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Rethinking Social Security Priorities in Latin America

TWO DECADES AGO CHILE'S GOVERNMENT radically altered its approach to old-age income security. Simply put, it changed the basis of public pensions from collective to individual: instead of the widely used system that pooled the risk of being unable to earn while aged, the Chileans adopted a system that relied on mandatory individual savings accounts. The shift was seen by its detractors as a retreat from "solidarity," and by its supporters as a move toward greater "personal responsibility." Neither characterization is entirely correct, but a debate has raged ever since on the shift's main effect: has the change left Chileans better or worse off?

An important event in this debate was the World Bank's 1994 publication of *Averting the Old Age Crisis*. The report explained that the existing approach to ensuring income support for elderly people was unsustainable, it neatly characterized the institutions involved using a novel terminology, and it prescribed a new doctrine for better addressing the challenges in this difficult area of public policy.

Using the terminology suggested in *Averting the Old Age Crisis*, the new approach has come to be called the "multipillar" model of old-age income security.[1] Although this approach has been used by reformers worldwide, it can be safely asserted that no region has taken it more seriously than has Latin America. In addition to Chile, governments in 11 countries—Peru (1992), Colombia (1993), Argentina (1994), Uruguay (1996), Mexico and El Salvador (1997), Bolivia (1998), Costa Rica and Nicaragua (2000), Ecuador (2001), and the Dominican Republic (2003)—representing about half of all Latin Americans, have adopted or are in the process of adopting various forms of the multipillar model as suggested by the World Bank. These changes have been seen by policymakers as necessary, but many of their citizens see in them a relinquishing of responsibility by government. The debate rages on: Will these changes make Argentines and Mexicans and Colombians and the citizens in these other countries better or worse off?

The Benefits of Hindsight

In this book, using both the experience of these countries and simple analytical principles, we try to shed light on this question. Thus, as in *Averting the Old Age Crisis*, we analyze public policy toward pensions over the last two decades, but especially since the early 1990s. But there are differences between that volume and this one, principally because of the developments in the last decade. We have benefited from advances in thinking that *Averting the Old Age Crisis* substantially stimulated. What is perhaps more important is that we have the benefit of more experience so we can replace informed conjecture based on the reforms in one country (Chile) with empirical evaluation of the reform experience of more than two decades in Chile; about a decade's worth of experience in Colombia, Peru, and Argentina; and somewhat shorter but still informative experience with reforms in several other countries, especially Bolivia and Mexico.

Latin America is not alone in its experience with structural pension reform. Eight countries in Eastern Europe also have undertaken multipillar reforms in their transition to market economies. Although these countries also offer important lessons, their institutional and demographic context (adapting formerly socialist systems to meet the needs of a population with an older age profile) is sufficiently different from that of Latin America to present a distinct set of issues that lie beyond the scope of this book. Furthermore, a much larger set of countries, in Latin America and elsewhere, have engaged in "parameter tinkering"—adjusting the size and scope of their single-pillar social security systems. Our purpose here, however, is to focus on multipillar pension reform in Latin America and present policy implications appropriate for the region, not to offer a global study.

This book is based both on specially commissioned background papers and on other work done at the World Bank and elsewhere. Some of the background papers address general questions such as the need to mandate participation in pension schemes (e.g., Packard 2002 and Valdés-Prieto 2002b). Some papers focus on more specific issues such the fiscal, labor market, and capital market effects of social security reforms (e.g., Fiess 2003; Zviniene and Packard 2002; Packard, Shinkai, and Fuentes 2002; Packard 2001, 2002, Yermo 2002a) and more country-specific experiences (e.g., Rofman 2002 for Argentina; Escobar 2003 for Bolivia; Valdés-Prieto 2002c and Yermo 2002c for Chile; Azuara 2003 for Mexico). Other papers assess how workers fared under the new pension system (Yermo 2002b) and their reactions to the reformed systems using data collected in purpose-built household surveys (e.g., Barr and Packard 2002 and Packard 2002 for Chile; Barr and Packard 2003, for Peru). We also take advantage of efforts at the World Bank and elsewhere to collect quantitative information and to refine actuarial techniques, again

inspired by the debates initiated in good measure by *Averting the Old Age Crisis*.[2]

There are some differences in our approach as well, principally because of differences in the circumstances that have prompted this inquiry. Whereas a primary (although not exclusive) objective of prior efforts has been to improve the public pension system's fiscal health or to help governments better administer and regulate the systems, the principal objective of this inquiry is to try to determine whether *participants* (not just the administrators or providers) in pension systems are better or worse off since the reforms. That is, we evaluate reforms from the viewpoints of individuals (and their households) and of the policymakers who represent them.

