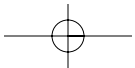
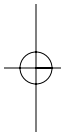
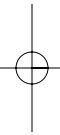

PART 2

DESIGN AND IMPLEMENTATION ISSUES

The second part of this presentation of the World Bank's perspective on pension systems and reform elaborates in some detail relevant issues of design and implementation. Chapter 5 reviews the generic options for reform and presents a stylized policy choice framework; while the goals of reform are universal, the policy choices of each country are substantially determined by the inherited system, the impetus for reform, and the (enabling or disabling) policy environment. Chapter 6 provides a quite extensive but still incomplete review of key reform issues. While Bank staff have developed fairly firm positions in some areas, we are still in search of good solutions in others. Chapter 7 presents a summary review of reform experience from the two regions in which the greatest activity has occurred—Latin America and Europe and Central Asia—and a less extensive overview of reform developments in other regions. Chapter 8 offers a few concluding remarks summarizing the discussion.



Chapter 5

General and Country-Specific Options for the Reform of Pension Systems

THE POLICY FRAMEWORK ARTICULATED IN CHAPTER 4 is oriented toward both process and outcome and looks to goals and criteria based on functional rather than structural concepts.¹⁵ This is bound to produce a broad range of approaches to pension reform and system design. Despite the individual character of pension reform efforts, the scope of feasible outcomes remains sufficiently constrained by common realities that make certain principles and patterns discernable. A review of these is useful in defining the range of reasonable results in a generic manner. Considering the nature of the options and their strengths and weaknesses provides a useful starting point for considering how various types of reforms may be able to fulfill the requirements articulated in chapter 4. The actual reform options for a country have to consider very specifically the inherited system(s), the specific reform needs, and the (enabling or disabling) policy environment.

General Options for Reform

There are essentially five main options for reforming a typical publicly managed, unfunded defined-benefit scheme. These are a subset of a potentially larger set of options resulting from different combinations of benefit type (defined benefit or defined contribution), administration (public or private), and funding (unfunded, fully funded, or prefunded). The relevant subset comprises (a) parametric reforms that keep the benefit structure, public administration, and unfunded nature of the scheme and merely change the system's parameters; (b) a notional defined-contribution reform that changes the structure of benefits but keeps public administration and the unfunded nature; (c) a market-based approach

that provides fully funded defined-contribution or defined-benefit arrangements under primarily private management (especially the investment of assets); (d) public prefunding that provides defined benefits or defined contributions that are publicly administered; and (e) multipillar reforms that diversify the structure of benefits, administration, and funding of the pension system. Each of these main options is discussed in turn. While these reform options are particularly relevant for unfunded systems, a subset is also relevant for centrally funded systems.

Parametric Reform

Parametric reforms leave the existing structure unchanged but adjust the parameters of the scheme to improve the delivery of social and economic objectives. Such parametric reforms include lengthening the assessment period for calculating initial benefits (for example, from the past three years of earnings to lifetime earnings), introducing actuarial increments (decrements) for earlier (later) retirement (typically from 0 or 2 percent to some 6 percent a year), reducing the annual accrual rate (for example, from 2 to 1.25 percent a year), increasing the retirement age, changing from wage to price indexation of benefits, and reviewing the minimum pension guarantee provisions but also increasing the contribution rate to make the scheme fiscally sound.

Such reforms can, in principle, deliver the social and economic objectives, but they have three main shortfalls. First, and most important, for largely political reasons, they are never fully implemented. No single country has undertaken a parametric reform that, by itself, delivers adequate, affordable, and sustainable pensions. Such parametric reforms simply are not politically attractive because many of the gains would be achieved after the politicians responsible have retired. For this reason, they engage in partial parametric reforms to keep the system afloat; that is, they react but do not act. Since individuals know that more is to come but the full game plan is not known, the reform is not credible, and many individuals have an incentive to oppose even minor changes.

Second, and as a result of the typically incomplete parametric reforms, while some distortions in the labor market may be eliminated, many distortions are likely to remain. For example, the obstacles to mobility between public and private sector employees persist because parametric reforms are rarely able to lead a common and harmonized general pension scheme. While a reduction in mandated benefits is likely to increase the demand for voluntary and funded arrangements, the impact on financial market development can be expected to be small. Third, any effort to deal with aging would require long-term, announced, or discretionary changes in the retirement age and other system parameters in line with changing life expectancy—again, not politically attractive and

almost never done. In nearly all cases, it is simply not politically feasible to reform a traditional defined-benefit structure to provide the flexibility needed for individuals to make adjustments among learning, work, and retirement leisure.

