Pension coverage and linkages in low- and middle-income countries

Mukul G. Asher
ISSA Consultant

This paper is one of the studies produced under the ISSA Project on “Examining the Existing Knowledge on Social Security Coverage Extension”

Working Paper No. 11

International Social Security Association, Geneva, 2009
The International Social Security Association (ISSA) is the world's leading international organization bringing together national social security administrations and agencies. The ISSA provides information, research, expert advice and platforms for members to build and promote dynamic social security systems and policy worldwide. An important part of ISSA's activities in promoting good practice are carried out by its Technical Commissions, which comprise and are managed by committed member organizations with support from the ISSA Secretariat.

This document is available on http://www.issa.int/Resources. For terms and conditions, please consult the ISSA website. The view and opinions expressed do not necessarily reflect those of the publisher.

Contents

Introduction

1. The context

2. Extending coverage through reforming existing formal systems and through linkages with income transfers

3. Case studies
   3.1 Brazil
   3.2 Chile
      3.2.1 The solidarity pillar
      3.2.2 The voluntary pillar
   3.3 China
      3.3.1 Pension reform in China
      3.3.2 Social assistance in China
   3.4 India
   3.5 Mauritius
   3.6 South Africa

4. Concluding remarks

References

Mukul G. Asher
Summary

Despite the development of significant analytical insights and country-reform experiences, the extension of pensions coverage to near-universal levels remains a vexing issue in most low- and middle-income countries (LMICs) globally. A large informal sector in most LMICs presents specific challenges to the objectives, design, delivery systems, and financing of pensions. The heterogeneity of country contexts makes formulating a single pension system or a single strategy to extending coverage difficult. This paper argues that main objective of pension extension in LMICs should be to substantially mitigate old-age poverty. This will require integrating pension system reform with poverty reduction and development strategies.

To extend pension coverage in the LMICs, parametric and systemic reforms of existing formal-sector systems are necessary. But such reform is not sufficient. There is a need to link the reform of formal-sector systems with retirement income transfers, such as social pension (whether universal or resource-tested), minimum pension guarantees under the existing formal systems, and matching contributions. The analysis of initiatives in Brazil, Chile, China, India, Mauritius, and South Africa suggests the need for context-specific design and implementation strategies to address the pension coverage gap. Common challenges that emerge include the absence of robust databases needed for formulating and evaluating policy initiatives and for identifying the intended beneficiaries; fiscal and institutional constraints; and the need to balance competing priorities. In turn, uneven and relatively slow progress in addressing the coverage gap in LMICs has been made more complex by the current global economic crisis.

Introduction

After several decades of pension reforms around the world, there has been increasing concern among policy-makers and researchers about the slow progress in extending coverage of the pension systems, particularly in low- and middle-income countries (LMICs) (Holzmann et al., 2009; Hu and Stewart, 2009; ISSA, 2009; Mesa-Lago, 2008).

There are three dimensions to pension coverage: (1) the proportion of potential beneficiaries covered by the pension system as a whole; (2) the risk contingencies covered; (3) the level of benefits (van Ginneken, 2008b). Globalization, technological changes facilitating off-shoring and contracting-out domestically of many economic activities in both the private and public sectors, and consequent labour market structures, and demographic trends portending rapid ageing in many LMICs have lent urgency to the issue of extending coverage. The objective of such extension is increasingly to prevent poverty in old age, and therefore there is a tendency to integrate pension schemes with overall poverty reduction and development strategies.

The LMICs are not, however, homogeneous in economic and labour market and governance structures, levels of economic development, institutional capacities and capabilities, and in other characteristics, such as the rate at which family and community support which has traditionally been important in LMICs has been eroding; and the prevalence of debilitating diseases such as HIV/AIDS.

There are enormous variations in and among Asian, African and Latin American countries with respect to these characteristics. In some countries, such as China, India, Indonesia, Brazil and South Africa, there are also large intra-country variations in pension coverage. Thus, over-generalization about LMICs as a group should be resisted.

Mukul G. Asher
The main objective of this paper is to examine policy issues, challenges and country experiences concerning extension of coverage of pension benefits in low- and middle-income countries. Such an examination will cover both contributory and non-contributory schemes, and the need for possible linkages between them.

Measuring coverage in these countries is constrained by data limitations, and by conceptual and methodological challenges (Forteza et al., 2009).

The main data sources for the coverage are (1) administrative data from provident and pension fund organizations and (2) household surveys. As each source has advantages and disadvantages, considerable research efforts are needed to gather data from a variety of sources. Most researchers depend on international organizations for comparative data on coverage, in spite of the known limitations concerning the degree of comparability across countries. There is often, for example, a lack of longitudinal data, which are essential to estimate contribution densities (defined as number of contributions within a pre-determined period), required to assess the adequacy of the pension benefits earned, and labour market behaviour.

Samson (2009) has argued that since many African countries do not conduct regular labour force surveys, it is difficult to monitor coverage rates, and therefore track and analyse progress and devise appropriate design.

The paper is structured as follows. The next section sets the context, particularly focusing on the current and future labour market characteristics, and coverage rates for the formal sector pension systems in the LMICs. In section 2, some issues relating to linkages between contributory and non-contributory pension systems are examined. The discussion is informed by country experiences and research by academics and multilateral organizations. Much of the discussion is based on the set of papers published in Holzmann et al. (2009); and on the papers commissioned by ISSA (Barrientos, 2008; ISSA, 2009; Matijascic, 2009; Samson, 2009) and UNRISD (Slater, 2008).

This is followed by selected case studies of LMICs covering Asia, Africa and Latin America (section 3) which illustrate differing experiences of extending coverage through linkages between the pension systems for formal sector workers and retirement income transfers. This includes Chile, whose 1981 pension reforms were influential in popularizing pension reform design towards defined contribution (DC) systems under which individuals bear the investments and other risks as under this system benefits are left undefined. Chile has recently introduced social pensions, and integrated its minimum guaranteed pensions under social pensions (Asher, 2009; Kritzer, 2008). Section 4 provides the concluding observations.

1. The context

In the Organisation for Economic Co-operation and Development (OECD) countries, economic development has been accompanied by an increase in formal sector employment. This has led to progressively increasing coverage of the labour force and of the population through social insurance, and other contributory schemes for risk-contingencies such as old-age and disability pension, health care, workmen’s compensation and unemployment benefits. In the OECD countries, the coverage as a proportion of the labour force is estimated to be above 90 per cent, though this may be an over-estimation, as some OECD countries do not include informal sector workers as part of the labour force in their statistics (Forteza et al., 2009).\footnote{Mukul G. Asher}
The LMICs, however, seem not to be following the OECD pattern of an increasing share of the labour force employed in the formal sector, leading to progressively increasing coverage of pensions based on an employer–employee contribution model. On the contrary, a major feature of the LMICs has been that the proportion of the labour force in the formal sector has either been increasing gradually, or has remained stagnant, though intercountry variations are quite high (Forteza et al., 2009). Figure 11.1 shows the coverage of the mandatory systems globally. It suggests that for most LMICs the coverage rates are below 25 per cent, with some countries exhibiting a coverage ratio between 25 and 50 per cent and a few, such as Chile, exhibiting a ratio between 50 and 75 per cent.

**Figure 11.1 Coverage as measured by active members of mandatory pension systems as share of labour force, worldwide, early 2000s**

Among the LMICs, the Latin American region has witnessed substantive structural (or paradigmatic) as well as parametric reforms during the last two to three decades. Even in this region, Matijasic (2009) reports that in several countries such as Argentina, Bolivia Costa Rica, and Ecuador, the coverage of the formal pension systems was lower in 2006 as compared to the base year (during the 1990s).

The share of formal sector employment varies from 84.3 per cent in the developed economies to only 20.8 per cent in South Asia and 22.9 per cent in sub-Saharan Africa (table 11.1). While the corresponding share is higher in South-East Asia and Pacific (38.8 per cent) and in East Asia (42.6 per cent), even these proportions are lower than the global average of 46.9 per cent. There are also variations according to gender, with the share of women in formal employment being considerably lower than that of men, particularly in South Asia and sub-Saharan Africa (table 11.1). In the MENA (Middle East and North Africa) region, the World Bank estimates the pension coverage as a proportion of labour force to be 40 per cent, with the average being skewed upward due to near-universal coverage in Egypt and Libya.

*Mukul G. Asher*
The prospects for increasing the share of formal sector employment are not promising in the LMICs. The current global economic crisis is expected to lower the medium-term trend rate of economic growth, and hence the rate of increase in per capita income over the next several years. As there is a positive correlation between per capita income and pension coverage, the LMICs will find it challenging to increase coverage through formal sector employment growth. As shown in table 11.2, the LMICs as a group will however need to generate a substantial number of new potential livelihoods between 2005 and 2020. The Asia-Pacific region will have to generate more than three-fifths of the nearly 850 million new livelihoods, followed by Africa (27.5 per cent), and Latin America and the Caribbean (9.4 per cent).