A payoff to emphasizing the perspective of individuals is that this enables us to exploit well-accepted insights provided by the economics of insurance to answer the critical questions raised in the debate on social security, even some of those raised in *Averting the Old Age Crisis* (see box 1.1). Matching insights gained from applying an analytical framework to the problem of old-age income security with the experiences of countries that have reformed their social security systems can help point the correct way forward.

It is reasonable to ask, however, whether enough time has passed to expect tangible results, and whether we are too quick to assert that some fresh thinking is required. We think the time is right. Although most countries that have implemented the multipillar reform model improved incentives for workers to participate in the system, the main concern among policymakers is that the degree of coverage—measured as the number of workers participating in formal pension arrangements—is now stagnant at levels less than half of the labor force. Covering the largest possible number of citizens

Box 1.1 Three Central Dilemmas of Pension Privatization

1. *If mandatory schemes are needed because of shortsighted workers, how can these same workers be counted on to make wise investment decisions?* That is, if workers are myopic (which is the primary justification for the mandated private pillar) how can they be trusted to make good investment decisions?

2. *If governments have mismanaged their centrally administered pension plans, how can they be counted on to regulate private funds effectively?* That is, if governments mismanage pay-as-you-go (PAYG) systems, how can they be trusted to properly regulate mandated private pillars?

3. *If government regulates and guarantees the plans, won't it eventually end up controlling these funds?* That is, does it really make a difference whether the funds are privately or publicly managed?

Source: World Bank (1994), p. 203.

against the risks associated with aging is among the objectives of policymakers in every country of the region. We intend to persuade the reader that our approach, with its focus on the individual—and the role of government emerging from individual welfare maximization—provides useful pointers for policymakers who wish to increase the reach of pension systems. We provide analytical and empirical evidence to show that the reforms have been in the right direction. But we do not stop here. We go on to consider how this progress can be continued by meeting the many detractors of pension reforms where they have somewhat cynically taken the debate (i.e., the concern for low coverage) and examine the problems raised from the perspective of the participants in the new multipillar pension systems.

Significant Progress, but Stalled Coverage

Latin America is the right place to study pension reform. The longest and most varied experience with the multipillar approach is in Latin America. Starting with Chile in 1981, 12 countries in the region have adopted multipillar arrangements, best distinguished from earlier systems by the prominence of a mandatory funded component administered by purpose-built and dedicated private providers. But often overlooked are the considerable differences in the systems adopted, most notably in the degree of choice allowed to workers between the old pay-as-you-go (PAYG) system and the new multipillar arrangement, and the level of benefits in the PAYG component. Costa Rica and Uruguay, for example, have kept a large earnings-related and defined-benefit (DB) system, whereas Argentina, Colombia, and Peru offer workers a choice between a reformed defined-benefit PAYG and the new defined contribution (DC) funded component to finance the bulk of their retirement income.

In Mexico, on the other hand, workers rely fully on the funded system but have a guarantee of benefit levels equal to what they would have received under the old system. Chile and El Salvador also rely largely on the funded pillar, and the government has limited the PAYG component to providing a basic pension or "topping-up" to ensure a minimum level of retirement income. What is common, however, is the "individualization" of social security (see also Lindbeck and Persson 2003).

When judged against the objectives of the reform, the multipillar approach can be credited with considerable success. The fiscal burden of pensions has been reduced: the most illustrative example is that total pension debt-to-GDP (gross domestic product) ratios have fallen in most of these countries, as a result of both reduced benefits in the reformed PAYG component and a lower rate of accumulation of new liabilities (see Holzmann, Palacios, and Zviniene 2001; Zviniene and Packard 2002). The reforms appear to have improved the incentives to contribute to the formal system: recent analysis indicates that the introduction of individual

accounts (in which benefits are closely linked to contributions) lowers labor market distortions and improves incentives for workers to participate in formal pension arrangements (Packard 2001). The reforms have also increased equity: internal rates of return have become less regressive (Zviniene and Packard 2002). There also has been an increase in the depth of capital markets, at least in part attributable to pension reform (Yermo 2002a). These successes warrant that future reforms should build upon the new systems.

