

## financiamiento del desarrollo

# **N**on-contributory pensions: Bolivia and Antigua in an international context

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## Abstract

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The author examines the pension systems of Bolivia and Antigua in the context of non-contributory pensions around the world, concluding with policy lessons. Universal pensions available to everyone of eligible age, regardless of income, assets or employment history, have many advantages over targeted pensions. If targeting is desired, it is best done with *ex post* recovery from other income rather than *ex ante* means tests. For reasons that are unclear, governments almost always prefer *ex ante* tests to *ex post* controls for non-contributory pensions, even though the reverse is true for tax collection. The worst type of old age pension, from the point of view of poverty relief, is a minimum pension tied to a contributory system or to government service, for this excludes the poorest and most vulnerable from benefits.

Key words: Bolivia, Antigua and Barbuda, non-contributory pensions, social security, targeting, means tests.



## Introduction

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This paper examines non-contributory old age pensions in two countries of Latin America and the Caribbean: Bolivia and Antigua and Barbuda (henceforth Antigua). The two countries are very different. Bolivia, a landlocked country inhabited by 9 million persons with a life expectancy at birth of 64 years, is the poorest country of South America. Antigua, in contrast, is home to 70 thousand residents with a life expectancy at birth of 74 years, is surrounded by the Caribbean Sea, and has attained one of the highest per capita incomes of the region (US\$10,000). Nonetheless, the two countries have one thing in common: both seek to ensure that all citizens, irrespective of income, assets or employment history, receive at least a basic pension in their old age. This system is in effect in Bolivia, and has been promised by Antigua's new government, which took office following an upset victory in the general elections of March 2004. To date, these are the only national governments in the region to have seriously considered addressing the problem of old age poverty in this way.

In order to place Bolivia and Antigua in an intellectual and international context, we look first at non-contributory pensions in the World Bank's 'multipillar' framework, an approach that, for better or worse, has had extraordinary influence on pension reform in the region. Then we briefly survey the different systems of non-contributory pensions in effect around the world before focusing on Bolivia and Antigua. For distinct reasons, in neither Bolivia nor Antigua is discussion of non-contributory pensions possible without looking also at mandated, contributory pensions. These contributory systems are described in some detail in two appendices. The paper concludes with lessons for countries seeking to alleviate poverty in old age.





## I. Non-contributory pensions in the ‘multipillar’ system of the World Bank

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The World Bank, in a now famous Report titled *Averting the Old Age Crisis* (1994) proposed a ‘multipillar’ approach to old age pensions. These pillars were three in number, each with a different function:

- Basic pension
- Mandatory contributions to an earnings-related scheme
- Voluntary saving

The first pillar is an anti-poverty pillar that guarantees a minimum income in old age, irrespective of a worker’s history of earnings. The second is a forced savings pillar that provides benefits only to contributors and, in general, provides the most benefits to those who contribute most. Pillar 3 is a voluntary savings pillar, available to anyone who cares to supplement the retirement income provided by the first two pillars. The first pillar provides a flat pension to protect the elderly from absolute poverty (consumption below a minimum subsistence level) whereas the second two pillars offer the possibility of consumption smoothing to avoid decreased consumption following retirement.

The Report (p.238) recommends separating basic pensions from earnings-related pensions “and placing them under different financing and managerial arrangements in two different mandatory pillars—one publicly managed and tax-financed, the other privately managed and

fully funded”. Pillar 1 should ideally be non-contributory and cover the entire population, for the Report (p. 243) recommends that it be financed from “a broad tax base, such as income or consumption tax instead of a payroll tax” unless coverage at first is employment-related, in which case it “should initially be financed from payroll taxes levied on covered groups”. Reference to Pillar 1 as a “mandatory pillar” is confusing if it is non-contributory and financed from general taxation. In any event, the Report did not emphasize non-contributory pensions and they received little subsequent attention. Even worse, World Bank staff came to define Pillar 1 as *any* public pension, including earnings-related pensions, muting its anti-poverty function.<sup>1</sup>

Pillar 2 pensions in Latin America have traditionally been public, pay-as-you-go and defined benefit. The World Bank has been very vocal in promoting a shift to Chilean-style private pension schemes that are both pre-funded and defined contribution.<sup>2</sup> This paper focuses on Pillar 1 rather than Pillar 2, but Willmore (2000) has argued that, with provision of basic pensions for all the elderly, there is no need for a second, mandatory pillar. This is the system in effect in New Zealand, where every resident receives a flat, subsistence pension from the Government at age 65, which he or she can supplement with voluntary savings or earnings. The political consensus in New Zealand is that “the ability to retire in a degree of personal comfort, without worry and with dignity, is the least that citizens can expect in a modern, developed economy.... [I]t is also most they can expect. They cannot expect the state to maintain in retirement the incomes people became accustomed to during their working lives” (Speech of the Deputy Prime Minister and Minister of Finance, 13 June 2003, quoted in O’Connell, 2004).

