

**TRANSITION ISSUES AND DEEPENING PENSION REFORMS:
CASES IN FOUR COUNTRIES**

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Working Paper

This working paper is being published with the sole objective of contributing to the debate on a topic of importance to the region, and to elicit comments and suggestions from interested parties. This paper has not gone through the Department's peer review process or undergone consideration by the SDS Management Team. As such, it does not reflect the official position of the Inter-American Development Bank.

**Washington D.C.
December, 2004**

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Foreword

The reform of the pension systems in Latin America and the Caribbean has been among the most profound and extensive of any region. During the decade of the 1990s and early 2000s, eleven (11) countries in the LAC region reformed their pension systems creating a funded second pension pillar with defined contributions and private management.¹

In 2003, perceiving the need to better understand the successes and failures of the first-generation of pension reforms, the Bank commissioned background studies of the reforms in four of the countries, Argentina, Bolivia, Chile and Mexico.² All of the background studies indicated the need to further analyze and to better understand the experiences thus far in order to be able to make sound policy decisions in the future.

In December of 2003, the Bank held a workshop that discussed the findings of the individual background studies. This paper summarizes the lessons learned from these four background studies and supplements and organizes the contents with additional research, particularly in the areas of data analysis, regulation, strengthening of existing institutions, fiscal discipline, revenues and incentives, capital markets impact, commissions' structure, investment liberalization, coverage and creating a savings culture. In this context, the purpose of the Bank's December 2004 Pension Forum is to begin to provide insights which would help shape the parameters of second-generation reforms and provide lessons learned for countries that have not yet begun their reforms.

¹ These countries are: Argentina, Bolivia, Chile, Colombia, Dominican Republic, El Salvador, Mexico, Nicaragua and Perú. The reforms basically followed one of three structures: the substitution of the social security system with individual funded retirement schemes: Chile (1981), Bolivia (1997); El Salvador (1998); Dominican Republic, (2003-2005) and Nicaragua (2002-2004); a parallel system where one must choose the new capitalized retirement schemes or the public retirement system: Peru (1993) and Colombia (1994); and a mixed system where both models exist and complement each other Argentina (1994); México (1997); Uruguay (1996) and Costa Rica (2001).

² The background studies are: *El sistema de pensiones en Argentina* by Héctor, Bruno and Julia Domeniconi, Hugo Bertin and Andrea Perrotto; *La reforma de las pensiones en Bolivia* by Helga Salinas; *El sistema de pensiones en Chile*, Julio Bustamante Heraldo; and *Los sistemas de pensiones en Mexico*, Salvador Gerardo Alonso y Caloca and *Informe Final*, Francia Breve.

Executive Summary

The reform of the pension systems in Latin America and the Caribbean during the 1990s, and in Chile's case 1981, has been among the most profound and extensive of any region. There is evidence that some aspects of this reform are not functioning well, but on the other hand there are other aspects that have been quite successful. Because of their depth, the pension reforms in the region need to be assessed in the context of a long-term agenda that is fine-tuned periodically and perfected over time to insure that they are able to attain their original objectives.

The actual performance of the funded pillar and privately managed pension system in the four countries shows mixed results but it does not necessarily lead to a negative conclusion about introducing the funded pillar to correct the imbalances of the public PAYG system. What the experience seems to indicate is the need for an appropriately designed savings pillar for workers with mid- or high incomes, which would supplement minimum pensions for most workers.

In retrospect, the four background studies point to several important aspects of the design and its implementation, which provide insights for the future and a policy agenda for the second-generation reforms. First, special consideration needs to be given to very low-income groups and those who may not qualify for the private pension system because the contribution level of this pillar is too expensive for them. Thus, safety net arrangements should be considered to provide for their old age needs. Second, sound data and an actuarial evaluation is

essential for the reforms and could well be revisited in the future, particularly in Bolivia where this has posed a difficult stumbling block. Finally, monitoring, evaluation and assessments of client satisfaction will gain increasing importance as the pension systems become more sophisticated.

The particular characteristics of a country are essential ingredients to any reform of the pension system. The importance of considering distance, topography and quality of data is clearly borne out by the experience in implementing the reform program in Bolivia where the final list of beneficiaries has still to be finalized several years after the reform. Likewise, the need to consider the composition of the labor force, especially where there is rampant informality, as is the case in Argentina, is extremely important since otherwise contributions will be much lower than anticipated. Finally, the need to consider the size of the economy is essential to determine if a funded pillar would be viable, both in terms of contributions and investment options within the country. In the case of Bolivia, the reformers considered this factor and as a result allowed a two-fund monopoly to exist that has effectively reduced marketing costs and made the system affordable in terms of the level of commissions.

An assessment of existing institutions and their strengths and weaknesses with a plan for improving them based on their new responsibilities would have made the reform transition period easier. This is clearly apparent in the functioning of Argentina's *Administración Nacional de Seguridad*

Social (ANSES), Mexico's *Instituto Mexicano de Seguro Social (IMSS)* and Bolivia's *Dirección Nacional de Pensiones* which all experienced difficulties with their expanded roles. Only Chile and its *Servicio de Seguro Social* planned well for this institutional transition. With respect to new institutions, the supervisory and regulatory frameworks established in all four countries have evolved over time and been extensively fine-tuned, as the reforms have unfolded. Overall, the institutional arrangements for supervision and regulation of the new pension fund industry have made financial services more transparent and while there have been some difficulties the framework is working well.

Fiscal costs in Argentina and Bolivia turned out to be far greater than anticipated. First, the original reform model was not adhered to and numerous changes were made to the system without a further analysis of the fiscal implications. Also Bolivia and Argentina did not accompany their pension reform with a well-thought out fiscal plan to increase revenues and control expenditures. Chile got high marks in both areas and in particular, its fiscal discipline is something that would merit further study. Finally, fiscal incentives for savings deserve serious consideration for the second-generation reforms in all countries.

The pension fund reform has undoubtedly had a positive impact on the financial markets of the four countries studied both in terms of their growth and the transparency of supervision and regulation. The capital markets effect has not been so significant especially with respect to the growth of the equities portfolio for reasons associated with corporate governance, contract law and other factors, which have still to be tackled. Finally, the verdict is still out on the creation of a savings and investment culture.

The analysis of the four countries' experiences suggests that the level of contributions in some cases is too high, particularly for the poor, leaving many workers and their families without old age coverage. High contributions rates are a disincentive for workers to save for their retirement and participate in the pension system. The high level of the commissions is not linked to performance results of the pension fund managers. countries' experiences In fact, the high level of commissions results in a lower amount of the contribution by workers that is actually invested. Moreover, it reduces the potential accumulated investments by contributing workers to the detriment of their old age security. Reductions in the commissions' structure could enhance and make it more attractive for workers to save and increase pension coverage.

Portfolio diversification and liberalization of investment guidelines to reduce exposure to sovereign risk is a theme that needs to be addressed in the context of the second-generation reforms. But the second part of the equation, restoring confidence in the pension system and assuring its citizens that the government will act responsibly encompasses a plethora of measures in areas other than pension reform.

Participation rates have increased since the reforms however the level of contributions has not kept pace and even declined in the instances of Argentina and Bolivia. Several factors account for this. First the high level of the contribution rates may discourage workers whose earning power is less. Second, there is a general lack of confidence created by many years of macroeconomic instability that need be overcome. A savings culture has not resulted from the creation of the pension system and further consideration needs to be given to this.

Chile, which weathered macroeconomic instability and established a program of fiscal discipline that worked, has been more successful in increasing coverage and probably of raising the confidence level of its citizens.

Chapter I. Motivation, Design and Implementation of the Pension Reform.

A. Pre-reform in Latin America and the Caribbean

Traditionally social security in Latin America has been associated with workers' demands for providing retirement benefits. Most of these movements to establish social security took place in the early 1900s with the inflow of immigrants from Europe. These immigrants were likely knowledgeable about the formal development of social security institutions in Europe, especially those introduced in Germany in the nineteenth century.

In Uruguay, for example, an employees' fund with a payroll contribution (*Montepio*) was established in 1838, extended to the armed forces in 1884 and to teachers in 1896, when the first fund ("*caja*") was created. Similar developments occurred in Argentina in 1904 when the first national program for public sector workers was established. In the 1920s the system was expanded to cover workers in the private sector and in the 1940s many of these funds were formed based on union or professional association.

