The role of social pensions

DRAFT

Robert Palacios and Oleksiy Sluchynsky
Abstract

Cash transfers for the elderly with little or no link to previous contribution or work history are employed in many countries to provide income support for the elderly. In the context of the larger debate over pension reform, some argue that these ‘social pensions’ are an effective way to deal with chronically low coverage of contributory schemes and to alleviate poverty among the elderly. This paper reviews the global experience with social pensions. We find that coverage and cost of these programs varies widely and that the appropriate role for and design of social pensions depends on several country-specific conditions. These include the design of the overall pension system, the coverage of the contributory scheme, the extent of other social assistance programs and the relative poverty status of households with elderly members. This paper aims to provide a framework for the policy discussion while leaving design and implementation issues for a subsequent paper.
The role of social pensions

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1. Social pensions and the evolution of pension systems

Cash transfer programs aimed specifically at the elderly can be traced to the late 19th century. In 1891, Denmark introduced a locally administered means-tested scheme for needy citizens over age 60. By 1897, almost one fourth of the elderly received a pension worth around 20 per cent of income per capita at the time. Financing was split between central and local governments and Copenhagen benefit levels were almost twice those in the countryside.2 Over the next two decades, New Zealand (1898), Australia (1908) and Sweden (1913) would follow with their own variants.

Just two years earlier, another type of pension program had been introduced in Germany. Otto von Bismarck was interested in tying workers’ interests to the new German state. He proposed a small flat pension that would be paid to workers that managed to reach age 65, a condition almost synonymous with disability for the working classes at that time. The program was to be financed by a tax on the tobacco monopoly. Instead, conservative elements in the Reichstag demanded that benefits be tied to contributions so that in this way workers would help finance the scheme. This new type of pension scheme – labeled ‘Bismarckian’ – would spread across the globe over the next century.

Pensions linked to contribution histories are now the dominant element of old age income security policy in most of the OECD countries, although the relationship between earnings and benefit levels varies hugely.3 That is not to say that non-contributory schemes are rare. To the contrary, most rich countries supplement their main schemes with a safety net targeted at the poorest elderly and in a few, such as Australia, it is a major element of the system. With few exceptions however, reliance is mainly on contributory pensions.4

The same pattern is observed in developing countries. The ‘policy transfer’ in the area of pensions influenced through bilateral contacts and international agencies led to the

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2 UK House of Commons (1899).
3 OECD (2005) compares the degree of redistribution versus earnings replacement implied by the parameters of public pension schemes in thirty countries.
4 New Zealand is a notable exception having opted not to mandate any contributory pension plan. In fact, this option was recently and decisively rejected in a referendum. Other examples are Denmark and UK, where universal flat pension is earnings and residency tested (People’s Pension in Denmark) or prorated for service periods (Basic State Retirement Pension, in UK); both countries, however, have special supplementary schemes targeting elderly poor that otherwise do not meet criteria of the main schemes.
introduction of mandated contributory schemes of the social insurance type throughout
Latin America, Africa, the Middle East and, most recently Asia. The latest examples include
the introduction of social insurance pension schemes in Korea and Thailand in 1988 and
1997, respectively. Meanwhile, a few dozen countries persisted with the contribution-based
‘provident fund’ model adapted from the colonial British period in places like India and Sri
Lanka.5 Only a few countries rely primarily on non-contributory pension schemes.6

While the contributory pension model is now pervasive, the reliance on this
approach in developing countries is now being seriously questioned. The reason is the
failure to extend the mandate to a large part of the population. In rich countries, coverage is
practically universal.7 In contrast, only one in ten workers contribute in the poorer regions
such as sub-Saharan Africa and South Asia.8 Even in middle income countries, coverage
rates rarely exceed half of the work force. Not surprisingly, the workers that do participate
tend to be found in the upper half of the income distribution, are predominantly urban
residents or have a secure career within a public sector. After operating for decades and
despite many attempts to expand formal systems, coverage rates have remained stubbornly
low in most of the world.

This reality forced international organizations like the World Bank, ILO and UNDP,
academics and advocacy groups to focus on non-contributory or ‘social pensions’ as a way to
address the coverage gap in an ageing world.9 A growing number of studies analyzed the
effects of the more significant social pension programs such as Brazil and South Africa.
Recently, a few low income countries, such as Bangladesh (2001) and Bolivia (1997) have
introduced new social pension schemes.

The appeal of social pensions as a public policy solution to low coverage is clear.
Nevertheless, the merits of this approach must be weighed against the fiscal costs and

5  The arcane term ‘provident fund’ refers to centrally managed, defined contribution schemes with
administered rates of return paying lump sum benefits at retirement.
6  South Africa is notable in this regard, not only because of the importance of its non-contributory
pension, but also because, as in New Zealand, no mandatory contribution-based scheme was ever introduced.
7  Coverage here is a general reference to participation in contributory schemes that produces some
pension during old age. The actual concept is more complex especially for cross-country comparisons. See
8  See Palacios and Pallares (2000).
9  See McKinnon and Sigg (2003).
potentially negative incentive effects that must be considered in any type of redistributive program. Proposals to introduce or expand these programs should also take into account the administrative capacity to implement them in a cost-effective manner and with adequate financial control\textsuperscript{10}. Bearing these questions in mind, this paper will argue that the appropriate role for and design of social pension programs is highly dependent on initial country conditions. These include the nature and coverage of the contributory scheme, the overall state of social assistance, the efficiency of categorical targeting focused on the elderly and of course, whether social pension schemes already exist. The paper will also propose some criteria and indicators for assessing social pensions. The discussion of policy options is found in Section 4, which builds upon the review of international experience found in the previous two sections.

The paper consciously avoids one area of pension policy, specifically, redistribution in the context of contributory pension schemes. Most contributory schemes provide for minimum pensions tied to contribution history. This is evidenced by the tendency to replace a greater proportion of income for low income workers in many OECD countries, for example.\textsuperscript{11} This is even true for privately-managed, fully funded schemes such as Chile. In countries with high coverage, the comparison between social pensions and minima in contributory schemes is relevant as the same population is affected by the redistribution.\textsuperscript{12} This is not the case in most developing countries where coverage rates tend to be low, especially at the bottom of the income distribution.

With this caveat in mind, the rest of this paper is an attempt to frame the policy discussion on social pensions. The next section distinguishes between existing social pension schemes according to functional definitions and groups them into categories. This section will also present comparative data on social pensions across developing countries and discuss the patterns that emerge. Section 3 reviews the limited empirical evidence on

\textsuperscript{10} Reportedly, the post-eligibility verification may prove to be a serious challenge. Furthermore, some developing countries may have no reliable system of civil records to validate age. See Willmore (2001).

\textsuperscript{11} See OECD (2005).

\textsuperscript{12} Our priors are that, as in World Bank (1994), the clear separation and financing of the redistributive component of the scheme through the most efficient tax available is superior to combining it with the consumption smoothing component of the scheme and financing it with inefficient payroll tax. This discussion is beyond the scope of this paper, however.
the effects of the different programs. This is the basis for the discussion and subsequent approach to making social pension policy found in Section 4. The last section summarizes.

2. A framework for the assessing the role of social pensions

The main feature that distinguishes social pensions from other types of pensions is that the eligibility criteria do not include a history of earmarked contributions having been made by the individual in question or his employer. They are pure cash transfers rather than savings or insurance schemes.\footnote{It should be noted that there are many non-contributory civil service schemes (see Palacios and Whitehouse 2006). In the latter case, there is a presumption that wage levels somehow reflect an implicit contribution, although empirically this is not verifiable.}

To differentiate between various types of the programs, from a public policy perspective, it is important to focus on the impact of social pensions (SP) and their role in the overall pension system. Some SPs serve to backstop contributory schemes that have widespread coverage and often, their own internal redistribution between members. This is the case in the United States, Uruguay and Germany, for example. The role is one of safety net for the lifetime poor or those individuals that for whatever reason slipped through the cracks of the contributory mandate.

The issues faced by these countries are very different from those faced by countries with the second type of SP. In the latter group of countries, social pensions are paid to most or even all of the elderly. They are generally found in countries with no mandated contributory system as in the cases of New Zealand or South Africa. These countries have chosen to use SP as a core element rather than a supplement to the contributory scheme. Also in this category are a few countries that have chosen to use SPs as a core element alongside mandated contributory schemes that are otherwise devoid of redistribution. Australia, Bolivia, and Kosovo are examples.

