IS LATIN AMERICA RETREATING FROM INDIVIDUAL RETIREMENT ACCOUNTS?

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Introduction

In 1981, Chile initiated old-age pension reforms that introduced mandatory funded individual retirement accounts (IRAs) and moved away from public systems. Beginning in the 1990s, ten other Latin American countries followed in Chile's wake. In recent years, even before the onset of the financial crisis, a second round of pension reforms was initiated to strengthen the public component and address the problems created by individual accounts. The most extreme case of retrenching is Argentina, where IRAs were eliminated for mandatory contributions in late 2008. This country has gone back to a traditional defined-benefit pay-as-you-go scheme. This brief reviews the two rounds of pension reforms to determine whether Latin American countries are moving away from individual pensions.¹ Even though this region is quite heterogeneous, its labor markets and social security systems share some common features,

such as a large informal economy and a variety of uncoordinated institutions providing old-age income protection. The 2008-2009 financial crisis and economic recession is posing new challenges to systems that have introduced IRAs.

First Round of Reforms: Enacting IRAs

Beginning in the 1990s, the fear of large fiscal imbalances and mismanaged pay-as-you-go (PAYG) pension schemes prompted ten Latin American countries to follow Chile in enacting IRAs (see Figure 1 on the next page).² Although the reforms improved long-term system sustainability, problems such as low coverage, a shrinking social safety net, and imperfect regulatory frameworks, remained.

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* Replaced PAYG system in 1981.

** Re-nationalized in 2008.

Sources: Authors' elaboration based on Meso-Lago (2004a); Gill, Packard, and Yermo (2005); and U.S. Social Security Administration (2003-2008) and (2008b).

IRAs were intended to create a stronger link between benefits and contributions to get workers to view their contributions as personal savings rather than as a tax. This mindset would in turn encourage workers to contribute and would increase coverage and compliance rates. However, the evidence from Latin America suggests that introducing IRAs did not improve coverage and compliance rates.³ Figure 2 on the next page shows that coverage rates, measured as the ratio of contributors to workers, actually declined after the reforms. This result clearly illustrates that structural features of labor markets are more relevant than pension system design in driving coverage.

Many other factors - including the type of benefits offered, funding mechanisms, administrative arrangements, and incentives - explain the variations in coverage.⁴ For example, the 1994 reform in Argentina raised retirement ages and vesting periods, creating stricter conditions to access benefits and thus reducing coverage for the population aged 65 and over from 78 percent in 1992 to about 65 percent in the mid-2000s. In addition, unemployment, informal labor markets, and cultural factors are strong determinants of compliance and coverage rates. Besides their failure to expand coverage, IRAs also removed some "solidarity" (or redistributive) mechanisms of PAYG schemes.5 Although with important limitations, PAYG schemes involve not only intergenerational redistribution (contributions from active workers are used to pay benefits for retirees) but also redistribution between income groups. In contrast, IRAs are based on personal savings and leave the responsibility of income redistribution to social assistance and minimum pensions provided by state-run programs. As contributory coverage declined or remained stagnant, social safety net and non-contributory programs have grown in number of beneficiaries in several countries, such as Chile and Colombia.

A third challenging area of IRA reforms relates to imperfect regulations, such as protection from political interference.⁶ Although a driving reason for reform was the intention to create pension systems highly insulated from political intervention, the evidence suggests that the reformed systems remain vulnerable to political manipulation. For example, loose regulation led to ambiguous approaches to transition rules in Bolivia and in the early 2000s allowed the government of Argentina to defer its debt by "selling" bonds to fund management companies until a default occurred. Because of low coverage rates and decreased solidarity, governments continue financing a substantial part of the pension bill and public institutions continue to manage pension benefits, including defined benefit, minimum guaranteed benefits, and social assistance pensions. Public institutions also work as guarantors of the private IRA scheme. In sum, although IRAs play an important role in reformed pension systems in Latin America, their enactment did not result in a full withdrawal of governments from pension systems.7



FIGURE 2. COVERAGE RATES IN LATIN AMERICA BEFORE AND AFTER FIRST ROUND OF OLD-AGE PENSION REFORMS

Notes: Coverage is measured as contributors/economically active population at two points in time: 1) the year before the reform; and 2) in 2002 for all countries except the Dominican Republic (which uses 2004 data). *Sources:* Adapted from Mesa-Lago (2005); Rofman and Luccetti (2006); and AIOS (2004).

Second Round of Reforms: Retrenching and Improving IRAs

During the last few years, Latin America started a second round of pension reforms in response to the shortcomings of IRAs. The new political context is characterized by governments being less enthusiastic about privatization. The reforms are resulting in a significant comeback of public components in old-age income support systems in an attempt to reach a better balance of social risks with individual savings. The case that best illustrates this trend is Chile, where a comprehensive pension bill was approved in 2008.⁸ The 2008-2009 financial turmoil will probably reinforce the changes of the second round of reforms in Latin America. The most extreme case is Argentina, which "re-nationalized" IRAs, partially in response to the financial crisis.

Retrenchment of IRAs and Expansion of Public Pensions

Public institutions have maintained an important role even after privatization. In the second round of reforms, the direct involvement of public institutions in pension provision has been reinforced in three ways: 1) allowing workers to switch back to the PAYG scheme; 2) incorporating solidarity and income redistribution mechanisms; and 3) creating new public pension reserve funds.

Choice between IRAs and PAYG. The first round of reforms generally established that new workers were to join the IRAs, with no option to switch back to the PAYG scheme.9 Perhaps one of the more radical transformations of the second round of pension reforms has been allowing some workers to switch back to the PAYG scheme. For example, in 2007 Peru permitted workers enrolled in IRAs to rejoin the PAYG scheme if they had contributed to the PAYG scheme before 1996 and met conditions to retire under that scheme. This law aimed to increase pensions for eligible workers who would have otherwise received a smaller pension in the IRA scheme. In 2008, Uruguay also enacted regulations that allowed some affiliates to leave IRAs and switch back to the defined benefit scheme. Argentina had taken the reforms one step further before the "re-nationalization" in 2008. During 2007, the government changed the default affiliation to the PAYG scheme for workers entering the formal labor market and - for a six-month window - allowed individuals already in the IRA scheme to switch back to the PAYG scheme. Notably, of those eligible to switch, 80 percent stayed in the IRA scheme, showing that inertia is a natural outcome when choice is introduced in pension systems. In

addition, workers within 10 years of retirement and with low IRA balances were automatically transferred to the PAYG scheme.¹⁰ Furthermore, the benefit paid by the PAYG scheme for each year of contribution increased from 0.85 percent to 1.5 percent of pre-retirement wages.¹¹ This change considerably raised the rate of return on contributions made to the public defined benefit scheme. Later on, Argentina decided to re-nationalize its IRA scheme in 2008.¹² The government justified this aggressive move as a reaction to the financial market crisis, though reducing its budget constraints was clearly a substantial motivation. The approved bill stated that, by January of 2009, IRA funds were to be absorbed by the public PAYG scheme.