With an eye on the budget, governments of Latin America have tended to provide adequate Pillar 1 benefits, in the form of a minimum pension guarantee, only to those who contribute a sufficient number of years to Pillar 2. This excludes vast numbers of non-contributors such as domestic servants, unpaid caregivers with interrupted periods of paid employment, agricultural workers and workers in the informal sector of the economy. The expectation or hope was that reform of Pillar 2, by linking benefits tightly to contributions, would encourage greater participation. This did not happen. Coverage did not increase, and participation continues to range from less than 12 percent of the labour force in Bolivia, Nicaragua and Peru to 25 percent or less in Columbia, Costa Rica and El Salvador, 36 percent in Argentina, 45.7 percent in Mexico and 62.7 percent in Chile (Gill, Packard and Yermo, 2004, figure 1.1, p. 6). Actual *coverage* of the total population is lower than participation rates, since many contributors fail to qualify for a minimum pension and unpaid caregivers are not counted as part of the labour force.

Pillar 1 pensions must be non-contributory if they are to reach all citizens. Especially in developing countries, it is simply not realistic to expect the poor to qualify for a minimum pension through contributions. As Estelle James (1999, p. 9), lead economist for the 1994 World Bank Report explains, “Extending coverage by requiring low income informal sector workers to contribute to social security would not be in the interests of these workers ..., even if the government had the capacity to enforce the mandate.” The World Bank in an official publication came to agree, promising that “work on pension reform will focus more on the provision of retirement benefits for people through public non-contributory schemes and community support” (World Bank, 2001, p. 32). This emphasis on poverty relief is evident in a recent report by World

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<sup>1</sup> A typical post-1994 description of the three pillars is: “(a) a publicly managed, unfunded, defined benefit scheme; (b) a privately managed, fully funded, defined contribution plan; and (c) voluntary retirement savings in the form of housing, insurance, or other assets” (World Bank, 2001, pp. 31-32). The 1994 Report itself initiated the confusion by referring to Pillar 1 as “the public pillar”, in the expectation that Pillar 2 would everywhere become a private pillar with mandatory saving in individual accounts.

<sup>2</sup> “Defined benefit” schemes promise retirement income based on the number of years of contributions and average earnings or, more often, on the average of the contributor’s last few (or best) years of earnings. In contrast, “defined contribution” schemes set up individual accounts for participants; retirement benefits depend entirely on accumulated contributions and on the investment return credited to each account.

Bank staff that concludes, with reference to the reformed pension systems of Chile and other Latin American countries, that

“coverage has stagnated at low levels and has become the single most important concern of policy makers in this area. A large portion of affiliates may not qualify for the minimum pension guarantee, and together with those who are not affiliated with any system, can only expect to receive rationed social assistance benefits in old age. Hence, the real challenge for policy makers who want to cover the risk of poverty in old age will be in establishing sustainable non-contributory, minimum-benefit programs” (Holzmann et al, 2005, p. 150).

Moreover, the report concedes that mandatory contributions are not necessary in all cases: “In many low-income countries, this [pension system] may be a [non-contributory] basic (zero) pillar that can be supplemented by a voluntary third pillar” (Holzmann et al, 2005, p. 11).<sup>3</sup>

The Holzmann et al (2005) report lists as co-authors twelve World Bank staff members, including Robert Holzmann, Director of the Social Protection Department; unlike the 1994 Report, it is not an official publication of the World Bank.<sup>4</sup> The report expands the three pillars of the 1994 Report to five pillars. Pillar 1 becomes a “zero pillar” that is *explicitly* non-contributory, financed from general revenues and distributed to all elderly persons on a universal or means-tested basis. An employment-related basic pension is no longer an option. The old Pillar 2 is split into two types of earnings-related pensions; the first pillar is public and the second is private,<sup>5</sup> so private, individual accounts are allowed to complement rather than replace public, earnings-related pensions. Pillar 3 consists of voluntary contributions to occupational or personal pension plans. A heterogeneous Pillar 4 has been added for non-pension savings (including homeownership), informal support from family and community, and government services such as health care.

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<sup>3</sup> This is the New Zealand model provided the basic pension is universal and the voluntary pillar does not receive tax subsidies. See Willmore (2000), St. John and Willmore (2001) and St. John (2005).

