

MRRC RESEARCHER

*Estelle James discusses
her MRRC-supported research*

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Q: How would you describe your MRRC-supported work?

A: My work has focused on an evaluation of the individual account system in Chile, the country with the longest experience with this type of system. In 1982 Chile replaced a traditional public pay-as-you-go defined benefit (DB) system with a system that is funded, privately managed, and largely defined contribution (DC). DC plans are sometimes called individual account systems. Each employee contributes 10% of his or her wages to the account, which is invested by pension funds (called AFPs), and another 2-3 percent is paid for administrative costs and disability and survivors' insurance. The government backs this up with a minimum pension guarantee (MPG), which sets a floor (about 25% of the average wage) to the pensions of workers who contribute for at least 20 years.

With my co-authors, we are asking what works, what doesn't work, and what can the US and other countries learn from Chile's experience? When the defined benefit is discarded, how do retirees secure lifelong income security, how are people protected who become disabled before they have accumulated a large sum, and how are women and other low earners assured a reasonable retirement income? Another set of questions concerns the impact of the new system on the broader economy, such as the labor market. We find that the devil is in the details. Through detailed regulations and carefully constructed guarantees, Chile has solved many of these potential problems. But it is still working to fine-tune and improve its system.

Q: How is the money in the account converted into a lifelong income stream?

A: In defined benefit schemes a monthly pension is automatically paid, but in individual accounts the worker ends up with an accumulation of retirement savings rather than an income stream. Will most retirees choose to buy annuities, which are designed to last their entire lifetimes? Who annuitizes and who chooses the other main option—gradual withdrawals? Will the annuity industry grow rapidly enough to accommodate the potential new demand and will it offer attractive terms? How do policies influence retiree behavior?

With co-authors Guillermo Martinez and Augusto Iglesias, my work has addressed these issues. Almost two-thirds of all retirees in Chile have annuitized—a very high proportion compared with other countries. And the annuity industry has grown from almost nothing to a multi-billion dollar industry. We argue that this high rate of annuitization is not an accident; rather, it is due to detailed public policies that constrain individual choice and push retirees toward annuitization. Retirees in Chile can either annuitize or take gradual withdrawals. (Lump sum payouts are allowed only after the worker has a pension that replaces 70% of his wage). Annuities provide a promise of a lifelong income, while gradual withdrawals continue only so long as money lasts in the account. Since there are practically no public or private defined benefit plans in Chile (except for disability benefits—see below), if retirees

want to be sure that they will have a lifelong income they must annuitize. The government encourages this choice by guaranteeing most of the annuity and by allowing insurance companies selling annuities to pay commissions to independent brokers, while pension funds selling gradual withdrawals are not allowed to pay these commissions—therefore brokers steer their clients toward annuities. Insurance companies further induce annuitization by marketing aggressively, providing price-indexed annuities and offering very good terms — annuitants can expect to get back their entire premium plus interest over their lifetime.

As a result, most retirees purchase annuities. The ones who don't are those with small accumulations, who are near the government's minimum pension guarantee. If a worker's own pension does not reach this level, the government tops it up, providing they have contributed for 20 years. Individuals with small accumulations do not have to buy annuities, because the government, in effect, provides annuities for them. If the US adopts an individual account system, the Chilean example illustrates the kinds of regulations and guarantees that will ensure that all retirees receive a lifelong income — which is the object of having a mandatory system.

Q: Are disabled workers protected?

A: The Chilean system contains an ingenious attempt to use the individual account as part of the disability insurance system, while also guaranteeing a defined benefit that is 70% of the worker's recent wage. This guaranteed defined benefit is important because the money in the account is often not enough to provide an adequate pension for disabled workers. For such eventualities, each pension fund must purchase a group insurance policy that covers all its affiliates. In exchange for a premium, the insurance company agrees to top up the account enough to finance an annuity of the required size. The cost of the group policy—less than 1% of wages per year for disability and survivors' insurance—is passed on to workers as part of their fee. With Augusto Iglesias I have been studying how this system works and what are its pros and cons.

This system has the big advantage that part of it is pre-funded—the money in the account partially insures against disability in addition providing retirement income. As a result, the premium for the top-up insurance is only about half as much as the premium that would be necessary to cover the same size benefit in a pay-as-you-go system. Also, the premium will be less sensitive to demographic aging than a pure pay-as-you-go system, since older workers, who are more likely to become disabled, have accumulated a larger account that helps to finance their disability benefit. Another advantage is the incentive that pension funds have to avoid over-use of disability benefits, to control costs. (Detailed regulations prevent the opposite abuse by pension funds—turning down too many claims).

However, the system also has some disadvantages. First, the cost of the top-up is very sensitive to the interest rate. Since the payout on the annuity is fixed, if the returns that insurance companies earn on their investments go down, the premium that is passed on to workers must go up to cover the benefit. This has been happening recently; premiums have risen substantially over the past 3 years. This problem is really unavoidable, if a defined benefit pension is paid through private markets.