Nevertheless, parametric reforms are important and constitute the majority of actual pension reforms in recent decades (see, for example, Fox and Palmer 2001; Gillion and others 2000; OECD 1988; Schwarz and Demirgüç-Kunt 1999; World Bank 1994). Although in most instances they will not by themselves lead to reformed, modern pension systems, these parametric reforms can be a crucial precursor to more far-reaching paradigmatic reform, as they change the liabilities under the old system and may thus allow for a smoother transition toward a new system and benefit structure.

Notional Defined-Contribution Reform

In a nonfinancial or notional defined-contribution system, an individual account is established to which contributions by the individual (and his or her employer) are earmarked and on which a notional interest rate is paid (Palmer 2005b). The notional interest rate is consistent with the interest rate that an unfunded scheme can pay—that is, the “natural” growth rate (essentially the growth rate of covered wages in a mature system). At retirement, an annuitization factor that reflects the remaining life expectancy of the cohort at retirement and the relevant interest rate is applied to the accumulated notional individual account to determine the benefit payout. The benefits are typically price indexed—or at least are not fully wage indexed—to allow for the buildup of a reserve for dealing with economic or demographic shocks.

This type of reform changes the benefit structure from defined benefit to defined contribution but retains the unfunded nature of the system. The move from an unfunded defined-benefit scheme to a nonfinancial defined-contribution scheme essentially makes the underlying financial relationship more explicit and transparent. Formally, an unfunded defined-benefit system can be adjusted parametrically to mimic a notional defined-contribution system, and a full-fledged defined-benefit system (such as the German or French point system) may come close to that (Disney 1999; Góra and Palmer 2004; Legros 2005). Full equivalence, however, would also require the defined-benefit formula to exhibit variable and actuarially adjusted decrements (increments) for earlier (later) retirement and to build increasing (remaining) life expectancy into the benefit formula. The reform experience in Brazil, Ecuador, France, or Germany suggests that such adjustments in the defined-benefit system are politically difficult to implement; hence, a notional defined-contribution reform is not simply a subset of a parametric reform.

This nonfinancial defined-contribution structure is appealing for its simplicity and transparency, its incentive effects on labor supply and retirement decisions, its adjustment to changing professional and family structures (including divorce), and automatic adjustment to increasing life expectancy. Specifically, as in funded individual schemes, workers have an interest in, and can easily verify, the amount of contribution paid on their behalf. Contributions are much less likely to be perceived as taxes, and the labor market distortions are reduced (but not eliminated, as long as the notional risk-adjusted interest rate remains below the risk-adjusted market interest rate or personal discount rate). Distortions on retirement decisions are reduced as well. Increments (decrements) for earlier (later) retirement are part of the benefit design and do not require extra political decisions.

The approach also allows for an easy and quick harmonization between different schemes (such as for public and private sector workers) because higher benefits for public sector workers are essentially conserved for those close to retirement (if accrued rights are transformed into the appropriate notional amounts), while new entrants are subject to the same rights as private sector workers. In its pure form, the notional defined contribution is intentionally nonredistributive within a cohort (that is, each worker gets back his or her contributions plus a notional interest rate), but redistributive elements can be introduced (such as matching contributions to low-income workers or during periods of sickness and unemployment). However, these redistributions should be accomplished through an explicit and transparent transfer of money, to avoid idiosyncratic or excessive giveaways of unfunded promises. The individual account structure allows an easy buildup of individual rights for women and splitting of the accrued value of benefits after divorce and death; it does not, however, provide survivor insurance for widows unless some of the notional capital is put aside for this purpose. When the estimated life expectancy of a cohort increases, individuals receive, through a reduced annuitization factor, a lower pension and can adjust by retiring later or saving more.