<sup>4</sup> According to the authors (Holzmann et al, 2005, p. 2) the report “is intended to conceptualize and explain current policy thinking within the Bank rather than to announce a new policy approach”, but they do acknowledge a number of “changes to the Bank’s perspective”, including “the enhanced focus on basic income provision for all vulnerable elderly”.

<sup>5</sup> Another distinction between new pillars 1 and 2 is that the public pillar can be pay-as-you-go or pre-funded whereas the private pillar must be pre-funded.



## II. Non-contributory pensions around the world

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The simplest non-contributory pension is a universal benefit paid at a flat rate to all persons who qualify by residence or citizenship once they reach a designated age. There is no income or asset test, no requirement to have participated in the paid labour force, and no requirement to actually retire from paid employment.

Universal pensions are easiest to administer, but they are fiscally expensive. The low administration cost of universality offsets only partially the expense of providing everyone with an old age pension. Governments therefore seek to reduce costs, and, aside from reducing the generosity of the pension or increasing the age of entitlement, they can do so in three ways. First, they might require lengthy residence—typically 40 or 50 years as an adult—to qualify for a full pension, reducing the pension proportionately for non-resident years. Second they can recover (‘claw back’) a portion or the entire pension from other income. Countries with residence-based flat pensions tend also to use some sort of claw-back mechanism. Finally, governments can impose an ex ante test of income or assets in an effort to restrict non-contributory pensions to the poor, or at least exclude the affluent.

In summary, there are four types of non-contributory pensions:

- Universal pensions
- Residence-based pensions
- Recovery-conditioned pensions
- Social assistance pensions

All four types of pensions are usually—though not always—financed on a pay-as-you-go basis from general government revenue rather than earmarked taxes or revenue from a contributory pension scheme.

## Universal pensions

Universal pensions are not very common. At present, they exist only in eight countries: New Zealand, Mauritius, Namibia, Botswana, Bolivia, Nepal, Samoa and Brunei. Only one country on this list (New Zealand) is a high-income country. Bolivia is the poorest country in South America and Nepal is one of the poorest countries on the planet. The other five countries are developing economies of Africa and Asia, with modest per capita incomes. The preponderance of low-income countries in this sample suggests the importance of administrative simplicity in developing countries.

Old age pensions in New Zealand and in Mauritius began as social assistance pensions, becoming universal in the year 1940 in New Zealand and in 1958 in Mauritius (Preston, 2001, pp. 12-13; Willmore, 2003). Namibia inherited a race-based system of non-contributory pensions, which it transformed into a single, universal pension following independence in 1990. Nepal began to disburse an Old Age Allowance in July of 1995, retroactive to January 1995 (Palacios and Rajan, 2004, p. 7).<sup>6</sup> Botswana inaugurated a system of Universal Old Age Pensions in October of 1996, and Bolivia passed legislation for its Bonosol in November of the same year.

Table 1 describes the basic characteristics of six of the eight universal pension schemes. (Samoa and Brunei are excluded for lack of information.) In each country pensions are paid to all who meet age, residency and (in four countries) citizenship requirements, regardless of other income they receive or assets they own. The qualifying age is 60 years in Mauritius and Namibia, 75 years in Nepal and 65 years in the other three countries. New Zealand requires pensioners to have completed at least 10 years of residency in the country, and Mauritius requires 12 years (15 if the resident is not also a citizen of Mauritius). Bolivia requires applicants to have been citizens residing in Bolivia on 31 December 1995. The other three countries require only citizenship and current residency, in addition to the age requirement.

The proportion of the population in these countries that satisfy the age requirement for a pension ranges from a low of 1.1% in Nepal to a high of 12% in New Zealand. A surprisingly low 93% of New Zealand's elderly residents satisfy the modest residency requirements, presumably reflecting high levels of inward and outward migration. Pensions reach only 77% of the age-qualified population in Nepal,<sup>7</sup> despite the supposed universality of the programme. There are a number of reasons for low take-up of pensions in Nepal, including difficulties in establishing proof of age, delays in processing applications, difficulties in reaching remote areas of the country, and the fact that some of the relatively wealthy do not bother to apply for a pension (Palacios and Rajan, 2004, pp. 10-11). At the other extreme, Mauritius and Bolivia record apparent rates of coverage of 103% and 105% respectively. There is no reported fraud in the universal pensions of Mauritius (Willmore, 2003), so the high apparent coverage might be solely a result of underestimation of the number of elderly in the underlying demographic data. In Bolivia, however, persons younger than the qualifying age are known to obtain pensions with fraudulent documents.