In Chile, the "*Cajas de Prevision*" gained momentum in 1924 with the creation of mandatory workers insurance to provide medical, health and retirement benefits. By 1979 there were 32 "*cajas*" with 2.3 million contributing members. In Mexico, there is also a long tradition of reforms targeted toward the poor which date back to the Mexican revolution including the *IMSS* and individual funds or "*cajas*." Progressively the system incorporated public workers under *Instituto de Seguro Social de los Trabajadores del Estado (ISSTE)* and other groups.

By the last decade of the twentieth century, most of these social security systems were under stress. This prompted Chile to begin its reforms in 1981, Argentina in 1994, and Bolivia and Mexico in 1997.

B. The Reform

1. Motivation and Design

Consequently, in all four countries reviewed in the background studies, the reform of the pension system was motivated by a growing fiscal deficit, concerns for the progressive deterioration of the ratio of the social security equation, the ageing population relative to the labor force, which made more difficult the fulfillment of the promises made for old age security, and the inequalities inherent in the benefits in the social security systems. In virtually all these cases, it would have been extremely difficult to adjust the existing systems to address these concerns due to political commitments and promises that had been made, regarding the benefit structure and contribution level.

In the planning stages of the reforms in all four countries, several models were considered: i) retaining the old pay as you go (PAYG) system but with special treatment for groups, such as the military; ii) establishing a new funded second pillar which would replace the PAYG as in Chile, Bolivia and Mexico, and (iii) establishing a second funded pillar but keeping the PAYG as in Argentina. However, it should be mentioned that at the time of the reforms in Argentina, Bolivia and Mexico, more than a decade had past since Chile had begun the reform of its social security system. Thus, Chile's model was the one most discussed by other reformers and policy makers in the region; it was the most emulated and Chilean pension experts were retained as advisors to the other countries.

The common denominator in all four countries was to change the PAYG system to a private funded pillar administered by professional pension fund managers with defined contributions and undefined benefits. One model, which was not fully considered, was establishing a non-contributory pillar for the very poor, who could not participate or qualify in either system because of very low earnings or for other factors. In particular, it was often difficult for women to qualify because they dropped out of the workforce to raise children and when they returned, they often received lower salaries. This is gaining importance as the percentage of women participating in the labor force increases. Also, it has meant that they either would not satisfy the criteria of years of contributions, or their contributions would be too low to provide an adequate income in old age.

The background studies indicate that consideration for poverty and gender has especially been a problem in Chile, Bolivia and Argentina.³ Moreover, in Argentina, as a result of the economic crisis of 2001, the income gap and increase in inequality has grown disproportionately causing it to become one of the highest in Latin America. About 50% of Argentines would be ranked below the poverty line as a result of widespread unemployment and the drop in real income. Over a third of the population 65 years and older do not have a pension or other source of income.⁴ These important elements were not adequately reflected in the design of the pension reforms and will undoubtedly be an area of focus in the second-generation of reforms.

In retrospect all of the background studies recommend measures that could have been undertaken during the planning stages, which would have greatly improved the systems, made their implementation easier, helped to create broader eventual acceptance by the citizenry and possibly have expanded coverage. The first and most obvious of these measures was the need to undertake a thorough diagnostic of the retirement system. This diagnostic would need to reflect existing commitments to the citizenry, assets, if any, the quality of the pension administration and institutions in place (PAYG and several "cajas"), and the timeliness and quality of the record

³ Possibly it has been less visible in Mexico since it has various pillars providing retirement coverage.

⁴ Rofman Rafael, *The Economic Crisis in Argentina and its Impact on the Pension System*,⁴ brings attention to a particular consideration in the case of Argentina: "Having a pension system based exclusively on a contributive scheme in a society whose labor market is mostly informal, and financing it with general revenue is not a reasonable social policy"....and ..."is not consistent with the goal of providing basic protection to all aged individuals"...

keeping of institutions responsible for tracking worker's contributions and years of employment.

In the instance of Argentina, which sought to consolidate all provincial pension systems into the reformed system, this analysis was particularly germane. Several provinces posed particularly difficult problems because of the high level of pensions received by politicians, judicial personnel and bankers. The province of La Rioja was an example of the prevalence of this type of highly paid public employment and it chose not to join the reformed system.

Another key aspect of the planning stage was access to good baseline data. This is especially important as became apparent in Bolivia where the estimate of future retirees was short of the mark. This considerably increased expenditures and coupled with other factors, widened the fiscal gap so that by 2002 it had reached troubling proportions. Bolivia's case is somewhat unique because of its demographics, with an *Aymara* and *Quechua* speaking population, and its topography that has kept some parts of the country relatively isolated, which have made good data collection a daunting task.

The diagnostic would be followed with the development of a solid actuarial model that included sufficient variables to allow for fine-tuning the system as it is rolled out. While all of the countries undertook assessments or diagnostics, they did not have good actuarial models that could be adjusted to assess the impact of later changes. This made it virtually impossible to predict the impact of what appeared to be minor changes made during the implementation of the reform, e.g., a small increase in the benefit level, which disproportionately increased the fiscal deficit.

At the same time, the four background studies recommended that the pension system needs to be monitored and reviewed carefully throughout all stages of implementation. In the case of Bolivia, there were so many changes made to the original proposal that the costs and benefits were no longer valid. Several groups including the military (that had its own pension system), were added to the reforms, the base pension was increased and costs skyrocketed increasing the fiscal deficit rather than reducing it. Ex post evaluation and assessing client satisfaction was not included in any of the designs but it is highlighted because it could provide useful insights for policy makers in the future. If a good actuarial model has been used then it can be fine-tuned using the monitoring feedback to adjust the system as it is rolled out.

In retrospect the four background studies pointed to several important aspects of the design and its implementation, which provide insights for the future and for the second-generation reforms. First, special consideration needs to be given to very low-income groups and those who may not qualify for the private pension system. Second, sound data and an actuarial evaluation is essential and both could well be revisited in the future, particularly in Bolivia where this has posed a difficult stumbling block. Finally, monitoring and evaluation and assessments of client satisfaction will gain increasing importance as the pension systems become more sophisticated.

2. Adaptability to Changing Circumstances

A fair conclusion of the studies is that more attention needs to be given to the adaptability of the funded pillar and its ability to respond to changing circumstances, including political ones while remaining resilient to changes that could undermine its integrity. In Chile, the transition from a military government to a democratic one led to a number of legal and other changes. These changes served to institutionalize and strengthen the funded pillar. One of the measures introduced was that changes to the pension system in the future would require a majority vote in the legislature. Chile's legal structure and the general acceptance of the reform facilitated rather than impeded this process.

If Bolivia and Argentina had this protection, then subsequent governments would have found it difficult to make changes by decrees, bypassing the legislative system. Modifications to the original reform plan and subsequent changes brought about by the economic crisis in Argentina are affecting the pension system. In other words, the experience with the introduction of changes to the basic reforms has had mixed results.

3. Developing Consensus for the Reform

The studies lead to the conclusion that political consensus is a necessary condition for reform. To garner support, the reformers need to enlist key sectors of society before enacting the reform. Political legitimacy has proven to be essential for the consolidation of the reform, irrespective of political changes. Some political consensus is evident in each of the four background studies but the approaches used were different. In Chile, the military government in power supported the reform fully. In Mexico, one political party (PRI) dominated the political arena with the backing of the labor union (CGT). In Argentina, the administration was strongly behind the reform but other groups, such as labor and some of the provincial governments, were not. Lastly, in Bolivia, the executive branch of government managed to get the support of the political parties for the reform. The studies also evidenced the importance of identifying opposition groups such as labor unions, and discussing the reforms with a strategy for winning their support.. All four cases illustrate this point with variations.

Finally, the business community viewed the reform as advantageous because the private pension pillar could have the potential to expand the capital markets and therein offer broader financial opportunities. Bankers, insurance companies and potential pension fund managers also saw the reform as opening opportunities for

business. In both Chile and Argentina recognition bonds were part of the transition. Furthermore, Chile and Bolivia offered special incentives such as a partial compensatory salary increase (Chile) or the shares of the *BONOSOL* (Bolivia).

Finally, the background studies indicate that the media can have an important role in the reform process. It can heighten awareness and explain the potential benefits to workers. In particular, Chile made broad use of the media with good results. It established a fairly broad workers' understanding of the system although it must be noted that the average education level is high. In Argentina and Bolivia, a media intensive approach was not developed and there appeared to be a stronger reliance on forging alliances to create a political pact. In Mexico, the strength of the single party PRI and its relationships with the CGT served this purpose. In the latter three countries there is some evidence that workers do not fully understand their pension systems.

The Bonosol

In concert with the Pension Reform Law of November 1996 that terminated the old social security system and provided for the management of pension fund assets by professional investors Bolivia created an annuity for Bolivian citizens, the *Bonosol (Bono Solidario)*. The Bonosol was comprised of shares from the state-owned companies that were capitalized/privatized in 1995. Bonosol is to be paid to all Bolivians who reached the age of 65 and its main purpose was to benefit the poor and the rural population.

4. Country Characteristics: Their Influence on the Reform

The background studies highlight an important lesson arising from the design of the reform and the funded pillar, that of fully reflecting the country's special characteristics. As can be seen in the table, these characteristics vary widely in each country and were important

considerations in structuring the pension system. Among the considerations that need to be reflected are: the size of the economy, its geography and topography, demographics and the potential market for the funded pillar.

Table No.1 Country Characteristics (1999)

| Concept | Chile | Bolivia | Argentina | Mexico |
|--|--------|---------|-----------|--------|
| Population (millions) | 15 | 8 | 37 | 97 |
| Population density per sq. km. | 21 | 8 | 14 | 54 |
| Laborforce (millions) | 4 | 3 | 11 | 40 |
| Female % of labor force | 33% | 38% | 33% | 49% |
| GNP per cap. (US\$) | 7.6 | 1,010 | 4,740 | 4,400 |
| Central Govt.Finances Overall deficit (% of GDP) | 0.40% | 2.30% | 1.50% | 1.10% |
| Social expenditures (% of total expenditures) | 71.30% | 51.20% | 63.60% | 48.10% |
| Govt. Capital expenditures (% of GDP) | 3.60% | 3.40% | 1.20% | 1.90% |

Source: World Bank Development Report 2000/2001

Each background study provided examples that underscore the need to adequately reflect local conditions in the design of the reformed pension systems. One of the most obvious considerations is the need to assess the potential market for the funded

pillar, considering the size of the population and percentage participating in the economically active labor force and their status, i.e., formal, informal, urban and rural, seasonal, family workers. Thus, this was a major consideration in the case of Bolivia, which had a relatively small population size and a total workforce of about 2.5 million, therefore a lower level of contributions than might be attractive to professional fund managers. In light of this consideration, the reformers decided to accept the bids of only two fund managers, to divide the country between them and to transfer the shares (the *Bonosol*) to them for management. This was intended to provide the fund managers with an immediate level of investment (the *Bonosol*), create a size which would attract high-quality fund managers and eliminate the need for marketing costs by creating a virtual monopoly. The elimination of marketing costs was passed on to the consumer in the form of reduced fees. Recently, with the merger of the banking side of these two pension fund administrators, Bolivia effectively has only one fund manager.⁵

It is worth mentioning that in 2002 Bolivia had plans to add another pension fund manager to the system but a bidding process resulted in a very low level of interest in entering the market, partially because of its small size. In “Pension reform in the English speaking Caribbean,” the size of the economies and labor force has been an important consideration in the discussion over establishing private funded pension systems.

Another consideration was the reliability of data given local conditions, i.e., problems in collecting, collating, maintaining and disseminating. Bolivia’s comparatively small population is dispersed in its magnificent, but geographically challenging topography. The reformers were concerned over the reliability of the data for these reasons as well as the high percentage of native peoples who might have cultural reasons for avoiding demographic surveys, census and polling records. They made the best assessment that they could based on the data but it has proven to be flawed. Almost seven years after the reform, Bolivia has still not been able to reconcile the eligible candidates to the *Bonosol*.

An additional element is the need to reflect the structure and composition of labor (formal, informal urban and rural, seasonal, family workers), the employment and unemployment situation and the percentage of the labor force, which is able to participate in a pension plan. Both Argentina and Bolivia have large informal markets, which imply that the number of workers making contributions will automatically be lower unless encouragement can be provided to attract workers into the formal economy. In fact, in Argentina, informality has become even more pronounced with the economic crisis in 2001. The informal sector, which is largely comprised of small companies and micro-entrepreneurs, has grown tremendously over the past few years. A recent World Bank study estimated that about one-quarter of all economic activity in Argentina is performed in the informal economy, while

⁵ Originally BBV and Argentaria, now BBVA.

some government agencies estimate that informality is higher and growing. A 2002 estimate placed Argentine informality at over 40 percent of all economic activity.⁶

The particular characteristics of a country are essential ingredients to any reform of the pension system. The importance of considering distance, topography and quality of data is clearly borne out by the experience in implementing the reform program in Bolivia where the final list of beneficiaries has still to be finalized several years after the reform. Likewise, the need to consider the composition of the labor force, especially where there is rampant informality as is the case in Argentina, is extremely important since contributions will be much lower than anticipated. Finally, the need to consider the size of the economy is essential to determine if a funded pillar would be viable, both in the form of contributions and of investment options within the country. In the case of Bolivia, the reformers considered this factor and as a result allowed a two fund monopoly to exist that has effectively reduced marketing costs and made the system affordable in terms of the level of commissions.

Chapter II. Institutional Structure for Reform: Prerequisites for Success

A. Existing Institutional Setup and the Reform.

In general, the institutions, which managed the public pillar prior to the reform, continued as part of the system during and after the reform was implemented. This should have required a detailed assessment of the existing institutions' functions, new responsibilities, staff, capabilities, budget and other factors because the reform required new institutional arrangements. But in those cases where the public pillar remained, for the most part these institutions were required to continue to provide services to workers who had retired as well as those who had the option of staying in the public pillar, as was the case in Argentina and Mexico. In the case of Chile, while the public pillar disappeared, its *Servicio de Seguro Social* was responsible for transferring contribution records and managing recognition bonds (*bonos de reconocimiento*) which acknowledged workers past contributions. It seems to have performed well.

The existing institutions were also required to transfer the historical contribution records of those workers moving to the funded, privately managed pillar in Argentina and Bolivia. However, in cases like that of Argentina, the existing national social security administration (*Administración Nacional de Seguridad Social, ANSES*) continued to maintain records for all retirees of both pillars. Moreover, *ANSES* was required to verify the employment record and contributions before a private pension fund retiree could receive payments. Until recently, this procedure could take up to six months.

In the case of Bolivia, Argentina and Chile some of the sector specific retirement funds (*cajas*) such as those for the military and employees of the manufacturing

⁶ Dirección General de Estudios y Formulación de Políticas de Empleo and IERAL.

industry, power sector and railways were consolidated through the reform. This implied substantial additional burdens for the government institutions, that were not computerized and had warehouses filled with records.

The case in Bolivia was even more acute in that the institution, the *Dirección Nacional de Pensiones* has still not been able to ascertain clear records of all retirees and contributors to the pension system (before and after the reforms). The impact of this is that there are still discrepancies over who was eligible to retire under the pre-reform system and who was eligible for the previously mentioned *Bonosol*.

In the case of Mexico, the background paper indicates that the reform has not been as far-reaching as in the other three countries as it has encompassed only persons previously covered by the *Instituto Mexicano de Seguro Social (IMSS)*. The reform in Mexico added a second pillar on top of the existing *IMSS* for private sector workers. Records for this new pillar are unreliable so far as shown in Table 2. Of 20.4 million workers registered with the *Administradoras de Fondos para el Retiro (AFORES)* only 6.3 million or 31 % are contributing. Of the 10.2 million assigned to an *AFORES*, only 1.5 million or 14 percent are contributing to the system. It is unclear from the background study why this situation has occurred and so few workers appear to be contributing but it indicates that the institutional record keeping is not adequate. This needs to be revisited in the second-generation of reforms.

Also, at present like the other three countries there is no portability from one system to another. However in Mexico this is a larger issue because there are several pension options between the public and private sector, which workers could choose. Improving portability is undoubtedly an element for the second-generation reforms.

| Workers | Registered | | Assigned ⁷ | |
|---|-------------------|----------|------------------------------|----------|
| | millions | % | millions | % |
| Active (Contributing) ⁸ | 6.3 | 31 | 1.5 | 14 |
| Inactive ⁹ | 14.1 | 69 | 8.8 | 86 |
| Total | 20.4 | 100 % | 10.3 | 100% |
| <i>Source:</i> Alonso y Caloca, Salvador Gerardo. Background paper for IDB: "Sistema de Pensiones en Mexico," Dec. 2003 | | | | |

B. Institution Building Required by a Funded Pillar

The introduction of a fully funded private pillar, the transfer of revenues from the public to the private pillar, and the investment of these resources by private pension fund managers had a significant potential impact on the development of domestic

⁷ Workers who did not select a pension fund and thus were allocated to one.

⁸ Millions of workers that have paid all of their contributions up until December 2003.

⁹ Millions of workers who have made no contribution over the past 12 months ending December 2003.

capital markets. At the same time, it had a considerable effect on the institutional arrangements requiring a significant institution building effort particularly in low income, poorly integrated societies.

This, in turn, required a careful diagnostic reflected in the design of the reforms to take into consideration the constraints arising from the level of development of financial institutions, insurance companies and capital markets. It also required consideration of the effectiveness of supervisory institutions and their legal powers to monitor the financial institutions including the newly created pension funds, to liquidate and intervene failing institutions, and to harmonize regulations among financial services.

C. Creating the Regulatory and Supervisory Framework

Strict regulation and supervision of the pension fund managers (*Administradoras de Fondos de Pensiones, AFP* and *AFJPs*) was an essential requirement of the reforms to ensure high-quality performance by pension administrators and maximum protection of retirement savings for old age security. The studies attest to the importance of this institutional requirement and conclude that for the most part the four countries have performed well in this area. At one point pension fund managers were investing in banking paper (*titulos valores*) which had been issued by the financial institutions that were their owners. Clearly, there needs to be Chinese walls between the banking system and the pension funds in such cases and regulators need to issue strict rules prohibiting this.

In general, the pension reforms established a new system of regulatory oversight which coupled with reforms in other financial services have heightened the transparency and sophistication of regulation and supervision in the four countries. The systems of regulatory oversight are still being fine tuned and harmonized with other regulations, guidelines and laws. In Argentina and Mexico, the regulation has become increasingly sophisticated moving toward risk based supervision and identification of potential risks before they become problematical.

Pension regulation and supervision has also had an impact on other financial services such as the insurance industry. For instance, the annuity business in the region has developed fairly recently with the support of the pension framework. In Argentina, because of the difference between a pension annuity and a regular annuity, special regulations have been issued to protect the underlying asset value.

An assessment of existing institutions and their strengths and weaknesses with a plan for improving them based on their new responsibilities would have made the reform transition period easier. This was clearly apparent in Argentina in the case of *ANSES*, Mexico with the *IMSS* and Bolivia with the *Dirección Nacional de Pensiones* which all experienced difficulties with their expanded roles. Only Chile and its *Servicio de Seguro Social* planned well for this institutional transition. The supervisory and regulatory frameworks established in all four countries have evolved over time and been extensively fine-tuned as the reform has rolled out. Overall the institutional arrangements for supervision and regulation of the new pension fund industry has made financial services more transparent and while there have been some difficulties the framework is working well.

Chapter III. Fiscal Discipline and Sustainability

A. An Accurate Assessment of the Fiscal Costs of the Reform.

The experience derived from the four background studies highlights the importance of an accurate assessment of the fiscal costs of the reform and of the economic environment in which they are undertaken. This implies: i) a solid diagnostic of the pension system and its transitional costs including a valuation based on a good actuarial model of the future costs; ii) the need for fiscal discipline; and iii) additional sources of public financing, including fiscal incentives. As discussed later, both Bolivia and Chile had additional income from privatization and capitalization. The four background papers show that only Chile has made a significant reduction in its fiscal deficit.

B. Transitional Fiscal Costs and Contingent Liabilities

Identifying and controlling the transitional costs of moving to two or more pillar systems posed difficulties in all four countries. In concrete terms, the fiscal costs included: first, the current deficit arising from the disequilibrium in the public PAYG (the lower number of contributing workers per retiree or pensioner); second, the operational deficit generated by the loss of contributions from the workers that would switch to the private pillar; third, the recognition bonds for past contributions issued to the workers moving to the private pillar, which require an actuarial assessment; fourth, the fiscal costs of any contingent guaranteed minimum pension to workers who retire in one or both pillars; fifth, the impact of changing parameters while the reform was being implemented such as increasing the minimum pensions or reducing contributions; sixth, the fiscal costs of financing the deficits of special systems that remain outside the reform (military and other professional groups); seventh, the costs of developing uncontested historical records of past worker contributions to avoid corruption or fraud of these records; and eighth, the costs of creating new institutions to regulate the legal framework established with the reform and to reinforce existing institutions with additional responsibilities.

As noted previously, Chile is a good example of an integrated approach to pension reform with strict fiscal management to accommodate the imbalance generated by the loss of contributions to the public pillar. Expenditures were reduced by transferring some responsibilities for covering social expenditures to other government levels (provinces, municipalities). A tax reform introduced the value-added tax system at a rate of 35% to raise revenues. Chile also passed a series of measures supporting fiscal discipline including a prohibition against central bank financing of the government. Finally, Chile enjoyed the benefit of the surplus generated by a non-privatized public corporation: the copper company (*Compania del Cobre, CODELCO*). Although copper prices fluctuated, these surpluses represented a very significant source of income. The combination of these factors resulted in a highly disciplined fiscal transition.

The experience in Argentina contrasts significantly with Chile as its fiscal deficit expanded. First, from 1994 to 2001 revenues to the public pillar managed by *ANSES* dropped 45% due to the transfer of affiliates and their contributions to the funded private pillar (8.7 percent of its affiliates switched). This was accompanied with a reduction in the employer's contribution as well. Second, evasion of contributions increased in association with high levels of taxation and lax tax controls. Third, to reduce unemployment the government attempted to use the contributions rates lowering them as an incentive to encourage employers to retain their employees.¹⁰ Fourth, the Government reduced its tax base by establishing a single tax system for autonomous workers (*monotributistas*). Previously the Government had revenue from three taxes for these workers (a value added tax, tax on earnings, and social security contribution).

For practical purposes, Bolivia too was the antithesis of Chile's strict fiscal management. Instead of the decline in the fiscal deficit that was projected, by 2001 the payments by the Government were more than double the projection made when the pension legislation (*Ley de Pensiones No. 1732*) was drafted in 1996. It had been anticipated at the time of the reform that the discounted value of all future payments from 1997-2060 would amount to US\$ 2.3 billion, and that the long run savings to the Treasury of transitioning to the new pension system would be about US\$ 1.0 billion. Instead, the fiscal deficit has increased as seen in Table 3. By 2002, over 75 percent of the fiscal deficit was explained by the transition costs of the pension system and the deficit had reached 8.7 percent of GDP.

Table 3 Bolivia, Expected vs Actual Payment of Benefits
(millions of US\$)

| Category | 1997 | 1998 | 1999 | 2000 | 2001 |
|-----------------------------|------|-------|-------|------|-------|
| Originally Expected Payment | 226 | 214 | 203 | 193 | 183 |
| Actual Payment | n.a. | 296.4 | 297.5 | 335 | 362.7 |

Source: Dirección de Pensiones (Ministry of Finance).

¹⁰ IDB Background papers, Domeniconi, Héctor, *El Sistema de Pensiones en Argentina*, pp.52.

The fact that the pension reforms failed to attain one of their primary objectives in Bolivia, that of reducing the Government's expenditures, has been cited and used by the reforms' detractors as evidence that the reforms failed. In fact, the reforms have had a far-reaching impact on Bolivian society but the expected fiscal impact is disappointing. There are several major factors that explain the failure to achieve the expected positive fiscal impact.

First, the pension costs of the public pillar increased significantly as the number of pension beneficiaries went up from 124,000 to 157,000 in 2001. The number of potential future retirees was underestimated due to poor data and to the fact that many persons took early retirement. Second, the quality of official records and the database facilitated those who wished to alter birth records in order to qualify for an early pension. Additionally, access to data was also not always straightforward due to the topographical conditions of Bolivia. Third, another aspect of the database difficulties that the government faced was the fact that there was incomplete information on the complementary sector pension funds (e.g. miners fund), and these were added to the pension system. The background study argues that if it had been possible to include the sector funds and agreement had been reached the associated costs would have been lower. Fourth, individuals were granted pensions although they did not meet the requirements, i.e., the required number of past contributions. Third, the military personnel affiliated to COSSMIL were not originally included but later were added to the reform. Finally, the base pension level was raised to above the minimum wage once the reforms began which added another element to alter the original projections of the fiscal costs.