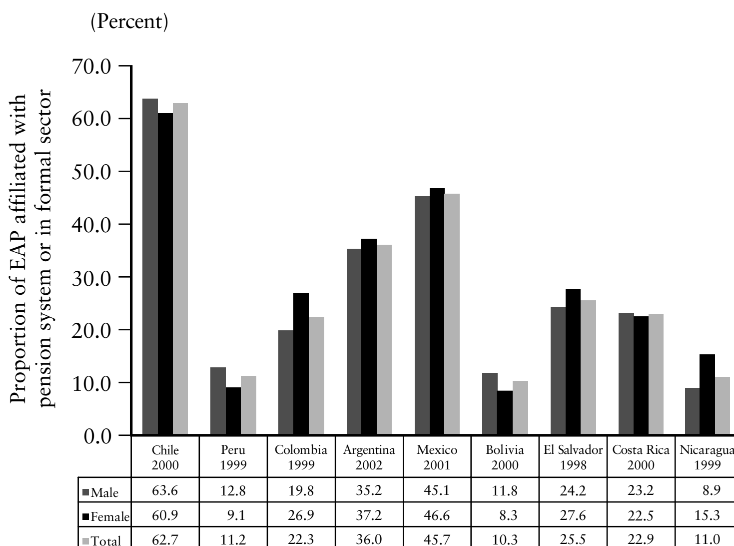
In each of these areas, the experience has revealed shortcomings as well. In Argentina, Colombia, and Peru, the option given to new workers to choose between the old and new systems creates uncertainty regarding the fiscal liability of government. In Colombia, where workers can change their choice every three years, the disequilibrium between benefits and contributions in the old defined-benefit PAYG system is particularly acute and severely weakens the reformed system. Chile is increasingly concerned about the rising costs of the minimum pension guarantee, driven in part by falling numbers of active contributors in the labor force. And pensions of government workers continue to exercise a serious fiscal burden in countries such as Argentina, Mexico, and Peru, although these constitute a greater burden even in countries, such as Brazil, that have not adopted the multipillar approach. These and other shortcomings, if not a failure of the reform *model*, are indeed failings of the *actual* reforms undertaken in the region.

The ability of the multipillar model to isolate the pension system from abuse by governments may also have been oversold by reformers. It is now clear that unsustainable fiscal and monetary policies can jeopardize even well-implemented funded schemes. Whereas this was highlighted most dramatically in Argentina during the economic crisis in 2001 when the government made the administrators of second-pillar pension funds increase their holdings of increasingly risky government bonds and eventually even confiscated their deposits in banks, similar threats to the viability of funded pension schemes can emerge in other countries of the region. In Bolivia, for example, there have been attempts to force a swap of dollar-denominated government debt held by pension funds for less attractive bonds denominated in the local currency (Escobar 2003).

After rising modestly as a result of the reforms, coverage ratios have stalled at levels of about half of the labor force in those countries where workers' participation is highest. In most countries the ratios are much lower (see figures 1.1 and 1.2). Although many factors other than pension reforms (e.g., changes in labor and social legislation[3]) can affect participation, stagnant coverage ratios are indicative of skepticism of the new system, despite its virtues. In Chile, for example, special survey data indicate that workers may perceive AFP (*administradora de fondos de pensiones;* pension fund administrator) accounts as a relatively risky retirement investment (see Barr and Packard 2002 and Packard 2002); this is

confirmed by the low number of workers who use AFP accounts as instruments for long-term saving despite their tax advantages. These same data show that many workers cease to contribute to the pension system after completing the minimum contribution requirement, preferring other long-term savings instruments to those offered by dedicated pension providers, and even more importantly revealing a preference for government schemes for pooling resources to insure against old-age poverty, compared with government-mandated saving instruments (Packard 2002). Preliminary indications are that these may be more widespread phenomena: analysis of the contribution behavior of a sample of Peruvian affiliates suggests that the longer workers have contributed to the reformed pension system, the less likely they are to continue contributing, and that where workers are free to choose how to save, many prefer to invest in housing and in their children.