Another problem is that the system involves complex but hidden cross-subsidies, since the premium as a percentage of wage is constant for all workers, but some workers are riskier than others. Furthermore, pension funds try to economize on costs by attracting low-risk workers (women, high income) and avoiding those who are high-risk (older workers, workers in risky occupations). This may make it more difficult for high-risk workers to switch into the pension fund of their choice. This “creaming” problem could be avoided by allowing the fee that is paid by the worker to vary according to the worker's risk category, or by separating disability insurance from the pension fund, putting all

workers into one pool, and using a competitive bidding process to auction off the top-up function to the lowest bidding insurance company. The idea of using the accounts as part of the disability benefit is a good one, and should be considered in the US, but possibly the Chileans have not yet found the best way to implement this concept.

Before I began my work with MRRC, I studied the gender impact of the Chilean reform, with colleagues Alejandra Cox Edwards and Rebeca Wong. Critics of individual account systems often argue that the tight link between payroll contributions and benefits in defined contribution plans will produce lower pensions for women, because they are low earners and therefore low contributors. In contrast, supporters of these reforms argue that they remove distortions that favored men and permit a more targeted public benefit that will help women. Moreover, regulations at the payout stage can protect women. This debate is important because the majority of old people are women, pockets of poverty among the old are concentrated in very old women, and pension programs affect work incentives for women.

On the basis of household survey data, we simulated the wage and employment histories of representative men and women. We used these histories to project what their pensions will be under the new systems and what they would have been under the old system rules. We find the Chilean reform has raised the expected level of lifetime retirement income of women relative to men. It is true that the pension from the workers' own account is much smaller for women than for men. However, this effect is mitigated by the minimum pension guarantee offered by the government, which women will receive disproportionately. Also, upon retirement husbands are required to purchase joint pensions that cover their widows as well as themselves. This is an institutionalization of the informal family contract, in which women do much of the household work, while men engage in market work and provide the family's monetary income. The joint annuity requirement maintains this obligation even after the husband's death. Widows are allowed to keep this joint pension as well as their own pension from their own contributions. As a result of these provisions, low earning married women are the biggest relative gainers from the pension reform.

However, women are still disadvantaged in Chile because they have a normal retirement age of 60, compared with 65 for men. This means they accumulate less money in their accounts and also less contributing time, so they may not be eligible for the MPG. Chile is now considering changes that would solve these problems. Again, the experience of Chile suggests policies that the US and other countries might adopt when individual account systems are under consideration. As low earners, women will be protected if the system as a whole includes a redistributive public benefit. Annuitization and price indexation are especially important to women, because they live longer. Widows can be protected without any expense to the public treasury if husbands are required to purchase joint pensions. Then, widows can keep their own pension in addition to the survivors' benefit, while in the US widows must choose between the two. Thus women who work in the market place are penalized in the US (because they make contributions without receiving a benefit) while women who work at home are subsidized (because they receive a benefit for which they have not contributed). This discourages market work by women in the US. In Chile, however, these subsidies and penalties based on marital status have been eliminated. Even if we don't adopt individual accounts we could change the present system to charge husbands for the spousal benefit and allow women who contribute to keep their own benefit as well. This would save tax dollars and give better protection to women.

Q: How has the Chilean system affected the labor supply of older workers?

A: As the population ages, it will become increasingly important to increase the labor force participation rate of older workers by inducing them to postpone retirement. Yet, ironically, existing defined benefit

pension systems contain penalties for postponing access to pensions and for continuing to work while receiving a pension. Older workers are typically required to continue contributing while receiving little or no additional benefit. As a result, retirement ages of older males have been falling in many countries. In the US most workers retire at the earliest possible age, 62, and they retire in their 50's in Europe.

With Alexandra Cox Edwards, I have been studying the impact of the Chilean reform on the probability of 1) becoming a pensioner and 2) dropping out of the labor force, for older workers. These two must be distinguished because in Chile it is possible to continue working while receiving a pension, and pensioners are exempt from the pension payroll tax. The new system swept away the penalties for continued work that existed previously, and instituted a close link between benefits and contributions. It also tightened the conditions for early pensioning. We would expect these measures to postpone the age of pensioning and to increase the labor supply of older workers, especially among pensioners.

We indeed found strong effects of the new system on both propensities, after controlling for many individual and macro-economic variables. Workers now start their pensions at a later age than they did in the old system, and pensioners in their 50's and early 60's are continuing to work—their work propensities have roughly doubled since the system began. Again, the policies that produced these results--tightened pre-conditions for early pensioning and exemption of pensioners from the pension payroll tax--might also be considered in the US—whether or not an individual account system is adopted.

In all these projects, the outcomes we observed were not inevitable. They came about as a result of detailed regulations that rule out undesirable behaviors (consuming lump sum withdrawals early in retirement, starting the pension early), require or encourage desirable behaviors (purchasing annuities, including joint annuities that protect widows, working longer). Also influential are government guarantees in strategic places-- the guaranteed minimum pension, the annuity guarantee. These regulations can help inform US policies, if we move toward an individual account system. In fact, some of these policies are relevant even if we simply modify our present pay-as-you-go system.

Sources:

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Estelle James is currently a consultant to the World Bank, USAID and other organizations. Previously she was Lead Economist at the World Bank and Director of the Pension Flagship Course at the World Bank Institute. She is also a member of the Governing Board of the new pension fund in Kosovo and served as a member of the President's

Commission to Strengthen Social Security in the U.S. She is principal author of *Averting the Old Age Crisis: Policies to Protect the Old and Promote Growth*, a World Bank study that provided the first global analysis of economic problems associated with population aging.

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