Some of these arguments have convinced policy makers in Italy, Latvia, Poland, and Sweden—and also in Brazil, the Kyrgyz Republic, and Mongolia—to undertake reforms that transform their defined-benefit systems into nonfinancial defined-contribution schemes (some doubt that Brazil's reform can be called a notional defined-contribution reform). These reforms highlight alternative approaches to reform, such as an immediate change toward notional defined contribution as opposed to a gradual phasing in, and different methods of transforming accrued rights into notional amounts (see Palmer 2005a). In addition, the experience in these countries also brings to light some basic weaknesses, with Sweden generally considered the benchmark country (see Palmer 2000).

The experience demonstrates that the notional defined-contribution concept can be hijacked by politicians and lead to less-than-optimal system designs. For example, financial unsustainability may persist if the “wrong” notional interest rate is chosen, such as per capita GDP or wage growth instead of growth of the total wage base (adjusted for changes in the contribution-benefit profile and demographics; see Settergren and Mikula 2005). The remaining cohort life expectancy needs to be projected and implemented; it should not be used as a fixed factor, as in China (James 2002). As the system remains unfunded, a financial balancing mechanism, such as a buffer fund, is needed to deal with demographic and economic shocks. Such a buffer fund may have the same fate as other reserve funds of unfunded systems in the past; that is, they get emptied. Contributions to the individual account should not be granted if they have not been paid, as in Italy. The substantial administrative requirements to run such a scheme should not be underestimated, as in the Kyrgyz Republic or in Mongolia. Despite these challenges, reforming along notional defined-contribution lines, if done well, is likely the best way to restructure a typical unfunded defined-benefit scheme within a multipillar structure (that is, securing redistribution through the zero pillar or explicit transfers through the notional defined-contribution pillar and having funded provisions in place to allow individuals to compensate for the likely lower replacement rate with individual saving efforts).¹⁶

A Full Market-Based Reform

This type of reform changes, most importantly, the manner of funding (from unfunded to prefunded) and can also involve a move from public to private administration. Market-based reforms can involve both defined-benefit and defined-contribution systems and may be linked with the conversion of a defined-benefit system to a defined-contribution arrangement. These reforms may involve comprehensive changes—from the collection of contributions to the disbursement of investments and benefits—or focus on the establishment of market-based investments only. Typically, the movement to market-driven investments is what really matters. Under this kind of a reform, publicly administered, unfunded arrangements are restricted to the zero or basic pillar dealing with pure poverty alleviation objectives. This would be accomplished through a noncontributory or social assistance scheme in addition to, perhaps, some form of redistribution to low-earning contributors through the first pillar, such as a minimum pension, and minimum rate-of-return guarantees in the new funded pillar. The Chilean pension reform of 1981, which provides a means-tested pension to poor noncontributors and a minimum pension guarantee to low-earning contributors (and similar reforms in the 1990s in Bolivia, El Salvador, Mexico, and Peru), or the reforms in Australia and Hong Kong (China) are examples of such an approach.

Ideally, market-based reforms offer many advantages. In particular, providing market interest rates on individual and funded accounts that exceed long-term wage growth affords the potential to produce higher replacement rates for a given contribution rate or demands a lower contribution rate for a given target replacement rate. But this potential gain also carries risks with regard to the rate of return and replacement rate. At the same time, the distortions on labor supply and retirement decisions should be reduced. Pension payouts adjust automatically to an increase in life expectancy, making the system less subject to demographic risk. By definition, the scheme is financially sound and sustainable, and the funding should increase national saving and contribute to financial market development and economic growth. Of course, various advantages of the notional defined-contribution structure—introducing distributive elements, granting individual rights for women, and adjusting to an increase in life expectancy—apply as well.

In reality, various obstacles have to be overcome to attain all or even some of these advantages. As discussed in part 1 of this report, the transition from pay-as-you-go toward full funding makes the implicit debt explicit. The repayment of the now-explicit debt requires an extra tax to pay the interest in order to prevent government debt as a percentage of GDP from becoming excessive. As a labor tax (for a given replacement rate), it exactly consumes the difference between the prior higher contribution rate and the lower premium in the funded scheme (Sinn 2000). Repaying the implicit debt requires a tighter fiscal stance (a higher tax burden or a lower expenditure on other budget items) to undo the original windfall profit that unfunded schemes confer on the start-up generation. Only if the reform lowers the excess tax burden (by changing the tax structure) or creates positive externalities (by encouraging a higher growth path as a result of increasing savings and stimulating financial market development) can a potentially double burden on the transition generation be mitigated (Holzmann 1997a, 1999). Most important for the Bank's client countries, such a reform prevents an increase in the unfunded debt and the implicit burden on future generations as coverage increases.