Figure 1.1 Pension Systems Cover between 10 and 60 Percent of the Economically Active Population in Latin American Countries

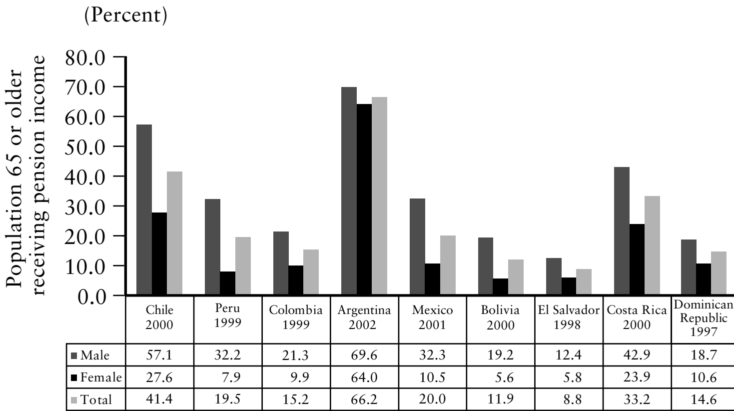


	Chile 2000	Peru 1999	Colombia 1999	Argentina 2002	Mexico 2001	Bolivia 2000	El Salvador 1998	Costa Rica 2000	Nicaragua 1999
Male	63.6	12.8	19.8	35.2	45.1	11.8	24.2	23.2	8.9
Female	60.9	9.1	26.9	37.2	46.6	8.3	27.6	22.5	15.3
Total	62.7	11.2	22.3	36.0	45.7	10.3	25.5	22.9	11.0

EAP Economically active population.

Source: Household surveys between 1997 and 2002, analyzed by Todd Pugatch.

Figure 1.2 Between One-Tenth and Two-Thirds of the Aged Populations Receive Pensions in Latin American Countries



	Chile 2000	Peru 1999	Colombia 1999	Argentina 2002	Mexico 2001	Bolivia 2000	El Salvador 1998	Costa Rica 2000	Dominican Republic 1997
■ Male	57.1	32.2	21.3	69.6	32.3	19.2	12.4	42.9	18.7
■ Female	27.6	7.9	9.9	64.0	10.5	5.6	5.8	23.9	10.6
■ Total	41.4	19.5	15.2	66.2	20.0	11.9	8.8	33.2	14.6

Source: Household surveys between 1997 and 2002, analyzed by Todd Pugatch.

The coverage ratios shown in figures 1.1 and 1.2 are the best illustrations for why further thought has to be given to how to close the coverage gap, beyond the simple multipillar recipe of reforms. Although ensuring fiscal stability was the primary impetus behind the region's pension reforms, advocates of multipillar reform, including the World Bank, saw the potential for increased coverage as an additional motivation (see box 5.2). But there are other reasons as well. Although the precarious fiscal positions of governments in the region have resulted in high gross returns on the portfolios of dedicated pension providers (through high interest rates on government debt issues), several factors provide cause for concern.

The first factor is how long these high returns can be maintained as fiscal adjustment lowers the spreads on government debt. The second factor (where fiscal adjustment is slow) is that a good part of these high returns reflects the risk of default, as the experience in Argentina illustrates. The solution is greater diversification into domestic nongovernment and foreign assets, and while these changes are difficult to engineer during times of fiscal stress, they should be introduced gradually as conditions improve. The third factor is that in some countries management fees have remained relatively stable, while the operational costs of the pension fund industry have fallen. This indicates deficiencies in regulation that should be cor-

rected, but also the impact of weak overall fiscal positions of governments in the region.