Much of the potential livelihoods generation will have to take place in the informal sector. As table 11.3 suggests, there is considerable heterogeneity among the workers in the informal sector, with differing rates at which workers move from formal to informal categories and among the informal categories. Given this heterogeneity, no single scheme is likely to be optimal for all informal sector workers. However, too many schemes directed at specific types of informal workers may hamper labour mobility, and create arbitrage opportunities. Moreover, if the schemes are dependent on government or donor finance, their sustainability over time may be compromised. Lack of robust data about the informal sector workers in the LMICs also hampers the formulation of appropriate design and implementation of pension schemes.

---

Table 11.1  Persons with wage or salary employment status on the labour market, circa 2008 (per cent)

<table>
<thead>
<tr>
<th>Region</th>
<th>Total</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Share of employed</td>
<td>Share of working-age population</td>
<td>Share of employed</td>
<td>Share of working-age population</td>
<td>Share of employed</td>
</tr>
<tr>
<td>South Asia</td>
<td>20.8</td>
<td>9.7</td>
<td>23.4</td>
<td>15.6</td>
<td>14.6</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>22.9</td>
<td>13.8</td>
<td>29.2</td>
<td>20.5</td>
<td>14.4</td>
</tr>
<tr>
<td>Southeast Asia and Pacific</td>
<td>38.8</td>
<td>21.9</td>
<td>41.5</td>
<td>28.6</td>
<td>35.0</td>
</tr>
<tr>
<td>East Asia</td>
<td>42.6</td>
<td>23.3</td>
<td>46.0</td>
<td>28.9</td>
<td>38.3</td>
</tr>
<tr>
<td>North Africa</td>
<td>58.3</td>
<td>24.4</td>
<td>58.8</td>
<td>38.5</td>
<td>56.7</td>
</tr>
<tr>
<td>Middle East</td>
<td>61.5</td>
<td>29.0</td>
<td>64.4</td>
<td>41.6</td>
<td>53.5</td>
</tr>
<tr>
<td>Latin America and the Caribbean</td>
<td>62.7</td>
<td>38.6</td>
<td>60.6</td>
<td>46.1</td>
<td>65.8</td>
</tr>
<tr>
<td>Central and Southeastern Europe and CIS</td>
<td>76.6</td>
<td>41.5</td>
<td>75.4</td>
<td>48.0</td>
<td>78.0</td>
</tr>
<tr>
<td>Developed economies</td>
<td>84.3</td>
<td>46.6</td>
<td>81.7</td>
<td>51.8</td>
<td>87.5</td>
</tr>
<tr>
<td>World</td>
<td>46.9</td>
<td>26.5</td>
<td>47.4</td>
<td>33.0</td>
<td>46.0</td>
</tr>
</tbody>
</table>

Source: Hagemejer (2009, p. 64).
Table 11.2  **Potential livelihoods generation* by region (2005–2020)**

<table>
<thead>
<tr>
<th>Region</th>
<th>No. (millions)</th>
<th>% of world total</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>846.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Asia-Pacific</td>
<td>526.7</td>
<td>62.2</td>
</tr>
<tr>
<td>of which</td>
<td></td>
<td></td>
</tr>
<tr>
<td>India</td>
<td>211.7</td>
<td>25.0</td>
</tr>
<tr>
<td>China</td>
<td>71.8</td>
<td>8.5</td>
</tr>
<tr>
<td>Indonesia</td>
<td>32.0</td>
<td>3.8</td>
</tr>
<tr>
<td>Africa</td>
<td>232.6</td>
<td>27.5</td>
</tr>
<tr>
<td>Europe</td>
<td>−17.8</td>
<td>−2.1</td>
</tr>
<tr>
<td>Latin America and Caribbean</td>
<td>79.3</td>
<td>9.4</td>
</tr>
<tr>
<td>North America</td>
<td>23.6</td>
<td>2.8</td>
</tr>
</tbody>
</table>

*This is defined as the number of economically active persons, defined as those between 15 and 64 years of age in a given region, for whom livelihoods will need to be generated in the formal or the informal sectors.


Table 11.3  **Different categories of informal sector workers**

<table>
<thead>
<tr>
<th>Employment category</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Owners and employees of micro-enterprise</td>
<td></td>
</tr>
<tr>
<td>Own-account workers</td>
<td></td>
</tr>
<tr>
<td>- Self-employed</td>
<td></td>
</tr>
<tr>
<td>• Independent contractors</td>
<td></td>
</tr>
<tr>
<td>• Sub-contracted home workers</td>
<td></td>
</tr>
<tr>
<td>• Out-workers</td>
<td></td>
</tr>
<tr>
<td>• Owner-drivers</td>
<td></td>
</tr>
<tr>
<td>• Casual employees</td>
<td></td>
</tr>
<tr>
<td>• Free lancers</td>
<td></td>
</tr>
<tr>
<td>- Independent contractors</td>
<td></td>
</tr>
<tr>
<td>- Street vendors</td>
<td></td>
</tr>
<tr>
<td>- Transport providers</td>
<td></td>
</tr>
<tr>
<td>Employees</td>
<td></td>
</tr>
<tr>
<td>- Wage laborers in micro-enterprises</td>
<td></td>
</tr>
<tr>
<td>- Unpaid workers</td>
<td></td>
</tr>
<tr>
<td>- Home-based workers</td>
<td></td>
</tr>
<tr>
<td>- Paid domestic workers</td>
<td></td>
</tr>
</tbody>
</table>

*Typically enjoy reasonable income
- Main customers in urban areas are non-state enterprises; main customers in rural areas are households.

- Self-employed workers are not associated with an employer and work at their own financial risk
- Many are affiliated with a small enterprise or middleman organizing their activity.
- A large percentage of self-employed work at least two jobs.
- Disproportionately female.

- Home workers disproportionately female
- Firm provides raw materials; home worker then transforms into finished product on piecework basis.

**Source.** MacKellar (2009).

The pension coverage in the informal sector therefore would need to be integrated with inclusive development policies and programmes, and with enhancing overall productivity of the agricultural sector which provides livelihoods to a significant proportion of those in the informal sector. However, as urbanization is increasing, livelihood prospects of informal urban sector would also need to be enhanced. (In 2008, for the first time, a majority of the global population was urban.)

**Mukul G. Asher**
The above suggests that there is an urgent need for the LMICs to construct multi-tiered social security systems, involving a mix of risk-sharing arrangements among the stakeholders – beneficiaries, the employers, the state, the family and the community, and not-for-profit organizations (both domestic and foreign). As a result of the rapid population ageing due to decline in fertility and increased longevity, the LMICs will have a shorter period than the already rich OECD countries to construct social security systems, which:

- provide adequate benefits to most of the eligible population;
- are sustainable financially and fiscally;
- are affordable by individuals, businesses and the economy as a whole;
- are robust in riding out macroeconomic cycles, such as the current global economic crisis.

Moreover, their social security systems will need to ensure that a high trend rate of economic growth and incentives for labour-market participation are sustained. Increasingly, in the LMICs, a small but still significant share of total income during retirement would need to be from some form of economic activity. The institutional retirement age in many LMICs is relatively low in comparison with life expectancy. A significant proportion of the young-old (i.e. those between 60 and 70 years of age) could have the skills and the abilities to engage in economic activities, at least on a part-time basis. This may supplement their pension benefits, permitting greater economic security. Labour market regulations in the LMICs would need to be amended, where needed, to enable such participation.4

As argued convincingly by Barr and Diamond (2009), there is no single best pension design. The government is an essential participant in any pension system, and fiscal and institutional capacities must be an integral part of pension design and pension reform strategies.

As noted, the LMICs are heterogeneous, and no single pension system will be appropriate for all. As all countries already have existing pension systems, path dependence (i.e. reforming elements of existing systems) will have to be an integral part of any strategy to extend coverage in individual countries. The global pension debate thus has become more nuanced, with a consensus emerging on the need for multi-tiered systems, whose components are well integrated, and are professionally designed and managed, informed by robust disaggregated databases and rigorous policy-oriented research. There is also a strong case that pension reform alone will not be effective in expanding coverage. It will have to contribute to and be integrated with broader inclusive development and enhancement of the productivity of the economy, particularly with respect to agriculture. The needs of the elderly should be balanced against the needs of the other age groups such as children and those who are economically active.

2. Extending coverage through reforming existing formal systems and through linkages with income transfers

There is now a consensus that for a variety of reasons, structural (or paradigmatic) and parametric reforms of the formal sector pensions systems predicated on reorganization of the employer–employee relationship will be necessary but insufficient to lead to significant progress towards near-universal coverage in the LMICs (Holzmann et al., 2009; Mesa-Lago, 2008; Samson, 2009). Various types of retirement income transfers (figure 11.2) are therefore essential to address the coverage gap in the LMICs.
As figure 11.2 suggests, retirement income transfers may be approached through ex-ante (during working life) and ex-post (after retirement) interventions. In the former, the main challenge is to design matching contributions by the state to ensure an adequate benefit, but without adversely impacting contribution density, retirement decisions and incentives to participate in the formal systems, while ensuring fiscal sustainability.