Solidarity and income redistribution. The first round of pension reforms partially removed important solidarity and redistribution mechanisms. In response, several countries introduced cash transfer programs and expanded their non-contributory pensions, financed by general tax revenue, to supplement contributory pensions and protect old-age people

against poverty.¹³ For example, El Salvador created a subsidy for retirees receiving IRA benefits that are lower than they would have been under

the old PAYG scheme. In early 2008, Chile approved a pension reform bill aiming to provide universal and more equitable benefits. The new system of "solidarity pensions" gradually replaces the means-tested pensions and the guaranteed minimum pensions with two types of benefits: a non-contributory pension and a supplementary pension (top-up) benefit for those who have contributed to the private system. The supplementary monthly benefit starts at the level of the non-contributory solidarity pension and ends at about US \$400. It also provides a tax credit of 15 percent for voluntary savings, which is targeted to low-income workers. Another interesting case is Colombia; in 2003 it introduced a solidarity pension fund, which pays non-contributory benefits and matches contributions for low-income workers. Although solidarity and income redistribution mechanisms have been enhanced elsewhere in the region, poverty reduction and gender equality are still considered missing or incomplete pieces of pension reform in Latin America.14

Reserve funds for public pensions. Latin American countries have also passed legislation creating separate reserve funds to provide greater financial stability

and reduce the burden on general revenues of funding the government's pension obligations.¹⁵ Chile has instituted two separate reserve funds (the Pension Reserve Fund and the Economic and Social Stabilization Fund) in response to the large budget surpluses attributed to the country's record copper sales during recent years. Both funds are not managed directly by the government, but by the Central Bank (65 percent of the funds) and third parties (35 percent of the funds). In Argentina, a state-owned bank supervised by multiple-institutions manages a Sustainability Fund, and a committee including members from different agencies oversees investment decisions.

Improvement of IRAs

Governments and private administrators have clearly acknowledged the shortcomings of IRAs and the need for intervention. However, this recognition does not necessarily imply the termination of IRAs, as happened in Argentina. The second round of pension reform in Latin America is also about revising IRAs

Recent reforms aim to correct the flaws of IRAs and strengthen safety nets.

and correcting their flaws. Three examples of reforms aiming to improve IRAs are: (I) extending mandatory contributions to work-

ers not currently covered; (2) lowering costs to account holders; and (3) changing the investment rules for pension assets.

Extend coverage. The first round of pension reforms typically made IRAs voluntary for self-employed workers. The second round extends mandatory participation to these workers.¹⁶ For example, following Costa Rica and Colombia, Chile will start requiring the self-employed to gradually join the IRA scheme within the next seven years. Mexico has enacted similar measures for the self-employed and has extended IRAs to federal public employees. Other countries, such as Peru, are also discussing compulsory savings for all categories of workers.

Lower IRA costs. High administrative fees and premiums for survivors and disability insurance have lowered net rates of return for account holders and produced very large profits for many fund management and insurance companies. The problem has been aggravated by participants' lack of awareness of the importance of fees.¹⁷ To lower costs for account holders, countries have implemented a number of measures.¹⁸ For example, in 2008 Mexico cre-

ated an indicator to help account holders compare the net rate of return of pension fund management companies. New entrants to the labor force who do not choose a management company are assigned by default to the one with the highest rate of return. Transfers between companies are allowed once a year, but transfers to the company with the highest rate of return are now permitted without restrictions. In addition, companies are now allowed to charge a fee on account balances, but not on monthly contributions. Countries such as El Salvador, Chile, and Peru took a similar path. Even though these policies are expected to have a positive effect, it is difficult to predict their magnitude. Some of the instruments to induce lower costs rely on past performance; therefore, their actual effectiveness is uncertain.

Investment rules for pension assets. Portfolios have been heavily concentrated in government bonds, but new types of instruments and multi-fund strategies have been authorized during the second round of reforms. Numerous countries have implemented such changes, including Chile, Colombia, Mexico, and Peru.¹⁹ Another way to cope with risks has been the implementation of multi-funds, where insured workers can choose among several risk-related portfolios. It is not clear that multi-funds actually contribute to financial literacy and adequate returns for the average insured worker. Furthermore, the recent financial market turmoil resulted in serious declines in IRA assets, suggesting that they were too exposed to market risks. Numerous reasonable concerns have been raised over whether letting workers choose portfolios with high exposure to risks are a proper "social security" policy.

Conclusion

This *brief* addressed whether IRAs are retrenching in Latin America. Although the idea is provocative, we conclude that the concept of "retrenchment" alone is insufficient to characterize the new politics and political economy of old-age pension reform. As opposed to what happened in the 1980s and 1990s, pension reforms in Latin America in recent years have combined retrenchment with improvement of IRAs. During the period of enactment, ten Latin American countries introduced mandatory funded IRAs as a full or partial replacement for the old PAYG public schemes. One remarkable aspect about this first round of pension reforms is that, even though it introduced substantial changes in funding and management, in most countries public institutions assumed a crucial role not only as regulating agents, but also in managing and financing minimum guaranteed and social assistance pension benefits.

The second round of pension reforms, which began after 2005, has reinforced the involvement of public institutions in the pension system. In addition, numerous countries have introduced measures to improve IRAs. The driving force of the second round of reforms has been to increase coverage, equity, and efficiency of the overall system. With the exception of Argentina, which has re-nationalized its pension system, the second round of reforms seems to be less radical compared to the path-breaking changes introduced by the first round.

The dominant policy prescriptions in vogue during the first round of reforms in Latin America have clearly been re-evaluated. As countries started to engage in a second round of reforms, the World Bank - and other international organizations that promoted IRA pension reforms - has acknowledged that more attention should be paid to mechanisms to reduce poverty in old-age, to expand coverage and equity, and to protect participants from market risks. Noncontributory and universal pensions are recognized as playing a greater role. The challenges faced by countries that introduced IRAs, the changes in international financing institutions, and the recent financial crisis may have tempered the enthusiasm of other countries from applying the same type of reforms. Policymakers around the globe could benefit from looking closely at these changes in pension policy.

APPENDIX

This appendix provides details on pension structure and reforms in Latin America.²⁰

Argentina

This is the only country case of full IRA retrenchment. IRAs were introduced in 1994; reformed in 2007 to allow the choice of switching back to the defined benefit PAYG scheme; and, finally, eliminated for mandatory contributions in 2008. The current system is, therefore, fully defined benefit PAYG.

Enactment of IRAs

The reform implemented in 1994 created a mixed system comprising both public and private components. The reformed system covered both employed and self-employed workers with a three-tier structure: 1) a non-earnings-related, universal public pension proportional to years of service; 2) an earnings-related public pension for contributions that preceded the reform; and 3) a choice between a public defined contribution plan and a private IRA based on earnings after the reform. IRAs were the default choice, with no option to switch back to the public system. Separate schemes still operate for the following groups: armed forces, security forces, and the police force; civil servants of some provinces and municipalities; and other groups, including teachers and judicial authorities.

The public component was run by the state and financed with general revenue and contributions by employees and employers. The private component was run by private fund managers and fully funded through employee contributions. For those workers in the fully-funded plan, employers' contributions continue financing benefits administered by the public component. Apart from these contributions, pension benefits were funded by the government through general revenue and earmarked taxes for social security. The government also contributed to the disability and survivor pensions of insured persons in transition²¹ who opted for the funded scheme.

To receive pension benefits, individuals must have contributed to the system for a period of at least 30 years (increased from 20 years for women and 25 years for men) and satisfy the age requirement (raised by five years, to 60 for women and 65 for men). Individuals aged 70 and above with 10 years of contributions receive an advanced age pension. The Superintendence of Retirement and Pension Fund Administrators were in charge of overseeing the pension fund administrators and the IRA scheme more generally. The National Social Security Administration (ANSES) administers the PAYG scheme.

Retrenchment and Improvement of IRAs

In 2007 the government introduced a number of reforms:

- Under the new regulations, the insured were allowed to switch between the PAYG and the IRA scheme every five years. After the reform, individuals already in the funded scheme had a sixmonth period to switch back to the PAYG scheme. For new entrants, unless they choose an option within 90 days, the default was the PAYG scheme.
- 2) Individuals close to retirement (i.e., up to 10 years before) with low balances in their individual accounts (i.e., balances that at the time they retire would not equal the current minimum pension paid by the State under the PAYG scheme) were automatically transferred to the PAYG scheme.
- 3) With the aim to increase coverage, conditions to be entitled to pension benefits were made more flexible. For a defined period of time, all individuals at their retirement age who had not complied with the requirement of 30 years of contributions could access a reduced pension benefit.
- 4) During Argentina's economic downturn in late 2001, the government increased workers' takehome pay by lowering their pension contribution rates from 11 percent to 5 percent for both the PAYG and the IRA scheme. By early 2002, the government raised contributions to 11 percent of earnings for workers in the public scheme and raised the individual account rate to 7 percent for those in IRAs. In 2008, pension employees' contribution rates were equalized for both schemes at 11 percent of earnings.

- 5) In order to provide guarantees to the PAYG scheme, a 'sustainability' fund was created. The fund began with US\$6.45 billion in assets from the ANSES and is financed with any annual ANSES surplus. The fund may be used only to pay for public pension benefits.
- 6) Prior to the 2007 reforms, pension fund managers were free to define their fees, always as a percentage of contributions (although measured as a percentage of salaries). Fees were used to cover administrative expenses and disability and survivors insurance costs. Administrative fees had changed over time; prior to the reform, they were at around 2.5 percent of wages on average (of which 1.1 percent was for administrative costs and 1.4 percent for insurance). In 2007 the government established a maximum fee level of one percent of wages.
- 7) Prior to the 2007 reforms, pension fund managers were required to buy an insurance policy to cover the cost of an annuity (net of accumulated funds in the individual account) in case the worker died or became disabled. Coverage was not universal, as it only included those who had contributed on a regular basis. In 2007 the government eliminated the insurance scheme for disability and survivors benefits in the funded scheme. It was replaced by a pooling mechanism including all pension funds.
- 8) Pension fund managers select their portfolio structure from a wide set of possibilities. The 1994 Law established maximum concentration limits by type of instrument and issuer. Following the 2007 reforms, the list of authorized investments included a new 'type' of instrument: "debt instruments, shares or other instruments that finance medium to long-term productive or infrastructure projects." Pension funds had to invest at least 5 percent, and up to 20 percent, of their assets in this new type of instrument to promote local economic activity.

In 2008, Argentina took the reforms one step further and Congress passed new legislation "renationalizing" the pension system. This meant the termination of IRAs for mandatory contributions and fully converting the system to PAYG defined benefit. The ANSES took over the assets held by private pension funds and the pension benefits paid by them. Insurance companies continued paying the annuities contracted before the 2008 reform.

Bolivia

Enactment of IRAs

The structural reform that introduced IRAs in Bolivia was implemented in 1997. The defined benefit PAYG scheme was completely closed and contributions to the old system switched to the new one. While participation of new workers in IRAs is mandatory, the self-employed can join the system voluntarily. There is no separate system for civil servants.

IRA benefits are fully funded with workers' contributions. The government contributes as an employer, pays a recognition bond for contributions to the old system and finances pensions payable under the old system. Employers other than the government make no contribution.

The retirement age was increased and set at 65 for men and women, or at any age if the accumulated capital in the individual account, plus accrued interest, is sufficient to finance a monthly pension equal to 70 percent of the insured's average covered earnings in the last 5 years. For payout, only annuities are allowed.

The system is supervised by the Superintendence of Pensions, Securities, and Insurance, which defines investment rules for pension fund administrators.

Retrenchment and Improvement of IRAs

A small universal non-contributory pension benefit (Bonosol) was implemented in 2002. This benefit is financed from the privatization of state-owned enterprises and is paid to resident citizens born before January 1974 who reach the retirement age. Every five years, the benefit amounts are recalculated by the Superintendence of Pensions, Securities, and Insurance.

The Bonosol program was modified in 2008 and replaced by Renta Dignidad. The program is still universal; however, benefits are higher for those who are not getting a contributory benefit. Besides financing a solidarity fund to supplement pensions for low earners, a pension reform bill sent to Parliament in July 2008 proposes additional modifications: lowering the full-retirement age to 60, creating a government agency to replace the two existing private pension fund companies, mandating employer contributions, and allowing retirement at any age if IRAs yield a pension of 60 percent or more of the worker's average salary in the previous five years.