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<sup>6</sup> Response to the programme was so large in Nepal that Government in 1997 decided to abandon universality, instructing village development committees to limit payments to persons below the poverty line. The committees complained that means-testing was difficult to carry out fairly and effectively, so universality was quickly restored (Palacios and Rajan, 2004, pp. 21- 22).

<sup>7</sup> Holzmann et al (2005, p. 97) report a higher figure (87%), but do not report the source. The 77% figure is an estimate of Palacios and Rajan (2004, p. 10), who adjust the 2001 census data for potential over-reporting at age 75. Using unadjusted census data, 1.3% of the population is 75 years or older and apparent coverage is 65%.

**Table 1**  
**UNIVERSAL PENSIONS AROUND THE WORLD, CIRCA 2003**  
*(measurement unit indicated in each row)*

Country	New Zealand	Mauritius	Namibia	Botswana	Bolivia	Nepal
Qualifying age	65	60	60	65	65	75
Population older than qualifying age (% of total)	12.0%	9.2%	6.0%	5.0%	4.5%	1.1%
Residency requirement	10 years from age 20, including 5 from age 50	12 years (citizens); 15 years (non-citizens)	Resident citizen	Resident citizen	Citizen 21 years of age or older, residing in Bolivia on 31 December 1995	Resident Citizen
Beneficiaries (number)	446 000	116 324	97 767	85 000	411 063	211 343
Beneficiaries (% of age-qualified population)	93%	103%	93%	96%	105%	77%
Monthly pension (local currency)	NZ\$ 1 253 (single) NZ\$ 951 (couple)	Rs 1 700 (60-89 yrs) Rs 6,400 (90-99 yrs) Rs 7,300 (100+ yrs)	N\$ 200	P 151	Bs 150	Rs 150
Monthly pension (US dollars)	\$737 \$554	\$61 \$229 \$262	\$23	\$30	\$19	\$2
Basic pension as % of per capita GDP	46% 35%	16% 60% 68%	16%	10%	26%	10%
Transfer to aged (% of GDP)	4.32% (gross) 3.56% (net)	1.66%	0.87%	0.48%	1.20%	0.08%

**Source:** S. St. John, "Retirement income policy in New Zealand", *The Economic and Labour Relations Review* 15:2 (2005), pp. 217-239; New Zealand Ministry of Social Development, *The Statistical Report* (2003); R.J. Palacios and S. I. Rajan, "Safety nets for the elderly in poor countries: the case of Nepal", World Bank, June 2004; Mauritius, Central Statistical Office, *Social Security Statistics, 2002/2003*; Botswana Daily News Online (Botswana Press Agency), various dates, 1999-2005 ([www.gov.bw](http://www.gov.bw)); E. Schleberger, "Namibia's Universal Pension Scheme: Trends and Challenges", ESS Paper No. 6, ILO, 2002.

**Note:** Estimates for Bolivia are those of the author, as reported in table 5 below. Figures for Namibia are for the year 2001.

The number of beneficiaries in Namibia and Botswana look reasonable. Since this was not true in the past, it undoubtedly reflects improvements in administration over time. Namibia's post-independence pension programme suffered at first from low coverage *and* from fraudulent claims. It was not uncommon for children and grandchildren to collect pensions of parents and grandparents up to ten years after the death of a pensioner (Subbarao, 1998, p. 15). Following outsourcing of cash payments to private firms in 1996, the incidence of fraud decreased, and coverage has increased to what one researcher (Schleberger (2002, p. 7) estimates as "above 95 per cent", which he describes as "excellent". Old age pensioners in Botswana initially numbered 84,000, an apparent coverage of 117%. These fell to 71,000 by 1999 due to better controls on

certification of age. Some of the early excess coverage might have resulted from ignorance rather than intentional fraud, as many citizens of Botswana do not know their date of birth. Age assessment committees have been formed to help local governments determine the approximate age of those elderly who are uncertain of their exact year of birth.

Universal pensions are an administrative challenge for developing countries, but it is important to keep in mind that *any* pension scheme requires, at a minimum, evidence of age and proof that a beneficiary is still alive. Non-universal schemes require additional information, such as a record of earnings and contributions, or knowledge of current assets and income; this increases costs of administration and increases the opportunities for engaging in corrupt behaviour. Administrative costs are well below 5% of transfers in five of the six countries with universal pensions (see, for example, Fulz and Pieris, 1999, p. 26). The exception is Namibia, where administrative costs as a proportion of pension payments increased from an already high 18%<sup>8</sup> to 27% when cash payments were outsourced in 1996. Costs are high in Namibia for two reasons. First, exposure to armed robbery and fraudulent claimants plagues the security firm, which has resolved both problems—for a fee equal to 9% of the cash transfers—by operating a fleet of mobile armoured ATMs with armed guards and by installing a sophisticated system of pensioner identification with fingerprint checks and electronic ID cards. Second, administrative costs are bloated because there was no downsizing of the public pension bureaucracy following transfer of responsibility for payments to the private sector. (See Schleberger, 2002, pp. 11-14).