In Chile and a few other countries, commission rates are slowly coming down to reasonable levels (less than 20 percent of contributions or 1 percent of assets). This raises questions of intergenerational fairness: the first generations of workers pay higher commissions in order to cover the start-up costs of the new industry of dedicated providers. The fee structures in Chile and elsewhere also result in within-generation inequity as poorer workers end up paying a larger share of their contributions as commissions (Yermo 2002b).[4] But most worrisome are findings that point to difficulties in regulating the firms that manage mandatory pension funds. In Peru, for example, management fees have remained steady even though the ratio of operating costs to fees fell by almost half between 1998 and 2002 (Lasaga and Pollner 2003). Whereas these high management fees would be troubling if discovered for voluntary pension funds, such diversions from worker contributions that are mandated by governments should be cause for concern. Only Bolivia acknowledged the natural oligopolistic nature of the industry and from the start decided to minimize administrative costs within this constraint. The bidding contest used led to the lowest commissions in Latin America, although since then the fees charged in other countries have approached the Bolivian level.

Governments also face a dilemma as they aim to make their funded systems more flexible by permitting workers to choose among a range of investments. In most countries, mandatory pension savings are backed by minimum pension guarantees (or even more generous guarantees) that expose the state to a contingent liability that depends on the investment performance of the pension funds. The ensuing incentive to take unwarranted risks (what is commonly referred to as a moral hazard) is a reality in Chile, where workers can choose among five funds with different allocations to equities. The tension between benefit guarantees and individual choice is evidence of the inherent weakness of pension systems that rely exclusively on mandatory contributions to funded accounts.[5]

In summary, it is safe to conclude that these reforms have been a major step forward. As part I (chapters 2 through 5) of this book shows, the reforms have led to lower fiscal burdens, a slower rate of growth of pension-related public liabilities, financial deepening and less regressive pension expenditures, although there is still much to do in these areas. As we reason in part II (chapters 6 through 8), the shift from defined benefit to defined contribution schemes as the mainstay of old-age income security accords well with the basic principles of the economics of insurance. But it may also be reasonable to question the effectiveness of the currrent multipillar systems in creating an attractive instrument for retirement savings. Concerns over stalled coverage indicators and the vulnerability of all the multipillar components to macroeconomic instability—a fact of life in Latin America—reflect weaknesses that merit reexamination of the multipillar

parameters. In part III (chapters 9 through 11) we argue that fiscal, coverage-related, equity, and financial indicators over the last decade show that a return to single-pillar, defined-benefit PAYG systems as the mainstay for old-age income security is not the answer, although in some countries in the region even this alternative is being considered.[6]

But the way forward is far less obvious. Using a blend of theory and empirical analysis, in part III of this volume we examine the options for the future and propose a rationale for continuing, redirecting, or strengthening various aspects of the reforms initiated during the last two decades.

Distinctions That Matter—Pooling vs. Saving, and Mandatory vs. Voluntary

In this volume we categorize the components of a multipillar pension system by their objective, rather than by whom they are administered (the public or private sector), how benefits are structured (final-salary benefit formula or defined contributions), or their financing mechanism (PAYG or full funding). Thus we use the term "first pillar" or "pillar one" to refer to the part of a pension system intended to keep elderly people out of poverty,[7] "second pillar" to refer to the mandated part intended to help individuals smooth consumption over their life cycle (i.e., to prevent a dramatic fall in income at the time of retirement), and "third pillar" to identify the instruments and institutions available on a voluntary basis for workers to increase their income in retirement. A simple way to characterize the main differences among these pillars is the differing role of government: in the case of the first pillar government defines benefits, in the second it defines contributions,[8] and in the third it defines incentives for retirement savings. Table 1.1 summarizes the main features of instruments for old-age income security that together constitute the multipillar system.

In general the issue of interest is not whether a country should have three pillars (or tiers) or just one. It can be shown without much difficulty that individuals are better off diversifying the risks to adequate income in old age and thus that a country does better for its elderly population by instituting more than one of these components (see Lindbeck and Persson 2003). The critical question is: What should be the relative importance of the three pillars—that is, their "weights" in the system? That is one of the questions this volume addresses. In doing so it exploits two fundamental dichotomies:

1. The nature of the instrument: *pooling*, where there is by definition a transfer in every period from the more to the less fortunate; and *saving*, where there is by definition a transfer of one's income from one period to another but no redistribution between individuals.[9]

2. The role of government or the main reason for participation by the individual: *mandatory*, where the government mandates participation and

Table 1.1 Instruments of Old-Age Income Security

Nature of instrument	*Mainstay: Pooling*	*Mainstay: Saving*[a]	
	Mandatory	*Mandatory*	*Voluntary*
Common name	First pillar	Second pillar	Third pillar
Main function	Insure against poverty in old age, lower income inequality	Smooth consumption over life cycle	Smooth consumption over life cycle
Main role of government	Defines benefits	Defines contributions	Defines incentives
Principal risk-bearer	Government	Worker	Worker
Financial instrument	Unfunded PAYG	Funded: individual accounts	Funded: tax-preferred individual accounts

[a] See chapter 6 for an important qualification: the use of annuities in the saving components implies that the risks associated with unexpected longevity are pooled.

defines the rules of the game; and *voluntary*, where the rules are made clear but people have the choice to participate or not.

Exploiting the first dichotomy enables the use of well-developed insights from the economics of insurance to answer the question of relative weights of the first pillar on the one hand, and the second and third on the other. The first pillar is pooling-based whereas the second and third are primarily savings-based, although there is an important role for pooling in the form of annuities and survivors and disability insurance. Throughout this book we refer to the first pillar as the pooling component and the second and third pillars as the savings component of a pension system. Combined with insights from the study of household behavior and financial institutions, the second dichotomy helps in deciding the relative weights of the second and third pillars. Together these can help determine the unfinished reform agenda needed in countries that have already adopted the multipillar approach, and the options that should be considered in those that are seriously contemplating pension reform. It may even persuade obstinate nonreformers to reexamine their strategies to help elderly people achieve income security.

A Summary of the Main Findings

This volume approaches the problem of old-age income security principally from the viewpoint of individuals, rather than that of governments

alone. Although previous analyses have certainly not ignored the individual's perspective, an explicit focus on the individual has been employed too infrequently in the literature in our view. Consistent with the advice of Barr (2001), who pointed out that analysis of pensions requires an understanding of macroeconomics, microeconomics, financial economics, and the theory of social insurance, this book examines pensions in Latin America using all four of these lenses. Taking this perspective, we find that the successes of pension reform are not where commonly believed: the successes of the reform are not in the much-touted shift to "pre-funding," but in the switch from pooling to saving as the mainstay of old-age income security. Put another way, the merit of the reform is not in the privatization of schemes for old-age income support but in their "individualization." And contrary to the claims of proponents of reforms, the strength is not in arriving at a durable and permanent system, but in breaking with a past of approaches that demographic and economic changes have made defunct.

It should therefore be emphasized once again that future reforms should build upon the efforts that countries have undertaken. The objective of future efforts should be to improve the functioning of all components—first, second, and third pillars—in countries that have adopted the multipillar approach, within the fiscal and administrative constraints they face.

In summary, this volume uses available evidence, including that presented in background papers and surveys commissioned specifically for our inquiry, to draw several important lessons from the Latin American experience with pension reform.

First, and most important, the *poverty prevention* pillar should get a lot more attention than it has in Latin America during the last decade. This poverty prevention role of government only *increases* in importance with economic development—as the likelihood of poverty in old age declines, the fundamentals of insurance make pooling of this risk across individuals more, not less, appropriate. A government mandate is necessary for such a defined benefit system because private insurance markets are unlikely to provide such coverage. Systems of this type are also best financed and managed separately from the savings component, which is not the case in countries such as Chile, El Salvador or Mexico. The defined benefit formulas of such programs call for conservative investment strategies that can clash with the need for individual portfolio choice in the savings pillar.

Second, it should be emphasized that although such poverty prevention tiers will provide a minimum pension to those people who are unfortunate or unwise, saving should be the mainstay for *earnings replacement* during old age (i.e., mechanisms to cover the loss of earnings capacity while living). Retirement programs on top of the poverty prevention pillar should closely link benefits to contributions and do so in a similar way for most workers. The individual capitalization schemes that have been introduced in

Latin America are fully consistent with this objective. In particular, rising life expectancy does not affect the link between benefits and contributions in these new schemes. On the other hand, countries that still have large earnings-related defined-benefit PAYG pillars (e.g., Colombia, Costa Rica, and Peru) will see benefits grow out disproportionately relative to contributions as life expectancy increases. These countries may therefore consider adjusting their benefit formulas to replicate a savings system (through notional individual accounts) or may provide more space to the funded system by closing down the earnings-related PAYG pillar to new entrants to the labor force.

Third, incentive compatibility between the poverty prevention and individual savings pillars is key. Excessively generous or badly designed poverty prevention pillars may create further incentives to informalization of employment and reduce contributions to the mandatory and voluntary savings pillars.

Fourth, more attention should be paid to the size of the mandatory savings pillar. High contribution rates and maximum taxable earnings can discourage worker participation, especially by young and poor populations with other urgent, competing demands on their disposable income. Large second-pillar pensions may be a useful instrument for effecting a transition from overly generous defined-benefit PAYG systems. They may also provide an initial boost to capital and insurance markets. However, these are needs that become less important over time, calling for a reduced mandate. Mandatory savings plans may not even be necessary in countries such as Brazil, which have overcome many political hurdles to social security reform and already have the foundations for thriving capital and insurance markets. Careful consideration of country circumstances, backed by solid country-specific analytical work, is necessary to determine the appropriate size of the second pillar.

Fifth, for countries that do have mandatory savings plans, the priority should be to lower costs to affiliates and improve risk management. Further reductions in commissions would also improve the attractiveness of the funded pillar, and there are various options for achieving this goal. At one extreme there is the centralized management model. At the other extreme there is a fully contestable market where different providers compete by offering diverse products. Latin American countries will need to assess which is the best solution for them, and we do not propose country-specific solutions in this volume. The choice will depend largely on the extent to which other financial institutions are appropriately regulated and supervised and the population's ability to make difficult choices. With respect to risk management, more consideration should be given to the value of international diversification of pension fund portfolios, the pros and cons of worker choice, and improving benefit options at retirement.

Countries with high fiscal net liabilities (and thus regressive transfers) may need to eliminate those net liabilities to make the "fiscal space" needed to fund a poverty reduction pillar.

A Roadmap to this Volume

This volume consists of three parts. In part 1, following a brief description of the reforms in the region in chapter 2, in the next three chapters we provide evidence on the performance of countries that have adopted the multipillar approach in three dimensions: fiscal, financial, and social. The numbers show that countries in Latin America that have adopted the multipillar approach have done well in terms of the objectives of reforms. This finding should form the basis of future reform efforts.

Part 2 makes the point that these countries have made progress in another (much less widely acknowledged) aspect: they have made or begun the transition to a more sustainable and meaningful social contract. The main reason for judging the changes with optimism is the switch to savings from pooling as the basis or mainstay of old-age income security. One can reasonably make the case that the shift from unsustainable defined-benefit PAYG to sustainable old-age income security systems had to go through this stage for reasons of political economy. So it would be a mistake to go back to the unsustainable structures that existed prior to the institution of the multipillar systems. But it would also be a mistake to think of this stage as the "final structure." In fact, the report argues that the 1990s could be seen as a transition in reforming Latin American countries to structures that are sustainable at their levels of institutional sophistication. Chapter 6 asks and answers the question, how do we know what is the appropriate structure? The main proposals stem from well-accepted principles in the economics of insurance that argue for saving as the mainstay of a comprehensive insurance strategy against a frequent loss—of being without earning capacity while living—and pooling as an auxiliary instrument for a risk that is now smaller—that of poverty in old age.

Chapter 7 continues to address the issue using this relatively simple analytical framework. It examines how well the mandatory and voluntary savings components have done from the individual worker/contributor's perspective. High contribution rates may have discouraged young and poor workers from participating in the formal pension system. Most countries also have very high earnings ceilings for calculating mandatory contributions and some have no ceiling at all. High contribution rates and earnings ceilings may explain why few workers have found it worth making voluntary contributions to their individual accounts in most countries, even when they are relatively liquid and offer attractive tax benefits. In addition, the operation of the savings component (both the mandatory and voluntary parts) presents some weaknesses arising primarily from high commissions, lack of international diversification, and inadequate risk management over the life cycle.

Chapter 8 provides some evidence on what may be wrong with seeing the multipillar structure with its heavy reliance on mandated saving as a final structure. Using survey data from Chile and Peru, the two countries

with the longest experience with mandated private savings, we provide evidence that supports worker rationality and reveals their preference for government provision of instruments to *insure against old-age poverty* over those that *enable individual saving*. Although the evidence is not definitive given the small size of the samples, it is more than merely suggestive. In view of this rationality (evidence of the ability to distinguish between risky and less risky instruments of old-age income security, and preferences for alternative long-term savings and investments) and in light of governments' difficulties in providing either PAYG pensions or efficient savings instruments, we propose here that the size of the mandate to save in the form of a rigidly defined and not-so-easily regulated instrument deserves to be reassessed.

Part 3 of the book proposes that the time is right to reflect on the government mandate to save for old age. Chapter 9 discusses how best to insure against the risk of poverty in old age, and chapter 10 treats the equally important issue of facilitating saving for retirement—the mainstay of old-age income security. The volume proposes continuing the move toward a system that consists of a sustainable first pillar to address the risk of poverty and a vibrant, competitive savings pillar to address the need for consumption smoothing over the life cycle. Chapter 9 proposes what may be seen by some as a radical increase in attention of Latin American governments to the poverty prevention function of public pensions. In contrast, chapter 10 proposes a gradual reform of plans to encourage saving for old age. But the principle that guides all the recommendations is that these changes be welfare-improving, institutionally feasible, and fiscally sustainable.

In chapter 11 we look back and ask whether the decade or so of reform has been a success. The answer is that in many respects, it has. But if the new structures are viewed as a final design, the efforts may well be assessed harshly because scores of people are left uncovered just as they were under the old systems, there are still some adverse equity effects and fiscal liabilities, and the cost and risk management features of the savings pillar are somewhat deficient. On the other hand, if the current structures are viewed as a transitory stage, social security reforms should be viewed as successful because the movements have been in the right direction. This is true in all countries surveyed in this book. In countries such as Brazil this is also true, even though the country has eschewed a mandated private savings pillar in favor of efforts to strengthen the third pillar.[10] Even in Argentina, where the second pillar is in the midst of a crisis, we believe that the current social security system is superior to the one it replaced; the reforms of the 1990s have to be built upon, not abrogated. The greatest dangers to all that the reforms have achieved lie not in countries where the new approach to ensuring income support for the aged is being scrutinized and altered, but in countries where large mandated saving is viewed as a solution for the ages.

Notes

1. Barr (2001) correctly points out that "tier" is a better characterization than "pillar" because it "is linguistically more apt: pillars can only be effective if they are all in place and all, broadly of the same size . . ." (p. 133). Because the relative size of these components is a central concern of this book, Barr's point is especially pertinent.

2. All 16 background papers for the book are available online at the Web site of the World Bank's Chief Economist for Latin America and the Caribbean region, www.worldbank.org/keepingthepromise.

3. We discuss the range of factors influencing the decision to participate in public pension systems more extensively in chapters 5 and 8.

4. In addition to the high costs borne by younger workers, a comprehensive generational accounting framework would necessarily account for many other factors to estimate the net intercohort impact of reforms. Such a framework is beyond the scope of this book, however.

5. Even in Chile, a country with one of the highest participation rates, the government considers that low participation in the private pension system will keep effective replacement rates low and thus put mounting pressures on the minimum-income plan for retirees.

6. In Argentina, for example, a draft law that would allow workers to switch between the public and the private branches of the pension system was passed in 2002 in the Lower House with only one vote against and one abstention. In Peru in late 2002 some articles proposed during the rewriting of the constitution would have allowed affiliates to the funded system to return to the public PAYG system and to lower the retirement age from 65 to 60 years. These articles were only narrowly defeated. In Chile in early 2002 civil servants started demonstrations demanding to be allowed to switch back to the pre-reform PAYG regime as a result of disappointing projected replacement rates from individual accounts.

7. We discuss the emerging distinction between "pillar one" and "pillar zero" poverty prevention pensions in chapter 9.

8. Although the second pillar can be implemented as a defined benefit scheme, its predominant association with defined contribution plans in both theory and practice overwhelms this distinction in our view.

9. Because the Ehrlich-Becker "comprehensive insurance" framework underlying our approach (and presented in chapter 6) would use the term "insurance" in reference to both the consumption-smoothing ("self-insurance") and poverty prevention ("market insurance") functions of social security, we use the more contemporary terms "pooling" and "saving" in order to avoid confusion.

10. The recent decision to raise the maximum taxable salary, however, will reduce the clientele in the third pillar substantially.