The ex-post interventions can be in the form of social pensions or minimum guarantees under the formal sector pension systems. The social pensions can be universal, i.e. provided to eligible individuals as a right, or resource-tested. In each case, there are considerable challenges with respect to design, implementation and linkages with the rest of the pensions system.

Retirement income transfers or social pensions should be distinguished from social assistance. The latter comprises general assistance programmes for all poor, not just those that are elderly or disabled. Robalino and Holzmann (2009, p. 16) have argued that "under ideal conditions, the most efficient strategy for preventing poverty in old age would be to include the elderly within general assistance programmes". They recognize, however, that if the poverty rates among the elderly are much higher than among the general population, if general social assistance programmes are absent as in most low-income countries, and if there is institutional discrimination against the elderly, targeted transfers to the elderly may merit serious consideration.

If the fiscal capacity is limited, resource-tested social pensions may be preferred over universal pensions. The identification of beneficiaries, however, needs to be undertaken efficiently for the benefits to reach the deserving. In practice, proxy indicators are often used to identify the beneficiaries. These may range from direct assessment of households who are eligible at frequent intervals; different types of means tests; selection by local communities; categorical selection where all individuals, regardless of income, in a given category, such as indigenous persons and tribals, are included; and finally self-selection (Slater, 2008). Identifying those eligible is costly, and some errors are inevitable. One type of error is excluding those who are eligible, and the other is including those who do not qualify. Both should be minimized.
However, once identified, there is also often political resistance to drop those who no longer satisfy the eligibility criterion. This increases the fiscal costs of the programme, without reaching the intended beneficiaries. As Slater (2008, p. 3) has cautioned, in practice

transfers are never really universal, and where they involve targeting specific groups of people they can be relatively simple to administer. However, targeting based on social categories is likely to involve major errors of inclusion and exclusion. In cases where the administrative capacity is low, overambitious procedures for targeting or conditionality should be avoided. However, to rule out any possibility of conditionality or targeting on the grounds of weak administrative capacity leaves only the option of universal transfers. In policy settings where these involve major errors of inclusion or exclusion, or where there is fear of the de-motivating effects of “handouts”, political opinion (and wider public opinion) may shift against social transfers altogether. Not only will this work against the interests (and rights) of the poor, it will also be detrimental to the building of precisely that administrative capacity which will be necessary for improved efficiency and effectiveness in making transfers.

Robalino and Holzmann (2009) also suggest the following in designing social pensions:

- eligibility age should be higher than the statutory retirement age of the contributory system, and this age should be indexed to life expectancy;
- the level of benefit should be low, i.e. not exceeding 15–20 per cent of average earnings to minimize adverse effects on labour supply and saving;
- to minimize incentives to withdraw from the mandatory contributory system, those in the mandatory system should in principle be eligible for social pensions; and
- effective marginal tax rates (EMTRs) imposed by the social pension or transfer should be relatively low.

The micropension scheme in Bangladesh, called the Grameen Pension Scheme (GPS), suggests possibilities of using microfinance institutions to extend coverage in a limited manner on a voluntary basis (MacKellar, 2009). Under the GPS, all borrowers from Grameen Bank with a loan above a specified amount contribute a small sum each month for a period of ten years. The amount is compounded and returned as a lump sum after ten years. The lump sum provision, however, may be reconsidered. A phased or programmed withdrawal would be more consistent with the periodic payments requirement of a pension, and could be integrated with old-age social assistance.

3. Case studies

These case studies cover Asia (China, India), Africa (South Africa, Mauritius) and Latin America (Brazil, Chile). They summarize some of the recent reforms that have an impact on extending coverage. The reforms involve not only mandatory and voluntary contributory schemes, but also retirement income transfers or social pensions. In general, the scope of social pensions in these countries has been increasing, though there are still substantive challenges of design, financing and delivery systems. These case studies illustrate differing experiences of extending coverage through linkages between the pension systems for the formal sector workers and retirement income transfers. As may be expected, there is strong path-dependency in their experiences, with no single design or pattern emerging which can be easily replicated elsewhere.

3.1 Brazil

Brazil, with a population of 190 million in 2007, and per capita income of US$8,197 in 2008 is an upper middle-income country, with a well-established social security system. The Federal Constitution of 1988 established the broad concept of social security, involving social insurance, health care and social assistance. Brazil’s pension system, comprising

Mukul G. Asher
contributory and non-contributory schemes, is managed by the National Social Security Institute (NSSI). Brazil has a multi-tier system, with an important role for social pensions.

Brazil’s social security system, comprising separate regimes for private sector workers (RGPS) and civil servants (RPPS) has undergone a series of reforms since the late 1990s. Some specific groups of public servants also belong to the RGPS. Most public servants, and military personnel, are covered by their own social security schemes, with their own regulations and specific features. Recent reforms, however, have reduced the differences between these schemes and the RGPS.

Parametric changes were introduced in the regime for private sector workers in 1998 to create incentives for the postponement of retirement on the basis of length of contribution. With regard to the regime for civil servants, a minimum retirement age was introduced in 2003, together with revenue-raising measures, which include the taxation of pension benefits (Giambiagi and de Mello, 2006).

The RGPS operates under defined benefit (DB), pay-as-you-go (PAYG) financing arrangements. It is compulsory for all employed workers not covered by their own social security scheme.

Currently, private sector workers can retire under the RGPS regime on the basis of:

(a) old age at 65 years for men and 60 years for women, provided that they have contributed to social security for at least 15 years;
(b) length of contribution, provided that they have contributed to social security for 35 years for men and 30 years for women, in which case there is no minimum retirement age; and
(c) disability, which is not constrained by length of contribution or age. Pension benefits are capped so as to encourage the development of complementary pension arrangements – contributions to social security are calculated based on earnings up to a ceiling, above which contributions are made on a voluntary basis to a personal saving scheme.

The main parametric change introduced in the RGPS regime in the 1998 reform was the social security factor. Until then, the value of pensions had been calculated as the average of earnings during the 36 months prior to retirement. Since the reform, pension benefits have been calculated by multiplying the average of the 80 per cent highest earnings throughout the working life by a parameter that depends on age at retirement, length of contribution and life expectancy at retirement. This parametric change in the formula for calculating pension benefits introduced a penalty for early retirement on the basis of length of contribution, because it made the replacement rate an increasing function of the retirement age (Giambiagi and de Mello, 2006).

The connection between these parametric reforms and extension of coverage may be explained as follows. Such parametric reforms have made current formal sector systems more sustainable and equitable. The reduction in generosity of benefits to the existing RGPS members potentially permits government expenditure to be devoted to other uses, including extending coverage, or reducing the statutory tax burden of RGPS.

Brazil has also introduced flexible rules favouring the inclusion of other categories of contributors, especially voluntary contributors (for example, women without their own income performing household tasks) and independent workers (mostly self-employed persons).

Mukul G. Asher
The 1998 reform also introduced parametric changes in the regime for public sector workers (RPPS). A minimum retirement age was established for both employees in active service (53 for men and 48 for women) and new entrants (60 for men and 55 for women). A lower retirement age, set in the 1988 Constitution, was maintained for primary- and high-school teachers, who can retire five years earlier than other civil servants (Giambiagi and de Mello, 2006).

A more comprehensive reform was enacted in 2003, setting different rules for public sector employees in active service and new entrants into the civil service. In the case of the employees in active service, the 2003 reform unified the employee’s contribution requirement at a minimum rate of 11 per cent on earnings exceeding a predetermined cap for civil servants of all levels of government; set a retirement age of 60 years for men and 55 years for women, with a reduction of 5 per cent in the value of pensions for each year of early retirement; reduced the portion of survivor’s pensions exceeding the cap by 30 per cent; exempted the 11 per cent contribution rate for the civil servants who postpone retirement; and applied the 11 per cent employee’s contribution rate to the pension benefits of retired civil servants exceeding the cap (from August 2004). In 2004, ancillary legislation introduced a 2-to-1 split in contributions between the employer (government) and the civil servants, and a minimum contribution rate for civil servants in the states and municipalities at a level that is equal to that of the federal government (Giambiagi and de Mello, 2006).

For new entrants, the reform was more ambitious and called for: (i) calculation of pension benefits based on the average salary over the civil servant’s entire working life, including contributions under RGPS (on a pro rata basis); (ii) indexation of pension benefits to past inflation, rather than wages; and (iii) introduction of the RGPS ceiling for pension benefits (mentioned above), pending legislation on the implementation of complementary pension funds for civil servants (Giambiagi and de Mello, 2006).

These parametric reforms will make the existing pension arrangements for public sector employees and civil servants financially and fiscally more sustainable. This will provide increased level of security of benefits to current and future pensioners. To the extent these parametric reforms reduce the cost of providing pension benefits, they may lead to better allocation of the nation’s resources among alternative priorities, including strengthening of rural universal pension schemes and Bolsa Família programmes.

Brazil has a resource-tested, flat pension for the elderly poor, equivalent to the minimum wage. In addition, there is an old-age pension for agricultural workers, which can be based on past earnings, but with minimum benefit equal to the minimum wage. The eligibility age is 60 for men, and 55 for women. This is quite low as average life expectancy in Brazil in 2008 was 68.8 years for men, and 76.4 years for women. In practice, most agricultural workers receive a pension equal to the minimum wage.

Flat pensions have only income effect, and do not impact directly on substitution between work and leisure. However, a high level of flat pension, while positively impacting on the poverty level, may adversely impact on the labour force participation rates, particularly as eligibility age is low (Piggot et al., 2009).

Brazil has developed rural universal pension schemes financed out of agricultural trade taxes. Setting eligibility requirements on the basis of residence, age, disability and survival conditions the State can apply the accession criteria. The simplicity of universal pensions schemes contrasts with the difficulties associated with the high (political and financial) costs of allocating scarce public resources to those population segments that have means for an appropriate subsistence. That is the reason why their application is targeted to the most
destitute. In Brazil it has been targeted to the rural population, one of the best examples of coverage extension through non-contributory mechanisms. Benefits are paid to those who have spent a minimum of 12 years in agriculture. The scheme is partially financed out of a specific tax on agricultural trade, representing a non-contributory pension targeted by geographical area and that has significantly contributed to lowering poverty among the aged in rural areas of north-east Brazil (Uthoff, forthcoming).

In addition to the above, Brazil also has fairly extensive social assistance programmes, covering the poor, whether they are elderly or not. Bolsa Familia is perhaps the most visible of Brazil’s cash transfer programmes, offering basic social protection income support for an approximate cost of 0.4 per cent of the country’s GDP. Unlike usual pension schemes, which are directed towards the individual, this programme is family-centred. It can therefore potentially have a positive impact on the gender gap in coverage.

Brazil has recently announced the extension of Bolsa Familia, a national family cash-transfer programme, to an additional 1.3 million poor families by the end of 2009.

By expanding the income ceiling for eligible families (from Brazilian reais (R$) 120 to R$137 for poor families and R$60 to R$69 for families in extreme poverty), the government plans to add an additional 300,000 families in May 2009, 500,000 families in August 2009 and 500,000 families in October 2009. The goal is to eventually reach 13 million families.

Bolsa Familia currently benefits 11.1 million families, or approximately one-quarter of Brazil’s 190.5 million citizens. Launched in 2003, monthly cash transfers range from R$20 to R$182 per family, depending on the number of children, with an average of R$85 per month per family. In return, the government imposes some conditions related to human development in order to break the cycle of poverty and provide children with access to health, financial and human capital. For example, families must ensure that children attend school and medical examinations in public hospitals. There is thus an attempt by Brazil to link social assistance (which provides income transfers to all those eligible, whether elderly or not) to laying the foundations for future growth.

3.2 Chile

Chile, with a population of 16.9 million in 2009, and per capita GDP of US$10,124, is an upper middle-income country. Chile’s 1981 pension reforms have been extensively discussed in social security literature and have had considerable influence in policy debates (Mesa-Lago, 2008). The reforms resulted in a switch from a PAYG system to a privately managed contribution system (also called the capitalization system), in which contributions were made only by the employees. After nearly three decades of experience with the pension system, there has been a reassessment, particularly with respect to coverage and adequacy. As at end-July 2009, total assets at US$102 billion (equivalent to 60 per cent of 2008 GDP) were lower than as at end-2007, when they were US$111 billion (68 per cent of GDP). Chile stock market capitalization declined from a peak of US$232.1 billion in October 2007 to US$199.3 billion in July 2009 (http://www.world-exchanges.org/WFE/home.asp?menu=395&nav=ie). The current global economic crisis has adversely impacted the medium-term real rate of return, which in turn is likely to reduce the replacement rate obtained from the contributory pension system.

In March 2006, the newly elected President Bachelet set up a Presidential Advisory Council on Pension Reform under the chairmanship of Mario Marcel to evaluate the existing pension system. Subsequently, a new Pension Act was enacted in March 2008. According to the Marcel Commission (2006), a large portion of Chile’s labour force has not been covered by

Mukul G. Asher
any social security programme. About 4 million workers, or 61 per cent of the labour force, have been covered by either the public PAYG or the individual account system. This figure is about ten percentage points higher than in 1980, but about the same level as in the mid-1970s, the period just prior to the implementation of the capitalization system.

The new Act includes measures to provide adequate benefits to a larger portion of the population, ensure more gender equity, encourage greater competition in the pension fund industry, improve the financial risk management by the AFPs (pension fund management companies) in order to increase the return on the workers’ contributions, change the rules for financing survivors’ and disability insurance, establish more opportunities for voluntary savings, and improve financial literacy.

The next generation of pension reform in Chile also reflects the policy-makers’ recognition of the changing social conditions in the country. In 2008, the population aged 60 years and older represented 12 per cent of the total population, and is expected to increase to 17 per cent by 2020 and to 28 per cent in 2050. Life expectancy at birth increased from 70.7 years in 1980 to 78.5 years in 2008, and life expectancy at age 60 increased from 16.8 years to 20.7 years for men, and 20.2 years to 24 years for women over the same period (Kritzer, 2008).

The basic tenet of Chile’s system is that each worker is responsible for financing his or her own pension. Under the 1981 reforms, the State provided assistance to those unable to fund their retirements. This was undertaken in two ways:

(a) **PASIS**: a publicly funded means-tested social assistance pension was provided to the poorest aged members, irrespective of their contribution history. The Government limited the number of PASIS pensions granted in order to control expenditure; thus there was always a waiting list to access these pensions.

(b) **MPG**: a Minimum Pension Guarantee was provided to all individuals who had contributed to the system for at least 20 years (specifically, made at least 240 contributions) but had not accumulated enough to achieve a minimum pension. This guarantee applied only when a member did not have enough accumulations to enable that person to draw down a pre-specified minimum benefit. The State simply topped up the members’ accounts by an adequate amount. The minimum pension was set at approximately three-quarters of Chile’s minimum wage or one-quarter of the average wage.

There were other covert guarantees provided by the State. If an AFP went bankrupt, the pension funds belonging to the members did not suffer; instead, the worker simply transferred them to another AFP.

In the case of the bankruptcy of an insurance company, the State guaranteed 100 per cent of the minimum pension stipulated by the State, plus 75 per cent of the difference between the pension the pensioner was receiving and the minimum pension guaranteed by the State, with a ceiling of 45 UF per month.

The pension system in Chile has seen a number of changes since its inception to improve coverage, adequacy and equity (Asher and Vasudevan, 2008; Mesa-Lago, 2008).

The new pension system is based on a three-tiered structure. Tier I is a government-financed social safety net called the Solidarity pillar. Tier II involves mandatory contributions with measures designed to increase the coverage of the labour force. Tier III involves additional voluntary savings. The incremental annual cost is projected to be 1.1 per cent of GDP. The basic design of the contributory second pillar will remain unchanged, although its scope will
be widened to cover currently excluded workers. The measures to widen the scope include the following (Asher and Vasudevan, 2008):

- All workers classified as "non-wage earners" will be integrated into the capitalization system by granting them the same benefits and obligations as wage earners. Thus equal access will be provided for child benefits; work injury insurance, old-age and disability benefits and equal tax treatment of contributions will be practised. However, non-wage earners will be expected to affiliate compulsorily with the system, rather than participate on a voluntary basis.

- Affiliation of self-employed and informal workers will take place over a transition period of, for example, five years, which will be used to (a) educate, inform and motivate independent workers to contribute; (b) implement incentives and agreed mechanisms of contribution; (c) develop sectoral strategies of incorporation of independent workers; (d) develop suitable mechanisms of collection; and (e) construct databases that help to maintain effective control of the collection process. The Council estimates that a process of gradual transition will be necessary to instil the concept of retirement savings among independent workers and enable them to know more about the system and its benefits so that workers would participate in a motivated and informed manner.

- In order to encourage younger workers and new entrants to participate in the individual retirement account system, the reform proposes a monthly subsidy equivalent to 50 per cent of the effective monthly contributions during the first 24 months of contributions for all low-income workers. The subsidy will be applicable to all workers between 18 and 35 years of age, and with an income below 1.5 times the minimum wage. These measures when implemented will permit the individual capitalization system to incorporate workers who work in conditions of total or partial informality, under the same conditions and in receipt of similar benefits to those accessed by wage-earning workers.

3.2.1 The solidarity pillar

A new System of Solidarity Pensions (SPS) replaces the existing PASIS scheme and the Minimum Pension Guarantee provided by the government. The aim of creating this pillar is to provide universal pension coverage to all Chileans and to minimize old-age poverty by supporting those with lower capacities of contributing towards their pensions.

The SPS benefits men and women aged 65 years and above, belonging to the poorest 60 per cent of the population. Additionally, in order to be eligible for SPS benefits, the applicant should have lived 20 years in Chile, in particular during the five years preceding the application.

The main benefits under the SPS include the Pension Basica Solidaria (PBS) and the Aporte Previsional Solidario (APS). From 1 July 2008, all persons who did not contribute to the system, and have no other source of pension, receive a minimum Solidarity Pension if eligible for SPS. Such persons receive a Basic Pension amounting to Chilean pesos (CLP) 60,000 (US$116) per month until 2010, which will increase to CLP 75,000 (US$145) until 2012.