Table 1 reports also the amount of the pension in each country, on a monthly basis, in local currency and in US dollars. Monthly figures are displayed only for ease of comparison. Actual payments are not necessarily monthly: in Nepal, for example, pensions are paid every four months and in Bolivia only once a year. Relative to per capita GDP, universal pensions are most generous in New Zealand (46% of per capita GDP for a single pensioner, 70% for an elderly couple), followed by Bolivia (26% of GDP). The basic pensions, at 16% of per capita GDP, are less generous in Mauritius and Namibia, but are adequate to ensure that few experience extreme poverty or deprivation in old age. Mauritius provides exceptionally generous pensions (60% and 68% of per capita GDP) to residents older than 90 or 100 years of age. The pensions in Botswana and Nepal (10% of per capita GDP) are clearly inadequate, but can be supplemented by personal savings (often in the form of housing) or earnings. The modest size of the pension in Nepal may explain why one survey of pensioners in that country found that one in seven continued to work, even though all were 75 years of age or older (Palacios and Rajan, 2004, p. 18).<sup>9</sup>

The total transfer of income to the aged via the universal pension ranges from a tiny 0.08% of GDP in Nepal to half a percent in Botswana, approximately one percent in Namibia and Bolivia, 1.66% in Mauritius and 4.32% in New Zealand. These figures refer *only* to the universal age pension. In each country pensions are provided on a means-tested basis to those who are not yet old enough to qualify for an age pension. These pensions are distributed to the disabled, widows, orphans and others and can dwarf the programme of universal age pensions, in terms of beneficiaries if not benefits. In Nepal, for example, the number of women aged 60 to 74 who receive “Helpless Widows Assistance” exceeds by far the number of old age pensioners; the widow’s pension is much smaller than the old age pension, however, so its budgetary cost is considerably less (Palacios and Rajan, 2004, p. 9). Researchers often fail to separate old age pensions from other types of pensions. Piggott and Whitehouse (2001, p. 8), for example, in a study commissioned by the World Bank, analyse what they call “the basic retirement pension (BRP)”

<sup>8</sup> “Administrative costs and salaries absorbed almost 15 per cent of the budget allocated to social pensions when the system was outsourced in 1996” (Schleberger, 2002, p. 13). Note that 15% of the total budget (administration plus transfer payments) amounts to approximately 18% of transfer payments.

<sup>9</sup> The same survey (Palacios and Rajan, 2004, p. 18) found that 96% of the pensioners owned their dwelling and 43% reported their health as ‘good’ as against 11% who described their health as ‘poor’.



offered “to every person aged 60 or over”, and find that outlays in 1998-99 amounted to three per cent of the country’s GDP—nearly double what we report in table 1 for 2003. A footnote to a table (p. 12) explains the discrepancy: the BRP “includes basic retirement pension plus BWP [basic widow’s pension], BIP [basic invalid’s pension], BOP [basic orphan’s pension] and inmates’ allowance”, all of which are transfers to persons younger than 60 years of age.

Payment of universal pensions, or a basic income, to the elderly and non-elderly alike, including children, is certainly possible. This is known as a Basic Income Grant or Negative Income Tax, and is supported by numerous social scientists including, most famously, the Nobel laureate Milton Friedman (1968). A group known as Basic Income Earth Network, or BIEN ([www.basicincome.org](http://www.basicincome.org), formerly Basic Income Europe Network) was formed in 1986 and actively promotes this policy, but no government has yet put the idea into practice. A universal old age pension amounts to a basic income guarantee in disguise, albeit one that is limited to the elderly, although it is rarely thought of in this way.

Five of the six countries,<sup>10</sup> finance their universal pension from general government revenue. Ignoring administrative expenses, the tax burden on the non-aged population is less than the transfer figures reported in the last row of table 1 because pensioners are also taxpayers: they contribute to government revenue whenever they pay taxes on income, consumption and property. A portion of each pension thus returns to Government through the tax system. An easy way to lower the *net* cost of universal pensions is to make them taxable as ordinary income, but only New Zealand currently does this. Income tax alone in New Zealand reduces the net fiscal cost of universal pensions from 4.32% of GDP to 3.56%.<sup>11</sup> Provided the tax system is progressive, taxing benefits introduces progressivity into the system in addition to reducing the net fiscal costs. In New Zealand, the lowest income bracket is taxed at 15% and the highest at 39%, which means that the net pension retained by the wealthiest is only 72% (= 61/85) as large as that retained by low-income pensioners.

There are other ways to reduce costs while preserving the universality of a pension system. Willmore (2001) shows that the revenue requirement (as a proportion of GDP) of universal pensions is equal to the product of two variables: the proportion of the population eligible for pensions times the ratio of the flat pension to per capita GDP. Neither variable is carved in stone. The first can be reduced by increasing the age of eligibility; the second by decreasing the generosity of the pension. New Zealand some years ago adjusted both parameters in order to reduce the cost of its universal pensions. In 1989 the Government reduced the pension floor for a couple from 80% to 65% of the average wage and indexed pensions by prices alone until the new, lower floor was reached.<sup>12</sup> At the same time, over ten years New Zealand gradually increased the age of entitlement from 60 to 65, completing the process in 2001. With these adjustments, the share of public pensions in GDP fell from nearly 8 per cent to less than 5 per cent within a decade. (See Preston, 2001, pp. 16-18).

New Zealand faces severe population ageing in the near future, so its gross pension costs are expected to exceed 8% of GDP in less than 30 years, peaking at 8.9% in 2050.<sup>13</sup> This time, rather than change the parameters of the system, Government chose to set up an investment fund as a tax-smoothing device: a portion of the fiscal surplus each year is invested in stocks and bonds so that taxes required for funding the net cost of pensions in the future can be kept lower than 5% of GDP

<sup>10</sup> Bolivia’s Bonosol is distinct. As explained below in some detail, it is financed from dividends and sales of the retained shares of five privatised public enterprises.

<sup>11</sup> The cost net of all taxes—including New Zealand’s 12.5% goods and services tax—is lower still, but this is difficult to calculate with any confidence.

<sup>12</sup> The “Single Living Alone” rate was simultaneously increased from 60% to 65% of the combined pensions of an elderly couple.

<sup>13</sup> Pension costs net of income tax are projected to peak at around 7.3% of GDP in 2050 (Susan St. John, private communication).

(St John, 2005). With this tax-smoothing, there will be no pressure to reduce pensions or increase the age of entitlement, much less abandon of the principle of universality.

## Residence-based pensions

Seven countries have residence-based pensions in place: the five Nordic countries (Denmark, Finland, Iceland, Norway, Sweden), Canada and the Netherlands. (See table 2.) The age of eligibility is 67 in Norway and 65 in the other six countries. Six countries require forty years of residence as an adult for a full pension; only the Netherlands has a more stringent requirement (50 years). The full pension as a percentage of per capita income varies from 9% in Iceland to 39% in the Netherlands. Five countries provide supplements for low-income pensioners that result in full pensions as high as 30% of per capita income in Norway and Canada, 35% in Iceland, 41% in Denmark and 54% in the Netherlands. In Finland, Sweden and the Netherlands, the size of the pension is reduced when the beneficiary shares accommodation with his or her spouse.

Residence-based pensions are quasi-contributory pensions, each year of adult residence counting as contribution toward an old age pension. A person with fewer than the required years of residency for a full pension might still qualify for a partial pension. Twenty years of residency, for example, earns 40% of a basic pension in the Netherlands and 50% of a basic pension in the other six countries. Three is the minimum number of years to qualify for a partial pension in five of the countries, but Canada requires a minimum ten years of residence while the Netherlands provides partial pensions with as little as a single year of residency. Denmark requires a minimum of ten years residence instead of three if the beneficiary is not a Danish citizen. There are no examples of residence-based pensions in low-income countries, possibly because such a system is likely to increase administrative costs and produce little or no fiscal saving in developing countries.

**Table 2**  
**RESIDENCE-BASED AND RECOVERY-CONDITIONED PENSIONS, CIRCA 2003**

Country	Denmark	Finland	Iceland	Norway	Sweden
Qualifying age	65	65	65	67	65
Residency test for full pension	40 years, age 15-65	40 years, age 15-65	40 years, age 16-67	40 years, age 16-66	40 years from age 25
Residency test for partial pension	3 years (10 yrs for non-citizens)	3 years	3 years	3 years	3 years
Monthly pension (local currency)	DKK 4,648	€496 (single max) €424 (couple min)	IKr 21 249	Kr 4 738	Kr 6 976 (single) Kr 6 223 (couple)
Monthly pension (US dollars)	\$705	\$557 \$476	\$277	\$669	\$862 \$769
Basic pension as % of per capita GDP	21%	22% 18%	9%	17%	30% 27%
Recovery from other income	31% of professional earnings in excess of DKK 19,750 a month (4.25x basic pension)	50% of all other pension income	30% of income in excess of IKr 143 000 a month (6.7x basic pension)	40% of earnings in excess of Kr 9 476 a month (2x basic pension); no claw-back from age 70	100% of all other pension income
Means-tested supplement (% of basic pension)	97% (single) 47% (others)	None	293%	79.33%	None

Table 2 (continued)

Country	Canada	Netherlands	United Kingdom
Qualifying age	65	65	80
Residency test for full pension	40 years from age 18	50 years, age 15-64	10 years in any 20 year period after age 60
Residency test for partial pension	10 years (20 years for payment abroad)	1 year	No partial pension
Monthly pension (local currency)	C\$ 461.55	€ 921.28 (single) € 631.76 (couple)	£ 200.85
Monthly pension (US dollars)	\$330	\$1 035 \$ 710	\$327
Basic pension as % of per capita GDP	14%	39% 27%	13%
Recovery from other income	15% of income over C\$ 4823 a month (10x basic pension)	None	100% of income from another basic state pension
Means-tested supplement (% of basic pension)	119% (single) 77% (couple)	100% of couple rate if partner is under age 65	None

**Source:** United Kingdom, Department for Work and Pensions, "Review of residency-based pension schemes", March 2005, [www.dwp.gov.uk/pub\\_scheme/2005/mar/rev\\_res\\_based\\_pen\\_schemes.pdf](http://www.dwp.gov.uk/pub_scheme/2005/mar/rev_res_based_pen_schemes.pdf); Social Security Administration (SSA) and the International Social Security Association (ISSA), Social Security Programs throughout the World: Europe, 2004 (released September 2004) and The Americas, 2003 (released March 2004), <http://www.ssa.gov>.

Six of the seven countries with residence-based pensions 'claw back' (recover) benefits from the relatively affluent and tax the net benefits as regular income. The exception is the Netherlands, which allows pensioners to retain all benefits, regardless of other income, and, in addition, provides all pensioners with a tax break. The tax break is a consequence of the fact that the Netherlands, unlike the other six countries, finances its residence-based pension primarily with an earmarked tax that is not paid by taxpayers 65 years of age or older.

The tax earmarked by Dutch authorities for the basic pension is payable on earnings up to a maximum amount, set at €28,851 in 2003. (See table 3.) This 17.9% payment is described as a 'pension premium', but it is very much a tax, since pension entitlements are determined solely by residence, not by how much—or indeed, whether—a person contributes to the pension scheme. There are income taxes earmarked for health care and other social security benefits as well, but pensioners pay these at the same rate as non-pensioners. In effect, Dutch pensioners enjoy a tax break that amounted in 2003 to €5,161 for those with taxable incomes higher than €28,851, and proportionately less for those with lower taxable incomes. This sum is nearly half the value of a full basic pension, and is available to everyone over the age of 65 with no residency requirement. Contributions to occupational pensions are deductible from taxable income whereas pension payments are taxable, so there is a large incentive for workers to delay receipt of their wage income in this way. The availability of tax savings may well explain why more than 90% of Dutch workers contribute to occupational pensions even though they are not mandated by law.

On equity grounds, there is no justification for reduced tax rates for pensioners, and much to justify equal treatment of taxpayers of all ages. In the Netherlands, if the basic pension were increased by 26.7% and the tax break eliminated, those with only a basic pension would be no worse off<sup>14</sup> and the net fiscal cost of pensions would be greatly reduced. The fiction that an earmarked tax is a contribution discourages reform and is an example of how an accounting convention can have policy effects.

<sup>14</sup> Using 2003 figures, the basic pension at the single rate could increase from £921 to £1,167 and, for a pensioner with no other taxable income, the pension net of taxes would remain the same: €783.

Table 3

**TAXES ON INCOME OF THE ELDERLY AND THE NON-ELDERLY IN THE NETHERLANDS, 2003**  
(Percentage)

	Brackets	Basic Pension	Health Care	Survivors' Benefits	Other Tax	TOTAL under 65	TOTAL 65 plus
1	€ 0 to € 15 884	17.9	12.05	1.25	1.7	32.9	15
2	€ 15 884 to € 28 851	17.9	12.05	1.25	6.75	37.95	20.05
3	€ 28 851 to € 49 465	0	0	0	42	42	42
4	above € 49 465	0	0	0	52	52	52

**Source:** Economist Intelligence Unit and Deloitte Touche Tohmatsu, *Country HR Guide for The Netherlands* (Rotterdam, March 2004).

**Note:** Taxable income includes income from imputed rent on owner-occupied housing, life annuities and pensions in addition to wage income. Mortgage interest is deductible, so income from imputed rent can be negative. Earnings from business, non-pension savings and investments are taxed at a flat rate.

## Recovery-conditioned pensions

There are as many examples of recovery-based pension systems as there are of residence-based systems (7 countries), but the overlap between the two systems is large, with six countries belonging to both sets. The Netherlands is the only country offering a residence-based pension without recovery from other income, and the United Kingdom is the only one offering a pension that is universal in all respects other than its recovery provision. (See table 2 once again).

The UK's non-contributory pension is neither well-known nor widely-utilised, but it does exist with the name "Category D State Pension". Beneficiaries must be 80 years of age or older and have resided in the United Kingdom for at least 10 years after age 60. Not all Category D pensioners receive the maximum benefit of £46.35 a week (equivalent to £200.85 a month) since the pension is reduced, pound-for-pound, for any income from contributory basic state pensions. Curiously, there is no recovery from other types of income, not even income from earnings-related pensions. In effect, Government in the UK guarantees a minimum basic pension to each person over the age of 80 who satisfies the residency requirement. Affluent elderly are not excluded provided they receive little or nothing from another basic state pension. As of March 2004, 23,000 persons—fewer than 1% of the relevant population—were receiving Category D pensions (United Kingdom, 2005). There is no information regarding the net fiscal cost of these payments.<sup>15</sup>

Sweden, like the UK, claws back benefits from other pension income at the rate of 100%, so its scheme also functions as a minimum pension guarantee conditional on years of residency. Finland also claws back benefits only from other pension income, but at the lower rate of 50%, so pensioners in Finland can receive other pension income equal to double their residence-based entitlement before losing all rights to a non-contributory pension. Denmark and Norway take the opposite approach, clawing back benefits from earnings of those who continue to work past the normal retirement age, but there is a large exemption in each case, so only those with high salaries or professional income are affected. In Norway, claw-back ceases at the age of 70, but the pension still is not universal from that age, for the quasi-contributory residency requirement remains. Iceland and Canada claw back benefits from all income, including pensions, but the recovery

<sup>15</sup> The full rate of the basic state pension given to contributors at age 60 (women) or 65 (men) was £77.45 a week in 2003. Because they paid contributions for less than ¾ of the years required for a full pension, 2.9% of the male pension recipients and 42.7% of the females receive less than 75% of this amount. For those over 80 years of age, 1.2% of the males and 17.5% of the females receive less than 75% of the full basic pension (UK House of Commons Hansard, Written Answers for 17 March 2005). These figures exclude an unknown number of elderly who contributed less than ¼ of the required years so receive no contributory basic pension at all. The Category D pension is approximately 60% of the full basic pension earned by contributions, so there seems to be low take-up of the pension by those who could benefit.

begins at a high level of income, and the rate is only 30% in Iceland and an even more modest 15% in Canada. It is important to keep in mind, though, that normal income taxes are also payable in all countries on net benefits of residence-based pensions. The Netherlands, as discussed above, not only has no claw-back of benefits, it also provides its pensioners with a large tax break.

It might appear that claw-back of benefits works best with residency-based pensions, but there is no logical connection between the two methods of reducing fiscal costs. The United Kingdom is the only example at the moment of a country with claw-back of benefits from what would otherwise be a universal pension, but there are other examples from the past. In 1985 New Zealand collected a taxation surcharge on other income that clawed back the entire benefit from 10% of the pensioners and a portion of the benefit from an additional 13% (Preston, 2001, p. 16). The surcharge was very unpopular, so universality was restored in 1998. Mauritius in 1965 introduced an “income tax test” that in effect was a Draconian claw-back scheme: those with taxable income lost their entitlement to a pension.<sup>16</sup> Few pensioners in Mauritius received sufficient income to require filing a tax return, so this measure affected fewer than 5% of the relevant age group, produced little fiscal saving, and was eventually withdrawn.

## Social assistance pensions

Social assistance pensions are by far the most common type of non-contributory old age pension. They exist almost everywhere in one form or another. Surprisingly, they even exist in the form of means-tested supplements in four of the seven countries with recovery-conditioned pensions. Recall that in Denmark, Iceland, