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Pension Reform in Latin America

Quick Fixes or Sustainable Reform?

Sri-Ram Aiyer

Countries in Latin America have been ahead of countries elsewhere in undertaking the transition from pay-as-you-go defined-benefit pension plans to fully funded, defined-contribution pension plans. Now they must address complementary reform in the banking, insurance, and securities markets.

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Summary findings

Because of better health and higher standards of living, people are living longer. By 2030, more than 16 percent of the world's population will be older than 60, compared with 9 percent today.

As a result, pension systems will need reform. Most current systems have substantial unfunded liabilities that will impose significant financial burdens on future generations without providing adequate protection for older individuals and lower-income workers.

Pension reform is inevitable because of demographic imperatives and because many pension systems are financially unsustainable. Unfunded public pension systems pose political risk if promises to future retirees cannot be met. Pension reform is both technically and politically complex but more and more countries are beginning to address the problem. The question is whether quick fixes will be adopted or sustainable changes that will benefit the macroeconomy and protect elderly and lower-income citizens.

Quick fixes — typical in many economies — generally involve changes in eligibility (such as retirement age), changes in the rate of contribution or the population of workers on which contributions are calculated, or changes in the structure of benefits.

Countries in Latin America have been ahead of other regions in undertaking major reform from pay-as-you-go defined-benefit pension plans to fully funded, defined-contribution pension plans. Because of the successful Chilean pension model, a notable number of Latin American countries have undertaken deep pension reform. Aiyer highlights reform efforts in a sample of countries: Argentina, Brazil, Chile, Mexico, and Peru.

Vigilance is still needed, says Aiyer. Effective oversight is essential, and so is complementary reform in the banking, insurance, and securities markets. In capital markets, for example, regulation must be strengthened and the requirement that pension fund investments be made only in government-related securities must be eliminated. New types of insurance must be made available and there must be increased competition among insurance providers.

More work must be done but the region's pension systems have started on the right course.

This paper — a product of the Technical Department, Latin America and the Caribbean Region — is part of a larger effort in the region to promote financial sector and capital market reform. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Patricia Lee, room I5-011, telephone 202-473-7805, fax 202-676-1733, Internet address plee2@worldbank.org. December 1997. (22 pages)

PENSION REFORM IN LATIN AMERICA:

QUICK FIXES OR SUSTAINABLE REFORM?

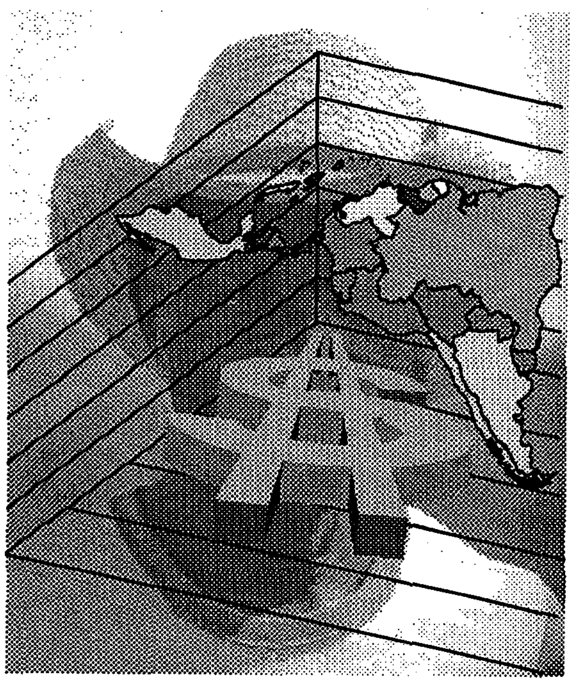

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TABLE OF CONTENTS

PAGE #

PAGE #

The paper benefited from valuable comments and suggestions from J.P. Singh, Robert Holzmann, Luis Guasch, Krishna Challa, Dmitri Vittas, Henry Hsiang, Jacques van der Gaag, Robert Hindle, Michael Moore, Fernando de Mergelinda, Baralides Alberdi and John Pollner. Jorge A. Serraino carefully and patiently prepared several drafts and the cover for this paper.

PENSION REFORM IN LATIN AMERICA

INTRODUCTION

Most formal pension systems worldwide are publicly managed. They pay defined benefits and depend on taxing a portion of worker's earnings. The pension systems are financed by payroll taxes on a pay-as-you-go (PAYG) basis. Today's workers are taxed to pay the pensions of those who have already retired. Social security systems have frequently been justified on the basis that they promote equity and redistribute income. Yet virtually all countries in the world need to reform their public pension systems. In many developed and transition economies, pension systems display a high expenditure level, and despite high contributions, often have high and rising fiscal imbalances. In many developing countries, pension programs are often unequal, actuarially unsound, and the financing is distortionary.

A number of countries in the Latin American region have been reassessing their pension policies because their systems are encountering financial difficulties and pose a large unfunded liability for future generations. Existing systems have not always protected retirees and will unlikely be able to protect those who grow old in the future. Furthermore, public pension programs in LAC have neither been very successful in achieving redistributive objectives nor in promoting equity. This is not surprising since pay-as-you-go defined benefit plans result in many inequities, and this is especially true in LAC.

The purpose of this paper is to document recent pension reforms in Latin America. Chile was the first country to initiate reforms in 1981 and major reforms have been undertaken or are underway in Argentina, Bolivia, Colombia, Mexico, Peru and Uruguay. Other countries, including Brazil, Costa Rica, Ecuador, El Salvador, Honduras, and Paraguay, are engaged in serious discussions. This paper highlights the problems associated with the public pension systems, the characteristics of the reforms that have been instituted, and lessons learned.

I. BACKGROUND

Some of the earliest pension plans in the Latin American region were established under the auspices of private organizations in the beginning of the 1800s. Later, a number of countries in the region established public pension programs. The rationale for government provision of pensions stems from several assumptions[1]. First, low income individuals and households may not have sufficient earnings during their lifetime to save for old age consumption. Other households may have sufficient earnings to accrue savings, but their preference is to consume rather than save for their old age. Mandatory retirement programs that force savings can eliminate the latter problem, and redistributive effects of a public pension plan can address the former.

But there are several important reasons for reform. Many of the public pension plans in the region encountered financial difficulties in the 1970s and 1980s, and by the 1990s, their sustainability was and remains in jeopardy. There is a need to address the large, hidden public debt implications for unfunded liabilities. Meanwhile, such costly systems are characterized frequently by low levels of coverage and public dissatisfaction is rising with both the level of pensions and the quality of service.

[1] See Mackenzie, G.A., 1995.

A. THE NEED FOR PENSION REFORM

Three major factors have contributed to the need for reform: insufficient contributions, generous benefits, and variable coverage among workers.

