

# The World Bank Pension Conceptual Framework

## Background – Evolution of the Framework

Since the mid 1980's, the World Bank has responded to the need to strengthen social insurance and contractual savings systems providing old age income support in developing countries. Such support has also been driven by pressures of global population aging, the erosion of informal and traditional family support systems, and weaknesses in the governance and administration of existing pension systems. The importance of effective formal sources of retirement income is accentuated by changes in work and family patterns including the increasing participation of women in formal employment, rising divorce rates, diminishing job stability and increases in local and international labor migration.

The Bank's conceptual framework has emerged from its experience in Bank-supported reforms and the changing conditions and needs in client countries. Following the important work of the mid-1990's, *Averting the Old Age Crisis* that established key principles and concepts, the Bank's attention has increasingly focused on refining system designs to adapt these principles to widely varying conditions and better address the needs of diverse populations to manage the risks in old age.

The conceptual framework for the Bank's pension work is presented in the 2005 report, *Old Age Income Support in the 21st Century: An International Perspective on Pension Systems and Reform*. The findings of these and important regional reports illustrate the evolution of thinking within the Bank and the importance of a policy framework that is sufficiently flexible to address diverse country conditions. This note draws upon and refines the framework presented in the 2005 report and in the 2007 Bank Board Discussion Paper.

Although the Bank's experience suggests that there are no universal solutions to the complex array of pension issues nor a simple reform model that can be applied in all settings, the Bank has developed principles of analysis and a conceptual framework to guide its' work. This framework suggests an assessment of *initial conditions and capacities* and *setting out core objectives* (Table 1). It then suggests evaluating potential *modalities* for pension systems by applying a *multi-pillar model* of potential reform designs. These possible designs should then be evaluated against a set of *primary and secondary evaluation criteria* in an attempt to reach an outcome that is contoured to country-specific conditions, needs and objectives. Finally, the Bank applies additional design principles in evaluating reform

This briefing is part of the World Bank's Pension Reform Primer: a comprehensive, up-to-date resource for people designing and implementing pension reforms around the world. The findings, interpretations, and conclusions expressed herein are those of the author(s), and do not necessarily reflect the views of the International Bank for Reconstruction and Development / The World Bank and its affiliated organizations, or those of the Executive Directors of The World Bank or the governments they represent. For more information, please contact the Social Protection Advisory Service, The World Bank, 1818 H Street, NW, MSN G7-703, Washington, DC 20433, USA, Telephone: (202) 458-5267, Fax: (202) 614-0471, E-mail: [socialprotection@worldbank.org](mailto:socialprotection@worldbank.org). All Pension Reform Primer material is available on the internet at [www.worldbank.org/pensions](http://www.worldbank.org/pensions).

choices and suggests considerations for the reform process.

### Initial conditions

An assessment of the initial conditions establish the motivation for, and constraints on, feasible reform options. Initial conditions include *inherited systems*, the *reform needs* of such systems, and the *enabling environment* which may or may not be conducive to potential elements of a reform design and process. The inherited system includes existing mandatory and voluntary pension systems, the acquired rights of workers and retirees, related social security schemes, existing family and community support of retirees, and old age vulnerability and poverty prevalence. Reform needs are determined by applying the adequacy, affordability, sustainability and robustness criteria discussed below to existing schemes. Finally, the enabling environment includes the demographic profile; the macro-economic environment; the capacity of administrative, regulatory and supervisory institutions; and the breadth, depth and efficiency of financial markets, particularly with respect to long-term instruments.

### Setting out core objectives

Having evaluated the initial conditions and the capacity to improve the enabling environment, the policy framework then focuses on how best to work within these to achieve the core objectives of pension systems--protection against the risk of poverty in old age and smoothing consumption from one's work life into retirement. In setting out the objectives of the pension system, policymakers need to consider broader questions of social protection and social policy which consider the poverty and vulnerabilities of different income groups. Key questions for consideration in this context are, for example, should scarce fiscal resources be devoted towards providing old-age poverty protection in those societies where data suggests that there are other groups such as children that may face greater poverty prevalence or vulnerability? How much should a society aim to redistribute income through the pension system and how can it ensure that this redistribution is made transparent and

progressive? What measures should be taken to strengthen the enabling environment which are conducive to reform options best satisfying the core objectives? Once these core objectives have been identified, one can then identify the mandate of the public pension system, the balance between insurance and adequacy functions and appropriate system design options.