Persons who have some contributory pension and are eligible under SPS, receive a "complementary" topping-up benefit (called APS) that declines as the member’s own pension increases, and will finally cease when the self-financed contributory pension reaches the Maximum Pension with Solidarity Contribution (PMAS).
The PMAS will be set at between CLP 50,000 (US$97) per month and CLP 150,000 (US$290) in 2008, and will gradually rise to CLP 255,000 (US$494) per month by 2012. The rate of "withdrawal" of the complementary top-up is designed in such a way that the total pension always increases in response to higher contributory effort.

The reform also gradually extends mandatory coverage in the individual account system to the self-employed, whose participation is currently voluntary. Beginning 1 January 2012, contributions by the self-employed will be based on 40 per cent of taxable earnings, increasing to 100 per cent by 1 January 2014. Beginning 1 January 2015, all self-employed will be required to contribute 10 per cent of their taxable earnings to an individual account (Kritzer, 2008).

An additional provision seeks to encourage youth employment and participation in the capitalization system. The measure requires the government to provide a monthly subsidy to low-income workers (those who earn less than one and a half times the minimum wage: 238,500 pesos (US$462) per month in July 2008) between the ages of 18 and 35 and their employers for the first 24 months of employment after they first enter the labour force. Beginning 1 October 2008, the employer subsidy has been equal to half of a contribution to an individual account based on the minimum wage (7,950 pesos (US$15) per month in July 2008) and will be provided each time the worker contributes to an individual account. The workers' contributions are not required to be continual. Beginning 1 July 2011, the subsidy for low-income workers, the same amount as the employers' subsidy, will be deposited into a worker's individual account each time the worker contributes (Kritzer, 2008).

**Expected outcomes:** The groups that benefit most from this reform include workers with low contribution densities; workers with relatively volatile income, such as seasonal workers and independent workers; the people who have dedicated an important part of their active lives to unremunerated home work such as the care of children, old people or disabled relatives; less-educated workers; and old people with very low pensions.

According to projections made by the Commission just before the launch in 2008, 510,000 people or about 40 per cent of the population over 65 years will receive a Basic Solidarity Pension. This represents an increase of 100,000 people among the beneficiaries of Assistance Pensions. By the fifth year of operation, it is expected that 60 per cent of the poorest in Chile or over 1 million persons will benefit from the scheme.

The scheme’s other advantage is that by creating a link between the smallest marginal contributions and additional pensions received, it maintains the incentive to make regular contributions. The Solidarity Pension is integrated smoothly into the contributory scheme (figure 11.3).

Thus, if workers contribute regularly to their individual pension accounts, the contributing pillar assures them a worthwhile pension. If for some reason they do not contribute at all or do so infrequently, then they are supported by the Solidarity Pillar that not only guarantees a basic pension, but also assures higher pensions based on their contributions.
3.2.2 The voluntary pillar

The main component of the voluntary pillar of the present pension system is the Ahorro Voluntary Previsional (APV), which came into effect on 1 March 2002 under Law No. 19,768. APV balances have grown at an annualized rate of 35 per cent between 2002 and 2005, reaching US$1.9 million in December 2005. Unfortunately, utilization of APV tends to be highly correlated with income: 26.1 per cent of high-income contributors to the AFP system made APV contributions in 2005, but only 2.7 per cent of low-income contributors used APV. In fact, voluntary pension-related savings are also a very small fraction of total financial voluntary savings, currently accounting for only 5.2 per cent of the total.

Thus the most important element of the Chile pension reform is a measure that will make the APV more inclusive; previously only those independent workers who were affiliated to an AFP were permitted to contribute to an APV; this restriction is being removed to allow access to all independent workers.

Additional proposals for strengthening the voluntary pillar can be grouped under two categories: fiscal incentives to promote additional voluntary savings within the current system; and provisions for new voluntary savings plans.

The reform (i) exempts low income individuals from paying tax (at 3 per cent) on early withdrawals from their voluntary accounts and (ii) abolishes taxes on commissions paid to voluntary savings account providers. Furthermore, legislation has been put in place to ensure that funds left in voluntary pension savings accounts form a part of inheritance estates.

The reform also includes a provision for new employer-sponsored voluntary pension plans, known as Ahorro Previsional Voluntario Colectivo (APVC), which collect contributions from both employers and employees. Employers are permitted to set up more than one APVC plan, if it is approved by a majority of workers. The APVC plans are non-discriminatory, implying that the plans must be open, in equal conditions, to all the workers of the company who wish to participate in them.

Mukul G. Asher
The changes proposed to the APV are expected to sustain the high rates of growth demonstrated by this product since its creation, and also enable a larger proportion of workers to take advantage of its benefits. The creation of a legal framework for a collective employer-employee plan such as the APVC will provide an important alternate form of saving and broaden the Chilean pension market.

3.3 China

China, with a population of 1.3 billion in 2007, and per capita GDP of US$3,180 in 2008, has managed to establish a comprehensive system including pensions, medical care, unemployment benefits, employment injury and maternity benefits. In recent years China has witnessed unprecedented extension in social security protection. This section summarizes key developments in the extension of social security protection in the field of old-age security. It also identifies challenges in addressing coverage issues.

Figure 11.4 Urban social insurance coverage in China

As we can see from figure 11.4, pension coverage is one of the most rapidly extended branches of social security in China recently. In the urban areas of China about 60 million more people have been covered over the period 2003–09.

China established its social security system in 1951, and has since witnessed considerable evolution. The 1951 Regulations on Labour Insurance provided comprehensive benefits to urban workers, an overwhelming proportion of whom were state workers. It was a PAYG system, and was funded by a 3 per cent contribution of total payroll by firms.

3.3.1 Pension reform in China

While China’s social security system was established in 1951, it was not until 1997 that modern milestone pension regulation was adopted. It is known as the State Council Document No. 26 on the Establishment of a Unified Basic Pension System for Enterprise Employees. It mandated three tier systems for all employees working in cities and towns, whether in public or private sectors. The intention was to broaden the coverage beyond state
agencies. The mandatory pillar had a combined contribution rate of 28 per cent, and the combined potential replacement rate was set at 58 per cent.

While the first pillar was mandatory, the other two were voluntary. For the mandatory pillar, there were 116.5 million urban participants in 2003, equivalent to about 40 per cent of urban workers (Hu, 2006, table 9). As the pensioners numbered 38.6 million, the dependency ratio was 33.

The voluntary pillars two and three have been receiving increasing attention from China’s policy-makers. In 2004, the Ministry of Labour and Social Security (MOLSS) issued provisional regulation on occupational pensions. This was followed by another regulation focusing on pension fund management and regulation. The second pillar has individual accounts and must be fully funded. The scheme, however, can be Defined Contribution (DC) or DB depending on the choice by employer.

Under the provisions, employers can receive a tax deduction of up to 4 per cent of the total wage bill for pillar two, but employees’ contributions are not tax-advantaged. The investment regime specifies quantitative restrictions on the investments, with maximum investment in equities of 20 per cent (Hu, 2006, p. 17).

Separately, China has a voluntary rural pension scheme implemented since 1991. It is financed by voluntary contributions and a collective subsidy. At end-2008, a total of 56 million rural Chinese (7.7 per cent of the total rural residents of 727 million) were covered under the scheme. The coverage rate has exhibited a moderate decline, as it was 8.3 per cent in 2003. Benefits amounting to Chinese Yuan Renminbi (CNY) 5.8 billion were distributed to around 5 million pensioners in 2008. Monthly average payment for a rural pension was slightly less than CNY 100 (US$14). Accumulated contributions amounted to CNY 50 billion over three years, approximately 11 per cent of which was paid out to pensioners in 2008.

As the rural working population is much larger than the urban working population, the overall coverage rate for China is less than 25 per cent (see figure 11.1).

In June 2009, China announced expansion of the voluntary pensions to rural residents to 10 per cent of the counties by the end of 2009 (Bloomberg, 24 June 2009). All those who are not covered by the urban pension scheme are eligible. The benefits will be paid when a member reaches 60 years of age.

It appears that the government would like to rapidly expand the coverage of pensions to all rural workers. This will be an enormous administrative challenge. As the funding for the rural pensions will be from contributions by the rural residents, collective benefits and government subsidy, this initiative may have the potential to increase the low coverage rate. Because initially the contributions will exceed the benefit payments, productive investments of these funds will be essential.

The age for pension eligibility is relatively low in China. The central government guidelines are age 60 (for men and professional women), age 55 (non-professional salaried women), or age 50 (women in all other occupations). Those employed in arduous or unhealthy work are eligible for pension benefits when 55 (for men) and 45 (for women). Each retiree in China will thus be eligible to receive a pension for a fairly long period, particularly as longevity is expected to increase.

China first piloted corporate annuities as a second pillar in its social security system in 1990, and implemented it in 2004. The Corporate Annuities scheme covers 10.38 million people,

Mukul G. Asher
over 30,000 enterprises and has accumulated contributions exceeding CNY 190 billion as of end-2008 (Zhu, 2009).