The aim of this paper is to address the majority of developing countries that have still not determined the role of social pensions. Almost all of these countries have a contributory scheme, but coverage is typically limited. Should these countries choose to use
SPs as a core element of their systems to address the coverage gap? Alternatively, should SPs supplement the contributory schemes and focus on the poor elderly, by incorporating some benefit programs targeted to the needy retirees? Assuming the universal guarantee of some minimum income at retirement as a policy objective, we can observe four distinct principal arrangements:

**Table 1: Universal minimum retirement income guarantee arrangements**

<table>
<thead>
<tr>
<th>Contributory scheme</th>
<th>Small or nonexistent</th>
<th>Major program</th>
<th>Major program</th>
<th>Varying or no arrangements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Pension</td>
<td>Core element</td>
<td>Core element</td>
<td>Supplementary program</td>
<td>Component of general welfare program</td>
</tr>
</tbody>
</table>

Source: Authors’ design

Basically, SP can play either core or supplementary role (as a separate program or as an implicit provision of the general safety nets). Note that the above stated policy objective does not necessarily translate into the universal retirement coverage, as the means testing provisions can exclude some individuals who can provide for themselves with alternative mechanisms, such as private savings or family support. In fact, our differentiation on core and supplementary does not imply any specifics of the eligibility or the benefit rules – mechanics of the SP scheme is of a secondary order of importance to this analysis – the programs of both core and supplementary nature can either provide for flat benefit or incorporate some means testing provisions. Rather, we focus on the scope of retirement coverage of the SP schemes. We added the last category, where SP may not exist as a separate program, to indicate that a special program to provide for the minimum retirement income security is not always required. In fact, general safety nets do not even have to have the old age as an explicit targeting criteria; elderly may have access to assistance as part of needy household.

To relate the above categories to specific country examples, the countries where SP plays core role and where other formal contributory mechanisms do not exist or are small

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14 An alternative, discussed in a separate paper by Palacios (forthcoming), is to channel resources to subsidize voluntary coverage of informal sector workers.
would include Botswana, New Zealand, and South Africa. In the second category, we would place Australia and Kosovo, where both contributory and non-contributory programs operate in parallel as two principle elements of the retirement provisions. Mauritius, where both schemes also operate in parallel with the contributory scheme having only a moderate coverage, can be referred to either of the categories depending on the adopted threshold. The United States, Germany, France, Uruguay, and the Baltic states would qualify under the third category; they have special schemes targeting elderly that supplement the principal contributory programs.

Many countries, however, do not fit into either of the above categories: their contributory programs are either too small or non-existent and their SP or safety net provisions, if any, are insufficient to close the coverage gap. The current role of SPs in 20 developing countries can be observed by looking at the coverage and benefit levels in the first two columns of Table 2. In twelve of the countries, the SP plays a supplementary role, with the beneficiary to elderly ratio below 20 percent.

In the other eight countries, this ratio is above 40 per cent and in some cases there is universal coverage. In at least six of these countries, the SP plays a central role in old age income security. In all but two of them, Brazil and Mauritius, coverage in the contributory scheme is either low or there is no mandate at all. In the case of Brazil, this reflects the fact that contributory coverage is concentrated in the urban areas while the SP is essentially a rural program. Viewed as two countries – rural and urban Brazil – the case fits the pattern.

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15 These countries do however, have contributory pensions for civil servants as well as significant voluntary occupation pensions in the case of South Africa.

16 For example, small social pension schemes operate in Turkey and Venezuela. Also missing from this table are the following island nations known to provide social pensions but are not included in this table: Antigua, Bahamas, Barbados, Cape Verde, Samoa, St. Kitts and Trinidad.

17 Brazil and Egypt are included in the table as social pensions despite the fact that there is some link with work history in both cases. In the case of Brazil, there are no contributions from rural workers, but years of service are considered while in Egypt, a symbolic contribution is made by casual workers. A similar case may be made for ‘pseudo-contributory’ schemes of farmers in Albania and Poland.
## Table 2: Key indicators for social pension programs in selected developing countries

<table>
<thead>
<tr>
<th>Country</th>
<th>Year</th>
<th>Recipients as % of 65+ pop</th>
<th>Benefit as % of income per capita</th>
<th>Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>Algeria</td>
<td>1998</td>
<td>6%</td>
<td>3%</td>
<td>0.2%</td>
</tr>
<tr>
<td>Argentina</td>
<td>2000</td>
<td>1%</td>
<td>22%</td>
<td>0.3%</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>2003/04</td>
<td>22%</td>
<td>7%</td>
<td>1.6%</td>
</tr>
<tr>
<td>Bolivia</td>
<td>1997</td>
<td>97%</td>
<td>13%</td>
<td>12.5%</td>
</tr>
<tr>
<td>Botswana</td>
<td>2000</td>
<td>195%</td>
<td>9%</td>
<td>17.5%</td>
</tr>
<tr>
<td>Brazil</td>
<td>2000/01</td>
<td>61%</td>
<td>26%</td>
<td>16.0%</td>
</tr>
<tr>
<td>Chile</td>
<td>2000</td>
<td>15%</td>
<td>12%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Colombia</td>
<td>1998</td>
<td>5%</td>
<td>40%</td>
<td>1.9%</td>
</tr>
<tr>
<td>Costa Rica</td>
<td>2000</td>
<td>22%</td>
<td>10%</td>
<td>2.1%</td>
</tr>
<tr>
<td>Dominican Republic</td>
<td>2000</td>
<td>2%</td>
<td>8%</td>
<td>0.1%</td>
</tr>
<tr>
<td>Egypt, Arab Rep.</td>
<td>2004</td>
<td>18%</td>
<td>22%</td>
<td>4.0%</td>
</tr>
<tr>
<td>Estonia</td>
<td>2003</td>
<td>2%</td>
<td>12%</td>
<td>0.2%</td>
</tr>
<tr>
<td>India</td>
<td>1999</td>
<td>14%</td>
<td>10%</td>
<td>1.4%</td>
</tr>
<tr>
<td>Kosovo</td>
<td>2004</td>
<td>100%</td>
<td>45%</td>
<td>45.0%</td>
</tr>
<tr>
<td>Mauritius</td>
<td>2000</td>
<td>153%</td>
<td>18%</td>
<td>27.1%</td>
</tr>
<tr>
<td>Namibia</td>
<td>2000</td>
<td>115%</td>
<td>17%</td>
<td>19.8%</td>
</tr>
<tr>
<td>Nepal</td>
<td>2001</td>
<td>47%</td>
<td>8%</td>
<td>3.7%</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>2000</td>
<td>10%</td>
<td>7%</td>
<td>0.7%</td>
</tr>
<tr>
<td>South Africa</td>
<td>2000</td>
<td>87%</td>
<td>32%</td>
<td>27.6%</td>
</tr>
<tr>
<td>Uruguay</td>
<td>2000</td>
<td>4%</td>
<td>24%</td>
<td>1.1%</td>
</tr>
</tbody>
</table>

For sources and notes, see Table A1 in Annex. Eligibility ages differ and the choice of the population 65 to normalize the coverage indicator is arbitrary.

Returning to the supplementary SPs, there are several instances of low contributory coverage. In Bangladesh, the Dominican Republic and India, coverage of SPs is low but so is contributory scheme coverage. In fact, although data are not readily available, it is known that this phenomenon occurs in Turkey, Venezuela and other countries. Moreover, as noted by Coady, Grosh and Hoddinott (2001) there are several examples of general social assistance programs that also use old age as a categorical criterion. Among the countries including the elderly as a preferred target group are Jamaica, Thailand, Trinidad and Vietnam. All of these countries have contributory schemes that cover less than half of the labor force. It should also be noted that many countries provide cash transfers to
households with elderly members as part of a general social assistance program (e.g., Sri Lanka) and finally, that there are countries that have neither type of program, including much of sub-Saharan Africa.

The dilemma of what role to assign SPs in the face of low coverage is the primary focus of this paper. The rest of this paper addresses the key issues that arise when determining policy in this area and reviews the international experience with SPs to this end. It will argue that initial conditions are an important consideration towards determining the ultimate role that social pensions should play.

3. Impact of social pensions – potential effects and case studies

In theory, social pensions can have a variety of direct and indirect effects on poverty, labor supply, savings and even unlikely areas such as education. This section begins with a general description of the possible impact of SPs. This is followed by a review of the empirical evidence of the impact of specific programs in a number of countries.