Chile

Enactment of IRAs

In 1981, Chile was the first country to introduce an IRA scheme and phase out its PAYG scheme. While participation in IRAs is mandatory for new salaried employees, affiliation for self-employed workers was voluntary. There is no separate system for civil servants. Only the armed and security forces have a separate defined benefit program.

Total payroll taxes were reduced substantially by eliminating employers' contributions. Employees' contributions for pensions were set at 10 percent of wages plus about 2.4 percent for administration fees and insurance premiums. Employers only make contributions for employees working under arduous conditions. The government covers guaranteed minimum pensions, social assistance pensions, and offers subsidies as needed to finance the program.

The retirement age was set at 60 for women and 65 for men, allowing early retirement for those workers with balances sufficient to finance an annuity higher than 50 percent of their pre-retirement wages or higher than 50 percent of the minimum pension. Payout options are annuity, scheduled withdrawal, and combinations of the two. The government guarantees a minimum pension of 61 percent of the minimum wage in 1982 to workers who contributed for at least 20 years but who have insufficient funds to yield the minimum pension, and to retirees who have chosen scheduled withdrawal but lived beyond their expected retirement age and exhausted their funds. The value of the minimum pension has been adjusted according to the Consumer Price Index.

The IRA scheme has been supervised by the Superintendence of Pension Fund Management Companies (SAFP), which was reformulated as the Superintendence of Pensions (SUPEN) under the 2008 reform.

Retrenchment and Improvement of IRAs

In 2002, a multi-fund format was adopted. Men under 55 and women under 50 can choose between five types of funds offering varying degrees of risk (A, B, C, D and E), whereas men and women older than these ages can only choose between the four funds of relatively minor risk, and pensioners between the three funds of lesser relative risk. The balances from mandatory contributions can be distributed between two different funds within one pension fund management company. Investment rules have been modified to allow more foreign assets in pension fund portfolios. For payouts, a combination of options (annuity and scheduled withdrawal) is also allowed.

In 2007, rules for early retirement were changed, making them stricter to discourage early withdrawal from the labor force with relatively low benefits. The new rules establish that the accumulated funds must be sufficient to finance an annuity higher than 58 percent of their pre-retirement wages or higher than 150 percent of the minimum pension.

In 2008, Chile introduced significant changes to the pension system as a whole. The minimum pension guarantee program was merged with the social assistance benefit program, creating a public institution that manages two types of benefits: a minimum non-contributory benefit that is paid to the poorest 60 percent of the elderly and a supplementary benefit for those workers with low IRA balances. Payroll contributions were not increased; however, the payment of the insurance premium for disability and survivorship will switch from employees to employers in July 2009. This insurance coverage now reaches male widowers. The self-employed will be gradually required to join the IRA scheme. Voluntary occupational schemes have been also introduced on top of mandated IRAs and individual voluntary pension savings. In sum, the pension system has gained in coverage, benefits generosity, and coordination.

Colombia

Enactment of IRAs

The structural reform started in 1994 after Congress passed a comprehensive bill reforming both the pension and health systems. IRAs were introduced to the pension systems. Workers can either choose to remain in a reformed defined benefit PAYG scheme or move to the privately-managed system. Participation in IRAs is voluntary for new workers and they are allowed to switch between both systems. Separate systems for civil servants and other groups of workers still remain.

Total contributions to pensions in the fully funded scheme are 15.5 percent of wages, which includes 10 percent for the IRA, 4 percent for administration fees and insurance premiums, and 1.5 percent for the Minimum Pension Guarantee Fund. High-income workers have an additional wage contribution, which finances a Solidarity Pension Fund. Resources of the Solidarity Pension Fund are used to pay social assistance benefits and to finance a subsidy that matches contributions of low-income workers in the contributory defined benefit scheme. The 15.5 percent contribution is shared by employers (11.63 percent) and workers (3.88 percent).

The retirement age was harmonized and increased to 57 for women and 62 for men. In the IRA scheme, there is no minimum retirement age but a minimum account balance is required. Payout options are annuity or scheduled withdrawal.

The IRA scheme is supervised by the Superintendence of Banks and the Ministry of Labor and Social Security. COLPENSIONES (formerly the Social Security Institute) administers the public program nationally and supervises regional funds and local offices.

Retrenchment and Improvement of IRAs

A Solidarity Pension Fund and a Minimum Pension Guarantee Fund were added to the system. The Solidarity Pension Fund pays non-contributory benefits and matches contributions for low-income formal workers. In addition, numerous legal modifications have introduced additional schemes and funding to improve fairness and solidarity of the system. For example, Colombia abolished privileged pensions and will start increasing the retirement age and requiring self-employed workers to gradually join the IRA system. Also, in 2008, a bill was sent to Congress proposing that the IRA scheme introduce a "multifunds" format allowing affiliates to choose among three different investment portfolios. The bill also requires that each fund management company yield a minimum rate of return for each type of pension fund, in addition to a minimum rate of return based on the average annual rate of return for all the fund management companies in the system.

Costa Rica

Enactment of IRAs

In 2001, Costa Rica introduced IRAs as a supplement to the PAYG pension scheme. The result is a mixed pension system. Public and private sector employees as well as the self-employed are covered under the PAYG, but IRAs are mandatory just for public and private sector employees. Special systems for teachers and employees of the Justice Department remain.

Contributions to IRAs are 1 percent of earnings for employees and 1.75 percent of payroll for employers. The PAYG scheme is funded with worker, employer and government contributions. Workers contribute 2.5 percent of their gross earnings and employers contribute 4.75 percent of payroll. Self-employed workers contribute between 4.75 percent and 7.25 percent of their gross declared earnings. In addition, the government contributes 0.25 percent of the gross income of all workers.

The retirement ages are 61 and 11 months for men and 59 and 11 months for women. Additionally, under the PAYG scheme, beneficiaries are required to have contributed for 240 months. Individuals aged 65 with at least 15 years of contributions are entitled to a reduced pension benefit.

IRAs are administered by Pension Operators, who are regulated and supervised by the Superintendence of Pensions. Also the National Council for the Supervision of the Financial System provides regulatory oversight. The PAYG scheme is administered by the Social Insurance Fund, which is directed by an executive president and a nine-member board.

Retrenchment and Improvement of IRAs

With the aim to guarantee the long-term solvency of the system, major changes to the PAYG scheme were implemented in 2006. Workers over age 55 were not affected, and transition rules apply to workers between the ages of 45 and 55. For workers under age 45, the following changes were introduced:

 The combined contribution rate from employees, employers, and the government will be gradually raised over a 30-year period from 7.5 percent of earnings to 10.5 percent.

- 2) The new basis for calculating the benefit is given by the average earnings over the last 20 years, adjusted for inflation, replacing the previous method of the highest 48 monthly contributions during the last five years of coverage.
- 3) The minimum number of required monthly contributions was raised from 240 to 300.
- 4) A separate disability benefit 50 percent of the full disability benefit – was set up for workers aged 48 and older with at least five years of contributions. For all other workers, the 10 years of contributions requirement has persisted.

Dominican Republic

Enactment of IRAs

The reform implemented in 2003 replaced the old PAYG scheme with mandatory IRAs for all public and private sector workers, employers, and Dominican citizens living abroad, but not the self-employed. During the transition, coverage was mandatory for private sector workers younger than age 45 in 2003, but voluntary for workers aged 45 or older and current public sector employees. The reformed system also includes a social assistance pension for severely disabled, indigent, unemployed, or self-employed people with income below the minimum wage.

IRAs are fully funded by mandatory contributions of the insured person and the employer. The insured person contributes 4.4 percent of covered earnings up to 20 times the minimum wage, with 2.87 percent of covered earnings going directly to the IRA, I percent going to disability and survivor insurance, 0.5 percent to administrative fees of fund management companies and 0.07 percent to cover operating costs of the supervisory institution. The government guarantees a minimum pension and finances the total cost of the social assistance pension.

IRA benefits can be claimed at age 60 with 30 years of contributions or more, or as early as age 55 if the IRA balance is at least equal to the minimum pension. Early benefits are also available at age 57 for unemployed workers with at least 300 months of contributions, or reduced benefits if less than 300 months. Gainful activity can continue after claiming

benefits and benefits are not payable abroad. The social assistance pension is income-tested and payable at age 60 to indigents.

The National Social Security Board provides overall governance of the pension system and the Superintendence of Pensions provides general supervision.

Retrenchment and Improvement of IRAs

There is a plan to implement a system of subsidized mandatory individual accounts for the self-employed.

El Salvador

Enactment of IRAs

The reform was implemented in 1998, when the country replaced the old pension system and fully privatized it. All new employees and all younger employees (those who were under age 36 in 1998) were required to enroll in the funded scheme. The old system remained in place for older employees (insured men older than 55 or women older than 50) but it has been gradually phased out. Participation in the new system was voluntary for those between the ages of 36 and 55 (men) or 50 (women) at the time of the reform. Participation is also voluntary for the self-employed and owners of small enterprises.

Under the funded scheme, contribution rates were initially set at 4.5 percent – approximately two-thirds payable by employers and one-third by workers. In addition, workers had to pay an insurance premium to cover the risks of disability and survivorship as well as an administration fee charged by the private fund managers. For those remaining in the old system, and seeking to provide an incentive for affiliates to switch over to the new system, contribution rates were set at 8 percent. Currently, in the funded scheme, total contribution rates are very similar for both employers and workers - 6.75 percent and 6.25 percent, respectively. In the PAYG scheme, the contribution rates are 7 percent for both employers and workers. Voluntary contribution for the self-employed is 13 percent of declared covered earnings, plus up to a maximum of 3 percent of declared covered earnings for disability and survivor insurance and administrative fees.

Entitlement to pension benefits requires 25 years of contributions. The age requirements are 60 for men and 55 for women. However, under both systems, workers with 30 years of contributions are allowed to retire regardless of their age. The government guarantees a minimum pension for those insured under the new system. In addition to the previous requirements, access to the guaranteed minimum pension – subsidized by the government – is restricted to those insured individuals whose pension (based on the value of the accumulated capital plus accrued interest) is less than the minimum pension set by law and who have no other income.

IRAs are operated by Pension Fund Management companies, which are supervised by the Superintendent of Pensions. The PAYG scheme is administered by the Social Insurance Institute, which is supervised by a board of 12 directors including the Minister of Labor, representatives of other ministries, the Director of Social Insurance, and representatives of management, labor and other professional groups.

Retrenchment and Improvement of IRAs

Beginning in late 2003, pensioners who retire under the new system and whose retirement benefit is less than what they would have received if they had remained in the old PAYG scheme receive an additional benefit subsidized by the government. In addition, a number of reforms have been introduced in the past few years in order to improve the IRA system:

- In order to encourage later retirement and boost IRA balances, the government established that, regardless of having 30 years of contribution, the minimum retirement ages are 60 years for men and 55 for women.
- 2) Beginning in mid-2006, fund managers were required to lower their administrative fees to allow workers to save more for retirement. The maximum combined fee that they can charge for administration and for survivors and disability insurance was decreased from 3 percent to 2.7 percent of earnings and the cost was shifted from the worker to the employer.
- 3) In order to reduce the costs linked to frequent transfers between the two private fund managers existing in the country, workers will have to remain with one private fund manager at least one year instead of only six months.

Mexico

Enactment of IRAs

In 1997 Mexico implemented IRAs meant to replace the PAYG scheme in the long term. The PAYG scheme continued to cover some employees in agricultural and credit union cooperatives that joined before 1997. IRAs are mandatory for all private sector employees and cooperative members entering the labor force after 1997. Participation is voluntary for public sector employees not covered by other systems. Special systems for oil workers, public sector employees, and military personnel still exist.

IRAs are funded by employers, employees, and the government. Employees contribute 1.125 percent of covered earnings, plus an average of 0.625 percent for disability and survivor benefits, and an additional amount for administrative fees. Employers contribute 5.15 percent of covered payroll, plus an average of 1.75 percent for disability and survivor benefits. Self-employed workers contribute 6.275 percent of declared earnings, 2.375 percent for disability and survivor benefits, and an additional amount for administrative fees. The government contributes 0.225 percent of salary for workers under the PAYG scheme, plus 0.125 percent of covered earnings for disability and survivor benefits. The government also finances the guaranteed minimum pension and provides a subsidy for each day of an entire working life that workers contribute to individual accounts. This subsidy is deposited into workers' IRA accounts every 2 months.

Under the funded scheme, the retirement age is 65 years for both men and women, and individuals must have contributed for at least 1,250 weeks. Those with less than 1,250 weekly contributions may continue to contribute or receive a lump-sum benefit. The same age and years of contributions are required for accessing the minimum pension, which is guaranteed to those individuals whose pension benefit (based on the value of the accumulated capital plus accrued interest) is less than the minimum pension. Early retirement is possible at any age for those whose individual account balance is sufficient to purchase an annuity that is at least 30 percent greater than the value of the minimum guaranteed pension. Also, individuals aged 60 to 64 with at least 1,250 weekly contributions who are unable to find suitable paid employment may access an unemployed worker's pension benefit. Individuals covered by the PAYG scheme must

contribute for at least 500 weeks and are allowed to retire at the age of 65. Individuals aged 60 to 64 with at least 500 weeks of contributions who are unable to find suitable paid employment may access their funds as an unemployed worker's pension benefit.

IRAs are operated by pension fund management companies, which are supervised by the National Commission for the Retirement Savings System (CONSAR). The PAYG scheme is administered by the Social Security Institute though regional and local boards.

Retrenchment and Improvement of IRAs

Since 1997, a large number of reforms to improve and strengthen the IRA scheme have been implemented in Mexico:

- In 2005, to expand pension coverage, the selfemployed were allowed to set up an IRA. Also, two new pension fund management companies were authorized. Millions of low-income workers not covered by social security were able to set up an IRA with one of these companies.
- Beginning in 2008, all new public sector em-2) ployees are required to join the funded scheme. Those already working in the public sector under age 46 had the option to join a new pension fund manager – called PENSIONISSSTE – or to remain in the PAYG scheme and receive a recognition bond for the value of their accrued rights under the PAYG scheme. For the first three years, PENSIONISSSTE will manage the public employee's IRAs. In the fourth year, public employees will be allowed to switch to any of the pension fund management companies, and PENSIONISSSTE will continue to manage IRAs for public employees who do not chose another pension fund manager. Beginning in the fifth year of operation, public employees will be able to switch to another pension fund manager or back to PENSIONISSSTE once a year. PENSION-ISSSTE is directed by an 18-member executive commission of representatives from worker organizations and government agencies, as well as the Institute of Social Security and Health for public sector employees. The CONSAR, which is the regulatory and supervisory agency for the IRA scheme for private sector workers, will also oversee PENSIONISSSTE. The administrative

fees that PENSIONISSSTE charges account holders may not be higher than the average fees for all the pension fund management companies.

- 3) To stimulate competition among private fund managers, in 2005 workers were allowed to switch to a company charging lower administrative fees at any time, rather than just once a year.
- 4) Starting in 2008, pension fund managers are no longer allowed to charge account holders a fee on their monthly contributions; they can only charge a fee on the IRA balances. Also, in order to increase competition, it was established that the regulator calculates a net rate of return indicator to allow account holders to compare the net rates of return of different pension fund manageers for the previous 36 months. New entrants to the labor force who do not choose a pension fund manager are automatically assigned to the one with the highest net rate of return at that time.
- 5) Pension funds were initially limited to investing in government instruments, but in 2004 pension fund management companies were allowed to invest 15 percent of assets in various approved equity indices and 20 percent in foreign debt. Further, in 2007, the limit on equity investments was raised from 15 percent to 30 percent.
- Before 2004, each pension fund management 6) company was limited to offering one fund for mandatory contributions and another for additional voluntary contributions. Since late 2004, each company can offer two types of pension funds. Workers under age 56 can choose between a fund that invests mainly in fixed-income securities and one that invests up to 15 percent of assets in approved equity indexes. Further reforms implemented in 2007 established that each pension fund manager may offer five different funds with varying levels of risk designated for specific age groups. The new funds range from the highest risk level available, Fund 1 (for workers aged 18-26) with up to 30 percent invested in equities, to the least risky Fund 5 (for workers aged 56–65) with portfolios containing fixed income. Younger workers who are not comfortable with the level of risk in the fund designated for their age group are permitted to change to a fund designated for an older age group.

Panama

Enactment of IRAs

Panama introduced IRAs as a supplement to the PAYG scheme in January, 2008. Under this mixed pension system, IRAs are mandatory for new entrants to the labor force and all self-employed workers younger than age 36. Other workers have the option to switch to the new system or remain under the public PAYG scheme.

Retrenchment and Improvement of IRAs

The system was implemented recently and there are no important changes to date.

Peru

Enactment of IRAs

Peru introduced IRAs in 1993 in parallel to the PAYG scheme. Workers are allowed to opt for either system. Those who do not make a choice become members of the funded scheme automatically. Those who opt for the PAYG scheme may switch to the funded scheme but have no option to switch back. The PAYG scheme covers wage earners and salaried employees in the private and public sectors, employees of worker-owned and cooperative enterprises, teachers, self-employed drivers, artists, domestic workers, seamen, journalists, tannery workers, and self-employed agricultural workers. Special systems operate for fishermen, military and police personnel. Coverage is voluntary for certain self-employed persons, for those who are economically active but no longer in covered employment (a minimum of 18 months previous coverage is required), and housewives. The funded scheme provides coverage to private and public sector employees.

Contributions to the PAYG scheme are approximately 13 percent of gross earnings for both employees and self-employed workers. Under the funded scheme, both employees and self-employed workers contribute 10 percent of gross earnings, plus an average 0.91 percent of covered earnings for disability and survivor insurance and an average of 1.81 percent of gross earnings for administrative fees. Between 1995 and 2006, the contribution rate under the funded scheme was "temporarily" reduced to 8 percent in order to encourage participation. Whether in the PAYG or the funded scheme, employers do not contribute to the system and the government finances the minimum pension.

Conditions for retiring under the PAYG scheme are 60 years of age and at least 20 years of contributions for both men and women. Early retirement is allowed under the following conditions: 55 years of age and at least 30 years of contributions for men or 50 years of age and at least 25 years of contributions for women; or 55 years of age and at least 20 years of contributions for both men and women in the event of a collective lay-off from employment. Under the funded scheme, the retirement age is 65 but individuals are allowed to retire at any age if the individual account has accumulated assets that will replace at least 50 percent of average indexed earnings in the last 120 months. To receive a guaranteed minimum pension, individuals must: be born before 1946, be at least 65 years old, have made at least 20 years of contributions paid on earnings equal to or more than the minimum wage, and be entitled to a pension payable (based on the value of the accumulated capital plus accrued interest) that is less than the minimum pension.