A major challenge for China’s pension system coverage in terms of improving the benefit levels is to pursue investment policies of urban, rural and the National Social Security Funds (NSSF) funds which result in better returns. A substantial proportion of the pension assets are in bank deposits and government bonds. Thus, in 2004, 82 per cent of NSSF assets and 56 per cent of rural pension fund assets in 2003 were in these two asset classes (Hu, 2006, p. 105, tables 19 and 20). The average real return for the 1993–2004 period on deposits was –0.6 per cent and on government bonds 1.0 per cent, and on equities 4.5 per cent (Hu, 2006, p. 104).

The global crisis is recent. Financial and capital markets in China are still developing. China is investing part of its accumulated social security fund abroad, not just in financial assets, but also in acquiring companies and physical assets. Not much, however, is known about the investment performance because of low transparency. As China’s financial and capital markets continue to develop, they may provide better opportunities for generating higher investment returns through domestic investments. But this will be neither easy nor automatic.

### 3.3.2 Social assistance in China

China has an urban Minimum Living Standard Scheme (MLSS), which focuses on the chronically poor and the long-term unemployed in urban areas. The targeted beneficiaries are therefore not just the elderly, but they form a part of the beneficiaries.

The MLSS is designed to cover the gap between per capita household income and the local poverty line. This is because the MLSS is administered on a decentralized basis. The minimum living standard is set by each locality on the basis of its financial capability, and not on household needs (Chen and Barrientos, 2006). The number of beneficiaries was 22 million in March 2006 (Chen and Barrientos, 2006). The mean value of the transfers has showed an increase from CNY 55 in May 2003 to CNY 75 in January 2006 (Chen and Barrientos, 2006). In spite of the increase, the mean benefits under the MLSS are relatively low. However, this varies considerably among various municipalities and provinces.

The MLSS is financed from general government revenue, with the costs divided by various government tiers. In 2005, the total expenditure on MLSS was CNY 19.2 billion, equivalent to 0.57 per cent of total consolidated government expenditure (Chen and Barrientos, 2006). In 2002, 18 per cent of the 19.4 million eligible poor were not receiving MLSS benefits (Chen and Barrientos, 2006).

### 3.4 India

India, with a population of 1.2 billion in 2009, and per capita GDP of US$1,000 in 2008, has developed a fairly complex system of social security since the 1950s (Asher, 2008). It has a defined benefit pension system for the civil servants. For the private sector workers, a mandatory defined contribution scheme has existed since 1952, but the coverage is confined to firms employing 20 or more workers. This has remained unchanged since then. In 1995, a DB scheme was implemented for the private sector workers. Its coverage, however, is somewhat lower than for the DC scheme, but the membership in the two schemes exhibits substantial overlap. There are also occupational pensions schemes, but their coverage is fairly limited. Consistent with international trends, such schemes are increasingly transiting from DB to DC schemes. There are several tax-advantaged voluntary savings schemes for retirement, many of which are administered by the life insurance companies.
Formal sector employment in India has remained fairly static at around 50 million (and this includes about 20 million civil servants). In addition to the formal sector workers, a small part of the workers in the informal economy are also covered by social security schemes. It is estimated that only around 10 per cent of the Indian population, equivalent to 120 million persons, enjoys some level of social protection if both formal and informal sector schemes are included (van Ginneken, 2008a). The civil service employs about 3 per cent of the labour force, but its pension system costs nearly 2 per cent of GDP (Asher, 2008). The fiscal unsustainability of the current civil service pension scheme was a major consideration in civil service pension reform.

Improving administrative, technological and managerial capabilities and capacities of the Employees Provident Fund Organization (EPFO) is essential for further extending coverage of formal sector workers.

India has taken several initiatives which are recent in origin, but which will have significant impact on extending pension (and health-care) coverage in the future. A major paradigmatic reform has been initiated for the civil servants, called the New Pension Scheme (NPS) (Asher, 2008). Since 2004, those joining the civil service at the centre after that date have been required to enrol in a defined contribution scheme, with no pre-retirement withdrawals until the retirement age of 60. At least 22 out of 28 states have also adopted the NPS. The architecture of the NPS takes into consideration the lessons from other countries as well as from behavioural finance literature. There has been particular attention to creating low transactions costs, including investment management costs (the investment mandate is auctioned and spread among several entities), and record-keeping for which Central Recordkeeping Agency (CRA) has been set up.

The proposed income tax code, introduced in August 2009, has signalled a shift in taxation of retirement savings to provide a level playing field for different retirement schemes (mandatory and voluntary), and different providers. Adequate transition arrangements have been provided. It is proposed that from 2011, any withdrawals from retirement savings will be taxed at applicable marginal income tax rates. This will reduce incentives for pre-retirement withdrawals and for lump sum withdrawal at retirement. Under current regulations, only 40 per cent of the total accumulations under the NPS must be annuitized. The remaining can be withdrawn as a lump sum. This will increase income flows for the elderly.

In May 2009, a voluntary NPS was introduced for any citizen in the country. The government regulatory agency called the Pension Fund Regulatory and Development Authority (PFRDA) has been established to provide professionalism and confidence to the stakeholders (the PFRDA Bill 2009 is expected to be passed during the winter session of the Parliament in December 2009). So far only a few thousand persons have registered under the voluntary NPS. The initiative is indeed too new to have had much impact as yet. But it holds promise given the demographic trends, and the need to save for retirement by so-called informal sector workers. India’s informal sector is quite heterogeneous with many self-employed professionals, shopkeepers, small manufacturers and service providers, as well as a large number of those with low and irregular income. The NPS is not likely to be initially attractive to the last category of informal sector workers. For them, other schemes, such as co-contributory schemes being introduced by the state governments (see below) and micropensions through microfinance and other institutions are likely to be more suitable. However, those schemes not initiated by the state governments can use the NPS architecture, and come under the regulatory purview of the PFRDA.

The policy-makers recognize that the voluntary NPS will still leave a large number of individuals uncovered. This is where the government co-contributory schemes (such as in

Mukul G. Asher
Andhra Pradesh and Rajasthan) and the social pension type schemes such as old-age pension (OAP) can usefully contribute to expanding coverage. However, three requirements for such schemes to succeed are (a) the ability to raise fiscal resources, (b) ensuring that delivery of these pensions reaches the intended beneficiaries and (c) that the transaction costs are low. Even for social assistance to those above 65, as is being implemented, reasonably good birth and death records are required to ensure that limited resources go to the intended beneficiaries.

In 2008, the Employees Pension Scheme (EPS) for private sector workers underwent parametric reforms, focusing on abolition of any lump sum payment (called "commutation" in India), and on making early retirement actuarially fairer.

There is, however, considerable scope for greater professionalism, particularly in vastly expanding the use of technology to improve administrative efficiency and lowering compliance costs by the Employees Provident Fund Organization (EPFO), which administers a provident fund and pension system for formal private sector workers (Asher, 2008; van Ginneken, 2008a). If the EPFO acquires greater professionalism and develops robust information technology systems, the establishments of less than 20 persons can be progressively brought under its net, increasing the coverage by between 5 and 10 million workers, equivalent to between 11 and 22 per cent of current membership (Asher, 2008).

There have been several state-level initiatives for providing pensions (and health-care services), with a combination of risk-pooling between the different stakeholders, including the State. Thus, in July 2009, an ambitious pension scheme was launched for women belonging to the Self-Help Groups (SHGs), called Abhayahastham, in the Indian State of Andhra Pradesh (Janyala, 2009). It aims to cover nearly 10 million women belonging to SHGs in the state. It provides for a minimum pension of Indian rupee (INR) 500 per month (about 15 per cent of per capita GDP) from age 60 until death. The pension amount varies positively with contribution density. The scheme also provides death and disability insurance, and scholarship for up to two children for secondary education. The SHG women must contribute, but the amount is matched by the government and deposited in the individual pension account. This scheme will address gender issues, and help enhance the status of older women in the society. It will also better equip the next generation to participate more substantially in the labour market, positively impacting their income status, as education is an integral part of the scheme.

The State of Rajasthan has launched the Rajasthan Vishwakarma Unorganized Sector Co-Contributory Pension Scheme under which low-income unorganized workers receive into their individual retirement accounts (IRAs) a conditional cash transfer (subject to a maximum limit) annually. As of June 2009, about 30,000 individuals have been covered. Providing direct cash transfers to the bank accounts of the individuals has several additional benefits, including advancing the goal of financial education and minimizing administrative costs and possible undesired leakages. Co-contributions also help in advancing the principle of shared responsibility. The Government of Madhya Pradesh has also announced a co-contribution pension scheme for unorganized sector workers in selected occupations on a means-tested basis.

India, however, will need to guard against multiplicity of pensions schemes at the centre and in the states, as they may overlap, adversely impacting on the effectiveness with which pension benefits reach only the intended beneficiaries; and in balancing other fiscal needs, such as for education and infrastructure, with those of the pensions for the elderly. Better targeting, informed by more robust data and rigorous analysis, is needed for improved effectiveness.

Mukul G. Asher
The India case study demonstrates the benefits of reforming existing formal sector pension systems to attain greater sustainability, equity and effectiveness, and better allocation of fiscal resources.