Insufficient Contributions

The public pension plans are pay-as-you-go systems in which current outlays for present beneficiaries are paid for by contributions from revenues from earmarked taxes. Contributions have been insufficient to meet present obligations to pensioners for a variety of reasons. Contributions to public plans generally emanate from payroll taxes. In the southern part of the region where life expectancy is comparable to that of Europe with very low population growth rates because of a sharp decline in fertility, payroll taxes can be up to 35 percent of wages or salary. Recent increases in the rates have been necessitated by the increase in the dependency ratio which measures the relationship between the number of pensioners to the number of active workers contributing to the plan. Higher payroll tax rates have contributed to payroll tax evasion which tends to increase pressure to raise rates even higher. In the northern part of the region where life expectancy is lower and where pension systems have had a shorter history, contributions are generally 5-10 percent of payroll taxes. Moreover, in a number of countries in the region, inflation has eroded the real value of reserves. When reserves have been invested, government requirements may stipulate that they be invested in public projects that have low rates of return. This, in turn, generates pressure to increase contributions.

Generous Benefits

Public pension systems typically are not progressive and contribute to arbitrary income distribution within and among generations. Further, they have been characterized by an increasing mismatch between contributions and benefits. The statutory benefits provided to pensioners in LAC are generally more generous compared to other countries. Retirement ages are low and the number of years that an individual must work are shorter than in other countries. But actual benefits tend to be less than the projected amount the systems should be paying. The real value of pensions has eroded owing to demographic trends that put pressure on the average benefit. Moreover, notwithstanding laws requiring full indexation, in periods of very high inflation as in Argentina in 1990, the real value of pensions has eroded quite drastically. These sources of erosion have precluded governments from abiding by the replacement principle of the pension plans, namely that a pension is to replace a certain percentage of working life income. As downward pressure on average pensions continued, governments such as Argentina sought to establish a minimum threshold to protect pensioners with the smallest pensions. These adjustments have resulted in a transition from systems based on the principle of replacement to a system that provides a level of benefit that has gravitated toward a minimum benefit.

Variable Coverage

Ideally the entire population should have access to some old age income, at least at the poverty level. And all workers should have a portion of their earnings replaced consistent with their contributions. But the region's public pension plans cover varying percentages of the population. Chile and Argentina have the largest percentage of the population covered. Coverage rates in several Central American countries and Bolivia are less than 20 percent of the formal workforce. Since the formal workforce in some countries is relatively small, pension coverage is even more limited than appears at first sight.

While not every country has the same degree of problems with regard to contributions, benefits and coverage, the preponderance of these concerns suggests that these problems are inherent in pay-as-you-go, defined benefit plans.

B. ESSENTIAL DATA FOR ASSESSING THE HEALTH OF PENSION SYSTEMS

In most countries worldwide, pension reform typically occurs in the context of a fiscal crisis or impending fiscal crisis affecting the solvency of the pension system. This occurs in part because of the political resistance to changing current pension systems. At the same time, surpluses in a largely unfunded system may not be an indicator of financial health. A second reason pension reform often comes too late is the absence of good data on the fiscal implications of the *status quo* as well as of policy options to reform the system. This problem is especially critical in developing countries. Basic and reliable information on the number of contributors and pensioners is essential to forecast future revenues and payouts but is not always readily part of the data that is brought to policy makers' attention. Appropriate models are needed to estimate future fiscal implications.

Demographic and Economic Data

Detailed demographic information is basic and essential. Data on present population, mortality rates, fertility rates and immigration are among some of the factors required to understand the size and pace of the aging population in relation to younger cohorts. The age structure of the population is important to understand dependency ratios. Dependency ratios are defined as the number of younger people to support the population of older persons who are retired.

Labor market conditions are another factor whose trends are important to guide pension policy. The number of employed individuals determines the portion of the younger population that is contributing (in pay-as-you-go systems) toward retirement payments to older individuals. Contractions in employment will affect contributions. So, too, will the definitions in the pension plans as to those who are covered. Military and civil servants are among some groups that may be exempted and have their own pension plans. The retirement age affects the length of time that a worker will be making contributions. This information helps to determine the effective contribution group which is contributing money into the pension system.

The financial sustainability of a pension system depends not only on the number of contributors and pensioners, but also economic trends. Macroeconomic indicators such as GDP growth, inflation, real interest rates and wage growth all affect the financial status of pension funds. The distribution of the working age population according to wage rates is important to capture differentiation in these variables.

Diagnostic data are needed to assess the causes, timing, and degree of seriousness of problems associated with present pension systems. Some fundamental questions need answers in order for a diagnosis of overall health to be made. For example, the system's dependency ratio may be too high because the retirement age is too low. There may be a significant amount of evasion that would reduce revenue. The number of groups exempted from coverage may be too high which would affect equity. The health of a pension system would be affected by low rates of return to pension assets compared with the average cost of capital in financial markets. The return on workers' investments in a pay-as-you-go system as compared to a fully funded system has a significant impact on retirement income. These questions help to diagnose the source of financial imbalance which allows for appropriate remedial action to be taken.

Indicators of Financial Health of Pension Systems

Several indicators can be constructed to assess the fiscal health of defined benefit, pay as you go systems. They help evaluate the impact of changes in singular or multiple variables. The indicators can also help in analyzing the impact of trade-offs among different policies that are most relevant to a country formulating policy. A sound actuarial capacity is needed to ensure that projections are modeled appropriately although this is often lacking. The indicators that are especially important include the following:

Pension Fund Cash Balance

The cash balance in a pension fund is one of the most important determinants of financial health. It indicates whether present and anticipated revenues are sufficient to meet the pensions of future retirees. It can also provide the timeframe when a pension fund will be flush with funds or depleted. Data indicating an imminent shortfall, e.g. within five years, in the pension fund can be motivation for policy reform.

Contribution Rate Needed for Positive Cash Balance

This indicator highlights the amount of contributions needed to keep the pension system in fiscal balance each year. The contribution rate helps to determine whether to expect surpluses or deficits in a given year. It also can track the impact of a one-time increase in contributions aimed at guaranteeing financial health

Income Replacement Rate

The replacement rate is a good indicator for assessing the degree to which pension benefits replace income earned during employment. A pension plan may be designed to provide the equivalent of a minimum wage, less, or more. It may be designed to replace a certain percentage of earnings depending upon the level of total earnings. A pension system with a very low replacement rate typically garners little political support. A pension plan with a very high replacement rate offers an incentive for less work and early retirement.

Retirement Age

The retirement age is an important factor affecting fiscal health. An early retirement age decreases contributions and increases required payouts. Many countries have a statutory retirement age to obtain a full pension with earlier retirement allowed on a reduced pension.

Net Pension Liabilities

Pension funds accumulate liabilities. Depending on expected contributions, some portion of the liabilities may be unfunded. These unfunded liabilities are often expressed as a percentage of GDP. High unfunded pension liabilities are often an impetus for reform.

Rate of Return on Pension Funds

This indicator highlights the real rate of return on existing funds that is necessary to achieve fiscal sustainability. It may be irrelevant in countries that have little reserves available to generate any return. On the other hand, if policy makers choose to recapitalize the system, the rate of return indicator would be the measure to assess the efficacy of a given level of recapitalization and whether alternative approaches to investing fund balances to generate a higher rate of return may be a proper and useful course of action.

C. ECONOMIC CONSIDERATIONS IN PENSION REFORM

The transition to a reformed pension system raises economic issues that have significant impact on the overall economy. The most crucial overarching issue is the sustainability of a pension program. The financial well-being of pension systems depends critically on the economy. Contributions to a pension system decline when real wages fall. Likewise if a pension program establishes large reserves then investment and real wages are likely to increase.

Paying for Benefits for Present Retirees

A fundamental economic issue is intergenerational equity, e.g., which generations will pay the social security benefits that accrue as liabilities. In pay-as-you-go pension systems, workers pay for the benefits of retirees. In moving to a fully funded system, funds are still needed to pay the benefits of present retirees. In pension systems where there are few reserves, and when workers begin contributing to their own individual accounts rather than pay into a public pension fund, the resources will be insufficient to cover the benefits of current pensioners as well as older workers who will soon be retiring. Should the government borrow to finance the benefit and service the debt through current workers' contributions, the cost of this debt can be paid off by present workers or future generations, or pensioners may be asked to bear a higher tax burden. The importance of these intergenerational issues varies with the demographic profile of the country undertaking pension reform.

Macroeconomic Effects of Reform

It is expected that pension reform will bring benefits to the macroeconomy. If this is to take place, the supply of labor and capital needs to increase. Labor supply can be increased by reducing the perceived and effective tax rate on wages. Higher labor earnings result in more national income, more savings, and hence, more capital formation. The intention is to structure incentives in pension reform policies to value savings and work, whereas the present pay-as-you-go systems that impose an effective tax on wages the incentives are tilted towards those who seek to have more limited employment.

II. NEW DIRECTIONS FOR REFORM

Several countries in the region are seizing opportunities to reassess the performance of the public pension systems, learn from experience, and identify the characteristics of pension systems that are sustainable. One of the lessons learned is the need to provide incentives for the efficient provision of old age benefits. Employee contributions must be linked to benefits so contributions are not seen by participants as a tax. It is possible and appropriate to redistribute income to older persons whose lifetime earnings have been too low, poverty while simultaneously maintaining equity within and across generations. At an aggregate level, public funding should not distort labor markets and drive employment into the informal, non-taxed sectors. Finally, public funding should not distort capital markets.

Several principles of reform of pension systems can be articulated. Most broadly, the role of government in pension systems needs to be reassessed -- which may mean a change in the role of the state from the provision of old age security to regulation of pension systems. This means an increase in the role of the private sector in the management of pension funds and in the provision of back-up insurance. More realistic contribution levels are necessary for sustainability which means a shift from defined benefit pay-as-you-go schemes to defined contribution, fully funded initiatives. Moreover, conditions of eligibility for benefits also need to be appropriately calibrated for sustainability.

Two main paths of reform of the region's public pension system are the subject of consideration in a number of countries. The first approach is limited reform which would make incremental changes in the present system to make it more financially sustainable. Typical reforms might include raising the retirement age, increasing the required contributions from employers and employees, limiting benefits, and increasing the rate of return of existing investments to generate a higher rate of return. Even these more limited reforms may be controversial in certain country contexts.

While these reforms may bolster the fiscal soundness of public pension systems in the short and perhaps medium-term, it is uncertain that they would be sufficient to contribute to long-term fiscal soundness. The expected benefits of more comprehensive reform that incorporates provisions for an increased role for the private sector in pension plans are more structural in nature. They include deepening and widening of capital markets and development or enhancement of the insurance industry.

The success of more structural changes in pension systems, though, often depends on complementary reforms that are likely to be needed in systems whose performance is essential for the pension reform to bear fruit. Capital market reforms are needed including those that strengthen regulation as well as those that open up investment opportunities in capital markets, e.g. eliminating requirements that limit pension funds investment only in government-related securities. Back-up insurance purchased by the government may necessitate reform of the insurance industry that allows the sales of new types of insurance products and increased competition among providers.

Countries in the LAC region that have undertaken reform have followed different paths based on the economic, demographic and other circumstances. The following sections highlight pension reforms in a sample of LAC countries -- Chile, Peru, Argentina, Mexico and Brazil.

A. Chile

Chile was the first country in the region to radically reform its pension system in 1981 by establishing a mandated defined contribution system with private management of contributions. Instead of paying a social security tax to the state, employees contribute 10 percent of their taxable earnings to their own individual account along with a commission for private administration of the account. Participation was required for new entrants into the labor force and kept optional for workers who had been contributing to the public system. Workers had an incentive to participate in the new system since their take home pay increased. The payroll tax was eliminated and employers were required to turn their contributions into salary increases. The employee's contribution was less than the total combined employer/employee contributions under the prior system[2].

Chile's system is based on individual capitalization. Individual workers' savings are directly correlated with the amount of the pension they ultimately receive. It is based also on administration of pension funds by private institutions referred to as Pension Fund Administrators (AFP). Employees can choose from among 16 different private pension fund administration companies (AFP) to have the savings invested in stocks and bonds. The pensions are portable since the individual account is tied to the individual and not to an employer. The AFPs' only purpose is to collect employee contributions, invest the funds and administer benefits. They engage in no other business so as to avoid conflict of interest. The AFPs are required to meet a minimum actual yield on a monthly basis and are required to make up the

[2] See also Mitchell, 1996.

difference with their own resources if they do not. This minimum is based on the average yield of all AFPs. If an AFP fails to meet the minimum yield requirement in a given year the government is required to make up the difference for the individual and the AFP will be dissolved.

The government provides a safety net. All individuals who meet basic requirements are entitled to a minimum pension notwithstanding the balances in their individual account that might otherwise have precluded them from receiving the guaranteed minimum. Second, should an individual become disabled and therefore unable to make contributions, the Government would provide additional contributions. If an AFP is bankrupt, the government guarantees life annuities up to 100 percent of the minimum pension and 75 percent of any amount above it up to a monthly maximum.

Lessons Learned

Chile took the first step to establish a direct link between contribution rates and benefits and thereby to link the savings effort and with the reward during retirement. Contributions are not a tax but a mandatory form of savings. So far, the number of people receiving pensions through the system has been quite modest -- 225,000 -- because of the short life of the new system. Since the inception of the system, pension funds have experienced an annual average growth rate of 39 percent, now representing almost 40 percent of GDP. This figure is expected to increase to 60 percent of GDP in 2004.

The replacement value of the private pension fund can be quite significant. It is estimated that employees who contribute 10 percent of their salary for 40 years and earn 4-6 percent per year will earn a monthly pension equivalent to 50-75 percent of their pre-retirement gross income. Coverage in Chile has increased to 5.5 million in 1996.

Although there has been a growth in the number of workers registered with an AFP, this does not mean that workers are active contributors. In fact, the number of active contributors has declined from 73 percent of eligible workers in 1982 to 54 percent in 1996[3]. Several factors account for the decline. Unemployment and economic hardship preclude some individuals from contributing. Some employers have postponed the transfer of funds to the AFPs and have used them for their own cash flow.

A deeper, more structural problem, however, may account for the decline in contributors. The government guarantees a minimum pension equivalent to 75 percent of the minimum wage or 25 percent of the worker's annual salary for the ten years prior to retirement, whichever is greater. This provision may encourage some workers to contribute only for the minimum time period required -- 20 years -- to be eligible for the minimum guarantees. Some estimates suggest that 50 percent of all future pensioners in Chile could qualify for the minimum guaranteed pension when they retire, which would pose a significant fiscal burden. This moral hazard problem is one that countries contemplating reform will need to address.

The cost of the commissions paid by employees to the AFPs is another significant structural factor that may be impeding contributions. In Chile, the commission costs were about 5 percent of salary in 1982 but have increased to more than 8 percent of salary in 1984. The commissions are used to defray what some critics have viewed as excessive sales and marketing costs in the AFP industry. The result has been that the bulk of the returns on the contributions went towards commissions. More recently, the commissions have declined to about 3 percent of salary but they are still relatively high. A major reason for the high commissions is the high transactions costs that are borne by AFPs owing to the high rate of switching among AFPs by workers, which the system allows creating negative incentives. This experience

[3] See Hsiang, 1997 for more discussion.

in Chile highlights the point that in funded schemes -- just as in unfunded schemes -- contributions must be perceived as resulting in commensurate benefits plus interest rates[4].

There are lessons to be learned from Chile about the impact of reform on efficiency and equity[5]. Chile is the only country in LAC which has had pension reform in place long enough to analyze its impact. Chile's financial system has become more liquid with the influx of pension funds invested in a diversified portfolio. Early econometric analysis suggests that pension reform has led to financial deepening that has increased total factor productivity by one percent per year, equivalent to about half of the increase in total factor productivity in the country. This result provides a basis for anticipated efficiency gains from pension reform in Chile and other countries that pursue effective reform.

There has yet to be a quantitative analysis conducted of the equity implications of pension reform. It appears that upon observation, equity was enhanced in Chile with the minimum pension guarantee to workers who meet the eligibility criteria. The guaranteed minimum is financed out of general revenue which is a more broad-based and progressive tax and therefore more equitable.

New equity issues arise, though, under pension reform. If high and low wage workers are in the same annuity pool, low wage workers end up paying more than their expected benefits while higher wage workers end up paying less than their anticipated benefits. Another inequity arises as low income workers are hurt more than high income workers by flat fee payments required for pension fund management.

B. Peru

Peru has two publicly sponsored pension systems, *Sistema Nacional de Pensiones* (SNP) and the *Cédula Viva System* (CV). The SNP was created in 1973 as a PAYG defined benefit system through consolidation of separate retirement programs. The SNP covered only 50 percent of the labor force and in 1990 only 50 percent of its affiliates made contributions.

The CV system started as the civil service pension system in the 19th century and was slated in 1974 to be phased out. Yet events changed and the system grew as additional groups of public employees were covered under the system. The CV system is costly owing to generous benefits and low contribution rates. Female (male) workers can receive benefits after 12 (15) years of service. The replacement rate varies between 50 percent if the worker has 15 years service and 100 percent when the worker has 30 years of service.

In 1992 private pension funds were authorized (AFP) as an alternative to the SNP. The new system, *Sistema Privado de Pensiones* (SPP) allowed workers to have individual retirement accounts in AFPs. This new program allowed workers who opened individual retirement accounts in AFPs to receive partial credit for previous contributions to the SNP with a bond (*Bono de Reconocimiento --BR)*. The new law, though, did not close off entry into SNP and did not allow public employees to transfer to the new system. The reforms also permitted different contribution rates and different retirement ages for the SNP and the SPP. More recent reforms in July 1995 eliminated these differences which led to an increase in transfers from the SNP to the SPP, and through increases in the retirement age, led to reductions in contingent pension obligations of the SNP.

In July 1996, public employees were given the right and incentives to transfer from the CV to the SPP. Also, the National Pension Office was given the authority to audit claims for CV benefits to ensure

[4] See Munoz, 1997.
[5] See James, 1997 for more discussion.

their legitimacy. A pension trust fund was established, the *Fondo Consolidado de Reservas Previsionales,* to back pension obligations. A ceiling for CV pensions was put in place, and pension adjustments of employees of formerly owned state enterprises are subject to the same limits as SNP pensions. These changes helped to reduce the fiscal impact of future CV liabilities.

As of September 1996, an estimated 1.4 million Peruvian workers were affiliated with the fully funded system, and the PAYG system covered approximately 980,000 active and 320,000 retired employees[6]. The defined benefit program for civil servants covered 250,000 active and 50,000 retired employees. The deficit for the SNP was an estimated US$207 million in 1997 and is expected to rise in the next decade because of an anticipate decline in contributions. Meanwhile, the treasury spends US$400 million annually in CV pensions which does not include costs paid by state-owned enterprises or local governments. In sum, the country's public pension systems -- SNP and CV -- are actuarially bankrupt. Present obligations exceed the Government's ability to pay, and these obligations will grow exponentially in the next 20 years.

The private pension funds (AFPs) have an estimated US$1 billion in funds. Each AFP manages a single portfolio and each affiliate can have only one account. Each AFP is required to have returns within a range of 50-150 percent of the average returns of other AFPs. The rate of return on the funds has been hampered by regulations that limit the diversity of allowable investment options. AFPs have therefore been investing in Central Bank paper, as well as a narrow range of bonds, certificates of deposit, and stocks. The real returns realized by the affiliates have been significantly negative over this period. Another hindrance to more robust growth is the commission for account management which is a high two percent of salary. In November 1996, Peru instituted changes to discourage the high commissions and to increase competition among AFPs to invest among a wider range of portfolio options. Especially important is the incentive to move away from investment in short term obligations toward long term financing which can bolster the economy.

Continued progress in Peru depends on continuing reform of the regulatory framework for pension funds and a reduction of the fiscal impact of outstanding obligations from ongoing public pension programs. To this end, also in November 1996 the eligibility criteria to apply for a BR have been eased. Now, all new applicants that have made contributions to the SNP in the last 10 years prior to December 1996 will be eligible for a BR. The intent is to create an incentive especially for younger workers to transfer from the SNP to the new regime.

C. Argentina

Argentina's pension systems had their inception in the early 1900s. A variety of pension funds existed for different groups of workers. Each had independent rules and benefits. Most of the early funds were designed as fully funded systems; a few had pay-as-you-go schemes. But the early pension funds were subject to a number of deficiencies. Generous benefits outpaced the actuarial value of the contributions. The impact of demographic trends began to be felt, and coupled with sufficient long term planning, contributed to a growing crisis as financial instability began to emerge. The ratio of those age 65 and older to the working age population was 6 per 100 in 1950; in 1990, the figure was 15 per 100; in 2050, it could reach up to 29 per 100. By 1993, the national pension system was characterized by pervasive evasion, low retirement age, and lax rules for eligibility because of disability. Evasion was estimated to be as high as 46 percent of eligible workers. The deficit ranged from 1 percent to 1.5 percent of GDP which was partly a function of high pensions and replacement rates, along with indexation of

[6] See World Bank Report P-7031-PE, 1996.

pensions. The Argentine authorities were compelled to change the benefit formula which resulted in reduced pensions. The negative response to this change propelled radical reform.

In June 1994, Argentina began a transition to a new pension system with two compulsory pillars that combined elements of a pay as you go system and a fully funded system. The first pillar or component is administered by the state and provides a basic universal pension to all workers who have made contribution for at least 30 years. The amount of the pension is about 30 percent of the average covered wage. The second component of the new pension structure is a funded component with defined contributions with individual accounts managed by selected management companies (*Administradoras de Fondos de Jubilaciones y Pensiones* -- AFJPs). It also includes a state-run defined benefit plan that is unfunded and available to those that choose to stay with that plan. The reforms left open some weaknesses such as the retention of wage indexation of pensions under the old system which was subsequently corrected in March 1995 when wage indexation of pension was eliminated with a cap placed on high pensions. Remaining weaknesses include high rates of evasion and the unfunded nature of the second component.

All wage earners with the exception of the military, police, and provincial workers are required to participate in the new system, although they have a choice as to whether to join the state-run or publicly managed second pillar or the new pension structure with regard to the first pillar which is entirely public, workers may be eligible for a basic universal pension (PBU) which is equal to 27.5 percent of the average covered wage after a minimum of 30 years of employment. This public pillar is financed by a 16 percent contribution assessed on employers and from earmarked taxes from general revenues.

The second pillar has funded and unfunded components. The funded component is managed by AFJPs. Their sole purpose is to administer pension funds and benefits. They cannot engage in other business. To become an AFJP, an entity must have a minimum of US$3 million in capital and possess managerial and technical competence. Presently, six of the AFJPs manage about 70 percent of affiliates and funds. The unfunded component is a defined benefit scheme operated by the state that offers 0.85 percent of the average salary of the last 10 years of employment for every year of service. It operates on a PAYG basis financed by an 11 percent contribution rate assessed on employees. This component represents a weakness in the pension reform design as it is unfunded.

The new pension system has had only a few years of operation. So far, there is no clear link between the size of AFJPs and their profitability and operating efficiency. Some AFJPs are sustaining significant operating losses while others have exceeded the break-even point. The private component has attracted 67 percent of all workers who participate in the new integrated system. In the first two years of operation, AFJPs, mobilized 4.62 billion pesos, a portion of which was used for operating costs. Total funds mobilized by the pension funds including investment income earned amounted to 3.84 billion pesos in June 1996, equivalent to 14 percent of GDP.

Evasion remains high in the new system[7]. Only 59 percent of contributors were making payments in 1996, resulting in a monthly deficit of US$450 million. Annual outlays in 1996 totaled US$15.3 billion. Overpayments due to errors and fraud are estimated at US$300 million - US$1 billion.

Notwithstanding the problems, many younger workers have joined and are contributing to a large and fast growing pool of long-term financial resources. In June 1996, assets totaled 3.8 billion pesos, or 1.4% of GDP and 6.2 billion pesos or 2.2 percent of GDP by March 1997. The AFJPs have earned substantial rates of investment return but have encountered high start-up and marketing costs. Although there have been high investment returns, individual affiliates have so far had negative real returns because

[7] See Vittas, WP #1819, 1997.

of the high commissions. As assets accumulate and operating costs moderate, net returns will likely increase.

Size of Funds

	Level bn pesos	Level % GDP	Change % GDP
December 1994	0.52	0.18	
March 1995	0.95	0.35	0.17
June 1995	1.36	0.47	0.12
September 1995	1.89	0.70	0.23
December 1995	2.50	0.91	0.21
March 1996	3.22	1.22	0.31
June 1996	3.84	1.40	0.18
September 1996	4.49	1.63	0.23
December 1996	5.33	1.91	0.28
March 1997	6.24	2.20	0.29

Source: Dimitri Vittas, "The Argentine Pension Reform and its Relevance for Eastern Europe" pp. 22

The Argentine system shares similarities as well as differences with the Chilean system. Argentina has less extensive pension privatization and the new system provides a basic pension to most workers who have the opportunity to remain with the unfunded public pillar. The costs of the pension system are higher in Argentina because of the higher level of pensions and a greater degree of redistribution. Both countries systems are characterized by a gap between the number of affiliates and active contributors.

D. Mexico

Since 1944, Mexico has had a social security system for formal private sector workers and the self-employed. It consisted not only of retirement benefits but also retiree health benefits and disability. Approximately 80 percent of the formal labor force is covered. Contributions are 8.5 percent of wages. Other pension plans cover public sector workers and the military. Self-employed agricultural workers and up to 10 million underemployed and unemployed workers are not covered by the system. The present system guarantees a minimum pension equal to the minimum wage. At least 10 years of contributions are necessary for eligibility for the minimum pension.

Reform of Mexico's social security system was undertaken because of the financial fragility of the system. Increased life expectancy and lower population growth have led to a rapid aging of the population -- notwithstanding a large share of young people in the population. These demographic pressures compounded the more immediate severe financial disequilibrium. At inception, pension surpluses were designed to finance the structural requirements of the social security system and to fund health and maternity insurance. In fact, pension reserves did not accumulate until 1960, 16 years after the system was established. Meanwhile, benefits outpaced contributions. Benefits were originally designed to cover only the retired worker and not dependents. Moreover, before 1989 minimum pensions increased from 35 percent of the minimum wage to 100 percent in 1995. The latter steps was taken owing to the sharp decline in the real value of pensions. In 1989 pensions were indexed to the minimum wage. The financial status of the social security system in 1996 suggested the need for either a three-fold increase in contributions or an increase in government contributions totaling 1 percent of GDP in the year 2000 and 3.75 percent of GDP in 2030.

1992 Pension Reform

In 1992, Mexico established the Retirement Savings System (SAR) as a mandatory fully funded savings scheme which was based on Individual Retirement Accounts with an employer contribution on behalf of private and public sector employees. Employee contributions were voluntary, but these did not occur. Contributions were deposited in individual accounts and managed by commercial banks. They held the individual account funds for up to four days before sending them to the central bank. The contributions earned a government guaranteed interest rate of at least 2 percent a year over the inflation adjusted balance using the inflation rate of the previous month.

This attempt at reform proved to be unsuccessful because of institutional and conceptual problems. As a result, beginning in July 1997 no further contributions were to be made into the old SAR accounts. Under the reformed system employees can collect the balances in their individual retirement accounts upon retirement. The reasons for the failure of this attempt at pension reform are numerous. There was an overall lack of consistent supervision of accounts by commercial banks and the absence of an adequate regulatory framework for investment managers. Banks received low commissions for account administration, and the relatively small amounts in the SAR accounts also generated a lack of interest by the banks. There was little incentive for banks to participate in the system in the first place. Political pressure appears to have been the primary motivating factor.

The lessons learned from the 1992 pension reform are clear cut. A regulatory capacity needed to be operational at the outset. Participants -- individuals and banks -- require an incentive rather than coercion --- to participate. Contributors need to have options to select from but in the original reform, contributors were not allowed to choose the managers of their accounts. Finally, the savings were used to finance public expenditure rather than to establish an investment regime that would deepen financial markets. Moreover, contributions to the individual accounts were perceived as a tax rather than a contribution to retirement savings.

The failure of the 1992 reform demonstrated the complexity of partial reform of pension systems which by necessity have many dimensions. Difficult political economy issues cannot be ignored. The reform had not only to be redesigned within the framework of a weakened financial system following the 1994 peso crisis but to be done in the context of constitutionally protected benefits to pensioners.

1995 Pension Reform

The Mexican Congress enacted the new social security law in December 1995. A second legislative package enacted in April 1996 spelled out the implementation of reforms. The new system eliminates the old pay-as-you-go system. It provides current participants with a choice at retirement between the benefits under the old system or their balances under the new system. It guarantees a minimum level of benefits for low income participants. Finally, it eliminates cross subsidization among retirement, health and other insurance branches. The reform of Mexico's system started on July 1, 1997 while private management of the pension funds began at the end of September 1997.

The design of this new pension reform is based on a three dimensional strategy. The first dimension is a minimum guaranteed pension equivalent to the indexed minimum wage for low-income workers. This component has a redistributive element to address equity issues. A second component is a fully-funded mandatory individual savings account regime with competitive mutual fund management. The third component is a voluntary savings regime.

The Mexican Social Security Institute, IMSS, will continue to have a role as the legal enforcer of all contribution collections and will continue to provide benefits to existing pensioners. It will continue to provide benefits to transition workers choosing the old PAYG system at retirement, and be the provider of the minimum pension guarantee to all private sector workers.

The reform of Mexico's pension system came at a time when its membership consisted of a very young age structure, making reform easier. It also follows a period of high inflation in the 1980s and the peso crisis which eroded the real value of pensions and the guaranteed minimum pension. Furthermore, the minimum wage was at a very low level in real terms. The new system limits the government's fiscal responsibilities only to minimum pension guarantees rather than the fiscal soundness of the system as a whole. But it enhances the government's responsibility to establish a regulatory framework for the private sector management of invested funds. The credibility of the reform hinges on this necessary element of reform.

The basic design creates the potential for more effective provisions for income security during retirement years provided the contributions of employers (5.5%) into a housing savings account for workers earns positive real returns. In the past this fund, INFONAVIT, has not done so, thus presenting a major challenge. Nonetheless, this reform represents a step to shift to from a defined benefit and pay as you go system to a defined contribution model that has the potential to enhance the domestic capital market with the creation of a new group of institutional investors.

Under the new rules, AFORES have been established which are specialized administrators of retirement funds and manage individual retirement funds (SIEFORES). The AFORES are single purpose business corporations established by the private sector and trade unions. The IMSS can establish a single AFORE. Workers are required to contribute 6.5 percent of earnings to AFORES. The operation of the AFORES is to be financed through commissions. Each needs to maintain a minimum paid-in capital of N$25 million and a special reserve fund. The capital of the pension fund administrators cannot be used to meet the obligations of subsidiaries of the group. AFORES are to be owned by Mexicans but non-Mexican financial institutions may operate AFORES under NAFTA. No individual or corporation can control more than 10 percent of AFORE stock. As of September 1997, the majority of AFORES have foreign partners. Furthermore, some 90 percent of private sector workers have enrolled in the new system.

The first priority in Mexico's pension reform was to establish a regulatory framework to ensure the security of pension fund investments. The April 1996 legislation established the structure and delineated the powers of CONSAR and provided guiding principles for the establishment, operation and supervision of the AFORES and the SIEFOREs . It also established rules governing conflicts of interest, market share limits, and investor protection. In September 1996 CONSAR had finalized draft regulations and stipulated the authorization and capitalization of AFOREs and SIEFOREs, commissions and fees charged by AFOREs, and rules for the promotion and marketing of AFOREs and SIEFOREs to the public.

CONSAR has been given broad powers to set and enforce rules. It has supervisory authority over AFOREs and supervisory authority over other participants in the pension system such as banks and insurance companies. CONSAR also has the authority to review the moral integrity and technical capacity of the board of directors of each AFORE. A system of arbitration and conciliation that mediates claims of workers is overseen by CONSAR.

Rules governing the establishment of AFOREs controlled by foreign financial institutions have been finalized by the Ministry of Finance and Public Credit. These rules permit a class of AFOREs with majority control by foreign financial institutions from NAFTA member countries. Up to 49 percent of the shares of such foreign-owned AFORES can be held by other foreign or Mexican shareholders.

CONSAR's regulations on fees and commissions allow each AFORE to freely set management fees based on a percentage of contributions (a front end fee), and percentage of assets under management, or some combination of these two factors. In addition, CONSAR will issue regulations requiring disclosure of the net rate of return.

The regulatory framework sets limits on market share. Any single AFORE can manage no more than 20 percent of the system's assets. The purpose of this provision is to encourage competition in pension fund management. To enable this, CONSAR was to hold off authorizing any AFORE to conduct business until there is a significant number of competitors willing to provide AFORE services. Regulations also lay out rules for advertising and marketing. All prospectuses must be reviewed and approved by CONSAR to ensure fair and clear descriptions of portfolio and investment policies.

The reform demonstrates an important shift to private intermediation of retirement funds. These funds can become the largest financial industry in the country within a relatively short time period. The effectiveness of the investment and the return on investments will affect retirees' welfare, the savings rate, capital market development and the overall soundness and practicality of continued reform. Hence, the groundwork for very significant reform has been laid. But substantial follow-up is needed to ensure the sustainability and political support for such reforms.

Final regulations on the management of investments are forthcoming and will address the need for SIEFOREs to maintain judicious balance between investment vehicles, namely government bonds, private equity and debt instruments as well as the valuation of portfolio securities. An important consideration for CONSAR is how to regulate portfolio composition given limitations in the Mexican securities markets. These limitations include the fairly small number of private issuers in the market and the potential negative effects of concentration of investment in related companies. Another issue is the appropriateness of too high investment in the banking system, especially when those institutions may be unable to meet capital adequacy standards. CONSAR also will consider the suitability of certain poorly-rated debt instruments for mandatory pension funds, as well as the amount of liquidity in many listed equity securities.

CONSAR's consideration of these issues highlights the need for complementary securities markets reforms. Indeed, the success of Mexico's privately-managed mandatory pension system depends crucially on improvements in the regulation and supervision of Mexico's securities markets. CONSAR and CNBV are working to improve the standards for rating securities and enhancing the disclosure of information consistent with international standards.

The macroeconomic effects of the reformed Mexican system are promising. They offer the opportunity for increased financial savings and direct investment. Higher levels of capital can be expected to be injected into the economy. In the short-term, though, there is likely to be an increase in government liabilities owing to the cost of transition. In 1997, fiscal costs of the transition were estimated at around 1 to 1.5 percent of GDP.

Besides the need to definitively take measures to ensure that housing savings with INFONAVIT earn a real positive return other challenges for the new system are limited coverage, administrative complexity and operational costs which will need to be monitored closely. It will be essential to build public confidence in the new system from the outset to ensure maximum affiliation of eligible workers. Finally, continued restructuring of IMSS will be essential. On the regulatory front, the range of available pension and insurance products is restricted. The limits imposed on entry of other potential providers of pension services limits the scope of competition and the long-term efficiency and effectiveness of the system.

E. Brazil

Brazil has had a tradition of social insurance provision which originated in the early 1920s. The pension system has two components. The first is a mandatory defined benefit program. Private sector and state-owned enterprises are covered by the *Instituto Nacional De Seguridad Social* (INSS). A separate program for civil servants exists and provides more generous benefits. Civil servants at the state level have a separate pension scheme whereby retirement benefits are, for the most part, treated like wages and paid directly by the Treasury. Other pension plans exist which are voluntary. Under the old-age retirement scheme, urban workers are eligible to retire at age 65 for men and 60 for women. Until 1992, participation in the system was required for at least five years. The years of participation is being raised gradually -- by six months every year -- and will have increased from 6 years in 1994 to 15 by the year 2012. The replacement rate ranges between 75 and 100 percent. The minimum benefit is the equivalent of the minimum wage and the maximum benefit is the equivalent of 10 times the minimum wage. In 1986 Brazil's social security system accounted for 42 percent of social expenditures. Only one half of Brazilian workers were covered. At that time, estimates indicated that 41 percent of the population in the lowest two income groups received about 8 percent of all social security benefits.

As with many of the pay as you go pension systems, Brazil's pension program has significant fiscal imbalances. In 1988, an estimated 54 percent of contributions to the social security scheme were necessary to finance pensions. But by the end of 1995, pension expenditures had grown to 115 percent of contributions resulting in a monthly cash flow deficit of US$431 million. The cash imbalances were partly a function of a change in policy in 1988 which doubled the minimum pension from 50 to 100 percent of the minimum wage. The retirement age of rural workers was reduced by five years. As a result, the number of new retirees increased by 34 percent in 1992.

F. Comparing Pension Reforms in LAC

Mexico's pension reforms differ from those in Chile and Argentina in several important ways. Eligibility for Mexico's new pension system requires 25 years of work, with a week defined as equivalent to seven working days. This high standard for eligibility reduces use of the minimum pension guarantee paid for by the Government. A second major difference is that Mexico completely eliminated its PAYG system whereas Chile and Argentina retained the option to contribute to the PAYG plan. New workers in Mexico, as in Chile, are fully integrated into the new system. The Mexico system also precludes new entrants into the system from switching between the old and new system which increases administrative costs and promotes volatility in the volume of private sector funds that are managed.

A third major difference is the terms and conditions of the minimum pension guarantee. It is now lower in Mexico than in other countries. Presently, it is about 40 percent of the average wage and the figure likely will decline to about 25 percent of the average wage when the first cohort of new workers retires. This low minimum pension guarantee gives workers an incentive to save and reduces the moral hazard that accompanies high minimum guarantees. Another difference is that in Mexico, each worker can invest in multiple funds offered by the same administrator whereas in Chile, Argentina and Peru, each worker can invest in only one pension fund.

Not all countries have followed the altogether fully funded, defined contribution approach. Chile, Mexico, Bolivia and Peru have this approach as their primary system. Colombia, though, has made the PAYG system the primary system if individuals prefer, but they can also choose the fully funded defined contribution option as their first choice. In comparing Chile and Argentina the latter has higher levels of targeted pensions and targeted redistribution.

III. ISSUES IN PENSION REFORM

A limited approach to reform and a more comprehensive reform entail significant transitions that may carry political as well as fiscal costs. Any reduction in social security benefits is politically difficult to introduce. It usually necessitates legislative action. Such changes might be more palatable if they are linked to an increase in other benefits which would make a pension system more equitable. Changes can be introduced incrementally, e.g., gradually increasing the retirement age or postponing the year in which the retirement age begins to increase. Governments can play an important role by periodically assessing and publishing annually the actuarial balance of the system, under the assumption of current benefits. In the long-term, better public understanding of the issues involved can be helpful towards ensuring an equitable pension system that is fiscally sustainable.

There are some essential ingredients for successful pension reform. Macroeconomic stability is central for confidence in a reformed system. Financial markets need to be functioning well and real interest rates need to be positive. The insurance industry needs to be relatively well developed, competitive, and efficient. Finally, the capacity for regulation and supervision must be adequate to the task at hand. These more technical conditions for pension reform must complement a political climate in which the reform of politically sensitive pension systems which often involves tightening eligibility, increasing equity and redressing abuse, is possible. The public's appreciation of the fragility of present publicly provided pension systems may serve as an impetus to such reform.

A. Objectives of Reform

Pension reform should aim to achieve multiple objectives. A government's strategy should aim to:

* increase the equity and efficiency of the social security system for retirees to allow for universal coverage that assists the rich and poor alike;
* ensure a financially viable system not only in the short term, but also in the long term; .
* minimize the fiscal impact of making the transition to a new system;
* encourage the transparency of the new system with regard to the way it is to function as well as the financial implications of the new system for the government as well as the affiliates;
* promote greater private sector financial intermediation and thereby enhance the array and soundness of financial instruments; and
* enhance the allocative efficiency of domestic savings and increase the aggregate level of savings.

B. Principles of Reform

Sound pension reform depends upon the adoption of several key principles. In addition to ensuring a conducive macroeconomic climate, key principles include the following:

* a sound regulatory and supervisory framework to ensure the integrity of the system bolstered by effective enforcement;
* the establishment of a parallel voluntary system to encourage savings and occupational pension plans -- with the relevant regulatory structures;
* complementary reforms in the banking system and securities markets to ensure a well-functioning market that can generate a reasonable rate of return on investment in a manner that inspires confidence among investors;
* recognition and financing of the fiscal costs of transition and identifying sources to finance any implicit social security debt into explicit debt; and
* ensuring that the public is fully informed about the new pension system so as to build public support and encourage full participation.

C. Issues for Reform

Voluntary or Mandatory

A key decision that needs to be made in the reform of pensions programs is the nature of the mandate, if any, that will be imposed. A voluntary system may be deemed appropriate in the absence of a social consensus on mandatory savings. If a mandatory approach is considered, the mandates could be on employers, employees, or both. A mandatory system is based on several premises. First, mandatory schemes might be imposed to avoid instances of moral hazard whereby individuals may presume that society will take care of them irrespective of whether they save. Second, mandatory participation may be imposed to protect those whose preference would otherwise be to consume rather than save during their working years.

Whether employers, employees, or both should be subject to a mandate also needs consideration. A mandate on employees only may emerge in country contexts where company-based pension programs are non-existent or poorly developed. Philosophical principles may affect such a choice. The notion of personal responsibility may be attractive to those who believe that more efficient and effective future savings may result when individual responsibility provides a potentially powerful incentive. An employer mandate might be appropriate in countries where employer-based pensions already exist on a voluntary basis. With an employer mandated system, large firms establish and administer their own pension plans while small firms rely on outside contractors to administer their pension programs. Another variant might be to impose an employer mandate but offering individual employees the option to choose an alternative independent fund operated by a financial institution or other group. Another variation would address the high administrative costs of the Chilean system attributed, in part, to individual contracting with funds. Under this approach employees could be mandated to participate but group contracts can be negotiated by employers in return for group discounts. Lower costs associated with group contracts can be passed onto employees.

The encouragement of voluntary pension plans simultaneously with a reformed mandated system can be a positive step as part of overall pension reform. Voluntary plans, such as those offered by private companies, may permit workers to receive a pension at an earlier age than under a country's social security law. In the case of Mexico, the new Social Security Law and Pension Systems Law introduced for the first time a regulatory and supervisory framework for Mexico's private voluntary pension plans. Such regulations should require voluntary plans to be actuarially sound and be subject to full regulation and supervision. This approach can help bolster public confidence in voluntary plans.

Employee Choice

The stringency of regulations that need to be developed will depend on the extent to which a pension system is voluntary or mandatory. Under mandatory programs there is a higher threshold that governments need to meet in their regulatory apparatus as compared to voluntary programs, in part because there is more at stake. Decisions about how much choice to allow workers depends on the intent of the pension system. If the system has redistributive goals, it would have limited success if employees could opt out. In other systems that have more of an individual savings and capitalization approach, self-employed workers are sometimes exempted from mandatory participation. Tax incentives might be used as an alternative to encourage participation. Some pension systems may make participation voluntary for older workers beyond the retirement age who remain employed.

There is another level of employee choice that can be incorporated within a reformed pension system. In Chile and most other countries in the region employees are allowed to have only one account per worker. The intent is to promote simplicity in the system. But this rule requires workers to place of their retirement savings with one pension fund manager. Allowing open-ended diversification would make determinations of compliance in mandated programs more difficult. But it also precludes young and old workers, for example, from pursuing different investment strategies that may be more suited to their risk tolerance and financial needs.

Establishing a Sound Regulatory Framework

The growth in private pension funds in industrial countries and more recently in countries in LAC that are reforming their pension programs has generated a substantial interest in the regulatory framework that should be established to govern their operations[8]. Generally, there is variability in the degree of stringency in the regulatory regime depending on the degree of development of the capital market. On the other hand, countries with a less developed capital market and little tradition in operating private pension funds may justifiably impose more rigorous regulation. But in either instance, it is prudent to establish protective regulations in the same vein as rules are applied to banks and insurers.

An effective supervisory and regulatory and framework has been an essential component of Chile's privatized pension system. This seemed to be a rational approach given: (i) the compulsory nature of the private pension; (ii) the lack of knowledge and experience among contributing workers to investing and the functioning of capital markets; (iii) the need to establish a climate of trust in a new system to create political acceptance of a radically reform system; (iv) the very limited depth of capital markets at inception of the system and relative inexperience in capital market developments; (v) the need to establish safeguards to preclude investments that jeopardize the stability of pension funds--for which the government is ultimately liable if they fail. Chile's overall success has depended crucially on the structure and implementation of supervision. This has worked well because of the independence with which such functions were carried out; the effective leadership and expert staff commensurate with the tasks at hand; and ample resources made available to undertake the regulatory and supervisory functions.

As pension systems mature and as countries gain experience in the oversight of such systems, some relaxation of regulations may be appropriate. In the case of Chile, there is some \evidence to suggest that the regulation of pension funds has resulted in disincentives to competition that could result in lower net returns. Impediments to competition include restrictions on competition from domestic banks, mutual funds and insurance companies. In response, Chile has relaxed the stringency of its early regulations as it demonstrated its ability to enable a privatized pension system to work.

[8] See Vittas, 1996.

As countries in the region consider the design of their regulatory system, they should look to the Chilean approach to regulation[9]. Strict regulation is likely to be important in the initial years of implementing a reformed system. At the same time, greater flexibility may be warranted at the outset, e.g. to permit investment in multiple accounts by the affiliates as is the law in Mexico and is now being considered in Chile. It may be appropriate likewise to permit well rated banks, insurance companies, and mutual funds to allow their usual products such as deposit accounts, certificates of deposits and other instruments that receive a high rating to be open for investment affiliates with the aim of engendering competition and giving incentive to pension fund managers to manage their investments with greater efficiency than has been the case under a more regulated system. The precise degree of regulations and the phasing of regulations with varying stringency needs to be based on country economic, political, and other structural circumstances.

Regulations need to ensure 'fit and proper" management of pension funds which requires purview over the principal officials, financial solvency, avoidance of conflict of interest, custodial safeguards for managed assets, information disclosure, and fiduciary responsibility.

Financing the Transition

When fully funded defined contribution systems are put in place in pension reform, workers' contributions are placed in individual accounts. The cost of paying the pensions of current retirees remains. However, major issue is the manner in which these transition costs will be paid and who will pay them. As noted earlier, how this is resolved can have very significant macroeconomic consequences. A related issue arises when workers who contributed to the PAYG system and are now in the new system have less in their individual accounts that those who work the same number of years but solely under the new system. A mechanism used to recognize and reward and individual's right in the old system is the recognition bond for workers used in Chile, Colombia, and Peru. They are valued at the amount that workers are owed based on the contributions to the old system. The bonds become payable at retirement with individuals converting to an annuity their accrued funds, and the principal plus interest from the recognition bonds.

IV. CONCLUSIONS: QUICK FIXES OR SUSTAINABLE REFORM?

Demographic changes are yielding a very significant growth in the aging population. By the year 2030, more than 16 percent of the world's population will be over age sixty, compared with 9 percent today. This changing age structure is the result of improvements in the standard of living as well as the attainment of better health status. These successes, though, present new challenges to providing financial security to individuals when they can no longer work to support themselves. As a result, pension systems in many countries are -- or will soon be -- in need of reform. Most of the present pension systems have substantial unfunded liabilities which pose very significant financial burdens on future generations -- while at the same time often providing inadequate protection for older individuals and for lower income workers.

Pension reform is inevitable because of demographic imperatives and financial unsustainability of many public systems. Moreover, the operation of public unfunded pensions is subject to political risk that arises if promises for future retirees cannot be met. Reform of pension systems is not only technically but also politically complex. The good news is that more countries are beginning to address the problem. The larger question, though, is whether the reforms that will eventually be undertaken will be quick fixes or

[9] See Bustamanate, 1996.

sustainable changes that will yield benefits to future generations of older individuals and lower income workers, but also bring benefit to the macroeconomy. Quick fixes typically involve changes in eligibility such as retirement age; changes in the rate of contribution or the population of workers on which contributions are calculated, or changes in the structure of benefits. These changes are typical of many pension reforms that are occurring worldwide.

Countries in the LAC region, though, have been at the forefront in comparison to other regions, in undertaking major reform from PAYG defined benefit to fully funded, defined contribution pension plans. The success of the Chilean pension model has been instrumental in making countries in the LAC region especially prominent in this area both in the number of countries that are undertaking reform and the depth of reform.

Nonetheless the need for vigilance remains as some of the new pension systems are implemented. The efficacy of oversight, the complementary reforms needed namely in the banking, insurance and the securities markets, are critical to the success of pension reform. Much more work needs to be done or is underway in countries in the LAC region in these areas. But much work has already begun to set the region's pension systems on the right course.

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