3.1 The potential effects of social pension programs

Social pensions are aimed at providing an income floor and therefore at reducing poverty among the elderly population. To the extent that they are successful, they would also reduce the overall poverty rate. However, the efficacy of this kind of categorical targeting depends on the relative poverty rates of the elderly. For example, social pensions may have more relevance in countries where households with elderly members tend to be disproportionately poor. On the other hand, low poverty rates among the elderly would suggest that funds directed at SPs might be more effectively used in more general social assistance programs or targeted to other categories of individuals.

The empirical evidence on relative poverty rates of households with elderly members is mixed. Schwarzer and Querino (1999) find that in Brazil the elderly have significantly lower rates of poverty than the general population (a fact partly attributed to high coverage of social pensions by the same study). Martinez (2004) finds Bolivian poverty rates similar for elderly and non-elderly households. Lucia Acosta (2005) finds poverty rates lower than
other population sub-groups among the elderly in Colombia. Rivera-Marquez et. al., (2003) find that poverty among the elderly is not higher in Mexico City. In a survey of various studies covering 44 countries, mostly in Europe and Latin America, Whitehouse (2000) concludes that generally, the situation of the elderly is representative of the population. For example, out of fourteen Latin American countries, poverty rates among the elderly were lower in ten. Grootaert (1997) finds that poverty rates are slightly higher among elderly headed households compared to the average but lower than households with young household heads. Lanjouw et. al. (1998), cite a number of studies for transition socialist countries showing lower poverty rates among the elderly. Both of these studies however, point out the sensitivity of the results to assumed equivalence scales.

In Africa, Kakwani and Subbarao (2005) find that households with elderly members are more likely to be poor in 9 out of 15 countries and that specific categories of elderly, such as ‘skipped generation’ households that include grandparents and children only are much more likely to be poor. In Sri Lanka, Rannan Eliya (2002) finds that households with elderly members were found to have lower poverty rates than other households. In an analysis of 8 Indian states, Deaton (1995) found that households with elderly were generally less likely to be poor. A more recent study by Pal and Palacios (2005) reinforced these findings in an analysis of 15 Indian states. Finally, a recent World Bank study of the Middle East and North Africa found ‘little evidence’ that the elderly ‘are poorer than the rest of the population’.18

Part of the explanation for the varied results may stem from methodological issues. Deaton and Paxson (1997) find that results, particularly the relative poverty rates of elderly versus children are sensitive to assumptions as to economies of scale. Lanjouw et. al. (1998) even show that the ranking of elderly households and households with children is reversed under plausible assumptions about economies of size and adult equivalence. Whitehouse (2000) shows how changes in the standard OECD equivalence assumptions can affect household rankings.

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18 See Robalino et. al., (2005). Data are presented for Jordan, Iran and Yemen.
Although a thorough discussion of equivalence scales is beyond the scope of this paper, the issue merits a few more observations given its importance in establishing the rationale for categorical transfers to the elderly, i.e., social pensions. First, the appropriate equivalence scales will vary across regions. This is because the relative cost of children is generally calculated in terms of minimum nutritional needs and therefore food consumption in low income countries while other expenditures will represent a larger share of costs in middle income countries (e.g., education-related expenses). Also, certain expenses that involve shared goods such as energy and heating costs may represent a higher proportion of the consumption basket in some countries than in others. Finally, no equivalence scale exists that can take into account intra-household allocation behaviour. This is important in poor countries where rates of co-residence are high. All of this suggests that sensitivity tests should be performed before drawing strong conclusions.

In sum, the available evidence on poverty rates among the elderly is mixed and does not clearly support targeting this group on a categorical basis for social assistance. (Table A2 in Annex summarizes the known literature). Moreover, the data suggest that if there is to be categorical targeting among the elderly, it should be focused on certain types of elderly households, such as widows or households where the elderly individual is the sole source of support for grandchildren.19

These results may be partially due to the observed link between longevity and income levels, supporting the conclusion that targeting the elderly was not an effective way to allocate scarce social assistance.20 There are at least two counter-arguments however.

First, in the poor countries, co-residence rates are very high and multiple generation households are the norm. Those who favor targeting the elderly point out that intra-household allocation of resources is very difficult to observe based on standard surveys and that assuming an equitable distribution among household members may not be realistic. The old may be discriminated against within the household. In fact, there is limited evidence of

19  Kakwani and Subbarao (2005).
20  This relationship has been observed in rich countries and there is little reason to think that it would not be at least as strong in low and middle income countries. To the extent that poverty is higher in rural than in urban areas, documented higher mortality rates in the former provide some evidence in countries such as India.
this phenomenon, as in the case of health spending on the elderly relative to working age adults in Pakistan (Kochar 1999).²¹

A second argument in support of targeting the old is that the behavioural effects of such transfers would be less likely to lead to the kind of moral hazard that could result in persistent poverty (Mulligan and Sala-i-Martin 1999) and that it is easily verifiable and therefore less susceptible to fraud (Atkinson 1985). From this perspective, old age is viewed as a kind of permanent and worsening state of disability. This argument is weakened however, to the extent that co-resident households share resources and working age members reduce their work effort.

This last point highlights the difficulty – inherent in all programs that aim to redistribute to the poor – of separating the ultimate poverty impact from incentives. There are at least three types of incentives that could potentially be affected by SPs.

From the earliest debates, policymakers expressed concern that social pensions would distort work and savings behavior:

“...it has been held that the prospect of a pension for their closing years will disincline the poor to make or continue the exertions that many of them make at present for their own support, and that the considerations which induce to industry and thrift will cease to operate in future.” (UK Parliament 1899).

The potential for such an effect is positively related to the size of the benefit in question; larger social pensions are more likely to lead to a reduction in work effort and savings than smaller transfers. It is also a function of the eligibility age chosen and the typical earnings and savings rates of that age group in a particular country. In general then, a low benefit (relative to income levels in the country) paid to individuals with few years left to live will create fewer negative incentive effects than an SP with high benefit levels at an eligibility age that implies a significant remaining productive life. In both cases, the effects would be complicated by co-residence and intergenerational contracts that might also lead other members of the household to reduce work or thrift.

²¹ Conversely, evidence from South Africa suggests that in cases of large transfers, there may be a reallocation of household expenditures in favor of things such as children’s education. See discussion below.
Related to this last point is a third potential effect, the reduction of intergenerational transfers – i.e., family support. Cox and Jimenez (1997) for example, document a reduction in private informal transfers to the elderly of 37 per every 100 received in public social assistance in the case of Peru. Jensen (1997) found a reduction on the order of 20-30 per cent of each Rand of pension income in South Africa. Once again, the concern over these effects increases along with the size of the benefit and the scope of the coverage. More subtly, this raises the question as to how such programs affect traditional family structures.

In addition to poverty and incentive effects, scarce fiscal resources imply opportunity costs or tradeoffs. Lower budget deficits or higher spending on other social programs may be sacrificed in order to finance SPs (of course, the counterfactual may also have been less desirable expenditures). Naturally, this is a more important issue in the case of core SP programs, but even in some of the smaller programs, the tradeoffs may not be trivial. Again, other things constant, larger schemes will involve larger tradeoffs.

Table 3 below, provides an idea of the magnitudes involved. The table shows the fiscal cost of a universal benefit at ages 60 and 65 for a benefit equivalent to 15 per cent of per capita income in a range of Middle Eastern countries that typically have a young population. The cost is about one per cent of GDP initially, doubling in three decades.