Mandating that a pension scheme be delivered through the private sector does not eliminate conjectural liabilities for the government. For social and political reasons, many governments will not be able to leave all retirement-income risks with the individual. Providing a minimum pension or minimum rate guarantee is equivalent to writing an option that may reduce the implicit debt very little (Smetters 2002). Finally, to deliver the higher rates of return in a funded scheme at reasonable risks requires a sound, well-regulated, and well-supervised financial sector. Although such a sector need not be fully established at the inception of the scheme, it must be there well before maturation. International diversification may provide major support to this end, but it also creates requirements and issues of its own (Chan-Lau

2004; Holzmann 2002). Full privatization, therefore, may be a reform option for countries with low implicit debt in the existing system (due to a relatively immature system for both benefit levels and coverage), with the potential to create a strong financial sector in a relatively short period (while allowing international diversification of assets), and with the ability to use budgetary means to compensate for major income shocks from adverse rate developments. Indeed, a full market-based reform has been found to be more likely among countries with low pension debt (James and Brooks 2001).

Public Prefunding

Public or centralized prefunding of defined-benefit or defined-contribution systems has been proposed (among others, by Orszag and Stiglitz 2001) and is being implemented in some developed economies in order to cope with the problem of an aging population. Canada, Ireland, New Zealand, and the United States all have some degree of partial prefunding. Additionally, provident funds that, in principle, provide retirement savings through a defined-contribution system have a long tradition in former British colonies in Africa and Asia, and a centrally managed defined-contribution system was recently established in Kosovo and is proposed for civil servants in Eritrea, in both cases as a first step toward greater choice. The common characteristic of these arrangements is that prefunding is centralized in one government-administered fund, although investment management may be outsourced to private asset managers.

To deliver on the primary and secondary goals of a pension system, prefunding requires the same changes in the benefit formula as the other reform options. Central prefunding is intended to achieve two objectives: (a) to reduce the fiscal burden on future generations by improving the intertemporal budget position of government (in much the same way as a reduction in explicit public debt but, perhaps, in a politically more palatable manner) and (b) to use one central public fund (compared with multiple privately managed funds) in order to improve risk pooling and keep administrative costs low.

To deliver on the potential benefits of central prefunding, the key requirement is to create a governance structure that keeps politics out of investment decisions and does not produce a looser fiscal stance because government has easy access to funds (Hess and Impavido 2004; Impavido 2002). The degree of government control of the capital stock in these types of arrangements imposes significant challenges. Although some of the recent changes and approaches in highly developed countries may provide some optimism (Palacios 2002), the track record on central funds worldwide is poor, including the well-known examples of Malaysia and Singapore (Asher 2002; Palacios and Iglesias 2001). Furthermore, the approach raises major questions with regard to corporate governance of private sector enterprises in possession of the central fund. The experience

of Kosovo and Russia during the next few years will indicate whether such an approach can be used as a transitional device toward decentralized fund management (see Musalem and Palacios 2004).

Multipillar Pension System

A multipillar approach simultaneously diversifies the structure, funding, and administration of benefits. The World Bank (1994) has proposed a specific definition of a multipillar pension scheme: (a) a (mandated) unfunded system of defined flat or means-tested benefits that is publicly managed and seeks to alleviate poverty; (b) a mandated funded (usually defined-contribution during the accumulation phase) system in which the assets are privately managed and that seeks to replace income; and (c) voluntary funded retirement provisions that compensate for any perceived retirement-income gap for individuals, in particular those with higher lifetime incomes.