The PAYG scheme is administered by the Office of Social Security Normalization. Contributions are collected by the National Superintendence of Tax Administration and the Comptroller General of the Republic provides general supervision. Pension fund administrators manage the individual accounts and the Superintendence of Banks, Insurance, and Pension Fund Administrators licenses and supervises pension fund and insurance companies.

Retrenchment and Improvement of IRAs

With the purpose of providing a higher pension to those workers who would have received a much lower pension if they remained in the funded scheme, beginning in 2007 certain workers enrolled in privatelymanaged individual retirement accounts may permanently switch back to the PAYG scheme. Workers permitted to leave the funded scheme must have been a contributor to the public system before 1996 and must have been eligible to retire under the public system at that time or when they joined the individual account system.

Starting in 2003, several other reforms have been implemented with the aim of improving the IRA scheme:

- Since late 2003, pension fund managers must use a competitive bidding process to select an insurance company to provide the survivors and disability insurance rather than the "no-bid process" they used in the past.
- 2) In 2006, the contribution rate automatically rose to 10 percent of earnings because Congress did not vote to keep it at the reduced level of 8 percent.
- Until late 2005, each pension management com-3) pany could offer only a single fund with limited investments. Beginning in 2006, workers with individual accounts are permitted to choose a fund from among three different types with varying degrees of risk: Type I is a preservation of capital fund with up to 10 percent in equities and up to 100 percent in fixed income; Type 2 is a mixed or balanced fund with up to 45 percent in equities (the original fund when only one was permitted); and Type 3 is a growth fund, with up to 80 percent in equities and up to 70 percent in fixed income. Workers who do not make a choice are assigned to Type 2. Account holders over the age of 60 are automatically assigned to a Type 1 fund to reduce their portfolio risk.
- 4) In 2005, the rules for transferring from one pension fund manager to another were eased. Previously, a worker opting to switch funds had to make at least six monthly contributions to one fund, pay an exit fee, and wait 10 months for the process to be completed. Under the new law, the worker needs only be enrolled with a pension fund manager, the fee is eliminated, and the process should take 2 to 3 months. Also, an account holder must choose one type of fund for the mandatory contribution and may set up a second account with another company for additional voluntary contributions.
- 5) By late 2006, Peru's Central Reserve Bank increased the limit on how much pension fund management companies can invest abroad. The limit was increased from 10.2 percent to 12 percent of assets under management and future incremental increases may be gradually authorized, until the limit reaches the legal maximum of 20 percent.

Uruguay

Enactment of IRAs

Uruguay introduced IRAs in 1996. The PAYG scheme remains open and plays a significant role because only high income workers were mandated to contribute to IRAs. Workers below a threshold level can choose to split contributions between the PAYG scheme and IRAs. The mixed system is mandatory for both employed and self-employed people born after April 1, 1956. However, contributions to IRAs are voluntary for workers with monthly income below a minimum set by law. Civil servants are included in the general system.

The total payroll tax rate was kept at the pre-reform level (27.5 percent for pensions). For those workers opting for IRAs, the employee contribution was established at 15 percent of wages. Administration fees and insurance premiums are deducted from the 15 percent; in 2006, these charges reached about 2.7 percent of wages. Employers also contribute 12.5 percent of wages for pensions, but these resources are directed to the public system. The government pays the total cost of non-contributory pensions and finances deficits with earmarked taxes. For payout, only annuities are allowed.

For both the public and private components, the retirement age was increased to 60 for men and women, and the minimum period of contributions to be entitled was set at 35 years. At age 65, IRA benefits can be received with no minimum required years of contribution.

The Social Insurance Institute administers the social insurance program and collaborates with the supervision of IRAs. A specialized unit in the Central Bank oversees pension fund management and insurance companies.

Retrenchment and Improvement of IRAs

Few changes have been introduced in the pension system since the reform. In 2008, a decree gave some workers the right to withdraw from the IRA system and become entitled to the benefit paid by the PAYG scheme. This decree applies only to those workers who were 40 years or older at the time of the reform.

Also in 2008, pension fund management companies were allowed to invest 15 percent of their assets in foreign instruments. Before this reform, almost 60 percent was invested in government debt. I Brazil is not included in this discussion because it reformed its pension system without moving towards IRAs. Brazil, however, has a long history with occupational plans managed by private companies and, more recently, legislation has allowed sub-national state governments to create supplementary occupational pension plans.

² The case of Panama is only discussed in the appendix, as IRAs were only enacted recently and no major revisions have been introduced to the system.

3 Economic Commission for Latin America and the Caribbean (ECLAC) (2006); Rofman and Lucchetti (2006); and Mesa-Lago (2008).

4 Bertranou (2004); Calvo and Williamson (2008); and Federación Internacional de Administradoras de Fondos de Pensiones (2006).

5 Mesa-Lago (2004b, 2008).

6 Bertranou, Rofman, and Grushka (2003); Calvo and Williamson (2008); and Gill, Packard, and Yermo (2005). Although PAYG may also suffer from weak regulations, IRAs were oversold in their capacity to prevent political manipulation.

7 Barr (2002); Kay and Sinha (2008); Schulz (2009); and Williamson (2001). As pointed out by Béland and Gran (2008), the line between private and public can be "fuzzy" when states regulate, promote, finance, and mandate private pension provision.

8 Barr and Diamond (2008); Kritzer (2008); and Vial and Melguizo (2008).

9 U.S. Social Security Administration (2007-09, 2007-04, 2005-02, 2004-04).

10 Insured individuals with low balances were defined as those that, at the normal age of retirement, would not be able to buy an annuity equivalent to the minimum pension paid by the defined benefit scheme.

11 This change means that for a worker retiring with 30 years of contributions, the replacement rate would increase from 25.5 percent (30*0.85) to 45 percent (30*1.5). Note that this benefit is paid on top of the basic pension.

12 Cottani (2008); *The Economist* (2008); Poder Ejecutivo Nacional (2008); and *The Wall Street Journal* (2008).

13 Consejo Asesor Presidencial Para la Reforma Previsional (2006); and U.S. Social Security Administration (2008-02, 2007-01, 2006-07, 2003-12).

14 Barrientos (2006).

15 U.S. Social Security Administration (2007-09, 2006-09).

16 Consejo Asesor Presidencial Para la Reforma Previsional (2006); and U.S. Social Security Administration (2008-02, 2007-01, 2006-08, 2006-07, 2005-05).

17 James, Packard, and Holzmann (2008).

18 U.S. Social Security Administration (2008-04, 2008-02, 2007-11, 2007-06, 2007-04, 2006-11, 2006-09, 2006-08, 2006-03, 2005-12, 2005-09, 2005-05, 2003-12).

19 U.S. Social Security Administration (2008-04, 2007-08, 2006-12, 2006-08, 2006-01, 2005-03, 2004-06, 2003-12, 2003-10).

20 Unless otherwise specified, the information presented in this appendix was drawn from U.S. Social Security Administration (2003-2008) and (2008b); and Asociación Internacional de Organismos de Supervisión de Fondos de Pensiones (2007).

21 Workers in transition were those who contributed to the pre-reform system and remain in the labor market under the new system.

References

- Asociación Internacional de Organismos de Supervisión de Fondos de Pensiones (AIOS). 2004. Boletín Estadístico: Los Regímenes de Capitalización Individual en América Latina. No. 12 (December). Available at http://www.aiosfp.org.
- Asociación Internacional de Organismos de Supervisión de Fondos de Pensiones (AIOS). 2007. Boletín Estadístico: Los Regímenes de Capitalización Individual en América Latina. No. 18 (December).
- Barr, Nicholas and Peter Diamond. 2008. *Reforming Pensions: Principles and Policy Choices*. New York, NY: Oxford University Press.
- Barr, Nicholas. 2002. "Reforming Pensions: Myths, Truths, and Policy Choices." *International Social Security Review* 55(2): 3-36.
- Barrientos, Armando. 2006. "Poverty Reduction: The Missing Piece of Pension Reform in Latin America." *Social Policy and Administration* 40(4): 369-84.
- Béland, Daniel and Brian Gran, eds. 2008. *Public and Private Social Policy: Health and Pension Policies in a New Era.* Basingstoke, England: Palgrave Macmillan.
- Bertranou, Fabio. 2004. "¿Desarticulación o subordinación? Protección Social y Mercado Laboral en América Latina?" In Protección Social y Mercado Laboral, ed. F. Bertranou, 13-28. Oficina Internacional del Trabajo.
- Bertranou, Fabio, Rafael Rofman and Carlos Grushka. 2003. "From Reform to Crisis: Argentina's Pension System." *International Social Security Review* 56(2): 103-14.
- Calvo, Esteban and John B. Williamson. 2008. "Old Age Pension Reform and Modernization Pathways: Lessons for China from Latin America." *Journal of Aging Studies* 22(1): 74-87.
- Consejo Asesor Presidencial para la Reforma Previsional. 2006. *El Derecho a una Vida Digna en la Vejez: Hacia un Contrato Social con la Previsión en Chile*. Santiago, Chile: Presidencia de la República de Chile.

- Cottani, Joaquin. 2008. "A Sad End to Social Security Privatization." *RGE Monitor* (October 23). Available at: http://www.rgemonitor.com.
- Economic Commission for Latin America and the Caribbean (ECLAC). 2006. Shaping the Future of Social Protection: Access, Financing and Solidarity. LC/G 2294 (SES.31/3). Montevideo, Uruguay.
- Federación Internacional de Administradoras de Fondos de Pensiones. 2006. Evaluación de un Cuarto de Siglo de Reformas Estructurales de Pensiones en América Latina: Un Comentario.
- Gill, Indermit, Truman Packard and Juan Yermo. 2005. *Keeping the Promise of Social Security in Latin America*. Washington, DC: World Bank and Stanford University Press.
- James, Estelle, Truman Packard, and Robert Holzmann. 2008. "Reflections on Pension Reform in the Americas: From 'Averting the Old-Age Crisis' to 'Keeping the Promise of Old-Age Security' and Beyond." In Lessons from Pension Reform in the Americas, eds. S. Kay and T. Sinha, 164-84. New York, NY: Oxford University Press.
- Kay, Stephen and Tapen Sinha, eds. 2008. *Lessons* from Pension Reform in the Americas. New York, NY: Oxford University Press.
- Kritzer, Barbara. 2008. "Chile's Next Generation Pension Reform." Social Security Bulletin 68(2): 69-84.
- Mesa-Lago, Carmelo. 2008. Reassembling Social Security. A Survey of Pensions and Health Care Reforms in Latin America. Oxford, UK: Oxford University Press.
- Mesa-Lago, Carmelo. 2004a. "Evaluación de un Cuarto de Siglo de Reformas Estructurales de Pensiones en América Latina." *Revista de la CEPAL* 84. ECLAC.
- Mesa-Lago, Carmelo. 2004b. "Las Reformas de Pensiones en América Latina y su Impacto en los Principios de la Seguridad Social." *Serie Financiamiento del Desarrollo* 144. ECLAC.

- Mesa-Lago, Carmelo. 2005. "Assessing the World Bank Report Keeping the Promise." *International Social Security Review* 58(2-3): 97-117.
- Poder Ejecutivo Nacional. 2008. *Proyecto de Ley*. Buenos Aires, Argentina.
- Rofman, Rafael and Leonardo Lucchetti. 2006. "Pension Systems in Latin America: Concepts and Measurements of Coverage." *Social Protection Discussion Paper* 0616. Washington, DC: World Bank.
- Schulz, James H. 2009. "Book Review: Lessons from Pension Reform in the Americas, Stephen J. Kay and Topen Sinha, eds." *Journal of Aging and Social Policy* 21(01).
- *The Economist.* 2008. "Argentina: Cristina's Looking-Glass World." (October 23).
- *The Wall Street Journal*. 2008. "Argentina's Property Grab." (October 26).
- U.S. Social Security Administration. 2003-2008. *International Update: Recent Developments in Foreign and Private Pensions.* Washington, DC. Monthly reports published between October 2003 and April 2008. Available at: www.socialsecurity.gov/policy.
- U.S. Social Security Administration. 2008b. *Social Security Programs throughout the World: The Americas.* Washington, DC. Available at: www.socialsecurity. gov/policy.
- Vial, Joaquín and Angel Melguizo. 2008. "Moving from Pay as You Go to Privately Managed Individual Pension Accounts: What Have We Learned After 25 Years of the Chilean Pension Reform?" BBVA Economic Research Department Working Paper #0805. Santiago de Chile.
- Williamson, John B. 2001. "Privatizing Public Pension Systems. Lessons from Latin America." *Journal of Aging Studies* 15(3): 285–302.

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The Center for Retirement Research thanks AARP, AIM Investments, Bank of America, ING, MetLife, Nationwide Mutual Insurance Company, Prudential Financial, State Street, TIAA-CREF Institute, and T. Rowe Price for support of this project.

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