### Modalities and Reform Options - The Five Pillar Framework

The Bank's policy framework flexibly applies a five-pillar model defining the range of design elements to determine the pension system modalities and reform options that should be considered. Country-specific conditions require a tailored and tactically sequenced implementation of the model that will substantially define the range of feasible options. Consideration of the full range of possible elements at this stage and seeking to incorporate multiple elements of the model in design is based on the view that a diversified system can deliver retirement income more effectively and efficiently. Multipillar designs provide more flexibility than monopillars and are therefore typically better able to address the needs of the main target groups in the population and provide more security against the economic, demographic, and political risks faced by pension systems. Single pillar schemes are also less effective than multipillar designs when measured in terms of the four evaluation criteria discussed below. The five pillars are:

- A non-contributory "zero pillar" (e.g. in the form of a demogrant, social pension, or general social assistance typically financed by the local, regional or national government), fiscal conditions permitting, to deal explicitly with the poverty alleviation objective in order to provide all of the elderly with a minimal level of protection. This ensures that people with low lifetime incomes are provided with basic protection in old age, including those who only participate marginally in the formal economy. Whether this is viable—and the specific form, level, eligibility and disbursement of benefits depends upon the prevalence and need of other vulnerable

groups, availability of budgetary resources and the design of complementary elements of the pension system;

- A mandatory “first pillar” with contributions linked to varying degrees to earnings with the objective of replacing some portion of lifetime pre-retirement income. First pillars address, among others, the risks of individual myopia, low earnings, and inappropriate planning horizons due to the uncertainty of life expectancies, and the lack or risks of financial markets. They are typically financed on a pay-as-you-go basis and thus are, in particular, subject to demographic and political risks;
- A mandatory “second pillar” that is typically an individual savings account (i.e. defined contribution plan) with a wide set of design options including active or passive investment management, choice parameters for selecting investments and investment managers, and options for the withdrawal phase. Defined contribution plans establish a clear linkage between contributions, investment performance and benefits; support enforceable property rights; and may be supportive of financial market development. When compared to defined benefit plans they can subject participants to financial and agency risks as a result of private asset management, the risk of high transaction and administrative costs, and longevity risks unless they require mandatory annuitization;
- A voluntary “third-pillar” taking many forms (e.g. individual savings for retirement, disability or death; employer sponsored; defined benefit or defined contribution) but is essentially flexible and discretionary in nature. Third pillars compensate for rigidities in the design of other systems but include similar risks as second pillars; and
- A non-financial “fourth pillar” which includes access to informal support (such as family support), other formal social programs (such as health care and/or housing), and

other individual financial and non-financial assets (such as home ownership and reverse mortgages where available).

Certain pillars are better suited to address the needs of the lifetime poor, informal sector workers at risk of becoming poor once they stop working, and workers covered by formal pension arrangements while also providing diversification for all income groups. For example, a zero pillar social pension is well suited to address the need for basic income support of the lifetime poor while also providing a foundation that covers gaps in coverage and benefit adequacy in societies with mandatory first and second pillar schemes that may not be reaching workers through their full working lives due to their movement in and out of formal employment. Similarly, in societies that have only been able to achieve limited coverage of mandatory first and second pillar schemes, developing well-supervised voluntary (third pillar) schemes may effectively reach the informal sector and provide an efficient means to supplement and diversify benefits for higher income groups. Some of the same societies may find that mandated first and second pillar schemes present obstacles to increased formalization of the labor force and achieve better outcomes with a combination of a social pension and a more extensive voluntary system. Finally, public policies which are supportive of transfers of family wealth, such as through land and asset titling, registries and inheritance laws can strengthen old-age income security of both the lifetime poor and informal sector.

### Primary Evaluation Criteria

The policy framework evaluates the range of overall systems designs through the application of a combination of primary and secondary criteria. The primary criteria are the ability of the reform to maintain adequacy, affordability, sustainability, and robustness while achieving welfare-improving outcomes in a manner appropriate to the current and expected environment of the individual country:

- **Adequacy.** An adequate system is one that provides benefits sufficient to prevent old-age

poverty (at a country-specific absolute level) to the full breadth of the population in addition to providing a reliable means to smooth lifetime consumption for the vast majority of the population;

- **Affordability.** An affordable system is one that is within the financing capacity of individuals and the society and does not unduly displace other social or economic imperatives or have untenable fiscal consequences;
- **Sustainability.** A sustainable system is one that is financially sound and can be maintained over a foreseeable horizon under a broad set of reasonable assumptions;
- **Equitability.** An equitable system provides income redistribution from the lifetime rich to lifetime poor consistent with societal preferences while not taxing workers or retirees external to the system; and an equitable defined-benefit system provides the same benefit for service across income groups and cohorts subject income redistribution parameters which may apply;
- **Predictability.** A predictable system provides benefit that (i) are specified by law and not subject to the discretion of policymakers or administrators, (ii) includes indexation provisions designed to insulate the individual from inflation, wage and interest adjustments before and after retirement, and (iii) as much as possible insulates the retiree from longevity risks; and
- **Robustness.** A robust system is one that has the capacity to withstand major shocks, including those coming from economic, demographic and political volatility.

Application of these criteria requires consideration of the linkages between the various elements and the associated tradeoffs among them. For example, contribution rates for a mandatory first pillar system that are deemed to be affordable to employers and employees may result in issues of

the adequacy of benefits or sustainability of the systems financing. In addition, other public policy provisions can materially affect the ability of a particular country to fulfill these criteria. Adequacy in preventing old-age poverty is, for example, closely linked to the manner in which health care for the elderly, typically representing a very large component of consumption for this age group, is financed. Evaluation and resolution of these tradeoffs further highlights the country specific nature of the decision process.

### Secondary Evaluation Criteria

Once a system and/or reform has been assessed in relation to the primary criteria, secondary evaluation criteria should be considered to evaluate the system's contribution to output and growth. This is based on the understanding that the capacity of any pension system to provide effective sources of retirement income is inextricably linked to its ability to support economic stability and development. The relevant criteria in this respect include: (i) minimization of labor market distortions; (ii) contribution to savings mobilization; and (iii) contribution to financial market development. Regardless of the design of the system pension benefits are effectively claims against future economic output. It is, therefore, essential that, over time, the systems contribute to growth and output to be able to provide the promised benefits. To achieve this, a reform should support labor and capital market efficiency, reinforce measures to improve savings mobilization and facilitate financial market development.

### Country-specific options do not imply infinite possibilities

Although the use of a multi-pillar model may be interpreted to suggest an infinite range of acceptable outcomes, in reality this has not proven to be the result. The application of the broader policy principles and the constraints imposed by individual country circumstances has the practical effect of focusing support for pension reforms to a constrained set of outcomes. The World Bank perspective continues to assign a high priority to parametric reform of unsustainable pay-as-you-go



systems and to rely on diversification of instruments to manage long term risks.

### Design Principles in Determining Reform Choices

Although there is no simple template for determining the relative pillar size and instrumentality appropriate to the diverse array of country circumstances, several basic principles are used to guide these choices. As indicated above, relevant and feasible reform options depend on country-specific circumstances which are broadly linked with the development status and income level of a country. While capacity and reform potential are linked, the relationship between income level and reform options are substantially influenced by non-income factors. Reform paths are therefore highly complex depending upon inherited system, reform needs, the enabling environment and substantially dependent upon incremental policy decisions in the process. This path dependency therefore results in variation between a country's income level and development status on the one hand, and suitable policy reform options on the other.

In addition to the relationships with the level of development and income several other principles are incorporated into the decision process on an appropriate pension system design. Key overarching principles include:

- **Prefunding commitments.** Prefunding of future pension commitments is generally advantageous for economic and political reasons provided conditions are right. The key to determining whether prefunding is advantageous is a comparison of the expected benefits (such higher capital stock and future output) with the expected costs (such as transition costs and intergenerational equity). Politically, prefunding may better guarantee the capacity of society to fulfill pension commitments because it ensures that pension liabilities are backed by assets protected by legal property rights.
- **Second pillar benchmark.** A mandatory and fully-funded second pillar provides a

useful benchmark (though not a blueprint) against which the design of a reform should be evaluated. A well-designed second pillar will generally satisfy the adequacy, affordability, sustainability and robustness criteria when implemented under the appropriate conditions.<sup>1</sup> As a benchmark, a second pillar serves as a reference point for the policy discussion and as a means to evaluate the potential welfare improvement. The efficiency and equity of alternative approaches to retirement savings, such as voluntary individual or occupational schemes can also be evaluated in relation to this benchmark.

- **Small, simple and universal.** In order for first pillars to satisfy the affordability and sustainability criteria, such schemes should be relatively *small, simple* and *universal*. Small refers to the mandated replacement rate, which should be modest enough to ensure sustainable financing and support compliance. Simple refers to the design of benefits and the advantage of a close link between contributions and benefits. Universal refers to the application to all sectors of an economy in order to allow mobility across professions. Redistribution in the pension system in favor of lower-income groups should be provided in a transparent manner. A system fulfilling these principles should help to minimize distortions in the labor market and deal with population aging in an incentive-oriented manner.
- **Broader assessment of risk, vulnerability and poverty.** A broader assessment of risk, vulnerability and poverty of all age groups has important implications for the desired objectives and characteristics of

---

<sup>1</sup> Most members of the academic and development communities as well as within the Bank agree that certain enabling conditions including macroeconomic, financial market and institutional characteristics are supportive of second pillar reforms. There is a spectrum of views however, as to what constitute the minimum conditions conducive towards success with some placing greatest importance on the clarity of the policy framework while others placing equal importance on environmental considerations.

pensions systems: (i) Mandating the participation of the very poor in a public, earnings-related pension schemes is likely to be welfare decreasing and difficult to enforce. Faced with so many other life course risks against which they lack risk management instruments, mandatory contributions to a pension scheme for the very poor is not optimal; (ii) The most damaging everyday risks for poor people are those that prevent them from working to sustain themselves and their families. A non-contributory social pension applicable to the disabled and to elderly beginning at an age when work is not feasible anymore caters to these needs and priorities in countries where these risks are more prevalent than risks of old-age poverty and where there are the resources to provide such remedies; and (iii) Since unemployment and old-age-related risks are imperfectly correlated, more-developed countries may gain from pooling these risks over time. Further, in view of the moral hazards associated with unemployment insurance, introducing unemployment savings accounts that become old-age savings accounts upon retirement may create efficiency gains.

**The Reform Process.** A major emphasis should be given to the *process* of pension reform, including what are commonly termed the political economy aspects. Three process criteria are therefore relevant:

- *A long-term, credible commitment by the government.* The reform needs to be effectively aligned with the political economy of the country and supported by a clear political mandate. Political conditions under which the reform will be implemented need to be sufficiently stable to provide a reasonable likelihood for a full implementation and maturation of the reform;
- *Local buy-in and leadership.* This includes credibility with the population at large. The preparation of a pension reform has to be undertaken primarily by the country itself, by its politicians and technicians, and be effectively communicated to, and accepted by, the population at large; and
- *Sufficient capacity-building and support for implementation arrangements.* These include, as necessary, reforms in governance, the collection of contributions, record keeping, client information, asset management, regulation and supervision, and benefit disbursement. Establishment of a legal framework is only an initial and potentially insufficient step that needs to be followed-up with extensive local capacity and institution building.

### A Strategic Approach Going Forward

The Bank is applying the above framework in country projects, economic and sector work and country and regional capacity building and knowledge management. In 2008, it initiated a process to strengthen the implementation of the framework through: (i) initiation and revision of pension primer notes and papers on pertinent policy and institutional development issues; (ii) linked to these primer notes and papers, an effort to focus the knowledge dissemination process; (iii) establishment of a global database of pension indicators; and (iv) development of monitoring indicators and a process of monitoring reform efforts to focus its support on measures which have the greatest impact.

**Table 1. The World Bank's Conceptual Framework**

<b>Initial Conditions</b>	<p><b>I. Inherited System</b></p> <ul style="list-style-type: none"> <li>▪ Elderly vulnerability and poverty prevalence in absolute terms and relative to other age groups</li> <li>▪ Existing mandatory and voluntary pension systems</li> <li>▪ Existing social security schemes</li> <li>▪ Existing levels of family and community support</li> </ul> <p><b>II. Reform needs</b> – such as modifying existing schemes in the face of fiscal unsustainability, coverage gaps, aging and socio-economic changes assessed against the primary and secondary evaluation criteria below</p> <p><b>III. Enabling environment</b></p> <ul style="list-style-type: none"> <li>▪ Demographic profile</li> <li>▪ Macroeconomic environment</li> <li>▪ Institutional Capacity</li> <li>▪ Financial market status</li> </ul>
Core <b>Objectives</b> of Pension Systems	<ul style="list-style-type: none"> <li>▪ Protection against the risk of poverty in old age</li> <li>▪ Consumption smoothing from work to retirement</li> </ul>
<b>Modalities</b> for achieving objectives	<ul style="list-style-type: none"> <li>▪ <i>Zero Pillar</i> – non-contributory social assistance financed by the state, fiscal conditions permitting</li> <li>▪ <i>First Pillar</i> – mandatory with contributions linked to earnings and objective of replacing some portion of lifetime pre-retirement income.</li> <li>▪ <i>Second Pillar</i> - mandatory defined contribution plan with independent investment management</li> <li>▪ <i>Third Pillar</i> - voluntary taking many forms (e.g. individual savings; employer sponsored; defined benefit or defined contribution)</li> <li>▪ <i>Fourth Pillar</i> - informal support (such as family), other formal social programs (such as health care or housing), and other individual assets (such as home ownership and reverse mortgages).</li> </ul>
<b>Primary Evaluation Criteria</b>	<ul style="list-style-type: none"> <li>▪ Adequacy</li> <li>▪ Affordability</li> <li>▪ Sustainability</li> <li>▪ Predictability</li> <li>▪ Equity</li> <li>▪ Robustness</li> </ul>
<b>Secondary Evaluation Criteria</b>	<p>Contribution to output and growth through:</p> <ul style="list-style-type: none"> <li>▪ Lowering labor market distortions</li> <li>▪ Contributing to savings</li> <li>▪ Contribution to financial market development</li> </ul>

Table 2. Multipillar Pension Taxonomy

Objective	Pillar	Target groups			Main criteria		
		Life-time poor	Informal sector	Formal sector	Characteristics	Participation	Funding/collateral
Elderly poverty protection	0	<b>X</b>	X	x	“Basic” or “social pension,” at least social assistance, universal or means-tested	Universal or residual	Budget/general revenues
Elderly poverty protection and consumption smoothing	1			<b>X</b>	Public pension plan, publicly managed, defined benefit or notional defined contribution	Mandated	Contributions, perhaps w/financial reserves
Consumption smoothing and elderly poverty protection through minimum pension.	2			<b>X</b>	Occupational or personal pension plans, fully funded defined benefit or fully funded defined contribution	Mandated	Financial assets
Consumption smoothing	3	x	<b>X</b>	<b>X</b>	Occupational or personal pension plans, partially or fully funded defined benefit or funded defined contribution	Voluntary	Financial assets
Elderly poverty protection and consumption smoothing	4	<b>X</b>	<b>X</b>	X	Access to informal (e.g. family support), other formal social programs (e.g. health) and other individual financial and nonfinancial assets (e.g. homeownership)	Voluntary	Financial and non-financial assets

*Note:* The size of x or **X**, normal or bold, characterizes the importance of each pillar for each target group.

Source: Holzmann and Hinz, *Old Age Income Support in the 21st Century*, Table 1, p. 10.