3.5 Mauritius

Mauritius, with a population of 1.3 million in 2007, and per capita GDP of US$ 6872 in 2008, has provided the elderly with non-contributory old-age pensions on a universal basis since the late 1950s. It is thus one of the few countries to make extensive use of the social pensions.

The National Pensions Scheme in Mauritius, governed by the National Pensions Act 1976, includes both contributory and non-contributory elements. In addition, under the National Savings Act of 1995, a National Savings Fund (NSF) was set up. The contribution rate is 2.5 per cent of the basic salary (subject to a ceiling). The contributions are credited into the account of each individual. The benefit is paid as a lump sum when a person retires.

Mauritius has also instituted a means-tested social assistance scheme, which may be paid in cash or in kind, as a safety net for those who qualify. The assistance varies according to the needs of the household. There are also other minor social welfare schemes. Mauritius has more than 60 schemes of social protection, which appears to be too numerous for a total population of only 1.3 million.

The Mauritian Government has promulgated the Protection of Elderly Persons Act 2005 which provides a legal and administrative framework to ensure that adequate protection is available to older people (be it physical, verbal, mental, emotional or material). The Senior Citizens Council, set up in 1985, has registered more than 600 Senior Citizens Associations. Thus, there is an active civil society which participates and monitors the welfare of the senior citizens.

The contributory benefits are payable only to (or on behalf of) those persons who have contributed to the National Pensions Fund (NPF). The contributory pensions include old-age, invalidity, widow and orphan pensions in addition to industrial injury allowances.

The contributory retirement pension begins at age 60, and provides a pension equivalent to one-third of average earnings after 40 years of contributions to employees contributing at a standard rate of 9 per cent. A pension of one-half of the earnings is paid to those contributing at the higher rate of 13.5 per cent of basic income, subject to a ceiling.

The non-contributory benefits, on the other hand, are entirely financed by the Government and are payable to every citizen under some residency conditions. The non-contributory benefits include the Basic Retirement Pension (BRP), Basic Widow’s Pension (BWP), Basic Invalid’s Pension (BIP), Basic Orphan’s Pension and Guardian’s Allowance (BOP), and Child Allowance.

The BRP is the main non-contributory social pension scheme. It is payable to all citizens aged 60 years and over. It is thus universal. The BRP benefits are equivalent to about 18 per cent of average earnings. As of 1 July 2008, the BRP was Mauritius rupees (MUR) 2,802 per month for persons between 60 and 89 years; MUR 8,335 for those between 90 and 99 years; and MUR 9,461 for those above 100 years. The pension thus increases with age, and is paid until the person dies. Thus, the state bears the longevity risk. The BRP for the severely handicapped is MUR 1,766 per month, which is in addition to standard amounts.
In 2005–06, government expenditure on social security and welfare amounted to MUR 11.4 billion, equivalent to 23.3 per cent of total government expenditure, and 5.8 per cent of GDP (Republic of Mauritius, Ministry of Finance, 2007).

According to the same source, the amount distributed under the BRP was MUR 4.1 billion in 2005–06, equivalent to 36 per cent of total expenditure on social security and welfare. The corresponding proportion for BWP was 6.0 per cent; BIP was 8.7 per cent; and the social assistance scheme was 3.1 per cent. The share of contributory pensions in total expenditure was 4.8 per cent.

Mauritius faces a demographic challenge. The number of working-age persons per retiree is projected to decrease from seven in 2000 to 2.3 by 2040 (Willmore, 2007). By 2030, the proportion of the total voters who are over 60 years of age is expected to reach around one-third (Willmore, 2006). The elderly vote will therefore be influential in affecting election outcomes.

The official projections are that the beneficiaries for the BRP will increase by about 80 per cent, from 126,000 (nearly 10 per cent of the total population) in June 2006 to 228,000 by 2021. The costs of BRP will increase by about 75 per cent from MUR 4.1 billion in 2005–06 to MUR 7.3 billion in 2020–21.

3.6 South Africa

South Africa, with a population of 47.9 million in 2008, and per capita GDP of US$5,693 in 2008, is a middle-income country. For a long time, South Africa’s pension policy was supply-driven and served political ends. Today it is demand-driven, with the aim of meeting the welfare objectives of reducing poverty and promoting equality.

South Africa was the first country in Africa to institute a state pension. In 1922 it introduced a universal pension of US$59 for whites age 65 and US$34 for "coloureds". In 1937 the age of pension eligibility for women, white and coloured, was reduced to 60 years; the current eligibility age is 60 for women and 65 for men. In 1944 pensions were extended to all citizens, but black South Africans received a lower pension than whites and coloured. There were also differentials based on residence; for example, black South Africans in urban areas received higher pensions than those in rural areas.

With the end of apartheid in 1994, pensions were equalized for all citizens meeting the age test. Pension payments are subject to means-testing, which excludes most of the white population and about 20 per cent of the black population.

South Africa currently has fairly comprehensive programmes for social security, with an important role assigned to social assistance or social pensions. Social assistance is a state-funded system, also referred to as social grants in South Africa, which is non-contributory and financed entirely from government revenue. The pension system consists of a public PAYG tier, a voluntary occupational pension system and voluntary personal savings arrangements. The occupational system can be thought of as quasi-mandatory for employees in the formal sector as many employers require a new employee to join the occupational fund offered by the employer as a condition of service (Hu and Stewart, 2009). Employees in the public sector are covered by separate pension schemes.

The informal sector workers in South Africa are covered by the public pension system. The public pension provides a non-contributory, means-tested old-age pension, financed by general revenues. The old-age pensions (OAP) are means-tested. Men and women aged 60
and above are eligible for OAP. In July 2008, South Africa’s Department of Social Development extended its non-contributory old-age grant to men from age 60. Previously men were only covered from age 65, while women were covered from age 60. This is in contrast to the international trend of increasing the retirement age to cope with the fiscal challenges associated with funding pensioners’ income. It is plausible to argue that electoral considerations played a part in the reduction in eligibility age for men. The opportunity costs of this measure, particularly given the diminished medium-term growth prospects due to the current crisis, appear not to have received sufficient recognition.

The amount of old-age grant changes every year. In 2009, the amount of the old-age pension was South African rand (ZAR) 1,010 a month for a single pensioner; married couples received double that amount.

Table 11.4  South Africa: Amounts of grants as at 1 April 2009

<table>
<thead>
<tr>
<th>Grant type</th>
<th>Amount payable at 1 October 2008</th>
<th>Amount payable at 1 April 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Old-age grant</td>
<td>ZAR 960.00</td>
<td>ZAR 1,010.00</td>
</tr>
<tr>
<td>Disability grant</td>
<td>ZAR 960.00</td>
<td>ZAR 1,010.00</td>
</tr>
<tr>
<td>War veterans’ grant</td>
<td>ZAR 980.00</td>
<td>ZAR 1,030.00</td>
</tr>
<tr>
<td>Grant-in-aid</td>
<td>ZAR 230.00</td>
<td>ZAR 240.00</td>
</tr>
<tr>
<td>Child support grant</td>
<td>ZAR 230.00</td>
<td>ZAR 240.00</td>
</tr>
<tr>
<td>Foster care grant</td>
<td>ZAR 650.00</td>
<td>ZAR 680.00</td>
</tr>
<tr>
<td>Care-dependency grant</td>
<td>ZAR 960.00</td>
<td>ZAR 1,010.00</td>
</tr>
<tr>
<td>Institution (25%)</td>
<td>ZAR 240.00</td>
<td>ZAR 252.50</td>
</tr>
</tbody>
</table>

Source: http://www.sassa.gov.za/content.asp?id=1000000512

The pension is reduced to 25 per cent of the full amount, for pensioners who are resident for more than three months in a private care institution. A means test is currently applied, which lowers the benefit by 50 cents for every ZAR 1 of other income, to a level of zero when other income exceeds ZAR 1,740 per month. This is the main source of income for 75 per cent of retirees, most of whom receive the full amount of ZAR 870 month (Hu and Stewart, 2009).

As table 11.4 suggests, the benefit level is currently informally linked to wages. Earlier, the real value of the fixed nominal amount of OAP was vulnerable to inflation as suggested by the experience during the 1990s. The linkage to wages permits a pensioner to participate in the growth of the economy as wages on the average rise by inflation and labour productivity increases. The current OAP design therefore provides a reasonable replacement rate to lower-income workers, as well as acting as an important source of poverty relief for those who are unemployed through most of their working lives. The costs of the OAP are of course higher. As these costs are met from the general revenue, the fiscal position of the government and budgetary priorities will have a crucial bearing on the affordability of the current OAP arrangements.

There is a provision for a grant-in-aid allowance (ZAR 180 per month) for those receiving the OAP who require the full-time attendance of another person because of a mental or physical condition. Family allowances cover low-income persons who have children younger than age 18. The total cost of this programme is also borne by the government.