Within this definition, some 20 countries now have a multipillar system, including, Argentina, Australia, Bolivia, Chile, Costa Rica, Kazakhstan, Switzerland, Uruguay, and other countries in Latin America. However, if we were to adopt a loose definition, almost all countries could be said to have a multipillar scheme because most have some kind of social assistance scheme for the general public (and the elderly poor), most have some form of occupational scheme that, in principle, is funded and covers some part of the formal labor force, and all countries offer access to voluntary retirement savings (via savings accounts or housing). Other considerations, however, render a straightforward definition of a multipillar pension scheme difficult:

- Tension between what an “ideal” system should look like (and this will depend on the eyes of the beholder) and what definition best characterizes the schemes existing in the world today.
- Differences in the use of the terms “second” and “third” pillar in the world (see OECD 2001b). In Europe and elsewhere, the second pillar refers to occupational pension plans, and the third refers to personal pension plans (whether mandated or voluntary); in the Americas and elsewhere, the second pillar refers to mandated plans, and the third pillar refers to voluntary plans (whether occupational or personal).
- Differences in the use of mandating or type of funding to define the pillars. A few public schemes are partially prefunded (Canada, Ireland), whereas some occupational schemes are unfunded (a few quasi-mandated schemes, as in France, and voluntary schemes through book reserves, as in Germany).
- Differences in the focus on the main groups of society to be covered. The traditional definition of a multipillar scheme focuses largely on formal sector workers only. Given the low coverage and the existence of two other main groups in society with different needs and

capacity—the lifetime poor and informal sector workers—the availability of different pillars has real-life significance.

As a result, the Bank proposes the following categorization of pillars targeted to the three main groups in society. Table 5.1 sets out the pillars, target groups, and main characteristics, which are detailed below.

The target groups constitute a rough characterization of the three main groups in the Bank's client countries:

- *The lifetime poor*, who do not participate in formal sector activities in a sustained manner, if at all. Labor is their main asset, and they are too poor to save for an extended retirement. When they become very old and are unable to work in a full-time capacity, they become very vulnerable, in particular those living alone or widowed.
- *Informal sector workers*, many of whom could participate in a formal scheme but do not for various reasons. While working, they are not in deep poverty but may become so if financial instruments are not available to transfer resources into the future.
- *Formal sector workers*, who, almost by definition, are mandated to participate in formal pension schemes. Some of them may have an insufficient work record, which makes them ineligible for even a minimum pension.

The suggested pillars go beyond the Bank's original three-pillar terminology. The zero or basic pillar is intended to deal more effectively with the lifetime poor as well as with informal or formal sector workers who reach old age with insufficient resources or are not eligible for a formal pension. The importance of the basic pillar is expected to decrease as income levels rise and the economy becomes more formal.

The first pillar is the typical public pension scheme, funded from social security contributions, with perhaps some reserves, with defined benefits or nonfinancial defined contributions, under public management, and possibly with an additional redistributive goal. Initially, this category comprises different plans for various occupations (such as civil servants, private sector employees, independent workers, or farmers), with a trend toward harmonization between the schemes as development occurs and labor mobility becomes increasingly important. Its essential feature is to provide a minimum level of longevity insurance to retirees, financed through intergenerational transfers.

For the second pillar—mandating—full funding and private asset management are the primary characteristics (whether for occupational or personal plans). Second pillars are typically defined contribution during the accumulation phase but, when mature, incorporate a means for individuals to convert account balances into a lifetime annuity. They may, however, be constructed with defined-benefit elements and should be designed with specific income-replacement targets.

Table 5.1. Multipillar Pension Taxonomy

Pillar	Target groups			Characteristics	Main criteria		
	Lifetime poor	Informal sector	Formal sector		Participation	Funding or collateral	
0	X	X	x	“Basic” or “social pension,” at least social assistance (universal or means tested)	Universal or residual	Budget or general revenues	
1			X	Public pension plan, publicly managed (defined benefit or notional defined contribution)	Mandated	Contributions, perhaps with some financial reserves	
2			X	Occupational or personal pension plans (fully funded defined benefit or fully funded defined contribution)	Mandated	Financial assets	
3	x	X	X	Occupational or personal pension plans (partially or fully funded defined benefit or funded defined contribution)	Voluntary	Financial assets	
4	X	X	X	Access to informal support (family), other formal social programs (health care), and other individual financial and nonfinancial assets (homeownership)	Voluntary	Financial and nonfinancial assets	

Note: The size and appearance of x reflect the importance of each pillar for each target group in the following increasing order of importance: x, X, X.

The third pillar comprises voluntary and prefunded pension plans (whether occupational or personal plans) established and regulated to ensure a clear retirement objective. Depending on the form of benefits, the third pillar can also provide longevity insurance, but its provision would rely on private sector institutions. The fourth pillar is added because a large part of retirement consumption may be derived from sources that are not formally defined as pensions, such as homeownership, interfamily transfers, and personal savings accounts.

The *type of funding* refers to the form of collateral of the pension liability, with economic development, strength of the legal framework, and political economy determining the quality of the collateral. Since the quality of collateral is linked to GDP and the underlying demographic structure, the traditional distinction between unfunded and funded is blurred. Furthermore, a funded defined-contribution scheme that is invested in an expanded supply of government paper or a corporate and personal pension scheme that lends to the government and allows an increase in the fiscal deficit and explicit public debt may be as unfunded as a nonfinancial defined-contribution scheme.¹⁷ One may think of unfunded versus funded in terms of how the creation of the pension liability contributes to implicit or explicit public debt. If no public debt, including contingent liabilities, is created, then the scheme may be called funded; if public debt is created, then it may be called unfunded. An alternative definition is presented in part 1, distinguishing between narrow and broad funding. Narrow funding refers to the backing of individual pension claims with financial assets (and property rights) as individual collateral. Broad funding refers to the translation of future pension commitments into increased aggregate saving (and higher output) as macroeconomic collateral. However, the latter definition makes the notion of funding dependent on behavior that is well outside any control.

The *type of benefits*—defined benefit or defined contribution—can, in principle, be distinguished by who carries the (investment and mortality) risk. In a (funded or unfunded) defined-benefit system, the sponsor of the pension plan typically carries the risk—that is, the enterprise or the government. In a (funded or unfunded) defined-contribution system, the individual carries the risk. The reality, however, is more complex. In an unsustainable, unfunded defined-benefit system, the economic or demographic risk is passed on to the next generation through higher contributions or higher government transfers. In an unsustainable company plan, the risk is passed on to pensioners and workers who are still alive when the plan becomes insolvent. The individuals also carry a risk that the benefit formula or indexation practice may change. In a defined-contribution system, the demographic and investment risk can either be borne by insurance companies if annuitization is common or be passed on to future generations if benefits are ultimately provided through nationwide public pooling.

Country-Specific Options for Reform: Policy Progression and Path Dependency

The pension systems and reforms will be guided by the main reform options discussed above. However, the actual choices will depend on a number of country-specific considerations, most important being the existing pension scheme (and other related public programs); the special reform need(s) of schemes; and the (enabling or disabling) environment. All these considerations are broadly linked with the development status and income level of a country. This has led to suggestions that the Bank offer a policy framework or progression that presents the breadth of reform options in relation to the enabling environment, addressing linkages to such factors as development status and fiscal and institutional capacity. This section attempts to address this suggestion, although, in order to condense the many potential combinations and variations, the result is more stylized than prescriptive.

While it is generally true that poorer countries with lower fiscal and administrative capacity have fewer options and that richer countries with a more supportive environment have more options, the progression of options is not linear. This is due to the shadow or absence of the existing system(s). Most critically, while a rich OECD country with full fiscal and administrative capacity could, from an enabling environment point of view, move toward any system, the actual (best) choice will have to consider the inherited system, including the implicit pension debt and institutional setup. As a result, the introduction of a second pillar may be a potential option, but not the best or even a feasible policy choice. In contrast, in a reform-minded middle-income country with moderate implicit debt and sufficient fiscal and administrative capacity, such a choice may be viable and desirable.

Table 5.2 highlights the central reform options and suggested choices by broad country groupings. It is a stylized representation of the choices because it limits constraints to three broad areas—existing system, need for reform, and reform environment—and, within each set, to a few central features with limited properties. Going through a larger set of features and properties would create a decision or choice tree of a few thousand entries, but not necessarily produce a better understanding of the operative principles. The choice of constraints, features, and properties is clearly influenced by actual experience with reform. For the inherited system, the crucial features are the existence or absence of pension systems, their heterogeneity, the level of coverage (and implicit debt), and the type of benefit and funding. For reform needs, the suggested crucial features are fiscal issues, low rate of return, multiplicity of systems, and coverage. With regard to the enabling environment, the suggested key features are macro and fiscal room, administrative capacity, minimum financial sector, and government commitment to reform (as suggested in the reform support criteria in part 1).

Table 5.2. Stylized Reform Choices for Countries: Matching Reform Needs with Constraints and Opportunities

<i>Type of country</i>	<i>Existing system</i>	<i>Reform needs</i>	<i>Reform environment</i>	<i>Central reform options</i>
<i>Low income</i>				
Postconflict	No system and coverage	Protect the most vulnerable	All capabilities essentially absent	Provide basic support and services via social funds, nongovernmental organizations, and international aid and avoid the introduction of costly civil servant schemes and the compensation of freedom fighters via pensions
Low-level equilibrium	Notional defined benefit for public sector with limited coverage	Deal with fiscal costs; extend coverage	No macro and fiscal room, limited administrative capacity, no financial sector, some government willingness to reform	Undertake a parametric adjustment of the unfunded system and provide community-based support for the vulnerable elderly

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Table 5.2. (continued)

<i>Type of country</i>	<i>Existing system</i>	<i>Reform needs</i>	<i>Reform environment</i>	<i>Central reform options</i>
Emerging and reform oriented	Notional defined benefit for public sector with limited coverage	Deal with fiscal costs; extend coverage	Limited macro and fiscal room, administrative capacity, and financial sector, but willingness to reform	Undertake parametric reform of the unfunded system (perhaps with a view to notional defined contribution); introduce, regulate, and supervise the voluntary system; introduce and test noncontributory pensions
	Funded defined contribution or defined benefit for public sector with limited coverage	Improve rate of return; extend coverage	Limited macro and fiscal room, administrative capacity, and financial sector, but willingness to reform	Improve governance of the central or provident fund; introduce, regulate, and supervise a voluntary system; introduce and test non contributory pensions

Table 5.2. (continued)

<i>Type of country</i>	<i>Existing system</i>	<i>Reform needs</i>	<i>Reform environment</i>	<i>Central reform options</i>
<i>Middle income</i>				
Under stress	Multiple notional defined benefit (and funded defined contribution) with moderate coverage	Deal with fiscal costs, low rate of return, multiplicity of systems, and labor market issues; extend coverage	Limited fiscal room, administrative capacity, financial sector, as well as willingness to reform	Undertake parametric adjustment or reforms of the unfunded systems; improve governance of central and provident fund; regulate and supervise a voluntary system
Emerging and reform oriented	Multiple notional defined benefit with moderate coverage (and implicit pension debt)	Deal with fiscal costs, multiplicity of systems, and labor market issues; extend coverage	Some fiscal room, administrative capacity, and financial sector and strong willingness to reform	Introduce a single unfunded system (such as notional defined contribution), move toward a fully funded system, or adopt a mixture of both; introduce, regulate, and supervise a voluntary system; introduce noncontributory pensions (social pension)

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Table 5.2. (continued)

<i>Type of country</i>	<i>Existing system</i>	<i>Reform needs</i>	<i>Reform environment</i>	<i>Central reform options</i>
	Multiple funded defined contribution with moderate coverage	Deal with low rate of return (and captive public bond market); extend coverage	Some fiscal room, administrative capacity, and financial sector and strong willingness to reform	Introduce a single funded system (funded defined contribution); introduce, regulate, and supervise voluntary system; introduce noncontributory pensions (social pensions)
<i>High income</i>				
Under stress	Multiple notional defined benefit with high coverage (and implicit pension debt)	Deal with fiscal costs, multiplicity of systems, and labor market issues; keep or extend coverage	Some administrative capacity and financial sector, but limited macro and fiscal room and political willingness to reform	Undertake coordinated parametric reforms of the unfunded systems; improve regulation and supervision of the voluntary system; improve the existing non-contributory pension systems

Table 5.2. (continued)

<i>Type of country</i>	<i>Existing system</i>	<i>Reform needs</i>	<i>Reform environment</i>	<i>Central reform options</i>
Maturing tiger	Basic income support but not mandated earnings-related scheme Centralized funded defined contribution (provident fund) with limited basic income support	Deal with current and future fiscal costs (aging); improve consumption smoothing for population Deal with low rate of return; keep or extend coverage	Strong administrative capacity, macro and fiscal position, financial sector, and willingness to reform Strong administrative capacity, macro and fiscal position, financial sector, and willingness to reform	Introduce a (limited) mandated and fully funded scheme; improve regulation and supervision of the voluntary system Improve governance of the centralized scheme, including opting out after minimum balance; improve regulation and supervision of the voluntary system; improve the existing and introduce noncontributory pension systems