<table>
<thead>
<tr>
<th>Year</th>
<th>2004</th>
<th>2010</th>
<th>2025</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>60</td>
<td>65</td>
<td>60</td>
<td>65</td>
</tr>
<tr>
<td>Algeria</td>
<td>0.9%</td>
<td>0.6%</td>
<td>1.0%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Bahrain</td>
<td>0.6%</td>
<td>0.4%</td>
<td>0.6%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Djibouti</td>
<td>0.8%</td>
<td>0.5%</td>
<td>0.8%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Egypt</td>
<td>1.0%</td>
<td>0.7%</td>
<td>1.1%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Iran</td>
<td>1.0%</td>
<td>0.7%</td>
<td>1.0%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Iraq</td>
<td>0.7%</td>
<td>0.5%</td>
<td>0.9%</td>
<td>0.5%</td>
</tr>
<tr>
<td>Jordan</td>
<td>0.8%</td>
<td>0.5%</td>
<td>0.9%</td>
<td>0.6%</td>
</tr>
<tr>
<td>Lebanon</td>
<td>1.2%</td>
<td>0.9%</td>
<td>1.3%</td>
<td>0.9%</td>
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<tr>
<td>Libya</td>
<td>0.9%</td>
<td>0.6%</td>
<td>1.1%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Morocco</td>
<td>1.0%</td>
<td>0.7%</td>
<td>1.1%</td>
<td>0.7%</td>
</tr>
<tr>
<td>Tunisia</td>
<td>1.3%</td>
<td>0.9%</td>
<td>1.4%</td>
<td>1.0%</td>
</tr>
<tr>
<td>West Bank/Gaza</td>
<td>0.7%</td>
<td>0.5%</td>
<td>0.7%</td>
<td>0.4%</td>
</tr>
<tr>
<td>Yemen</td>
<td>0.6%</td>
<td>0.4%</td>
<td>0.6%</td>
<td>0.4%</td>
</tr>
</tbody>
</table>

Source: Robalino et al (2005)
To our knowledge, a comprehensive analysis that simultaneously considers each of these three key areas – poverty, incentives and fiscal tradeoffs – has not been produced for any single country where such programs exist or are being considered. Many studies focus on one or two of the three elements and, admittedly it is difficult to measure the fiscal tradeoffs (what, for example, would the money have been spent on if not on SPs?). Nevertheless, all three elements should be considered by policymakers. They will be the basis for the discussion of evaluating policy options in Section 4. First, however, we review the existing empirical evidence on SPs.

3.2 Empirical evidence of the impact of selected social pension programs

3.2.1. ‘Core’ social pension schemes

Most of the empirical research on social pensions in developing countries focuses on the larger schemes. These were classified above as core SP pensions and along with the large rural scheme in Brazil, are examples of SPs that are likely to result in significant changes in areas such as poverty, incentives and fiscal tradeoffs.

The most studied case is that of South Africa. Dating back to the 1920s, the scheme was extended to non-whites in the 1940s although benefit levels remained lower for ‘coloreds’ and blacks until the end of the apartheid period. At this time, equalization of benefits was achieved by raising the pensions of blacks to the white levels. Combined with a highly skewed income distribution, this resulted in a benefit level twice the median income of the black population (Case and Deaton 1998) that remains today (Willard 2003). In principle, the scheme is means-tested, but in practice, it is practically universal among blacks (Jensen 2003).

Various impacts of the scheme have been researched. Case and Deaton (1998) estimate that the poverty headcount would be five percentage points higher without the program. Jensen (2003) found a reduction in the poverty rate among elderly households in Venda (a region of South Africa) of 26-33 per cent depending on whether offsetting reductions in private transfers are taken into account. Woolard (2003) cites a recent
government study showing a reduction in the poverty rate among households with elderly from 55.9 to 22.9 per cent and from 38.2 to 2.5 per cent for the concept of ultra-poverty. In contrast, Barrientos (2004) finds only a slight reduction in head count poverty rates, from 43 to 40 per cent among the recipient households (comparing pre and post transfer poverty).

Other welfare indicators also support the conclusion that the program has had a positive social impact. Case (2001) finds that the elderly who received a pension had a higher self-reported health status than those who did not receive a pension holding other factors such as age and gender constant. Furthermore health status for South African women improves dramatically when they became eligible for a pension (Case and Wilson, 2000).

Behavioral effects induced by the South African scheme have also been studied. Labor supply of other members of the household, for example, fell with pension income in one study (Bertrand 2001) but was not affected in another (Jensen 2003). Pension income was also found to positively influence enrolment rates of children in pensioner households (Duflo 2000, 2003). The positive effect of better nutrition on child welfare has been studied through the proxies of weight and height. Case (2001) found that the presence of a South African pensioner in the household was associated with an additional 3 to 4 centimeters in the height of the children in the household. In her study, Duflo (2000) also found favorable effects of pension income on weight given height and height for children of a given age.

Of course, it would be surprising if the studies did not show a significant reduction in poverty rates for the elderly given the high coverage and large relative benefit levels. Strangely, however, there does not seem to be any research on the tradeoffs that the program entails. For example, there is also a means-tested cash transfer program for children in South Africa but there is no analysis available comparing the poverty reduction efficacy of the two programs. Van der Berg (2002) suggests that poverty would be reduced more by focusing transfers on the unemployed, but does not present quantitative evidence. The implicit assumption is that there is no tradeoff.
The social pensions of Brazil have also been studied. It consists of three separate programs. The Prêvidencia Rural (PR) instituted in 1991, supports rural laborers. The Renda Mensual Vitalícia (RMV) – a program for urban elderly – is partly contributory as potential elderly and disabled beneficiaries must have made contributions for at least twelve months and be at least 70 years old in order to receive a benefit of half the minimum wage. In 1996, a separate social assistance scheme was introduced, replacing a previous regime. The ‘Beneficio de Prestacao Continuada’ or BPC is means-tested and applies to individuals that are age 67 or above or invalid in both rural and urban communities. It pays a minimum wage per month and had more than 700,000 elderly recipients by 2001.

The rural pension program is by far the most significant. Tracing its origin to 1971, the program’s benefits were increased to a full minimum wage and the number of beneficiaries rose dramatically in the early 1990s (Schwarzer and Querino (2001)). By the late 1990s, the benefit represented as much as half of household income for recipients. Studies showed that very few households receiving these pensions could be said to be in extreme poverty. Schwarzer and Querino (2001) note behavioural effects ranging from a reversal of migration from rural to urban areas to the changing role of the elderly in the households. While the same paper shows significantly lower poverty rates for elderly than for other groups, unfortunately, they are not able to assess the direct impact of social pensions as separate from other pension income. Meanwhile, Barrientos (2004) finds a drop in poverty rates from 61 to 54 per cent in households receiving social pensions.

Aside from the poverty impact, there are many purported indirect impacts. Similar to the case of South Africa, when pension benefits for the elderly in Brazil increased, there was an observed increase in the number of children living with pension-recipient grandparents especially in rural areas (Camarano, 2002). A possible related effect is the increased school enrollment of girls aged 12 to 14 in response to expansions in the rural non-contributory program (Carvalho 2001). The infusion of liquidity has even been found lead to investment (see Bolivia case below). This has led some experts on pension programs to conclude that for Brazil, “the regularity, certainty and liquidity of pension benefits meant

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22 For historical development, see Barrientos (2004).
that they played a key role in shifting households from subsistence to surplus agriculture” (Barrientos and Sherlock on Delgado and Cardoso 2000).

As in the case of South Africa, counterfactual uses of these large budget allocations are not compared with these outcomes. So, for example, the potential impact on enrolment ratios through direct spending on education or conditional cash transfer programs rather than the indirect effect that relies on intergenerational transfers has not been explored. Paes de Barros and Carvalho (2004) argue that the poverty reduction impact would be greater if funds were diverted from pensions to families with children, but do not quantify their claim.

In Bolivia, a core SP called the BONOSOL (or BOLIVIDA, as it later became known) was initiated in 1997 and continues to operate today despite a suspension from 1998 to 2000. The original plan envisioned an annuity of US$248 for those aged 65 and older which amounted to 27% of the per-capita income and 50% of the income of the poor. In practice however, the scheme did not pay the anticipated benefits. No payments were made between 1998 and 2000. Then in 2001 and 2002, retroactive payments for 1998-1999 and 2000-2001 correspondingly were only US$120 a year, which basically translates into US$60 on accrual basis for each of the years with no payments. Coverage according to administrative data is nearly universal. However, household survey results put the figure closer to three-fourths (Rofman, 2005). The actual rate is probably somewhere in between given potential fraud and survey errors. Despite the reduced amount, this still represented a sizeable transfer, especially in the countryside. Consumption increased significantly among recipient households, although the impact on poverty has not, to our knowledge, been measured.

Evidence of an indirect impact includes Martinez (2005) findings that the transfers allowed for investment rural home production thus increasing consumption by an amount greater than the transfer itself. The program was also found to have a positive effect on school enrolment. By analyzing school attendance of children before and after the implementation of the BONOSOL program, Martinez (2005) found some evidence of an increase in rural school enrolment ratios.

23 Financing came from part of the proceeds from the privatization of five large state owned enterprises.
In Namibia\textsuperscript{24}, the social pension scheme can be traced to 1965 with blacks becoming eligible only in 1973. The program in Namibia pays N$160/month for any citizen aged 60 or more. The amount is estimated to be enough to feed three adults, though cost of living varies greatly by region. Subbarao (1998) found take up rates to be less than 50 per cent and even lower in outlying regions, mostly due to the long distances involved in obtaining the transfer. After the administration was privatized in Namibia, coverage rose dramatically, although it is still not universal and administrative costs rose from about 8 to 15 per cent.

In a national survey, 11.3\% of the respondents said that the SP was their main source of income, while in general coming in third in importance after ‘subsistence farming’ and ‘wages in cash’. While pension-recipient households are slightly less well-off than the general population, the majority of them live above the poverty line due to pension income. 42\% of pension-recipient households are ‘moderately or severely poor’, higher than the figure for the general population of 37.8\%. Pension-recipient households are highly dependent on pension income. In households with at least one recipient, an average of 81\% of total household income is pension income. We are not aware of any incidence analysis.

Pensions may also affect household structure by providing flexibility to work-seeking adults who seek better employment opportunities further away. One study notes that migration of working-aged adults from rural areas increased due to the implementation of the pension program (Adamchak, 1995). In southern communal areas, it is common to have skipped generation households where the elderly and children live in rural areas while the parents of the children live away in more urban areas to work and earn wages.

Researchers found that only 28\% of pension income is spent on pensioners themselves, the remainder going to the household or relatives. Grandchildren received half of the remaining income, adult children received 25\% and the spouse received 9\%. Child education expenses are also an important use of pension income as 15.5\% of the pension income diverted to grandchildren is spent on it. In the north, due to higher income levels and value on education, the percent of pension income going to education is 28.6\%. Other uses of pension income include food for the family (27\%), pensioner health expenses

\textsuperscript{24} The best account is Deveraux (2001)
(13.8%) and food for the pensioner (10.6%) (Devereux, 2001). The pension system also appears to be invigorating the local economy through investment. About one in four pension-recipient households had invested in agricultural technology, livestock or business.

The small island nation of Mauritius has a universal scheme with an estimated 99.9 per cent of individuals over age 60 receiving the flat pension benefit equivalent to almost one fifth of income per capita.\textsuperscript{25} It is the highest income country among those covered in this section. The latter came first by about two decades in the 1950s\textsuperscript{26} and even now, the social pension is more important in terms of annual spending.

A World Bank report found that certain categories of households with elderly in Mauritius, such as single elderly, were more likely to be poor. A simulation in the same report showed that the social pension significantly reduced poverty among households with elderly members, especially for the most vulnerable groups. Table 4 below shows a reduction in the poverty rate for single elderly and elderly couples of more than 40 percentage points.

Table 4: Impact of social pension on poverty rates in Mauritius

<table>
<thead>
<tr>
<th></th>
<th>Pov. Line</th>
<th>Sh.of Poor</th>
<th>Pov. Gap</th>
<th>W/o BRP</th>
</tr>
</thead>
<tbody>
<tr>
<td>No elderly adults in household</td>
<td>9.5</td>
<td>72.8</td>
<td>2.1</td>
<td>9.5</td>
</tr>
<tr>
<td>Single elderly adults</td>
<td>33.7</td>
<td>2.5</td>
<td>9.1</td>
<td>51.7</td>
</tr>
<tr>
<td>Elderly couple</td>
<td>18.6</td>
<td>1.7</td>
<td>2.9</td>
<td>47.8</td>
</tr>
<tr>
<td>Elderly with single non-elderly</td>
<td>16.3</td>
<td>5.9</td>
<td>4.0</td>
<td>27.0</td>
</tr>
<tr>
<td>Elderly with non-elderly couple</td>
<td>8.0</td>
<td>6.7</td>
<td>1.7</td>
<td>12.1</td>
</tr>
<tr>
<td>Elderly with multiple non-elderly</td>
<td>6.4</td>
<td>10.5</td>
<td>1.5</td>
<td>10.8</td>
</tr>
<tr>
<td>ALL</td>
<td>9.4</td>
<td>100</td>
<td>2.1</td>
<td>11.8</td>
</tr>
</tbody>
</table>

Note: Poverty line at 50% of median equivalized income.

High co-residence rates prevail in Mauritius. This, along with the fact that only one of ten Mauritians is over the age of 60, explains why the last line of the table shows an overall drop in the poverty rate of only 2.4 percentage points. The report did not simulate

\textsuperscript{25} Increasingly large payments are made to 80, 90 and 100 year olds, respectively.

\textsuperscript{26} According to Willmore (2003), the original social pension scheme started as a means-tested scheme in 1950 and was made universal in 1958. He also notes that the move to universality was originally supposed to be temporary and only until a comprehensive social insurance scheme had been introduced.
the poverty impact of using the same budget allocation for different categorical groups or other types of targeting.\footnote{Mauritius does have a small general social assistance program which is dwarfed by the social pension.}

The potential tradeoffs are significant as the social pension costs around two percent of GDP and is the largest single cash transfer scheme in the country. Willmore \cite{2003} points out that this ratio could be held roughly constant even in the face of rapid population ageing by raising the eligibility age to 65 and indexing benefits to prices. However, the recent history of the scheme suggests that there is little political support for these measures. A continuation of recent policies would result in a doubling of the ratio of spending to GDP for the program. The World Bank report also explores the impact of means-testing the scheme. It reports that excluding the top quintile of recipients (and therefore reducing spending by one-fifth) would not result in increased poverty. Savings would be lower in a more sophisticated approach that minimized the incentive problems of such a discrete cutoff by using a taper.

With the highest eligibility age at age 75 for an SPP among the countries covered\footnote{This is tempered somewhat by the widow’s pension which is a means-tested benefit paid to widows age 60 and above.}, \textbf{Nepal} just barely qualifies as a core SP program, although it’s benefit levels are low at less than one tenth of income per capita. According to Palacios and Rajan \cite{2004}, coverage of those at the eligible age is around three fourths. There are large disparities in geographic (by districts) coverage that are not clearly correlated to differences in income levels. Administration takes place at the local level (Village Development Committees) and there appears to be little evidence of corruption.

We are not aware of any analyses of the remaining core schemes, \textbf{Botswana} and \textbf{Kosovo}. The scheme in Botswana appears to pay more pensions than there are potential beneficiaries in the age category of 65 and over \cite{2001}. This may be partly attributed to the lack of reliable birth registration and the potential for fraud. Benefits, however, are quite low at about one tenth of income per capita.

The Kosovo scheme was introduced in 2001 as part of a package that replaced the collapsed scheme that had prevailed during the Yugoslav period. As reported in Gubbels
et.al. (2006), the system involved a new social pension payable at age 65 and a defined contribution scheme financed through contributions of ten per cent of wages. Notably, coverage is practically universal for the target population and the ratio of benefit level to income per capita is the highest among all of the countries covered here at 45 per cent. Almost by definition it will sharply reduce poverty among households with elderly members29. Its current cost, at around 2.5 percent of GDP however, implies important tradeoffs in a country with low social indicators in other areas.

3.2.2. Supplementary or safety net social pensions

These schemes are more common in countries with moderate to large contributory schemes. Most OECD countries have some version as do middle income Latin American, Middle Eastern and East European countries. South Asia appears exceptional in this regard with Bangladesh and India using Supplementary SPs despite very low contributory scheme coverage (below 10 per cent and mostly public sector workers). Nepal, although classified earlier as a core scheme has the lowest coverage among that category and is in some ways closer to its South Asian neighbors in terms of impact (see below).

Four of the supplementary schemes – Argentina, Costa Rica, Chile and Uruguay – were the subject of an in-depth review by the ILO in a book on social pensions (ILO 2004).

In Argentina, Bertranou and Gruschka (2004) find that social pensions reduced poverty rates among elderly recipients by about 30 per cent and by more than two thirds for extreme poverty. In terms of overall poverty among households with elderly however, the effect is minimal given the ratio of recipients to elderly (see Table 2 above). The cost of the scheme, around 0.2 per cent of GDP, is marginal relative to the overall budget and when compared to other social expenditures. Coverage in the contributory scheme results in more than half of the elderly receiving contribution based pensions. The social pension therefore, clearly operates as a safety net for the uncovered population.

Uruguay spends about three times as much as a share of GDP on social pensions and covers about three times the share of the elderly. It also has higher coverage from the

29 In fact, by design, the benefit rate is linked to the cost of minimum food basket.
contributory scheme and a significantly older population. Like Argentina however, the role of the scheme is to act as a safety net for the uncovered or partially covered labor force. Its impact on poverty among the recipients or among elderly households in general has not been measured, but as in Argentina will be small given the percentage of elderly that receive it. The tradeoffs in terms of spending on other programs is also negligible.

Chile is well known for its pioneering private pension scheme, which includes redistribution through a minimum pension guarantee. Coverage of this contributory scheme is one of the highest in the region at around two thirds of the labor force. Less well known however, is the fact that the social pension scheme is much larger than those in Argentina or Uruguay where contributory scheme coverage is also high. The ratio of social pension recipients to the population over age 65 is close to 15 per cent compared to 1 and 4 per cent respectively for its Southern Cone neighbors.\(^{30}\) Despite the broader coverage, spending as a share of GDP is actually lower in Chile than in Uruguay due to the fact that the benefit relative to income per capita is half as much in Chile and because Uruguay has a proportionally larger elderly population.

Targeting in Chile appears to have improved significantly by the 1990s with the ratio of beneficiaries in the bottom two quintiles rising to 73 per cent according to Grosh (1994). ILO (2002) finds that among recipients, poverty rates fell more than 37 per cent. While poverty rates among recipients fell by more in Argentina and Uruguay, the higher coverage of the Chilean scheme resulted in a larger overall decline in poverty among the elderly.

Coverage was even higher in Costa Rica’s social pension scheme at around 22 per cent of the over 65 population. Costa Rica also spent more than the other three countries. However, the percentage reduction in poverty among beneficiaries was the lowest among the four studied, suggesting problems in targeting.\(^{31}\) Despite its high coverage, the poverty reduction among the overall elderly population was higher in Chile than in Costa Rica. Yet Chile spent half as much as a share of GDP.

\(^{30}\) The figure in Table 1 is based on 2001 data shown in ILO (2002) and is consistent with household survey data for 2003 cited in Rofman (2005).

\(^{31}\) Coady, Grosh and Hoddinott (2002) report that this program was well targeted relative to others based on the proportion of beneficiaries falling into the bottom decile or bottom two quintiles.
In one of the most thorough case studies of its kind, Rivera-Marquez et al. (2003) found evidence of poor targeting of Mexico City’s PRAAPAM, a cash transfer program targeted to low income persons 70 years and older. The cash transfer program paid about US$60 per month to around 300,000 beneficiaries in 2001-02. The analysis showed that take-up rates were only marginally higher in the lower income deciles with many recipients in the highest deciles. Moreover, the impact on indicators such as nutritional status of the elderly was weak or non-existent. The results were based on a survey specifically designed that allowed for a control group and impact analysis.

In January 2006, the Mexican Government announced a massive new social pension initiative. The program would pay one million elderly in the poorest communities a social pension equivalent to around 15 per cent of the average income per capita. Notably, the SP would build on an existing social assistance program, Oportunidades, targeting the same poor households, but adding the SP to the total transfer when the elderly member was present.

The SP in the Dominican Republic is almost symbolic, both in terms of coverage and in terms of benefit levels. However, the Social Security Law of 2001 included provisions for a new social pension benefit that would potentially cover as much as one quarter of the elderly population. The new SP would result in benefit of 60 per cent of minimum wage indexed to prices. Spending is projected to double from around 0.5 to more than 1 percent of GDP in the next two decades and to 1.5 per cent by 2050. In fact, the 2001 legislation is being implemented gradually and the social pension is only at a pilot stage.

Although Table 2 presents data only for Russia and Estonia, Supplementary social pension programs also exist in several other Eastern European countries. As in these two countries, the SPs are a last resort program for those that were not covered by a contributory scheme that once boasted universal coverage. Despite the decline in employment coverage during the transition from socialist to market economies, social pension schemes have generally remained small in the region, as the impact of the reduced compliance has not fully phased in yet to have considerable impact on the old age contributory coverage. Russia and

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32 The information on Dominican Republic is based on Palacios (2003).
Estonia pay small benefits to a small fraction of the elderly population. They also have significant general social assistance programs alongside the SPs.

With the exception of Egypt, the Middle East also tends to use SPs as safety nets for those that do not manage to obtain contributory pensions. Only Algeria is listed in Table 2 and is clearly an insignificant program, but it is typical of the region. Egypt’s program, with its symbolic flat contributions from casual workers, has managed to increase its overall coverage figures through what is, for our purposes, a social pension scheme. We are not aware of any incidence analysis related to this scheme.\(^{34}\)

In South Asia, there are SPs in Bangladesh and almost all states in India. Interestingly, these Supplementary schemes have been introduced in conditions of very low coverage in both countries. Barrientos (2004) finds that the rapidly growing Bangladeshi scheme is relatively well targeted with more than three fourths of beneficiaries found in the lowest two quintiles of the distribution.\(^{35}\) These results were based on survey data from 2000, only two years after the initiation of the scheme. According to Khan and Gorman (2005), the number of beneficiaries more than tripled over the next five years. Benefits also increased in real terms. Thus, the results based on data from 2000 will underestimate the impact of the program and may not be an accurate reflection of the current targeting efficiency.

In India, each state uses different eligibility criteria and pays different benefit levels in their SPs.\(^{36}\) The central government supplements the state level benefits with a transfer based on a formula that takes into account the poverty rate and the number of persons over 65 in each state.\(^{37}\) Benefits vary widely across states mostly falling in the range of 10-15 per cent of income per capita. There were a little more than seven million recipients in 2001, roughly one tenth of the population age 65 and above. These figures are similar to those

\(^{34}\) In addition to the quasi-contributory program, Egypt until very recently had maintained some small and targeted assistance pension for those not covered by any of its contributory schemes. It also has a general welfare program that uses old age as a targeting criteria – that program seems to be gradually acquiring importance as the targeted assistance pension is being phased out. See World Bank (2006).

\(^{35}\) The quintile assignment of households is based on a wealth index using assets rather than expenditure or income data for each household.

\(^{36}\) See Appendix 3.

\(^{37}\) The National Old Age Pension is part of a package of transfers to state governments and many state governments pay benefits to widows, disabled and other specific groups. See Rajan (2001).
found in the more modest Latin American schemes. Expenditures were estimated at less than 0.1 per cent of GDP, a level that makes the question of tradeoffs less important.

There are large differences across states in implementation. For example, Rajan (2001) reports that a number of states do not disburse the available funds transferred by the central government. Coverage also varies, with states such as Kerala paying benefits to a much larger share of the elderly than what was observed in other states. A study by HelpAge International, an NGO, found that many recipients in India’s largest state, Uttar Pradesh, were required to pay bribes and incurred high transaction costs in order to receive the pension (HelpAge 1999). Saxena (2005) reports long delays in disbursement of pensions, cumbersome procedures for establishing eligibility and poor recordkeeping across several states.

The incidence of these programs is also likely to vary across states, although information is not readily available. Preliminary results from a special survey commissioned by the World Bank for the SP administered by the state of Karnataka confirm that about half of the elderly in the poorest quartile (based on an index of assets) receive the benefit, while only about four per cent of the richest quartile do. Overall, one in five elderly received the benefit. On the other hand, a significant share of beneficiaries – 19 per cent – could not be located by the survey team and others had not received benefits regularly during the previous three months.38

3.2.3. Summary

The general concept of ‘social pensions’, defined as cash transfers to the elderly unrelated to previous contribution history, provides little insight with regard to the implications within the broader public pension policy. Although in principle social pensions could be found at any point along the spectrum in terms of coverage and benefit levels, in practice they tend to cluster into two, very distinct categories. The first category includes expansive schemes that either pay pensions to all citizens above a certain age or apply

38 World Bank (forthcoming).
income tests that exclude only a minority of the elderly. The second are safety net programs that are meant to reach the elderly poor.

Not surprisingly, the former tend to be found in countries where contributory pension play a negligible role, often as a matter of conscious policy. The decision to rely on core social pensions rather than mandated contributory schemes can be observed in Scandinavia until the 1960s, Australia until 1993 and several South African countries and New Zealand even today. Supplementary social pensions, in contrast, generally reflect an implicit assumption that the contributory pension scheme will reach all but the poorest. The important exceptions to this pattern were in South Asia where limited SPs co-exist with low coverage of the contributory scheme.

In every core SP studied, the impact on poverty among the old and overall poverty rates appeared to be significant. Results to the contrary would have been surprising given the size of the program. Supplementary schemes varied in terms of targeting performance and the impact of poverty among the elderly. Almost by definition, these small schemes cannot have a major impact on overall poverty rates, especially in young countries. It is also worth noting that the results from the different studies rely on different indicators and are not completely comparable.

Core SPs are expensive and therefore imply potentially important tradeoffs. Generally, the literature has not investigated these tradeoffs. Supplementary programs tend to be marginal and relatively low cost, so arguably there is less need for such an analysis in these cases. This is an important distinction that will influence the discussion in the next section.

The potential behavioral and incentive effects of the different kinds of schemes were evident in some of the core cases such as Bolivia, Brazil and South Africa. These effects include reduction in private transfers, spillover positive health and education effects within multiple generation households, greater investment in food production and reduced labor supply. Little attention was paid to the potential ‘poverty trap’ issues that might arise from means-testing either because the schemes were universal or the means-test was relatively lax. In contrast, these issues should be more important in supplementary schemes.
where they tend to exist alongside contributory schemes. This could discourage participation in the latter since the means-test would imply a tax on any savings including pension contributions. The literature does not provide much evidence on whether this effect is important. Interestingly, this is less of an issue in countries where low coverage co-exists with supplementary SPs as in India and Bangladesh where recipients are highly unlikely to be formal sector workers in any case.

Finally, this review reveals large gaps in our knowledge of social pensions. What, for example, are the administrative costs of these programs? What institutional arrangements work best and under what circumstances? What determines take up rates? How does the expansion or contraction of contributory scheme coverage affect the long run costs of social pensions? More broadly, how realistic is it to expect contributory schemes to eventually cover the majority of the population in a particular country? These are topics for future research. In the meantime, the next section attempts to lay out an operationally oriented approach to assessing social pension issues across countries with different initial conditions.

4. Policy options for SPs in developing countries

The purpose of this section is to outline an approach to policymaking in the area of social pensions. The approach involves two steps. First, the initial conditions should be assessed, starting with a clear understanding of what SPs already exist and their role in the overall pension system. Second, a set of criteria would be applied either to assess the existing scheme or to consider the utility of introducing a new scheme.

4.1 Initial conditions

The most obvious question is whether a social pension already exists and if so, what are its dimensions. Outside of South Africa, most of the continent does not have an SP, for example, while in South Asia the situation is mixed with SPs in Bangladesh, India, and Nepal but not in Bhutan, Pakistan or Sri Lanka. That is not to say that the elderly do not receive cash transfers where there is no SP. There are two other potential sources – contributory pension income and general social assistance. The extent to which the elderly are in receipt...
of either can be picked up in household survey data. In Latin America, for example, Rofman (2005) found that coverage of the elderly in contributory pension schemes ranged from 5 to 85 percent.

Where there is no social pension, transfers to elderly households may still be significant if the social assistance program is large. The OPORTUNIDADES program in Mexico or the Samurdhi program in Sri Lanka reach many households with elderly members despite not being targeted demographically. This is because they cover a relatively large proportion of the lower income population. A good indicator of the scope of social assistance is the ratio of spending to GDP.

The answers to the previous questions will (or at least should) influence the rate of poverty among elderly households. While it may be difficult to separate the impact of existing programs on poverty rates among the elderly, a starting point would be to compare relative poverty rates of households with and without elderly. A related question is the extent of co-residence. The summary of the initial conditions to be considered is presented in Table 5. Appendix 2 provides indicators for a variety of countries.

<table>
<thead>
<tr>
<th>Initial condition</th>
<th>Indicator</th>
<th>Possible source</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is the coverage of the elderly in contributory pension schemes? What are sectoral or geographic gaps?</td>
<td>Percentage of 65+ population receiving contributory pension income</td>
<td>Household survey data; administrative data.</td>
</tr>
<tr>
<td>What is the degree of benefit differentiation within the contributory scheme?</td>
<td>Variance of distribution of individual benefits.</td>
<td>Statistics on individual benefits.</td>
</tr>
<tr>
<td>Does a social pension already exist? If so, what is its role and impact?</td>
<td>Social pension impact index (see below). Implicit tax imposed by the means-testing, if any.</td>
<td>Calculated w/administrative and budget data. Constructed based on program rules.</td>
</tr>
<tr>
<td>What is the scope of the social assistance program?</td>
<td>Social assistance spending to GDP ratio</td>
<td>Budget figures.</td>
</tr>
<tr>
<td>How does elderly poverty compare to poverty among the rest of the population?</td>
<td>Ratio of poverty among households with elderly to other households</td>
<td>Household survey analysis.</td>
</tr>
<tr>
<td>Other social indicators</td>
<td>E.g., school enrolment ratios or child mortality rates</td>
<td>Administrative and census data.</td>
</tr>
</tbody>
</table>

Table 5: Initial conditions for policy analysis of social pensions

Source: authors.

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39 These may include residents of rural communities or mountainous regions as well as self-employed and employees of small businesses.
4.2 Criteria for evaluating proposals on social pensions

The initial conditions help frame the evaluation of social pension policy. For example, from a practical viewpoint, countries that have developed contributory schemes with moderate and concentrated coverage may choose to focus social pensions on those sectors or geographic areas where there are larger lacunae. Countries that already have SPs are unlikely to eliminate them, even if the arguments in favour of doing so are compelling. Therefore, where the programs already exist, the more relevant policy questions are how to make it work better and whether to expand it, preferably in that order.

Countries that do not have broad contributory coverage or do not have such programs at all may be classified as follows in terms of their starting conditions: (i) those that have neither SP nor broad social assistance scheme (those are to be found in most countries of sub-Saharan Africa); (ii) countries that have some SP with a narrow coverage already in place (for instance, India and Nepal), and (iii) countries that have no SP but some broad social assistance (e.g., Sri Lanka). Likely, policy preferences will vary for different categories.

The previous section presented scattered evidence of the incidence or poverty impact of various SPs. Although SPs have occasionally been included as part of broader reviews of the performance of social assistance programs, most have escaped scrutiny and no standardized comparison has been made across SPs. Several are also of recent vintage (Bolivia, Bangladesh and Nepal, for example).

Targeting could be measured according to the program-specific criteria in each country, and an in-depth analysis should probably include this aspect. Are there errors of exclusion or inclusion based on the explicit income/wealth or other criteria? If so, what is driving the deviation from the administrative norms etc.

40 A special case observed in post-transition socialist countries is where legacy contributory schemes pay pensions to most elderly due to high coverage rates during the period of state ownership and collectivization. In many of these countries, coverage has fallen, sometimes sharply, so that future cohorts will not be covered to the same extent. This reopens the question of the role of social pensions in these countries. Moreover, the benefit distribution in legacy post-socialist schemes is often collapsed around the minimum pension and paid for out of the general budget to some extent. This has led to proposals to convert legacy schemes into social pensions and start afresh with a newly designed contributory scheme.

41 See Coady, Grosh and Hoddinott (2002).
For more general purposes, however, and where there are resource constraints, a relatively simple targeting indicator would be the proportion of beneficiaries found in the bottom part of the income/expenditure distribution by deciles or quintiles. This should be available for core schemes from national, representative household survey data. For Supplementary programs, it is possible but less likely to be singled out in survey data and even where it is, the sample size may result in a large margin of error. Supplementary programs frequently cover fewer than one per cent of the population making it difficult to draw statistically robust conclusions.42

A more difficult, but perhaps more useful indicator would show the reduction of poverty among the elderly.43 This may require detailed data on elderly households, which again, may necessitate oversampling of households with elderly members.

Other things constant, we would expect core programs to be less well targeted but to have a greater impact on elderly poverty than supplementary programs. As mentioned earlier, the role of supplementary programs is really that of a safety net for the poorest elderly or those that are not covered by the contributory scheme. This dichotomous categorization is less useful when comparing one country to others in order to assess the role that is being played by either type of scheme. An objective index would take into account both the scope of coverage and the relative benefit levels. This can be done as follows:

1) \( \left( \frac{SPB}{POP65+} \right) \times \left( \frac{SPLEV}{YCAP} \right) \),

The first term is the number of social pension beneficiaries divided by the population aged 65 and over and the second term is the level of the benefit as a share of income per capita. The index is the product of the two terms and would be equal to 1 if all elderly were covered and received a benefit equivalent to income per capita of the country in question.44

42 Although, such programs often involve means testing and rely at least on a self-declared evidence of individual or household’s income, which may be used as a starting point for obtaining the income data of the beneficiaries and matching it with the general household survey data.

43 For a detailed explanation of methodological issues, see Ravallion (2005).

44 Since in the very long run (75+ years), demographic projections typically show the convergence of the share of elderly across countries, the index multiplied by the steady state share of 65+ population gives a rough sense of the long run cost of the social pension.
Figure 1 below illustrates the index as applied to 20 developing country schemes.\textsuperscript{45} Not surprisingly, the six core schemes are ranked highest. Nevertheless, among them, there is significant variation with South Africa with more than twice the potential impact of Bolivia. Nepal also stands out because, despite its universal flat benefit, its high eligibility age (75) and low benefit level result in low score.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{social_pension_impact_index.png}
\caption{Social Pension Impact Index, selected countries}
\end{figure}

Source: authors’ calculations.

The index provides useful information about the role of the SP, but in order to inform policy, it should be juxtaposed with data on the role of the contributory scheme (if one exists). Normally, it would seem inconsistent to have a large SP alongside a large contributory scheme. Indeed, the index is highest in countries that either do not have any

\textsuperscript{45} Kosovo, although not an independent country, has the highest score on this index at 45 per cent due
mandated coverage for the private sector (South Africa, Namibia, and Botswana) or low coverage in the contributory scheme (Bolivia and Brazil). Mauritius stands out as a case of moderate contributory coverage levels with a high score, perhaps partly because of the relative immaturity of the contributory scheme. Meanwhile, former socialist countries along with moderate to high coverage countries in Latin America and the Middle East have lower scores. The outliers are in South Asia, where low coverage and low index scores coincide. It is notable that two of the three schemes arose only in the 1990s and have continued to expand. Should they be expanded further given the low coverage of contributory schemes? And what about countries that do not already have a social pension in place as is the case for most of sub-Saharan Africa.

The answer would in our view begin with a review of alternatives to the SP model, namely general social assistance programs. While there may be arguments for specific programs designed for the poor elderly (see discussion above), high co-residence rates, the prevalence of private intergenerational transfers and the objective of maximizing the poverty reduction impact within a fixed budget constraint all support focusing transfers on all poor households. Alternatively, the results may suggest targeting specific types of elderly households.46

Transfers to households with elderly members in high co-residence countries would seem to create distortions whereby two otherwise identical households would be treated very differently simply because the grandparent in one household is a year older than the other. Worse still, if some shock such as the loss of a breadwinner hits the non-qualifying household, the disparity will become even starker.

It could be argued that support should be available for both poor households and that social assistance and social pension should co-exist. This presumes that resources are available for both programs, an issue discussed further below. There are countries with extensive social assistance programs that may already be effectively covering the elderly among others, whether or not they have the old age as an explicit targeting criteria. Again,

46 Perhaps the most thorough analyses of these alternatives can be found in Kakwani and Subbarao (2005). The analysis covered 15 sub-Saharan African countries using household surveys.
whether there is a pay off to creating a separate SP would depend on the arguments for
different treatment of the elderly vis a vis other groups. In general however, we would not
expect that the arguments for introducing new SPs or expanding existing ones would be as
strong in countries with large social assistance programs. For example, Uruguay, which is
among the highest spending countries on social assistance scores low on the SP index.\textsuperscript{47}
Rather, such countries may focus on fine-tuning of the targeting provisions. Meanwhile, the
Dominican Republic scores very low on both indicators but has recently decided that the SP
should be expanded.

Introducing a new SP or expanding an existing one would require additional
borrowing, taxes or a cut in other spending. There may be ways to increase tax revenues
that do not imply marginal costs greater than the marginal benefits of new programs. There
are clearly ways to rationalize existing spending (e.g., eliminating untargeted subsidies for
energy or water) that would free up resources for programs targeted at the poor. The
question then is would an expansion of existing SPs or the introduction of a new one be the
best use of these funds?

A useful starting point here is the indicator from the previous section – the relative
poverty rates of the elderly. If poverty among the elderly is much higher, then categorical
targeting may be an efficient way to reduce poverty. As mentioned, however, the evidence is
mixed and the inter-household type comparisons are often sensitive to equivalence scales
and the eligibility age.\textsuperscript{48} This suggests that any figures used to support the introduction of an
SP should include sensitivity analysis around a reasonable range of assumptions.

On the other hand, in assessing the overall social budget, there are other programs
that could generate equivalent or even greater reductions in poverty. Moreover, some
programs may result in concurrent positive growth effects as households increase human
capital and productivity through better education and health, for example.

\textsuperscript{47} See Grosh (2005) for data on social assistance spending across countries.
\textsuperscript{48} For example, Kakwani and Subbarao (2005) find that subject to the same budget constraint, a transfer
to all households would reduce headcount poverty by a greater amount than a transfer to only households with
individuals over age 60 in 8 out of 15 countries. The figure is reduced to 4 countries for an eligibility age of 65.
While a holistic approach is often recommended\footnote{Holzmann and Hinz (2005), p. 96.}, actually quantifying these tradeoffs is difficult if not impossible in most countries. Normally, the assessment of social pensions will not be cast as a trade-off between say, more primary school teachers and more transfers to the elderly. In fact, research on the secondary impact of the much-studied South African scheme has tended to focus on positive indirect impacts in areas such as education and health of members of beneficiary households without directly asking the question ‘what if the same money was directly allocated to those programs?’

We propose an intermediate approach that recognizes that these tradeoffs exist but does not attempt to quantify them with any precision. The approach is based on the notion that the marginal impact of a dollar spent is higher where certain indicators suggest a need for more resources for programs known to be progressive and/or have ancillary long term benefits. These include, for example, spending on public health programs such as immunization or spending on primary education. This is not to say that all such spending will always be preferred to social pensions, but rather that certain indicators would at the very least suggest that alternatives be considered. This is particularly true for proposals for the introduction of core social pension programs that, as we have seen, can cost 1-2 percentage points of GDP even in demographically young countries. Examples of indicators that could signal important potential tradeoffs include primary school enrolment ratios, literacy rates, immunization ratios, mortality rates for children under 5 and maternal mortality ratios. Lower scores on these indicators would be indicative of the need to perform an in-depth analysis of alternative uses of funds. This is especially true when the spending is clearly an incremental one. On the other hand, we recognize that actual policies are rarely subject to this kind of analysis. Nevertheless, the current discussion of social pensions implicitly dismisses the possibility that there are better ways to spend limited resources to reduce poverty.
4.3 **Summary and conclusion**

In this section, we argued that the approach to social pension policy should take into account initial conditions including whether such a program already existed. These indicators, along with other country-specific considerations should inform decisions as to how to improve and/or expand existing SPs or introduce new ones. Among these considerations, and recognizing the inherent difficulty of quantifying tradeoffs, we suggested using indicators of needs in other areas to guide more in-depth analysis.

The following table summarizes the various factors and whether they support or detract from arguments to introduce or expand social pensions.

### Table 6: Factors to consider when formulating social pension policy

<table>
<thead>
<tr>
<th>Introduction or expansion of SPs</th>
<th>Contributory scheme coverage</th>
<th>Social Assistance</th>
<th>Poverty ratio elderly/non-elderly HH</th>
<th>Other social indicators*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supporting</td>
<td>Low</td>
<td>Limited or non-existent</td>
<td>High</td>
<td>Better</td>
</tr>
<tr>
<td>Detracting</td>
<td>High</td>
<td>Broad; high spending ratio</td>
<td>Low</td>
<td>Worse</td>
</tr>
</tbody>
</table>

Notes: * ‘better’ refers to better indicators such as higher enrolment ratios or lower child mortality rates.
References


10. Case, Anne and Angus Deaton 1998. ‘Large cash transfers to the elderly’,

11. Case, Anne and Francis Wilson ?????


13. Cox and Jimenez ?????


24. Jensen


45. Subbarao, K. “Namibia’s …” ?????


Annex

Table A1: Social pension programs in selected developing countries
To be added

Table A2: Evidence of poverty among the elderly
To be added