimum pensions, or else these are subject to restrictions. Chile has the most generous benefits during the transition, but it also has the highest fiscal costs, while Bolivia has lower fiscal costs but also (together with Peru) the most limited rights for the beneficiaries.

The fiscal cost of the transition under a structural reform (as well as the implicit pension debt) should be projected in a professional and careful manner, because it can last for between 40 and 70 years, depending on the country's demographic characteristics and the age of the pension system. The projections should be subjected to an external audit and should be made public so that they can be examined by domestic experts and international organizations. A basic condition for the success of a structural reform is fiscal discipline, especially in the case of governments which already have a fragile fiscal position. Fiscal discipline and the generation of a surplus, or at least fiscal balance, are essential prerequisites if pension reform is to be sustainable. Reforms must also be made in the areas of finance, banking and taxation and in the insurance industry in support of the pension reform, while it is also necessary to identify the sources for the financing of the fiscal cost and to design effective economic policies to meet that cost. In-depth research is needed on the impact that the fiscal cost of the structural reform can have on income distribution.

7. While financial markets may be developed, there may be a lack of diversification in the investment portfolio

It is claimed that pension reform will help to develop capital markets, create new financial instruments and

diversify the investment portfolio of the pension fund in order to hedge against risks. The study by Holzmann (1997) on Chile concluded that the pension reform has indeed helped to make the financial markets more liquid and mature, and that the empirical evidence coincides with the assumption that such reform has contributed to the development of the financial market and a more diversified portfolio. It warned, however, that this evidence does not constitute convincing proof that the pension reform has been the decisive factor in the development of those markets since the mid-1980s, because that development may have been due to other factors unconnected with the reform. The World Bank also maintains that the markets have been deepened, due at least in part to the pension reform, but in countries where there have been parallel macroeconomic reforms, such as Chile, it is extremely difficult to isolate the effect of one specific reform (Gill, Packard and Yermo, 2003). Corbo and Schmidt-Hebbel (2003), in contrast, consider that the contribution of pension saving flows to the development of the Chilean financial market has been quite robust and recommend the most radical possible structural reform to accentuate that effect.

There is a long-standing debate on whether it is necessary to have a capital market before a structural reform or whether this is not an essential prerequisite,

since the reform itself will have a positive effect on the development of that market. Although this is not the place to settle that controversy, the fact is that small countries such as Bolivia, El Salvador, Costa Rica and Uruguay did not have a capital market before their reforms, or else it was only very incipient and small, with few investment instruments, and those of a highly concentrated nature (El Salvador adopted the law creating and regulating the capital market shortly before the reform began). And indeed it is precisely these countries which have least diversified the composition of the pension fund investment portfolios.

The percentage distribution of the portfolio by instruments as of mid-2003 indicates that most of the countries are still very far from reaching a satisfactory level of diversification (table 9). In Uruguay, Bolivia, Argentina, El Salvador, Mexico and Costa Rica, between 57% and 90% of the portfolio is in public securities, the vast majority of them debt paper. Only in Peru and Chile do public securities have a clearly minority share, while in Colombia the share of these securities is 49.4%; Chile took 17 years to bring this proportion down from 46% to 29%, thanks largely to the actions of the supervisory body. In most countries, the bulk of the investment is in public securities, and if these have shown a good rate of return this is only because the State has paid high interest rates on its debt

TABLE 9

**Latin America (9 countries): Distribution of portfolio
by types of financial instrument, 2003**
(Percentages)

Model/Country	Public securities	Financial institutions	Non-financial institutions	Shares	Mutual and other funds	Foreign issuers	Others
<i>Substitutive</i>							
Chile	29.1	30.4	7.2	10.9	2.4	19.9	0.2
Bolivia	68.1	10.3	19.0	0.0	0.0	1.2	1.4
Mexico	85.4	3.4	11.3	0.0	0.0	0.0	0.0
El Salvador	84.0	12.0	3.6	0.4	0.0	0.0	0.0
<i>Parallel</i>							
Peru	13.0	33.2	13.1	31.2	0.8	7.2	1.6
Colombia	49.4	26.6	16.6	2.9	0.0	4.5	0.0
<i>Mixed</i>							
Argentina	75.9	3.5	1.3	8.2	1.6	8.3	1.1
Uruguay	57.2	37.1	3.4	0.0	0.0	0.0	2.3
Costa Rica	89.5	5.1	4.7	0.0	0.7	0.0	0.0
<i>Average^a</i>	<i>57.4</i>	<i>16.2</i>	<i>8.0</i>	<i>7.1</i>	<i>1.3</i>	<i>9.7</i>	<i>0.4</i>

Source: AIOS (2003a), except for Colombia, for which the data were taken from SBC (2003).

^a Excluding Colombia.

paper (as for example in the case of Argentina up to the end of 2001), but this is costly for the economy, cannot be kept up in the long term, and is risky.²² This latter aspect was observed in Argentina in 2002, when the economic crisis and devaluation of the exchange rate caused a drastic fall in the value of the pension fund and an increase in the concentration of the portfolio in public debt paper. The supervisory body played an active role in this process, because in the course of 2001 it cooperated with the government to persuade management companies to agree to convert instruments which were expressed in dollars and were tradeable on international markets into “guaranteed loans” at a lower interest rate; subsequent decrees made it obligatory to invest the product of bank certificates of deposit and cash in debt paper, and in 2002 the government converted the “guaranteed deposits” into pesos, so that the subsequent devaluation considerably reduced the value of the pension funds’ portfolio (ILO, 2002a; Hujo, 2004).

Shares are one of the favourite instruments for diversifying the portfolio, and if the capital market indeed develops there will be many shares in which the pension funds can invest. Only in Argentina, Chile and Peru, however, is a significant proportion of the portfolio invested in shares (between 8% and 31%); in El Salvador and Colombia the proportion is very small (0.4% and 2.9%, respectively), and in the rest of the countries it is zero. If there are no suitable possibilities for investing in the domestic market, an alternative would be to invest in foreign financial instruments, but some countries prohibit this, since they consider it against the national interest. In Chile, 20% of the portfolio is invested in overseas instruments, the corresponding figures for Bolivia, Colombia, Peru and Argentina are between 1% and 8%, and the proportion is zero in the other countries studied.

Small countries which have no capital markets or where these markets are only incipient must establish and consolidate them before undertaking a structural reform. It is essential to develop a capital market, regulate it, generate confidence in it, create new local instruments and allow investment in foreign instruments, subject to a suitable ceiling. Countries which plan to invest the pension funds mainly in public debt paper where there is a danger of default should

not make a structural reform, since the risk for the private sector would be overwhelming. The pension fund supervisory body must play an important and independent role in the task of promoting diversification of the portfolio, in collaboration with the supervisory bodies for the capital market (Chile has had a positive experience and Argentina a negative one in this respect).

8. The variable net real return on investments

Another assumption of the reform is that it will generate a high rate of real return on investment. The statistics support this assumption, although the results vary between countries and also vary according to the period used for the calculations. The last column of table 7 shows the average real annual rates of return (adjusted for inflation) from the time when the system began to operate up to the end of 2002: 17% in Bolivia; 15% in Uruguay; 10% in Chile, El Salvador, Argentina and Mexico; and 7% in Colombia, Costa Rica and Peru. These are gross rates of return: i.e., they do not deduct the cost of the commission, so that the net return will be lower: for example, the rates were 10.4% gross and 7.95% net in the case of Mexico. In 1981-2000, the gross rate of return of the pension fund in Chile averaged 11.9 percentage points less than the Selective Share Price Index (IPSA) of the Santiago Stock Exchange and 3.8 points more than the average interest rate on deposits, but with much greater volatility (Acuña and Iglesias, 2001). In 1993-2000, the pension fund in Peru had an average rate of return below that of bank deposits or Brady Bonds (Gill, Packard and Yermo, 2003).

The foregoing figures refer to the average for the whole period since the reform came into effect, but if we take only the period up to the mid-1990s the average is much higher, while for the period since 1995 it is much lower, because of the 1995, 1998 and 2001 economic and stock exchange crises. Thus, for example, the average rate of return in Chile was 13.8% in 1981-1994, compared with 4.4% in 1995-2002 and negative average rates of -2.5% in 1995 and -1.1% in 1998 (SAFP, 2002a and 2003). In Argentina, the average was 19.7% in 1994-1997, compared with 7.2% from mid-1997 to mid-2001 and negative rates (-13.7%) from December 2000 to December 2001 (SAFJP, 2003a and 2003b). These fluctuations in rates of return involve a serious risk: if the insured person retires at a peak period in the securities market, his pension will be good, but the amount accumulated in his individual

²² In El Salvador, the real rate of return fell from 14% in 1999 to 2.4% in 2002, mainly because of dollarization and a cut in the interest paid by the State (Mesa-Lago, 2004a).

account may go down considerably during a crisis, especially if this is prolonged (as in Argentina in 2001-2002).

This risk is reduced in mixed models, because they combine two systems: one with guaranteed defined benefits and another with undefined benefits, but more time and research are needed to prove this point, and in any case it requires suitable diversification of the portfolio. The measures suggested in the previous section for the diversification of the portfolio would serve as the basis for ensuring that the rate of return of the fund would be less dependent on the interest rates on public securities, and this would improve the degree of compensation for risks.

9. There is no proof that pensions in the private system are higher than in the public system

The reforms have promised that the private system will pay better pensions than those of the public system, but it is difficult to verify this important promise because of the lack of up-to-date statistics which are comparable between the two systems. Two Chilean experts stated in a study published late in 2001 that "the latest information published by the Office of the Superintendent of Pension Fund Management Companies (AFPS) is for June 1992", that is to say, at that time it was almost ten years out of date. That information indicated that the average levels of private pensions as compared with public ones was as follows in the different categories: 43% higher in old age pensions, 68% higher in disability pensions, 42% higher in widows' pensions, and 9% lower in orphans' pensions (Acuña and Iglesias, 2001, p. 27). These data are partly contradicted by the following data²³ on the average level of private pensions (March 2002) as compared with the average for public pensions (December 2001): private old age pensions (63% of all pensions) were 24% lower than public ones; disability pensions (7% of the total) were 15% higher; survivors' pensions (28% of the total) were 110% higher, and the weighted average for all private pensions was only 3% higher than the corresponding average for public pensions.

In Argentina, the two statistical publications of the supervisory body do not include figures on the level of pensions in the private system. Moreover, projections

indicate that the changes made during the 2001-2002 crisis (including the halving of contributions and the conversion of financial instruments expressed in dollars into devalued pesos) will reduce the benefits of an average pensioner with 30 years of contributions by 65% (ILO, 2002a). In Colombia, public pensions have a higher rate of return than capital in the private system, which is one of the reasons why the majority of insured persons have stayed in the public system (Kleinjans, 2004).

It is too soon to predict whether private pensions will be higher than public ones in the future, because the private system is not yet mature: in 2002 it paid only 20% of total pensions in Chile. It is relatively easy to determine the replacement rate in the closed public system, since it is based on defined benefits (in Chile it was estimated that it was between 61% and 80% in 2000), but it is much more difficult to determine what that rate will be in the private system, since it depends on multiple variables: age of entry into employment, growth rate of wages, density of contributions and rate of return on the pension fund, for example. Simulations made in Chile, based on different assumptions for those variables, display enormous differences in their results (Bertranou and Arenas de Mesa, 2003). In 1988-2001 the lifetime income received showed considerable variations from one year to another, due to the different replacement rates obtained by the different cohorts as a result of the unstable interest rates prevailing in that period (Gill, Packard and Yermo, 2003).

In Chile, the beneficiaries receiving the minimum pension (in both the public and private systems together) amounted to 43% of the total number of pensioners in the two systems in the year 2000; the minimum pension was equivalent on average to 70% of the minimum wage and 24% of the average wage in the private system; both percentages had shown a downward trend between 1990 and 2000. It is estimated that approximately half of the affiliates of the private system (35% of the men and 60% of the women) will receive a minimum pension (Arenas de Mesa and Hernández, 2001). Surveys made in Argentina in 2001 indicate that, in the population of economically active age, 33% of the men and 45% of the women had little or no hope of fulfilling the requirements for obtaining a minimum pension (Bertranou and Arenas de Mesa, 2003). Based on surveys carried out in the metropolitan areas of Santiago and Lima in 2000, the World Bank estimates that in Chile 30% of the male and 50% of the female affiliates do not comply with the requirements for

²³ Based on statistics for 2001 provided to the author by the National Institute of Social Security (INP) and data in SAFF (2002a).

receiving a minimum pension, while in Peru the corresponding percentages were 30% and 60%, but the gap against gaining access was greater than in Chile (Gill, Packard and Yermo, 2003). These percentages would have been even higher if the surveys had been on a national scale and included rural and smaller urban areas.

Historical statistical series should be published comparing the averages for private and public pensions broken down by categories. Comparative research is also needed on the replacement rates in the private and public systems.

10. Increase in gender-related inequity

Structural reforms and private systems have accentuated gender-related inequity. There is information from various countries that shows that women have smaller social security coverage than men and that their pensions are smaller due to causes both outside and within the social security system. The external causes correspond to labour-related characteristics of women such as: their lower rate of labour participation and higher rate of unemployment than those of men, wage discrimination, their proportionately greater employment in unskilled work (domestic service, the informal sector, part-time work and independent work at home without a contract); furthermore, such occupations are poorly paid and are usually not covered by social security. The result is that women accumulate fewer contributions than men during their working life and therefore have a lower density of contributions. On the other hand, the life expectancy of women is between four and five years more than that of men, so that the period their pensions have to cover is longer (Bertranou and Arenas de Mesa, 2003; Mesa-Lago, 2004a).

The causes of the gender-related inequity stemming from within the social security system are to be found in both the public and the private systems. A problem common to both systems is that women often retire earlier than men: five years earlier, for example, in five private systems. This, together with their greater life expectancy at birth, means that women draw their pensions for between nine and ten years longer than men, on average. The private systems accentuate the gender inequity in three ways: i) they demand a minimum number of contributions in order to receive the minimum pension (20 years in Chile and 25 years in El Salvador, for example), and most of them have increased the number of years of

contributions required in order to obtain a pension (from 15 to 25-30 years in the Dominican Republic, for example), thus making it even more difficult for women to obtain pensions; ii) they base the pension on the contributions made throughout the entire active working life, instead of only taking into account the last few years, as the public systems do, which adversely affects women because their contribution density is lower than that of men; and iii) they apply mortality tables which are differentiated by gender in respect of lifetime incomes and programmed withdrawals, so that the amount accumulated in the individual account is divided by the average life expectancy; consequently, women's pensions are lower than those of men, and even more so if they retire earlier (although there is some degree of compensation in the case of married women, since the lifetime income takes into account the life expectancy of the spouse). It is argued that this form of treatment is actually fairer, because it avoids cross-subsidies between the sexes, but it is not fairer when one takes into account the fact that women pay the whole cost of raising their children, because Latin American pension systems do not award any credits for that work (in Chile, the pre-reform pension legislation granted women one year for each live child). A positive measure in the reforms has been the equalization of the normal retirement age for both sexes in seven of the countries (Bolivia, Costa Rica, Ecuador, Mexico, Nicaragua, the Dominican Republic and Uruguay), which makes it easier for women to accumulate more contributions and a larger fund in their individual accounts, for distribution over a retirement period which is five years shorter. This does not compensate for the longer life expectancy of women, however.

The combined effect of the above factors on differences between the sexes may be seen in the case of Chile: in 2001-2002, for example, the amount accumulated in the individual accounts of women was only between 32% and 46% of that accumulated by men; the replacement rate of women was between 52% and 57%, while the rate for men was between 81% and 86%, and the average pension of women retiring at 60 was 60% of that of men, or 87% if they retired at 65 (SAFP, 2002b; Bertranou and Arenas de Mesa, 2003). According to the World Bank, in all the countries which have made pension reforms, women continue to obtain lower rates of return than men (Gill, Packard and Yermo, 2003, pp. 62-64). In theory, mixed systems should tend to make up for gender inequity more than substitutive systems, depending on the relative

importance of the two pillars, because the first (public) pillar would reduce such inequity, while the second (private) pillar would accentuate it. In Costa Rica, the compensatory effect should be greater than in other countries, because the pension paid by the first pillar is the main element and the second pillar is supplementary to it. The opposite would be the case in Argentina.

Policies to reduce gender inequities should be aimed at the root causes of these problems. With regard to the external causes, measures should be taken to promote stable and productive employment for women; to increase investment in women's training at the national and the enterprise levels; to ensure social security coverage in the occupations in which most women work (domestic service, independent work); to ensure that the principle of equal pay for equal work is rigorously applied; to ensure that contributions continue to be paid during maternity leave or periods when women are receiving unemployment benefits (where these exist); to permit shortening of the prenatal period of maternity leave and a corresponding extension of the postnatal period, in order to give women more time to look after their newly-born children; and to make it obligatory to provide day nurseries in firms above a certain size or to establish a public programme to provide these services at reduced rates through fiscal contributions. With regard to the causes within the pension system, measures should be taken to equalize the normal age of retirement in countries where it is still different for men and women, raising that age for women gradually over a period of time when necessary, and to allow early retirement subject to the payment of a smaller pension calculated actuarially.

11. Disappearance or erosion of solidarity

In the private system, the principle of solidarity is replaced by the principle of strict equivalence between the contributions paid and the pension received, thus reproducing the inequalities existing in the labour market and in wages, eliminating inter-generational income distribution, and transferring the redistributive function to the State (i.e., outside the pension system) through the guaranteeing of a minimum pension and the granting of social assistance pensions.

The reforms have introduced (or in some cases maintained) redistribution mechanisms which are mostly of a regressive nature: i) exclusion of insured persons who are in separate special programmes (the

armed forces in almost all the countries and public employees in some); these insured persons generally have middle- or high-level incomes, do not contribute under the general system, but enjoy generous benefits and fiscal subsidies; ii) the virtual exclusion in most countries of independent workers and other groups in the low-income informal sector, as well as the poor; iii) accentuation of gender inequalities; iv) elimination of the employer's contribution and an increase in that of the worker; v) a greater proportional reduction in the tax burden of high-income insured persons, because of the deferment of tax payments on the contributions they deposit in their individual accounts; vi) the very high management costs of the system, which are paid for entirely by the insured persons and generate profits for the management companies but reduce the amount deposited in the individual account and future pension, affecting in particular low-income affiliates; vii) the fixed commission charged by some management companies, which represents a larger proportion of the contributions of low-income workers than those of high-income affiliates, thereby disproportionately reducing the deposit in the individual account and the size of the pension of low-income workers; viii) the inter-generational inequalities caused by the subsidy paid by the older affiliates, who have borne the brunt of the cost of installing the new system, to the younger affiliates, who bear a smaller burden, and ix) the fiscal cost of the transition, which implies a transfer to the middle- and high-income groups of insured persons which is financed from national taxes, often levied on consumption and paid by the whole population, including those who are not insured; this effect becomes even worse as coverage goes down. See in this respect Arenas de Mesa (1999); SAFF (2002b); Gill, Packard and Yermo (2003); Kiefer (2004), and Mesa-Lago (2004a).

The elements of solidarity and progressive redistribution effects claimed for the system are usually exogenous to it. The minimum pension financed by the State and financed from national taxes does not generate redistribution among the affiliates of the private system, but between taxpayers and insured persons who do not meet the requirements for receiving such a pension; a considerable part of the current insured persons will make use of this guarantee, and their pensions will not usually be in line with the cost of living. Social assistance pensions, which are also the responsibility of the State, are only granted in a third of the countries that have made structural reforms, and while they have a progressive effect (reduction of

poverty) this is not financed by those insured in the private system but by the whole population. In 1981-2000, the fiscal cost of the social security system in Chile averaged 5.7% of annual GDP, of which 5.3% was to cover the cost of the transition (operating deficit, recognition bond and minimum pensions) but only 0.4% was for social assistance pensions (Arenas de Mesa and Benavides, 2003). There are two important exceptions. In Colombia, insured persons whose wages are four times the minimum wage pay a contribution of 1% to the Pension Solidarity Fund (with an additional contribution of 0.2% to 1%, in proportion as income rises from 16 to 20 times the minimum wage); the first 1% is designed to extend the coverage of independents and other groups whose socio-economic situation prevents them from forming part of the social security system, while the remaining percentage is intended to cover social assistance pensions (LRP, 2002). In the Dominican Republic, employers pay 0.4% of the payroll into a Minimum Pension Solidarity Fund which is to finance minimum pensions under the contributory system (LDSS, 2001). The equalization of access conditions is positive, but exceptions have been made for some privileged systems, which do not contribute under the general system, enjoy generous benefits, and receive fiscal subsidies; it also leaves out the vast

majority of independent workers and other low-income groups.

The absence of solidarity can be offset by integrating the privileged groups into the general system or eliminating the fiscal subsidies they receive, using these resources to help to incorporate low-income workers, to extend the coverage of social assistance pensions, and to adopt the measures suggested earlier to reduce gender inequity. Countries could also introduce a solidary contribution to be paid by high-income workers and/or employers (as in Colombia or in the law approved in the Dominican Republic) or a solidary contribution levied on very high pensions (as provided for in the law which is in the course of approval in Brazil); the resources thus collected would be used to extend the coverage of low-income groups and social assistance pensions. The flat-rate commission charged by some pension fund management companies should be eliminated, and the possibility that the cost of commissions should be shared with employers (as in Colombia) should be discussed. The high fiscal costs of structural reform should be offset by the need for resources to provide social protection for low-income and poor groups.

(Original: Spanish)

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