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Table 5.2. (continued)

<i>Type of country</i>	<i>Existing system</i>	<i>Reform needs</i>	<i>Reform environment</i>	<i>Central reform options</i>
With continuous reforms	Multiple notional defined benefit with high coverage (and implicit pension debt)	Deal with fiscal costs, multiplicity of systems, and labor market issues; keep or extend coverage	Strong administrative capacity, macro and fiscal position, financial sector, and willingness to reform	Move toward a single unfunded system (such as notional defined contribution); strengthen regulation and supervision of the voluntary system; introduce and strengthen noncontributory pensions

Note: Level of income loosely refers to the classification used by the World Bank, with low income referring to International Development Association countries and high income referring to OECD-type economies.

The suggested progression of policy choice for *low-income countries* is relatively straightforward, but perhaps less simple than expected. In postconflict countries without a prior scheme, the emphasis for the elderly should clearly be on poverty relief and the most vulnerable. However, the elderly may not be the most vulnerable, and the most vulnerable may include persons of all ages who are disabled by civil strife, including many children. In these circumstances, war veterans expect compensation for their efforts, preferably in the form of a pension, which risks becoming mixed with the perceived need to provide some pension to civil servants, in part to reduce the vulnerability to corruption. If obligations toward public sector employees under a preconflict scheme need to be honored, in what form and how should they be linked to a new system, and what should it look like? Countries currently facing such choices are, for example, Afghanistan and Eritrea.

Most low-income countries have a pension system for at least a subset of their population—public sector employees (that is, civil servants and workers in parastatals). These systems are typically in dire financial condition and urgently require reform. The reform direction will be very much determined by the reform environment. With low capacity and political willingness for reform, little more than minimum adjustments of the existing scheme(s) and stronger community support for the vulnerable elderly can be expected. However, in a reform-oriented environment with some, albeit limited, capacity, the reform options are much more comprehensive: a comprehensive parametric or even a notional defined-contribution-oriented reform of the unfunded scheme; improved governance of funded schemes; the introduction or at least the testing of a noncontributory pension scheme; and the introduction and improved regulation of emerging voluntary schemes are appropriate to these conditions. Countries in this set include Kenya, Senegal, and Uganda.

For *middle-income countries*, the set of feasible policy choices is already more enhanced. The limitations for this quite heterogeneous group of countries are derived more from the capacity constraints than from inherited systems. As a result, for countries with limited capacity and political willingness to reform, the basic reform choices boil down to damage control and basic adjustments. Strongly reform-oriented countries with sufficient capacity at the fiscal and administrative levels have the full array of options open to reform an unfunded or funded (mandated) public scheme. As the coverage—and hence implicit debt—of the inherited system is typically small, the move toward a full second pillar can be envisaged. If the inherited unfunded scheme is large (as in most transition economies), the set of options is restricted, and the move toward a funded, mandated pillar may be partial.

For *high-income countries*, the set of feasible policy choices may appear to be even more enhanced, but this may not be the case. For these countries, which are also quite heterogeneous in their composition, the limitations are quite likely to derive from the inherited system rather than from

capacity issues, although the latter can be significant. As in middle-income (and low-income) countries, a rich country under (macro and fiscal) stress, with a government not fully committed to reform, will be restricted to damage control and incremental parametric reforms. A reform-oriented country, with all of the needed capacity but with an inherited Bismarckian system with high implicit debt, is likely to exclude a move toward a funded (second) pillar among its choices, even if it is only partial. Presumably, many countries in continental Europe fall into this category. Those few economies with full capacity but only basic income provisions will move toward mandated funded provisions (as more recently was done by Australia and Hong Kong, China).

Conclusions

While there is, indeed, a link between capacity and reform space, the link is not linear. The feasible options and actual choices will be (co)determined by the inherited system. This suggested path dependence of reform space implies that reform-oriented, middle-income countries need to assess their choices carefully and work diligently on their capacity for reform if they do not want to be constrained in the future. By extension, the same applies to low-income countries and their need to find the appropriate moment to introduce and better regulate and supervise voluntary systems.