An additional tax-incentivized saving for retirement is available for employees in the informal sector through voluntary savings vehicles. They are mainly in the form of Retirement Annuity (RA) fund policies, primarily offered by insurance companies. Estimates by the National Treasury place coverage of occupational and personal pensions at approximately 60 per cent of workers in the formal sector (Hu and Stewart, 2009). No statistics are available for pension

Mukul G. Asher
provisioning in the informal sector, although unofficial estimates are around a mere 1 per cent (Hu and Stewart, 2009).

The employer-based pension plans may be DB or DC types. The private pension plans are regulated by the Financial Services Board (FSB). At 31 March 2008, the FSB supervised about 13,000 registered retirement funds (South Africa, 2008). As at end-2006, the total assets of retirement funds were ZAR 1.454 billion (84.3 per cent of GDP); while the total membership was 9.3 million12 (slightly more than half of the labour force) (South Africa, 2008).

South Africa thus has one of the largest private retirement industries among the middle-income countries. In the current global economic crisis, as stock markets and currency values decline, such large accumulated financial assets are likely to reduce the medium-term real rate of return on these balances. This, in turn, will adversely impact on the replacement rate obtained from these balances.

Studies of South Africa’s experience with social pensions almost uniformly show a significant reduction in poverty rates for the elderly. Barrientos (2003) estimates that among sampled households in South Africa, the poverty headcount would be 1.9 percentage points higher without social pensions. The reduction is attributed to high coverage and large benefits relative to incomes, particularly for the black population (Palacios and Sluchynsky, 2006). In 2007, 2.2 million beneficiaries received social pensions, and 33,000 benefited from the grant-in-aid programme (Patel and Triegaardt, 2008). There is also evidence that social pensions and other non-contributory income support programmes have had a positive effect on access by women (Patel and Triegaardt, 2008). There also appears to be some evidence that social pensions in South Africa have facilitated labour migration by younger family members, thus expanding labour force participation options (Piggot et al., 2009).

For the time being, the rate of graduation of the elderly to a pension in South Africa is slower than the rate of increase of South Africa’s elderly population, and so the system is still fiscally manageable. There is, however, concern as to whether the country will be able to sustain such ambitious social pensions and related programmes in the medium term because of fiscal affordability and limited institutional capacities. Another concern is corruption, which, even with improved oversight, is estimated to account for 15 per cent of all claims (Patel and Triegaardt, 2008).

The success of the social pension has not stopped South African policy-makers from seeking to strengthen other components of the pension system. There have been two noteworthy initiatives by the South African government in recent years.

The first is the Older Persons Act, 2006 (Act 13 of 2006). Its main objectives are to promote the well-being and participation of older persons in South African society. The second initiative is more substantive and will fundamentally change the current social security system once instituted. The initial proposals are contained in a document released by the Minister of Finance on 23 February 2007, titled "Social Security and Pension Reform: A Second Discussion". An Inter-Ministerial Task Force has been set up to restructure the current social security system. The new system is likely to contain five broad elements:

- non-contributory social assistance to deal with poverty;
- a contributory social insurance component to partially cover retirement, as well as unemployment, disability and injury;
- mandatory retirement savings, designed to provide a higher replacement rate and increase national savings;
- a voluntary savings and insurance arrangement;

Mukul G. Asher
• for very low-income earners, the introduction of a wage subsidy will seek to offset the mandatory contribution.

The policy-makers hope that mandatory participation could improve the coverage and efficiency of the system by generating the appropriate scale of operations. The role of current retirement pension funds, where participation is voluntary, will need to be reconciled with the mandatory participation feature of the proposals.

Specifically for employees in the informal sector, the government is currently thinking of establishing a national savings fund. This fund will be designed so as to accommodate the needs of informal sector workers, e.g. flexible contributions and less strict terms for withdrawal (Hu and Stewart, 2009).

In the 2008 State of the Nation address, the South African President emphasized the need for consultation and planning before these proposals involving complex technical and transitional issues are actually implemented. It appears that for a variety of reasons, including the current global economic crisis, the original 2010 target date for implementation is unlikely to be met.

4. Concluding remarks

The issue of closing the coverage gap in the LMICs has become a central concern among policy-makers and multi-lateral institutions. The heterogeneity of the LMICs makes it even more difficult to formulate a single system that would be appropriate for all the LMICs. There are also large intra-country variations in pension coverage in several LMICs such as China, India and South Africa.

There is consensus that the reforms of the formal sector contributory systems are essential and are capable of improving sustainability and equity of the existing formal sector pension systems. However, such reforms are insufficient for progressing towards near-universal coverage of the pension systems. This is also illustrated by the several case studies from Asia, Africa and Latin America discussed in the paper.

The analysis strongly supports the view that contributory and non-contributory retirement income transfers will need to be interlinked for extending the coverage, while achieving high degree of effectiveness, and a balance between needs of the elderly and needs of the non-elderly. The large informal sectors in the LMICs, which are likely to persist, make it unlikely that OECD’s experience of progressively larger formal sector leading to near-universal coverage can be repeated in the LMICs. Thus the coverage gap issue in the LMICs must be viewed from a larger developmental perspective, with greater focus on the objective of mitigating poverty in old age.

Designing and implementing retirement income transfers or social pensions of various types (figure 11.2) will not, however, be an easy task, particularly given the lack of robust database and analytical capabilities in many LMICs. Delivery of retirement income transfers depends on fiscal capacities and on administrative efficiency. Many low-income LMICs must therefore give urgent priority to broad governance reforms, including better fiscal management, finding new sources of revenue to finance growth-enhancing expenditure and strengthening delivery of public services throughout the country, if they are to achieve a reasonable degree of success in extending coverage.

The Dynamic Social Security framework advocated by ISSA (2009) emphasizes greater professionalism and technocratic orientation of social security organizations; the need to

*Mukul G. Asher*
evolve political consensus; and outcome-oriented experimentation with new and appropriate models of delivering social security programmes.

While the LMICs have embarked on many initiatives to extend coverage, as illustrated in the case studies, there is insufficient priority given to developing country-specific robust databases and analysing empirical evidence about these initiatives. There is also a need to develop expertise in policy analysis, and exhibit political willingness to design policies which incorporate such empirical evidence and analysis. Without these, even if technical issues of linkages between contributory and non-contributory systems are addressed, the progress in addressing the coverage gap will be slow.

Notes

1 The author would like to thank Wouter van Ginneken, Timo Voipio and Yukun Zhu for their constructive comments and support.

2 Furthermore, there is a growing informalization of the labour markets in the OECD countries, too.

3 As noted later in the paper, there may be room for some extension of coverage, both in terms of number of persons covered and the benefit levels, through application of greater professionalism, including more extensive use of technology, and through parametric reforms.

4 A special report entitled "The end of retirement" in The Economist has made a similar argument for OECD countries (The Economist, 27 June–3 July 2009).

5 In low-income countries of Africa, there is a higher incidence of old-age poverty as compared to the general population (Barrientos, 2008).

6 Barrientos (2009) has analysed social pensions in Bolivia, Bangladesh and Lesotho. Only in Lesotho is the social pension scheme universal (covering 93 per cent of the eligible), and its cost equivalent to 2.4 per cent of GDP is financed from tax revenues. In Bangladesh, only 16 per cent of those eligible are covered, but the budget costs are only 0.03 per cent of GDP. In Bolivia, 80 per cent of those eligible are covered, and the costs are 1.3 per cent of GDP. The main conclusions reached by Barrientos (2009) concerning the role of social pensions in low-income countries are the following. First, few low-income countries have social pensions schemes. Second, reducing or eliminating exclusions for the elderly in general social assistance programmes holds promise in many countries. Third, where general social assistance programmes are absent, social pensions have advantages as they represent identifiable groups, and they minimize labour market and saving distortions. They also may assist in improving the social status of the elderly, particularly women.

7 The information about the main features of the Brazilian social security system is from Ansiliero and Paiva (2008), Savoia (2007) and Giambiagi and de Mello (2006).

8 Except 1–2 per cent of covered earnings paid by the employer for employees working under arduous conditions, plus a subsidy for low-income workers.

9 This is indicated by the fiscal deficit of 2.6 per cent of GDP in the first half of 2009, ending six years of annual surpluses (The Wall Street Journal, 30 July 2009). It is also reported that Chile has had to draw down on its sovereign wealth fund to stimulate the economy, and partially finance the fiscal deficit.


11 The retirement age will be raised to 65 years over a period of ten years, beginning from August 2008.

12 The membership figure does not reflect the numbers of individuals, as some are members of more than one fund. So, the effective coverage of the labour force is lower.

13 These have not been discussed in detail, but they have been implicit in much of the discussion in the paper.

Mukul G. Asher
References


—; Vasudevan, D. 2008. Lessons for Asian countries from pension reforms in Chile; Discussion Paper No. 381 (Hitotsubashi University, Institute of Economic Research), June.


Mukul G. Asher


Janyala, S. 2009. "SHG women to get pension in Andhra", in Indian Express, 13 July.


Palacios, R.; Sluchynsky, O. 2006. Social pensions part I: Their role in the overall pension system, Pension Reform Primer (Washington, DC, World Bank).


Mukul G. Asher


Zhu, Y. 2009. *Case study on social security coverage extension in China* (Geneva, International Social Security Association (ISSA)).