Social Security in Latin America: Recent Reforms and Challenges

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LATIN AMERICA HAS LED THE WORLD IN INTRODUCING INDIVIDUAL RETIREMENT SAVINGS ACCOUNTS INTENDED TO COMPLEMENT OR REPLACE DEFINED-BENEFIT STATE-SPONSORED PAY-AS-YOU-GO SOCIAL SECURITY PENSIONS. IN THE 1990S SEVERAL COUNTRIES IN THE REGION FOLLOWED CHILE'S LEAD IN SETTING UP INDIVIDUAL ACCOUNTS, AND SINCE THAT TIME COUNTRIES THROUGHOUT the world have looked to the region for lessons. This article describes the vast array of pension reforms that have taken place in Latin America since Chile's original 1981 reform and summarizes some of the fundamental policy challenges that remain. Policymakers seeking to learn from the Latin American reforms have no shortage of models from which to choose.

The first half of this article highlights the wide variety of policy choices that each country has made. Rather than presenting a comprehensive survey, this article describes some of the most noteworthy and unique features of each country's reform. While some countries have embraced defined-contribution individual accounts as a replacement for financially troubled state-run pension systems, other countries have adopted mixed systems or have made individual accounts optional and supplementary. The diversity of reforms in the region suggests that there is no single Latin American model but rather a range of pension systems which incorporate individual retirement savings accounts to varying degrees.

The article's second half describes some of the most serious policy challenges that policymakers have faced since the implementation of the new pension systems. Governments are seeking to improve the performance of the new systems by reducing administrative costs, limiting evasion, incorporating new categories of workers into the system, and improving competition in the pension fund industry. In this respect the region's diverse social security reforms are still works in progress.

The Range of Reforms in Latin America

The Chilean retirement pension scheme is used as a benchmark in this article and is described here in some detail, followed by brief descriptions of how other programs differ from the Chilean model.[1] While some countries have replaced their public social security system with a privatized one (Bolivia, El Salvador, and Mexico), others have added a new private tier and modified the public one (Argentina, Uruguay, Colombia, and Peru). Still others offer supplementary pensions (Costa Rica and Brazil). In describing the range of reforms in the region, countries are classified below according to whether or not workers are required to contribute to a private individual account (see Table 1). Selected reforms unique to each country are highlighted.

Mandatory Individual Accounts

In Chile, Bolivia, El Salvador, and Mexico, workers are required to contribute to individual retirement savings accounts, and the old public systems are either closed to new entrants or closed completely. Transition provisions may allow individuals who were in the labor force at the time of the reform to switch to the privatized system with some form of compensation.

Chile. In 1981 Chile was the first country to replace a pay-as-you-go system with mandatory individual retirement savings accounts. Prior to this reform, the Chilean pay-as-you-go system included inequitable benefits based on occupation and political clout, mismanaged programs, high rates of evasion, low coverage, and promises of higher benefits that could not be sustained. The pension reform was part

TABLE 1
Benefits under Privatized Systems

Country	Retirement Age: Men	Retirement Age: Women	Guaranteed Minimum Pension	Type of Retirement Available: Annuity	Type of Retirement Available: Programmed Withdrawals with Deferred Annuity	Type of Retirement Available: Programmed Withdrawals	Requirement for Early Retirement
Mandatory Individual Accounts							
Chile	65	60	Yes	Yes	Yes	Yes	Pension equals 50 percent of average wage over last ten years and 110 percent of minimum old-age pension.
Bolivia	65	65	Yes	Yes	No	No	Pension equals 70 percent of average of last five years' earnings.
El Salvador	60	55	Yes	Yes	Yes	Yes	Pension equals 70 percent of basic wage or 170 percent of minimum old-age pension.
Mixed Systems							
Argentina	65	60	Yes	Yes	Yes	Yes	Pension equals 50 percent of average wage over last five years.
Uruguay	60	60	No	Yes	No	No	No early retirement.
Colombia	60[a]	55[b]	Yes	Yes	Yes	Yes	Pension equals 110 percent of minimum old-age pension.
Peru	65	65	No	Yes	Yes	Yes	Pension equals 50 percent of average salary in last ten years.
Mexico	65	60	Yes	Yes	Yes	Yes	Pension equals 30 percent of minimum old-age pension.

[a] Rising gradually to age 62 by 2014.
[b] Rising gradually to age 57 by 2014.

Source: SSA (1999)

of a major economic reform package that included privatization of state enterprises and government programs. Employees who moved from the old system to the privatized one received a government-mandated gross wage increase of 18 percent (about 11 percent net) to make up for the increase in the employee's contribution rate after the employer's contribution was eliminated (Ruiz-Tagle 1996, 3). Employees were also given a recognition bond representing the value of accrued rights under the old system that was indexed for inflation and funded by general revenues. To help fund the transition, Chile privatized state-owned industries and ran budget surpluses over a period of years (Diamond and Valdés-Prieto 1994, 280).

After the privatized scheme was introduced in 1981, the old system was closed to new entrants. All new workers were required to join the new system and those in the old system who were not within five years of retirement could opt to switch to the new system. The police and armed forces retained their separate programs.

Financing and Benefits. Under the new system, workers pay 10 percent of their monthly earnings into an individual retirement account run by a pension fund management company (*administradora de fondos de pensiones,* or AFP). The payment is mandatory for employees and voluntary for the self-employed. Workers pay a monthly administrative fee averaging 1.76 percent of salary, and an additional 0.64 percent of wages goes to survivors and disability insurance.[2] Most AFPs also charge a flat fee on contributions that averages about 600 pesos (about U.S.$1.15) (FIAP 2000b; SAFP 2000b). Workers may switch from one AFP to another twice per year without any transfer fee.

The retirement benefit is payable at age 65 (men) and 60 (women). Retirees choose among an annuity, programmed withdrawals (scheduled to guarantee income over the insured's expected lifespan), or a combination of the two options. The amount of the pension is based on the individual's contribution plus interest and less administrative fees. Pensions are protected against inflation because they are denominated in a monetary unit adjusted to reflect changes in the consumer price index—the *unidad de fomento*. Annuities are purchased from an insurance company for an additional administrative fee, which averages about 5.46 percent of the value of the annuity. Most AFPs also charge a monthly fee for programmed withdrawals that averages about 1.3 percent of the withdrawal; one AFP instead charges a flat monthly fee of 1,495 pesos (about U.S.$3) (SAFP 2000a, 2000b).

Early retirement is permitted if the pension equals at least 50 percent of the average wage over the last ten years and is at least 110 percent of the minimum old-age pension. A minimum pension is guaranteed to those who have made at least twenty years' worth of contributions and whose accumulated funds do not yield this minimum level (SSA 1999, 123).[3]

Table 2 compares key features of the financing of Chile's system with other systems in the region.

Administration. AFPs are private-sector companies strictly regulated as to allowable investments: as of August 2000, 37 percent of investments were in government bonds, 18 percent were in stocks, 33 percent were in the financial sector, and 12 percent were in international investments. Although the overall real rate of return on invested capital from July 1981 to April 2000 was about 11 percent, after subtracting the administrative fees mentioned above, the net rate of return was an average of about 7 percent (SAFP 2000c).

An AFP must maintain both a minimum and a maximum rate of return calculated to reflect the average performance of all AFPs. If an AFP exceeds the average by 2 percentage points or 50 percent (whichever is higher), it must place excess earnings in a rate of return fluctuation reserve fund.[4] An AFP must also keep 1 percent of the value of its pension fund as a separate reserve fund. Conversely, when returns are 2 percentage points below or 50 percent of the average (whichever is lower), an AFP must make up the difference from these reserve funds. If both of these funds become exhausted, the government makes up the difference, the pension fund management company is dissolved, and the individual accounts are transferred to another AFP.

Until recently, AFPs were permitted to manage only one fund. But since March 2000, AFPs have been required to offer a second fund that is completely

1. For a more detailed description of the public and private retirement, disability, and survivors programs for all of these countries, see Social Security Administration (1999).
2. Fees are assessed for each contribution made; thus, there are no fees for inactive accounts.
3. The value of the minimum pension varies since it is adjusted when the consumer price index is at least 15 percent higher than in the previous year. It was 61 percent of minimum wage in 1982, 91 percent in 1987, and 74 percent in early 2000. Also, the minimum pension is about 7 percent higher for those over age 70 (CBO 1999; SAFP 2000a).
4. Until 1999 the industry average was calculated yearly. Beginning in late 1999 the period was lengthened to three years but is being phased in; the period increases by one month every month for up to thirty-six months (SSB 1999, 131).

TABLE 2
Financing of Privatized Systems, December 1999

Country	Contribution (Percentage of Wages) Employee	Employer	Average Survivors and Disability Insurance[a] (Percentage of Wages)	Average Administrative Fees[a] (Percentage of Wages)	Recognition Bonds
Mandatory Individual Accounts					
Chile	10	None	0.64	1.76[b]	Yes
Bolivia	10	None	2.0	0.50	Yes
El Salvador	3.25	6.75	1.13	2.05	Yes
Mexico	1.125	5.15	2.5[c]	1.79	No
Mixed Systems					
Argentina	11[d]	N/A[e]	1.01	2.40[b]	No
Uruguay	15[f]	N/A[e]	0.61	2.03	No
Colombia	3.375	10	1.86[c]	1.63[c]	Yes
Peru	10	None	1.38	2.36	Yes

[a] Employee pays as percent of earnings.
[b] Does not include flat fees.
[c] Employee and employer split fee.
[d] Administrative fee and survivors and disability insurance deducted from this amount.
[e] Employer's contribution goes to public system.
[f] For incomes above U.S.$800. Workers earning less than $800 contribute 7.5 percent of half of their earnings to an individual account and 7.5 percent of the other half to the public program.

Source: SSA (1999)

invested in fixed-rate instruments for workers within ten years of retirement (SSB 1999, 123).

The Superintendencia de Administradoras de Fondos de Pensiones (Superintendent of Pension Fund Management Companies, or SAFP), an autonomous state-financed government agency, regulates, supervises, and licenses AFPs. The superintendent, appointed by the president, also serves as a member of the risk-classifying commission that evaluates the risk of each type of allowable investment (Callund 1994, 409).

Bolivia. In addition to receiving retirement benefits by accumulating financial capital in personal accounts, all Bolivian resident citizens who were at least 21 years old on December 31, 1995, receive shares of 50 percent of the proceeds from the sale of six leading state enterprises. The original law called for a *bonosol*, an annual old-age bonus to be paid to all these citizens once they reach age 65. The assets are held in the *fondo de capitalizacion* (FCC) and invested and managed by AFPs. The *bonosol* also included funeral expenses (Von Gersdorff 1997, 10–12).

However, in 1998 the *bonosol* was suspended because the FCC was severely underfunded.[5] A new law replaced the *bonosol* with the *bolivida,* which is yet to be implemented. The *bolivida* is to be paid to Bolivians who were age 50 or older on December 31, 1995, when they reach age 65. It will be funded by 30 percent of the FCC. The remaining 70 percent of the FCC will finance an individual account (*cuenta de acciones populares*, or CAP) for Bolivians between the ages of 21 and 50 at the end of 1995. (The CAP is separate from the individual account financed by the employee's contribution.) Prior to retirement, an employee may use the CAP as collateral for a loan or to buy shares in the financial market; at retirement, he or she may convert the CAP to an annuity. The *bolivida* and CAP provisions will not be implemented until a new national identification system is in place because the old *bonosol* program had so many fraudulent claims.[6] The amount of the *bolivida* will be based on available funds (IMF 1998).

Currently, only two AFPs, both owned by a consortium of foreign firms, are permitted to operate. Enrollment is directed by the Bolivian government according to the enrollee's area of residence and date of birth. Since January 2000 enrollees have been permitted to switch AFPs if they have made twelve contributions, changed jobs, moved, or if fees or insurance premiums have increased. In 2005 other AFPs will be allowed to enter the market and enrollees will be permitted to switch from one AFP to another. Administrative fees are expected to increase at that time (SSB 1998, 88–105).

El Salvador. Eligibility for the privatized system is based on age. Men who were 55 or older and women who were 50 or older at the time of the 1998 reform were required to stay in the public ISSS (El Salvadorean Social Security Institute). Anyone under the age of 36 at the time of the reform was required to set up an individual account. Individuals between those ages could choose either system (SSA 1999, 117). Contribution rates are being phased in so that by the seventh year of operation (2005), employers will pay 8.75 percent of payroll, and employees will pay 4.25 percent of earnings plus 3 percent for survivors and disability insurance and administrative fees (SSA 1999, 117). The government will pay the minimum pension only if fiscal resources are available (Mesa-Lago 1997, 397).

As in Chile, AFPs must guarantee a rate of return that falls within a range of the average rate of return of all AFPs, but the government does not guarantee a minimum rate of return if an AFP goes bankrupt. In addition to investing in locally issued securities, AFPs invest in the state-run public housing fund for a period of ten years, beginning with 30 percent of total assets and gradually declining (Mesa-Lago 1997, 409; SSB 1998, 293).

Mexico. One unique feature of the reformed Mexican system is that workers may switch back from the private system prior to retirement. Instead of a recognition bond, retiring workers who have previously made contributions under the pay-as-you-go system may choose between a benefit under the old or new plan. If the individual chooses the pay-as-you-go benefit, the balance of his or her individual account is transferred to the government. This ability to choose is advantageous to the worker, who can receive the higher of the two benefits, but it poses a potential problem for the government, making it difficult to project and plan for the long-term costs of paying for the transition from the public to the privatized system. Having this option could cause workers to take higher risks with their individual accounts, increasing the financial burden if the resulting average account balances are low and the government must fund a large number of benefits under the old public system.[7]

A housing fund (INFONAVIT) sets up a separate interest-bearing housing account for each employee and is funded by a 5 percent payroll tax paid by the employer. Since the housing fund provides low-interest loans to employees for the purchase of a home, the returns from this account are lower than from the individual retirement account. Upon retirement, the balances of these two accounts are combined to provide the pension (Grandolini and Cerda 1998, 32–34; CBO 1999).

Each pension fund management company (*administrador de fondos de ahorro*, or AFORE) is limited to a 17 percent market share (to be increased to 20 percent after the system has been in existence for four years). Although each AFORE currently manages only one fund, in the future AFORES will be allowed to manage multiple funds with different types of investment and risk levels. AFOREs may charge fees for a variety of services. The fees are charges as a percentage of wages, as a percentage of assets under management (including inactive accounts), and as a percentage of real return (Grandolini and Cerda 1998, 19).

Unlike in many of the other Latin American countries where disability and survivors insurance is a separate private contract with an insurance company funded only by the employee, in Mexico the public Mexican Social Security Institute administers these programs. They are financed by an employer/employee/ government contribution (CBO 1999; SSB 1998, 202; 1999, 230; Queisser 1998, 92).

While some countries have embraced defined-contribution individual accounts as a replacement for financially troubled state-run pension systems, other countries have adopted mixed systems or have made individual accounts optional and supplementary.

Mixed Systems

While Chile, Bolivia, El Salvador, and Mexico developed systems that will eventually eliminate the state-run pay-as-you-go system and require all workers to contribute to private accounts, other countries kept their state-sponsored systems. The countries with mixed systems described below maintained their state-run programs and gave workers the option of contributing to private accounts. Some countries offer a first-tier state-provided benefit and the choice of a public or private benefit for the second tier; other countries allow switching from public schemes to private ones.

Argentina. The Argentine program has three tiers. The first two tiers are pay-as-you-go: a non-earnings-related universal flat-rate benefit based on

5. Payments of the *bonosol* required the banks to borrow U.S.$50 million dollars at 11.75 percent interest per year. It became clear that in future years additional borrowing would be required (*La Razon* 2000).

6. Recent newspaper accounts indicate that the program should begin during the first half of 2001.

7. Although current regulations require most investments to be in government instruments, as the system matures, other types of investments will be permitted.

years of service and an earnings-related compensation benefit for service rendered before July 1994. The third tier offers a one-time choice between the public system and a private individual account (SSA 1999, 11). However, the Argentine pension system may soon undergo a major overhaul: in November 2000, President De la Rua announced a series of proposals that included eliminating both the universal flat-rate benefit and the state-run third-tier public benefit. At the time of publication, these proposed reforms had not been implemented.

A unique feature of the Argentine system is that a state-owned bank, the Banco de la Nación, is required to set up a pension fund management company that provides a guaranteed minimum rate of return equal to interest rates earned in savings accounts. The other pension fund administrators do not offer this kind of minimum guarantee; rather, they are expected to compete with the state-owned fund and provide returns that are equal or higher (Arenas de Mesa and Bertranou 1997, 334). Furthermore, the law states that no less than 20 percent of the investments of the Banco de la Nación must be invested in local economies; in practice, this requirement has called for investments in a combination of provincial, municipal, public sector enterprise, and autonomous public agency-issued bonds or Banco de la Nación–issued certificates of deposit.

The region's new pension systems continue to face a common set of policy dilemmas, including the need to improve finances, drive down expenses, reduce evasion, and expand coverage.

Uruguay. This program has a two-tier mixed system. The first tier covers all workers for the first U.S.$800 of monthly earnings (about 87 percent of the labor force earns under U.S.$800). The benefit is equal to a proportion of adjusted average monthly earnings. The second tier is a mandatory individual savings program for workers under the age of 40 with monthly earnings between approximately U.S.$800 and U.S.$2,400. (The program is voluntary for those who were age 40 when the program was set up and is voluntary for lower earners). At retirement, the insured must buy an annuity—indexed to average wages—from an insurance company (SSA 1999, 376).

Unlike most other Latin American countries where a new autonomous organization was created to oversee the private program, in Uruguay the central bank is responsible for the supervision and regulation of pension fund management companies. The social security bank supervises the public program and collects the contributions for both programs (Mesa-Lago 1997, 411; Mitchell 1996, 13).

Colombia. The Colombian system offers workers the choice between the public (Social Security Institute, or ISS) or private (AFP) retirement plans; workers are allowed to switch back and forth between the public and private plans every three years (SSA 1999, 82). Colombia's pension system is grappling with rapidly growing unfunded liabilities (Echeverry-Garzón and Navas-Ospina 1999, 93.) A government proposal in late 2000 to reduce these liabilities through a restructuring of the pension system does not appear to have sufficient political support.

By law, AFPs may offer more than one pension fund with different risk portfolios. Affiliates whose accounts would finance at least 50 percent of the minimum pension are permitted to invest the excess in other funds (Queisser 1997, 27).

Unlike in other countries where the supervisory institution is autonomous, in Colombia a government agency, the Superintendent of Banks, supervises both the public and private pension systems. It is effectively an umbrella regulatory body whose departments deal with banks, insurance companies, and pension funds. The superintendent's pension department regulates and supervises AFPs and other institutions and is not a separate and independent organization (Queisser 1998, 74; 1997, 26).

Peru. As an alternative to the existing pay-as-you-go system, Peru has introduced a private tier. Switching back and forth between the two tiers was permitted for the first two years of operation. Since then, once a worker has made a choice, no change is allowed. Peru is the only country that allows AFPs to charge an exit fee. In addition contributions to the AFPs are not tax-deductible and pensions are taxed (unlike in other countries); in effect, there is double taxation (Queisser 1997, 20). The Superintendent of Pension Fund Management Companies, an autono-mous agency that oversees the AFPs, is financed by 6.5 percent of gross earnings of all AFPs (AFP Horizonte 1997, 30).

Supplementary Accounts

While the countries described so far have initiated profound structural reforms that incorporate new systems of individual accounts, other countries have maintained their pay-as-you-go systems and provided optional supplementary accounts or private pensions. In Ecuador and the Dominican Republic, AFPs are operating even though proposals for reform of the pay-as-you-go system have been stalled in the legislature.

Costa Rica. Costa Rica's system differs from the countries described above in that the pay-as-you-go tier continues basically intact and voluntary individual accounts provide second-tier benefits. The pay-as-you-go benefit, financed by employee, employer, and government contributions, is equal to a proportion of adjusted average monthly earnings. The supplementary benefit is similar to the other programs described above.

A yet-to-be implemented new program reduces the employer's severance pay contribution by 3 percent. This 3 percent will go to a new funded labor account set up for each employee. Half of the account will fund the severance payment, and the other half will be sent to a supplementary pension fund chosen by the worker. Upon retirement individuals can choose either an annuity or programmed withdrawals (IBIS 1999, 39–40; 2000, 13). The voluntary account remains unchanged. The Superintendent of Pensions will oversee the new four-tiered social security system (IBIS 1999, 39–40).

Brazil. Brazil's private pensions are voluntary and serve as a supplement to the public system. Closed pension funds, the most common type (with about 92 percent of pension assets), are nonprofit and are set up by a company or group of companies, with membership limited to their employees. Both employees and employers contribute to these funds, and the funds are regulated by an agency within the Ministry of Social Security. Open pension funds are open to all workers and may be either nonprofit or for-profit organizations. The Superintendent of Private Insurance, a separate organization, oversees open pension funds.

In 1998 the Brazilian government introduced an individual programmed retirement fund (FAPI or *fundo de aposentadoria programada individual*) to supplement the public pension for workers who do not have the other private pension options. Workers choose an authorized financial institution or insurance company to manage their FAPI. Both employers and employees may contribute periodically (not less than once a year) for at least twelve months. After ten years, the employee may withdraw the funds in a lump sum or purchase some type of pension (SSB 1999, 106–14).

In some countries, where reform of the social security system is caught up in the legislative process, AFPs already operate despite the fact that no law has been passed. In Ecuador, six AFPs with a total of about 200,000 affiliates have about U.S.$35 million in assets. The Dominican Republic has four AFPs with about 15,000 affiliates and about U.S.$75 million in funds (FIAP 2000a, 36–38; SSB 1999, 290).

Policy Challenges

Throughout the region, the increasing prevalence of defined-contribution individual retirement savings programs is reflected in the increase in pension fund investments as a percentage of GDP (see Table 3). A new set of policy challenges has accompanied this broad set of reforms, including high commission costs, limited competition within the pension fund industry, questions over investment rules, high evasion rates, greater differentiation in pensions based on gender, and political obstacles to incorporating occupational groups not currently participating in the new system. These policy issues, and the extent to which countries in the region have attempted to resolve them, are summarized below. The discussion concentrates on Chile's system of individual accounts, established in 1981, because its relative maturity

TABLE 3
Pension Fund Management Firm Assets as a Percentage of GDP, 1999

Country	Year Program Began	Company Assets (in Thousands of U.S.$)	Fund as Percentage of GDP
Argentina	1994	16,787,099	5
Bolivia	1997	534,803	6
Chile	1981	34,501,000	47
Colombia	1994	2,887,108	5
El Salvador	1998	212,591	2
Mexico	1997	11,508,822	2
Peru	1995	2,406,034	4
Uruguay	1996	591,161	2

Source: FIAP (2000a; 2001)

has led to challenges that the other, newer systems, may not yet have encountered. (The second-oldest system began twelve years later in Colombia).

Administrative Fees. Under the new systems of individual accounts, workers contribute a percentage of their wages to their individual accounts, with additional deductions going toward an administrative fee and insurance premium. Commission fees vary throughout the region. In Colombia, administrative fees paid to pension fund administrators represent 14 percent of total contributions (not including insurance); the figures in Uruguay, Peru, and El Salvador are 21.2 percent, 22.8 percent, and 31.3 percent, respectively (calculations based on FIAP 2000b). Some argue that high administrative costs may be a necessary feature of a "retail competition" model in which pension fund administrators compete directly for worker contributions (Thompson 1999, 9).

In Argentina an average of 24 percent of a worker's total contributions goes toward an administrative fee, and in Chile the figure is 15 percent (FIAP 2000b). These two countries also allow firms to charge an additional flat-rate commission fee. In Argentina fees range from $1.90 to $9.00 for the eight firms out of twelve that charge a flat-rate fee (SAFJP 2000) whereas in Chile the charges range from 73 cents to $1.89 (only one of the eight pension firms in Chile does not charge such a fee) (SAFP 2000b). The net result is that lower-income workers pay a higher percentage of their salaries in charges than do higher income workers. For example, an Argentine worker earning $240 a month would pay an average of 3.99 percent of salary in total charges (commission fees plus disability insurance) while a worker earning $2,400 a month would pay 3.19 percent (SAFJP 2000).

Commission fees have a significant impact on returns, especially in the early years of a new system, when workers are beginning to accumulate capital in their accounts. In Chile the return on capital between July 1981 and April 2000 was 11.1 percent, but once commissions are factored in, lower-income earners received a 7.34 percent return, and higher-income earners received a 7.69 percent real average return (SAFP 2000c).[8] When workers retire, they may purchase annuities or elect to withdraw their money gradually in a programmed withdrawal. In Chile, annuities are purchased from an insurance company, and in April 2000 average fees were 5.46 percent of the value of the annuity (SAFP 2000a).

Policymakers have made lowering administrative fees a top priority. Pension fund administrators in Argentina have considered dropping fixed commissions altogether (Ojeda 2000). In Chile the government has sought to promote greater consumer awareness by requiring pension funds to publish data on expenses and fees. The government also made the process of transferring from one pension fund to another slightly more cumbersome (instead of simply signing a form, workers were required to present identification and a recent account statement). As a net result, transfers dropped from 26 percent of the labor force in 1997 to 3.5 percent in June 1999, enabling pension funds to reduce sales and marketing expenses; the pension fund sales force dropped from 22,643 employees in November 1997 to 4,026 in September 1999 (SSB 1999, 130; *Santiago Times* 1999). During that time the variable commission fee fell: between November 1997 and July 2000 average administrative fees dropped from around 19 percent to 15 percent of total contributions. However, the average flat fee rose 37 percent during the same period (SAFP 1997–2000). Several other reforms, such as loyalty discounts for workers who remain with a fund for a certain length of time, group discounts, and commission fees that vary according to services provided, are also under discussion in Chile.

Limited Competition. Numerous observers have attributed the high expenses of private pension funds to limited competition and industry concentration within the pension fund industry. The combination of a small market and the economies of scale inherent to pension fund management may create a tendency toward oligopoly, and concentration within the industry may limit the extent to which market competition can drive down costs (Thompson 1999, 27).

Diamond and Valdes-Prieto (1994, 288) have noted that the Chilean AFP market resembles a monopolistic competitive market rather than a competitive market, preventing lower costs and returns on the risk-return frontier. At its peak, there were twenty-two pension fund companies in Chile, a number which now stands at eight due to consolidation. The largest three funds control over two-thirds of the market, and, in an effort to stimulate competition and lower costs, the Chilean government now allows pension funds to subcontract investment services with other financial services firms.

In other parts of the region, Argentina began with twenty-six pension funds and now has thirteen. Mexico has gone from seventeen to thirteen funds. Two of Colombia's eight firms control almost 50 percent of the market. One of Uruguay's six firms controls 55 percent (FIAP 2000c). See Table 4 for a further comparison of the number and characteristics of pension fund management firms.

There has been much debate over whether or not banks, mutual funds, and insurance companies

TABLE 4
Characteristics of Pension Fund Management Firms

Country	Name	Number of Companies	Allowable Funds per Company	Allowable Transfers per Year	Minimum Rate of Return
		Mandatory Individual Accounts			
Chile	AFP	8	Two	Twice	Yes
Bolivia	AFP	2	One	Once	Yes
El Salvador	AFP	5	One	Every 1.5 years	Yes
Mexico	AFORE	13	One[a]	Once	No
		Mixed Systems			
Argentina	AFJP	13	One	Twice	Yes
Uruguay	AFAP	6	One	Twice	Yes
Colombia	AFP	8	Multiple	Twice	Yes
Peru	AFP	5	One	Twice	Yes

[a] The law allows for multiple funds; however, there are no regulations at this time.

should be allowed to enter the pension fund market to compete directly with AFPs. These firms argue that greater competition would spur competition and lower costs. Pension fund companies caution that allowing these firms entry could lead to conflicts of interest. At this point the subject is still being debated in Chile, but the government has signaled that it is committed to stimulating greater competition within the pension fund industry.

Investment Rules. Pension fund investments are strictly regulated, and pension funds generally face limits regarding what percentage of their portfolios can be invested in a given type of security. Local capital markets suffer from a lack of diversification of investment-grade instruments and are dominated by the issuance of government paper; therefore, investment is highly concentrated in state-issued bonds and short-term instruments. Uthoff (1997) argues that these factors tend to result in less-than-efficient allocation of investment and long-term capital formation.

Because pension funds receive sanctions for deviating from the average return, there is a herd effect as firms have little incentive to take risks that would lead to deviation from the mean. This lack of incentive effectively rules out longer-term investment strategies. Beginning in October 1999, Chile began lengthening the period of time for calculating minimum profitability from one to three years. Peru relaxed its minimal profitability requirements as well and began calculating minimum returns over a five-year period. These initiatives may encourage longer-term investment strategies and reduce the herd effect.

Until recently each Chilean pension fund company offered only one portfolio for all workers despite the fact that workers have a range of preferences for risk taking that can vary according to age and proximity to retirement. Following a severe financial market downturn in Chile in 1998, many workers decided to delay retirement. The government later approved the creation of a second type of investment portfolio to be invested only in fixed-income instruments and available to men aged 55 or older and women aged 50 or older. The pension fund superintendency is also studying the possibility of adding a third pension fund geared toward younger workers at the opposite end of the risk/return spectrum, which would be invested largely in stocks.

As the pioneer of private pension funds in the region, Chile has gradually liberalized investment rules as the system has matured and become more established. For example, no foreign investment was permitted in the early years of the system, but currently up to 20 percent of pension fund investments may go overseas. Recently introduced legislation would raise that limit to 35 percent, reducing risk through greater diversification.

Mexico's AFOREs currently manage only one pension fund; however, in the future the law will permit each AFORE to offer funds with different types of investments and risk levels. Each AFORE will be required to offer one fund that has at least 51 percent of its investments in inflation-indexed securities, one fund with mainly fixed-income investments, and another fund with investments primarily in equities (Queisser 1998, 92). Colombia permits pension funds to operate more than one plan, and affiliates whose

8. A study by CB Capitales (1999) concluded that once commission fees are accounted for, the real average return from 1981 through 1998 for a worker earning the average wage was 5.1 percent.

funds would finance at least 50 percent of the minimum pension are permitted to invest the excess in other plans.

Evasion. As was the case with the public systems, evasion has remained a consistent problem since the inception of new private pension systems. Because the informal sector in Latin America comprises about 57 percent of the labor force (Lora and Olivera 1998, 7–8), by definition less than half the workforce is in a position to make social security contributions. The growth in the informal sector shows no sign of abating. For example, approximately 72 percent of new employment in Argentina in the 1990s was in the informal sector (Ojeda 2000). Only about half of those workers with a private pension plan make regular contributions. Therefore, only about a quarter of the total workforce is making regular contributions and is on track to receive full retirement benefits. Workers who do not make regular contributions will, of course, accumulate less capital in their individual accounts and will receive lower retirement pensions. (At the end of 1999, 61 percent of workers in Mexico with individual pension accounts made regular contributions, 56 percent in Uruguay, 44 percent in Peru, Argentina, and Chile, and 40 percent in Colombia [FIAP 2000d]).

Pension reforms are continually subject to revision, and reform itself can be an incremental process. Latin America's social security systems are likely to continue to attract international attention as they confront the ongoing challenges of reform.

In some cases, there are incentives to evade. For example, in Chile workers who contribute for twenty years receive a government subsidy that will top up their benefit and assure them a minimum pension. Workers therefore have little incentive to contribute over and above the twenty-year requirement. In Argentina workers must contribute for thirty years to be eligible for a full benefit—a daunting obstacle in a country with high unemployment and a large informal sector. If governments do not improve compliance, significant percentages of the workforce will likely require government subsidies (if available) in order to receive adequate retirement benefits. The issue of evasion is closely tied to the overall structure of regional labor markets and is unlikely to improve until the size of the informal sector begins to shrink.

Gender. The new systems of individual accounts in Latin America strictly link benefits with earnings and place men and women in separate actuarial categories. Under the old systems, women and men were placed in the same actuarial category, and differences in pension levels were less pronounced since benefits did not depend directly upon total contributions and investment results. Because women tend to earn less than men and spend more years of their lives outside the paid labor force, women will also tend to accumulate less capital than men. With men and women now placed in separate actuarial categories, a woman purchasing an annuity and having the same amount of money as a man will receive lower benefits than the man because of her greater expected longevity.

According to a 1995 Chilean study, a woman whose salary is 75 percent of a given man's salary would receive a pension that is between 35 percent and 45 percent of his pension. If a woman and a man have the same salary and have contributed for the same number of years, the woman's pension would be between 52 percent and 76 percent of the man's pension (though she could expect to collect it longer). Consequently, in order for a woman to receive the same pension as a man with the same salary, she must retire later than the man does (Arenas de Mesa and Montecinos 1999). Thus far about half of those who have retired in Chile under the new system have accumulated sufficient funds to retire early. Of that total, 86 percent have been men and only 14 percent have been women (SAFP 1997–2000).

Incorporating New Sets of Workers. Pension reforms in the region often exclude workers benefiting from special, privileged pensions. The military and police, for example, have generally not been included in any of the new individual accounts systems in the region (Bolivia is one exception). In Colombia the new private system does not cover the military, national police, teachers, or employees of the state-owned oil company. In Argentina and Uruguay reforms were intended to eventually include the military and police, but despite some discussion little progress has been made. The 1995 Uruguayan reform legislation stated that programs would be introduced by the end of 1996 to incorporate workers enrolled in the relatively generous quasi-governmental pension plans into the new system of individual accounts (such systems include pension programs for bank employees, notaries, and professionals). However, these occupational groups have continued to object to being incorporated into the new system, largely because their current pension plans grant them a defined-benefit pension that is likely to be higher than what they would receive in a defined-contribution individual account plan.

For this reason, governments seeking to incorporate additional occupational groups will continue to face political opposition.

Argentina and Uruguay are the only countries where affiliation is mandatory for the self-employed. In other countries affiliation is optional. In 1997 only 11 percent of Chile's self-employed were affiliated with a pension fund, and only 4 percent made regular contributions (SAFP 1998, 196). It is clear that providing adequate pension coverage for the self-employed will be an ongoing challenge in the region.

Conclusion

Latin American countries have become the world's laboratory for pension systems based upon individual retirement savings accounts. This article illustrates the broad range of pension reforms by highlighting features specific to each country. Chile, Mexico, and El Salvador have gone the farthest in converting to individual accounts; Argentina, Uruguay, Colombia, and Peru have allowed parallel pay-as-you-go systems to continue. Under Bolivia's reform, retirement accounts were capitalized with revenue from the sale of state-owned assets. Meanwhile, several countries, including Brazil and Costa Rica, have embraced voluntary, supplemental pension plans but remain committed to the public pay-as-you-go system. Clearly there is no single Latin America model, and countries that seek to learn from the Latin American reforms can look to a wide range of systems.

The process of pension reform in Latin America remains a work-in-progress as initial reforms have been revised to reflect new policy needs. The region's new systems continue to face a common set of policy dilemmas, including the need to improve finances, drive down expenses, reduce evasion, and expand coverage. In Chile, for example, regulatory restrictions continue to evolve after twenty years. Argentina's president recently announced that he favors ending the current state-sponsored universal pay-as-you-go benefit and replacing it with a residual, means-tested benefit. Colombia's government also intends to revamp its troubled pension system in order to cope with unsustainable benefit obligations. These developments serve as a reminder that pension reforms are continually subject to revision, and that reform itself can be an incremental process. Latin America's social security systems are likely to continue to attract international attention as they confront the ongoing challenges of reform.

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