Mexico has a more complex system of social benefits, which were affected only partially by the reform. Since the reform covered only the private sector workers the fiscal costs are defined as those arising from the pre-reform system covering these workers.¹¹ According to the report, the fiscal costs turned out to be adequate with respect to the projections.

C. Revenues and Expenditure Reforms to Compensate for the Fiscal Costs

An important element, which needs to accompany the reform of pension systems, is an implementation plan to increase revenues and/or reduce expenditures with the purpose of decreasing the size of the fiscal gap. Pension reform by itself without other elements of fiscal discipline may not have the intended positive impact on reducing the fiscal gap.

In consonance with the reform of its pension system, Chile undertook an overhaul of the tax system, introducing the value-added tax to finance the reduction of the public debt and the social security reform. In addition it supplemented these measures with profits from *CODELCO* and generated a fiscal surplus of 5 percent of GDP.

¹¹ IDB Background papers, Alonso y Caloca, Salvador Gerardo. *Los Sistemas de Pensiones en Mexico*, pp.34-35, December 2003.

However, that is not to say that Chile had an easier time than the other countries. From 1981 to 1986, copper prices dropped significantly and public revenues also declined between 1982 and 1983 as the private sector experienced a crisis. The financial sector required huge transfers to banks because of this systemic crisis. However, by 1989 copper prices recovered, *CODELCO* transfers to the fiscal accounts reached US\$1.5 billion compared to the average of US\$537 million during the period 1982-1987, and the fiscal position stabilized.

Argentina was in the process of privatizing public enterprises when the reform of the pension system was enacted. Moreover, instead of introducing changes to the contribution rates to ease the fiscal costs of the reform, Argentina moved in the opposite direction and reduced the contributions rates. This measure was taken in 2001 in an effort to benefit employers to hire workers, ease unemployment as the crisis gained momentum. In brief, the fiscal side of the reform was poorly managed in the attempt to promote other goals, such as attracting workers in the informal sector to the pension system and using the contribution rates as a countercyclical unemployment policy measure.

Bolivia, as noted previously, experienced severe deviations in the execution of the original reform plan, possibly due to the changes of parties and the Presidency. It did not undertake tax measures to support the reform nor did it curb expenditures. There were also numerous changes made to the original reform plan, which reflected political exigencies. For example, in 1997, a new President stopped payments on the *BONOSOL*, reduced and renamed it, the *BOLIVIDA*. Other changes included substantial reductions in the budget and salaries of the independent regulators.

D. Role of Fiscal Incentives

The subject of tax incentives to promote private savings as presented in the four background studies is weak because the income tax legislation in these countries does not promote savings. Furthermore, tax evasion is rampant because of out of market transactions or low incomes. Apparently, Chile has entered a stage in which the preferential tax treatment of retirement savings would be expanded for contributions to savings in approved institutions other than the private pension funds.

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Fiscal costs in Argentina and Bolivia turned out to be far greater than anticipated. First, the original reform model was not adhered to and numerous changes were made to the system without an adequate analysis of the fiscal implications. Also Bolivia and Argentina did not accompany their pension reform plan with a well-thought out fiscal plan to increase revenues and control expenditures. Chile got high marks in both areas and in particular, its fiscal discipline is something that would merit further study. Finally, fiscal incentives for savings deserve serious consideration for the second-generation reforms in all countries.

¹² “Keeping the Promise of Old Age Income Security.” Packard, Gill and Yermo, World Bank, 2004.

Chapter IV. Financial Considerations

A. The Capital Market Effect

One of the additional benefits expected from the reform of the pension systems in all countries, was the anticipated growth in capital markets. It was widely held that creating large institutional investors, such as the private pension fund managers would result in an enlarging of market liquidity, which could reduce dependency on foreign capital. It would create broader demand for equities and debt instruments especially bonds and stimulate savings and investment. Downstream, as institutional investors began to purchase domestic securities from local companies, this would have a positive catalytic impact on other domestic and individual investors. Indeed, this was a major contributing factor to the reformers' ability to develop consensus and secure the support of the financial and business sectors.

Pension funds have undoubtedly become an important force in financial markets since the reforms. As can be seen in Table 4, pension funds assets in Chile have grown significantly between 1981 (before the reforms) to 2003. This represents more than 50 percent of GDP in Chile. In Argentina, Bolivia and Mexico, pension fund

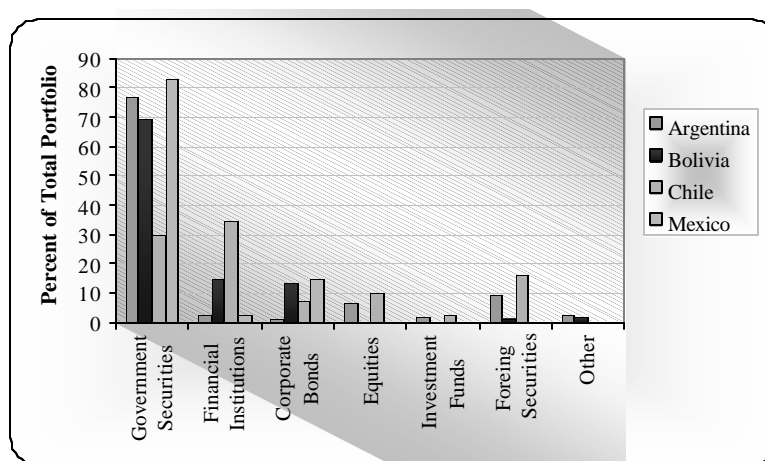
Table 4: Pension Fund Assets Under Management Since the Reforms
(millions of US Dollars)

| Country | 1981 | 1995 | 1997 | 2001 | 2002 | 2003 | Jun-04 |
|-----------|------|--------|--------|--------|--------|--------|--------|
| Chile | 300 | 25,143 | 30,525 | 35,460 | 43,432 | 49,691 | 48,992 |
| Argentina | | 2,497 | 8,827 | 20,786 | 11,409 | 15,947 | 16,222 |
| Bolivia | | | 98 | 936 | 1,144 | 1,485 | 1.617 |
| Mexico | | | 615 | 27,146 | 31,748 | 35,844 | 37,930 |

Sources: AIOS, Statistical Bulletin No. 11, June 2004.

assets have also grown. Since the pension reforms in all four countries, the pension fund industry has abounded and represents the largest domestic institutional investor in all economies. Moreover, pension funds are one of the largest purchasers of Government debt, with the exception of Chile, as can be seen in Chart 1.

Chart 1



Source: AIOS (2002)

However a good indicator of market development is the number of companies listed on the domestic exchanges. Listed companies have increased only marginally in Chile. The number of companies listed in Argentina and Mexico has actually declined as seen in Table 5. While this does not speak well for the impact of pension funds on domestic markets, it should be mentioned that this does reflect another powerful force, which has been occurring at about the same time, the rise of globalization. Large corporations in all four countries have tended to list and to issue ADRs on the New York Stock Exchange rather than in their domestic markets.

Table 5
Size of Capital Markets in Selected Countries of Latin America

| | Market Capitalization (Millions of US\$) | | Listed Domestic Companies (Number) | | Debt Securities (Millions of US\$) | | Bank Assets (Millions of US\$) | |
|------------------|---|---------|---------------------------------------|------|---------------------------------------|----------------------|-----------------------------------|--------|
| | 1990 | 2003 | 1990 | 2003 | 1997 | 2003 | 1997 | 2003 |
| Argentina | 3,270 | 38,927 | 179 | 107 | 70,100 | 22,100 | 63,162 | 13,777 |
| Bolivia | -- | 1,560 | -- | 29 | -- | -- | 3,917 | 3,029 |
| Chile | 13,600 | 86,291 | 215 | 240 | 38,300 ¹³ | 37,100 ¹⁴ | 42,621 | 51,299 |
| Mexico | 32,700 | 122,532 | 199 | 159 | 37,800 | 148,800 | 99,213 | 97,916 |

Sources: The World Bank, World Development Indicators 2004, Standard and Poore's Emerging Market Fact Book, 2003, Bank for International Settlements, BIS Quarterly Review, September 2004, and International Monetary Fund, International Financial Statistics, June 2004.

In the case of both debt securities and bank assets in Argentina, the situation is somewhat clouded by the devaluation of the currency, pesification and default on debt. In Chile assets have increased along with the companies listed on the exchange.

¹³ This data refers to 1996.

¹⁴ This data refers to 2002.

Debt securities have declined as a result of fiscal discipline and the impact of devaluation. In Mexico debt securities have increased significantly but bank assets have declined.

While pension fund assets have grown, the expected catalytic effect on capital markets has been less than hoped for. Both market capitalization and liquidity have grown at lower rates than expected and regional market capitalization lags behind Asia and Eastern Europe as shown in Table 6.

| | Stock Market Capitalization | Debt Securities | Bank Assets ¹⁵ |
|-----------------------|-----------------------------|-----------------|---------------------------|
| World | 31,202 | 51,965 | 40,627 |
| EU-15 | 7,754 | 16,713 | 18,148 |
| United States | 14,266 | 21,012 | 5,700 |
| Asia | 2,943 | 1,725 | 4,347 |
| Eastern Europe | 131 | 419 | 381 |
| Africa | 168 | 97 | 334 |
| Latin America | 608 | 846 | 776 |

Source: International Monetary Fund, Global Financial Stability Report 2004.

Overall capital markets have not grown significantly for reasons that are not associated with the reform of the pension system and the performance of the pension fund managers. While it has been widely held that there is excess demand for capital markets products in all four countries, and that by improving market infrastructure, potential investors will leap into the market, this tenet has proven to have some flaws. The existence of unsatisfied demand is undoubtedly true, for when well structured, credit enhanced products are placed in the market, they are generally quickly purchased and even traded in the secondary market.¹⁶

The anticipated growth in equities is hampered by the lack of corporate governance in the region. In capital markets where the rules for corporate governance are clearly established, closely regulated and follow international best practices, markets flourish. Guidelines on corporate governance are important to investors. They help insure that a company will be well managed, by professionals, a *sine qua non* for making an investment in a company's shares. These guidelines better insure transparency through controls including auditing standards, accounting and

¹⁵ Assets of commercial banks.

¹⁶ Although there are many such credit-enhanced instruments on regional markets, the IDB has successfully undertaken four such transactions over the past year. These include: Brazil Tele Norte Leste Bond Guarantee for US\$ 270 million, Chile Costanera Norte for US\$ 75 million, Peru Grana y Montero asset backed bond US\$ 10 million and Mexico Hipotecario Nacional for US\$ 500 million.

disclosure, an independent Board with clearly defined roles including management oversight, and protection for shareholders. In the four countries reviewed, with the exception of Chile, and to a lesser extent Mexico, this corporate governance structure, which would provide comfort to investors from these governance risks, is absent.

Another aspect, which affects the growth of markets, and investor choices, is the structure and enforcement of contract law. The legal structure of all four countries is based on a civil law structure and in most instances this makes it difficult to enforce and to perfect contracts in the event of defaults and disputes. Mexico has recently revised its legislation to make enforcement, especially of mortgage loans, more straightforward. This measure has been followed by the first mortgage-backed security, a standard instrument for markets where contract enforcement issues are fewer. Chile has also made changes to its laws. The question of clearing and settlement, registering a security and having it change hands in a secure and immediate way is also an aspect, which poses impediments for market growth especially in Argentina and Bolivia. In the final analysis, security and enforcement aspects will continue to hamper financial market growth and development if not addressed.

The pension fund reform has undoubtedly had a positive impact on the financial markets of the four countries studied both in terms of their growth and the transparency of supervision and regulation. The capital markets effect has not been so significant especially with respect to growth in equities for reasons associated with corporate governance, contract law and other factors, which have still to be tackled. Finally, the verdict is still out on the creation of a savings and investment culture.

B. Commissions System

In general, the commission structure in the four countries is not cost based. The administrative costs include account and assets' management expenses, which are a percentage of the workers' salary and represent the largest part of the commissions. Additional commissions can be charged in some countries notably Mexico and Chile. Overall, in three of the four countries the commissions are quite high as can be seen in Table 7.

| Country | Total Commissions (1) | Disability and Death Insurance (2) | Net Commissions (3)=(1) – (2) | Pension Contribution (4) | Total Commissions/Pension Contribution | |
|-----------|--------------------------|---------------------------------------|----------------------------------|-----------------------------|--|-----------------------|
| | | | | | Gross (5) = (1)/ (4) + (1) | Net (6) = (1)/ (4) |
| Argentina | 2.5 | 1.2 | 1.3 | 4.5 | 36 % | 57 % |
| Bolivia | 2.2 | 1.7 | 0.5 | 10.1 | 18 % | 22 % |
| Chile | 2.3 | 0.7 | 1.6 | 10.0 | 18 % | 23 % |
| Mexico | 4.0 | 2.5 | 1.5 | 7.0 | 36 % | 56 % |

Source: Asociación Internacional de Organismos de Supervisión de Fondos de Pensiones (AIOS) Statistical Bulletin No. 11, June 2004.

Bolivia and Chile have lower commissions with respect to pension contributions at about 23 %. Approximately 10 percent of the salary goes to their pensions and the commissions and fees are about 2 percent of the salary. In Argentina and Mexico only between 4.5 – 7 percent of the salary goes to the pension while commissions are 2.5 – 4 percent of salaries, respectively. In the case of Argentina the contribution was about 9 percent but was halved in December 2001 with the economic crisis to assist people in continuing to make their payments. Nonetheless, the end result is that over 50 percent of the workers' contributions go to pay commissions and fees in Argentina and Mexico.

This implies that on average the total salary deduction for a pension contribution is between 11 and 12 percent. For the average middle class worker this is probably reasonable. However, for lower income groups where there is no excess disposable income, this amount is too high.

To achieve a benefit amount commensurate with the contribution before the commissions, the rate of return on the individual portfolios would need to be higher (one-third higher in the case of Argentina) to make up for the up-front deduction on the commission.¹⁷ Another recent study supports this and concludes “ the commissions structures in countries such as Chile imply that the poor may end up paying a higher share of their salaries in commissions than the wealthy, so that the management fees act like a regressive tax.”¹⁸

Also, as a result, the number of people who do not qualify for a minimum pension based on a certain level of contributions in the private pension funds are significant. In Chile, the estimates are that only one-half of the affiliates to the private funds would qualify for the minimum pension while in Argentina about 60 percent would qualify.¹⁹

In a reaction to the high levels of commissions worldwide, one of the top specialists on social security matters, Laurence J. Kotlikoff, in a reform proposal for social security in the United States suggests that “The Social Security Administration handles all paperwork, investing and pension conversions. Wall Street plays no role and collects no fees.”²⁰ While this view may not be a well-balanced one, it is receiving increased attention in the region.

In the case of Bolivia, removing the need for competition and marketing as described in Chapter II significantly reduced the commissions. Argentina on the other hand has twelve pension funds and large marketing costs. Between 1995 and 1999 it had a sales force that grew to about 30,000 persons. The average marketing cost at that time was about US\$ 200 per affiliate, which was underwritten by the up-front

¹⁷ The sum of an annual contribution earning r (rate of interest) per year is equal to:

$$S = \frac{a(1-r^n)}{1-r}$$

¹⁸ “Keeping the promise of old age income security,” Packard et. al., World Bank.

¹⁹ Before the economic crisis.

²⁰ Kotlikoff, Laurence J. *How to Fix Taxes and Social Security*, *The Washington Post*, Nov. 2004.

commission of 33 percent of every pension contribution. This left only two thirds of each contribution, which could be invested.

In Chile and other countries, commission rates have been slow in coming down to a more reasonable level raising questions of intergenerational fairness. The first-generation of affiliates in Chile in 1982 paid higher commissions than the following generations.

C. Administrative Costs

Another issue which was raised by the background studies and which is being debated in the region is the administrative costs of the pension funds. As previously mentioned, a significant part of workers' contributions go to pay this cost. As can be seen in Table 8 below expenditures for administering the funds and promotion and sales commissions are extremely high with the exception of Bolivia.

| | Administration | Marketing | | | Other | TOTAL |
|-----------|----------------|-----------|-----------------------|-------|-------|-------|
| | | Promotion | Sales and Commissions | Total | | |
| Argentina | 119.6 | 27.1 | 99.4 | 126.5 | 6.0 | 252.1 |
| Bolivia | 4.2 | 0.1 | - | 0.2 | 0.2 | 4.6 |
| Chile | 140.6 | 5.6 | 49.7 | 55.3 | 8.4 | 204.3 |
| México | 359.6 | 22.0 | 19.3 | 41.4 | 125.3 | 526.3 |

Source: AIOS. Op. cit.

The analysis of the four countries' experiences suggests that the level of contributions in some cases is too high, particularly for the poor, leaving workers and their families many without old age coverage. High contributions rates are also a disincentive for workers to save for their retirement and participate in the pension system. The high level of the commissions is not linked to performance results of the pension fund managers. In fact, the high level of commissions results in a lower amount of the contribution by workers that is actually invested. Moreover, it reduces the potential invested by contributing workers to the detriment of their old age security. Reductions in the commissions' structure could enhance and make it more attractive to workers to save and increase pension coverage.

D. Investment Liberalization and Maintaining Financial Integrity

The liberalization of investment guidelines, providing more investment choices to pension funds and therein better diversifying risks and portfolio balance is an important consideration in all four countries. The question is whether guidelines should be liberalized, given the special responsibility of the pension and insurance administrators to future retirees and the adequacy of risk based analysis, particularly in view of the need to match long-term pension payments with a long-term stream of

investment returns. This issue is beginning to receive heightened attention.¹⁵ In addressing this issue, an important element for the success of the reforms in the long-term is the ability of pension fund managers to match the horizon of future pension payments with the maturation of investments.

Of the four countries, only Chile's pension funds have had a fairly balanced investment profile as seen in Table 9. The other three countries have been heavily invested in Government securities. This has occurred because of the regulatory requirements that limit investment in most types of instruments but permit an up to 80 percent investment in those of the public sector. These requirements have meant that until recently in Bolivia, Argentina and Mexico, about 70-80 percent of the pension fund portfolios have been invested in Government paper so that, in effect, the portfolios are not diversified and are heavily exposed to sovereign debt.

Table 9
Investment of Pension Fund Portfolios June 2004
(%)

| | Government Securities | Financial Institutions | Corporate Bonds | Equities | Investment Funds | Foreign Securities | Other |
|-----------|-----------------------|------------------------|-----------------|----------|------------------|--------------------|-------|
| Argentina | 68.1 | 4.5 | 2.1 | 10.4 | 2.9 | 9.4 | 2.5 |
| Bolivia | 64.9 | 6.5 | 18.2 | 7.9 | 0 | 1.6 | 0.9 |
| Chile | 21.2 | 28.3 | 7.1 | 13.3 | 2.5 | 27.5 | 0.1 |
| Mexico | 85.6 | 4.3 | 10.1 | 0 | 0 | 0 | 0 |

Source: AIOS, Statistical Bulletin No. 11

Overall, the requirement that such a large portion of the portfolios be held in government securities has crowded out financing of the private sector through bonds and equities. Moreover, while the returns on this government debt are relatively robust, the preponderance in the pension portfolios represents too high a level of sovereign risk. In discussions over the past few years of the need to liberalize the investment guidelines, governments have been unwilling to relinquish this source of funding.

This policy has had a negative impact on pension portfolios in Argentina, which were heavily concentrated in Government securities (about three-quarters of the investment assets). During the economic crisis of 2001 the government undertook a number of asymmetric policy measures as it struggled to meet huge debt payments, including converting debt instruments, altering interest rates and eventually defaulting on its debt. The peso devaluation and changes to the terms of government debt instruments has raised questions over the real value of the pension portfolios. The difficulty is how to both protect portfolios in the future and how to engender confidence among the people in their pension systems and in their government.

Mexico has recently liberalized its investment system and there has already been a shift away from Government paper. In particular, it has raised the levels allowed in foreign securities. The Mexico report on "Financial Regulation and Supervision of

¹⁵ IFM, Global Financial Report, Market and Issues, September 2004

the *AFORES* and *SIEFORES* Based on Risks” presented to this conference raises this question. It promotes an additional regulation that would widen the spectrum of assets allowed to be included in the investment portfolios of the *AFORES* and *SIEFORES*.

Portfolio diversification and liberalization of investment guidelines to reduce exposure to sovereign risk is a theme that needs to be addressed in the context of the second-generation reforms. But the second part of the equation, restoring confidence in the pension system and assuring its citizens that the government will act responsibly encompasses a plethora of measures in areas other than pension reform.

Chapter V. Macroeconomic Stability and Success

A. Economic and Social Stage of Development

The findings of this report show why the macroeconomic performance is important and how the design of the social security reform and its success is highly dependent upon it. This also underscores that reforms must be supported by macroeconomic stability if they are to be successfully implemented and if the population is to have confidence in them. A review of the four countries covered in the background studies illustrates the influence of economic and social conditions in determining the outcome of the social security reform. The political commitment at the highest levels together with the social consensus supporting the reform is essential to make the necessary adaptations as required by economic developments. The following sections cover the experience of the four countries with their reforms as economic developments unfolded that affected the pace of the reform.

B. Situation of the Four Countries at the Time of Reform

Chile did a far-reaching restructuring of its economy beginning in the mid-1970s, which included the privatization of public corporations, banks and the social security system. In 1981, the unemployment rate in Chile was 10.4% (15.1% if the emergency employment programs were not included). The 1982 recession raised it to 19.6% (or 26.1% without the jobs’ creation program) and as previously mentioned, a drop in copper prices also had a negative impact, as did the weakened financial sector. The PAYG system deficit increased to about 28% of the benefits paid during 1970-1980 period despite high contribution rates. Nonetheless, Chile’s fiscal discipline, revenue and expenditure plan, along with other measures such as the pension reform helped it to weather these adverse macroeconomic factors. By 2000, the unemployment rate was lowered to 9.2%. Table 10 summarizes some of the parameters of the pre-reform Chilean system and characteristics of the pre-reform social security safety net.

Table 10. CHILE'S PRE-REFORM PUBLIC PENSION SYSTEM

Coverage 90% of the population.
 Administration: 32 "cajas" with 2.3 million workers affiliated and 7 "cajas" for family allowances, 3 mutual associations covering job accidents and other special regimes.
 Contribution rate: Variable according to each "caja" (with up to 50%²¹ wage rate in some cases)
 Benefits: Variable for each "caja".
 Financing from: workers 14.4%; employers 46.5%; retirees 1.9%; state 32%; investments 1.6%; and others 3.4%.
 Deficiencies Multiple institutions running the system; work overload; inefficient procedures, etc.

Source: Bustamante, Julio Jeraldo, *El Sistema de Pensiones en Chile*, Jan. 2004

Argentina's reform began to be implemented while the financial system was weathering the adverse repercussions stemming from the Asian, Russian and Mexican markets (*Tequila crisis*). The Tequila crisis had a serious impact on the health of Argentina's financial sector and on the sustainability of the Convertibility Law and the role of the Central Bank (BCRA) as a currency board. At the same time, a severe restructuring of banks took place with a process of consolidation and revamping of banks in distress to create viable banks, while favoring an increasingly strong presence of foreign banks.

In 2001, Argentina experienced a serious economic crisis that led the abandonment of the Convertibility Law, a systemic banking crisis, a run on deposits and the pesification of all local deposits and loans. The unemployment rate reached an all-time record of 21.5 percent in May 2002. Apart from the demographic prospects, the pension system was in worse financial situation because of i) the government appropriation of the accumulated reserves to cover its fiscal cash needs; ii) inefficient and costly administration; iii) poor control of contribution; and iv) privileged regimes with discretionary rules. The final outcome for the private pillar is still to be firmed up as Argentina deals with its other urgent agenda matters.

²¹ This rate consolidated payments for retirement benefits, health, job related accidents, etc. Source: Julio Bustamante Jeraldo, *El Sistema de Pensiones en Chile, January 2004* and Superintendencia de Pensiones, *El Sistema Chileno de Pensiones derivado de la Capitalización Individual, 1994*.E

Table 11 Argentina's Public Pension System

| Concept | 1993-1995 | 2001-2003 |
|--|---|---|
| Administration | Crisis of the system leads to structural reform of the PAYG introducing the multipillar scheme in 1994-1995 | Macroeconomic crisis (devaluation, asymmetric pesification, and debt default) |
| % workers in the informal sector | 1994 30% | 2003 70% |
| s.s. expenditures as % public expenditures | 1990 26.1% | 2001 22.9% |
| s.s expenditures as % of GDP | 1996 7.8% | 2001 7.6% |
| taxes as % of public s.s. expenditures | 1995 40.3% | 2002 61.8% |
| Contribution rate: employer | 1995 13% | 2003 11.0% |

Source: IDB Draft Report Domeniconi, Héctor, El Sistema de Pensiones en Argentina,

Bolivia has gone through very difficult times, with rampant hyperinflation and low levels of economic growth. In 1994 Bolivia developed a creative plan to privatize public enterprises, opening them to foreign capital participation. The pension reform accompanied the Capitalization Plan. In 2002, after a prolonged recession spanning several years, which severely crippled business, reduced government tax revenue and led to a financial crisis, Bolivia lost any forward momentum it had. It remains unable to service its relatively high foreign debt which has required a special agreement with foreign creditors under the "Highly Indebted Country Program" (HICP). Like Argentina, it is plagued with growing informality and declining contributions to the pension system. Unfortunately many changes were subsequently made to the pension system, which have compromised its sustainability.

Table 12. Bolivia's Public Pension System

| Concept | 1997 (prereform) | Post-reform |
|--|--|---|
| Administration | A Basic Public Pension (FOPEBA) and 38 complimentary funds under political and unions control. | Creation of an individual capitalization system |
| Special cases | Armed forces | |
| Retirement age | 55 for men, 50 for women | |
| Members | 300,000 | |
| Benefit of social security system (FOPEBA) | 30 % of monthly wage | |
| Fiscal deficit | Forecast: 4% | Actual: 9% 2002 |

Source: IDB Background papers, Revollo, Alfonso

Mexico has also experienced multiple adverse economic developments despite its close association with the United States and Canada under the North America Free Trade Association (NAFTA). Since 1985, several systemic financial crises have

required an overhaul of the banking system. In 1997, in this economic situation, the government introduced a partial reform of its social security system.

Chapter VI. Declining Contributions and Shortfall in Coverage

In addition to the positive capital markets effect and the closing of the fiscal gap, the reform of the pension systems was expected to generate increased savings for retirement and insure that a larger proportion of the population was covered by the pension system. Theoretically, providing individual retirement accounts, for each worker, had been anticipated to increase coverage by providing an incentive to contribute to a stable funded pillar. The fact that private pension fund managers would manage the individual retirement accounts would further engender a savings culture.

In fact, the experience with the coverage rates both before and after the reform is not entirely encouraging. While the coverage of the privately funded pillars of workers who participate and are registered has increased as seen in Table 13, their contributions to the pension system have not increased accordingly. Only 11 percent of workers registered in the pension system in Bolivia contribute. In Argentina and Mexico the workers who contribute are between 22 and 29 percent. Only in Chile is the rate better, i.e., 56 percent of workers who belong to the plan contribute to it.

| Coverage Before and After the Reform | | | |
|---|------------------------|---------------------------|---------------------|
| Table 13 | | | |
| Percent of Workforce in Four Countries | | | |
| Country and Year of Reform | Coverage Before | Coverage June 2004 | |
| | | Participants | Contributors |
| Chile (1980) | 64 | 116 ²² | 56 |
| Bolivia (1996) | 12 | 25 | 11 |
| Argentina (1994) | 50 | 59 | 22 |
| Mexico (1997) | 37 | 75 | 29 |
| <i>Source: AIOS, Statistical Bulletin, No. 11, June 2004 and Carmelo Mesa Lago, "Las reformas de Pensiones en America Latina y su impacto en los principios de la seguridad social," CEPAL, March 2004.</i> | | | |

A more detailed analysis is presented in Table 14, which provides the number of workers participating and contributing in the private pension pillar by year. As can be seen, affiliates in Chile have increased steadily since 1982, as well as contributors. However, while the number of affiliates has increased fivefold the contributors have only increased three and a half times. In Mexico, participants have increased since 1998 almost threefold, and the number of contributors increased by only one and a half times.

²² The level of participation in Chile is skewed because it includes inactive members who have dropped out of the labor force.

In Bolivia the number of participants has increased by only 12 percent since the reform and the contributors have declined by 10 percent. In Argentina, the participants have increased by 37 percent since 1995 but the contributors have declined by 17 percent. So the system is moving forward in the case of Chile, Mexico, and to a lesser extent Argentina, but with a drastically different pace between those joining the system and those contributing to it.

Table 14
Affiliates and Contributors
(number of persons)

| Country | 1982 | 1986 | 1995 | 1998 | 2003 | 2004 |
|------------------|-----------|-----------|-----------|------------|------------|------------|
| Chile | | | | | | |
| Affiliates | 1,440,000 | 2,591,484 | 4,899,115 | | 6,883,566 | 7,046,146 |
| Contributors | 1,060,000 | 1,774,057 | 2,432,456 | 2,560,158 | 3,377,029 | 3,619,606 |
| Bolivia | | | | | | |
| Affiliates | | | | 760,959 | 809,179 | 854,989 |
| Contributors | | | | 450,000 | 360,045 | 365,285 |
| Argentina | | | | | | |
| Affiliates | | | 7,069,503 | 9,164,725 | 11,810,732 | 9,711,577 |
| Contributors | | | 4,347,104 | 4,858,165 | 4,462,441 | 3,619,606 |
| Mexico | | | | | | |
| Affiliates IMSS | | | | 11,188,114 | 30,400,000 | 32,321,677 |
| Contributors | | | | 7,709,610 | 12,327,534 | 12,573,110 |

All four countries reviewed in the background papers had to a greater or lesser extent a history of macroeconomic instability, rampant inflation, and inappropriate policies. Moreover, when Argentina, Bolivia and Mexico undertook their reform of the pension systems, they were emerging from what has become known as the Lost Decade of the 1980s, characterized by massive indebtedness and later on from the Tequila Crisis. Chile undertook its reforms in 1981 at the beginning of this decade and the pension reform coupled with the fiscal reforms comprised part of the revamping of the economy and lowering its debt. Under this regional scenario, there existed wide scale mistrust of government in general, and lack of confidence in the financial institutions and in particular contributing to individual accounts. Moreover, the employment situation has also affected the coverage rates, particularly in Argentina where informality is now estimated at 70 percent. These factors combined to make a powerful counterweight to the goal of increasing savings and contributions.

Bolivia and Argentina are not likely to increase coverage in the short term given recent developments in both countries and a general lack of confidence. In the first instance, a public sector obligation, the *Bonosol* was transferred to the private pension accounts, and in the second, Government paper, which the pension funds were forced to purchase, was arbitrarily converted to pesos, the interest rate lowered and the asset value of retirement savings was severely undermined. Reinstating confidence and trust will imply a variety of interactions from fiscal discipline, to tax incentives and is an area that has been very little studied up until now.

The “Global Financial Well-Being Study,”²³ reconfirms the pervasive mistrust in its annual survey of twelve countries, which include Chile and Mexico. It concludes, “...a majority in every country don’t believe they can trust the government to help them save for retirement, and are also not convinced they will receive the benefits they are entitled to from their employers’ retirement or pension funds.” The survey found an overall profound and deep-seated pessimism about living out a financially secure retirement. These are sentiments that are being raised around the world and are not limited to the region. Helping Bolivia and Argentina to reinstate confidence should undoubtedly form part of the second-generation of reforms.

Participation rates have increased since the reforms however the level of contributions has not kept pace and even declined in the case of Argentina and Bolivia. Several factors account for this. First the high level of the contribution rates, which may discourage workers whose earning power, is less. Second, there is a general lack of confidence created by many years of macroeconomic stability that need be overcome. A savings culture has not resulted from the creation of the pension system and further consideration needs to be given to this. Chile, which weathered macroeconomic instability and established a program of fiscal discipline that worked, has been far more successful in increasing coverage and probably of raising the confidence level of its citizens.

²³ The “Global Financial Well-Being Study,” is an annual survey undertaken by Principal International, Inc.

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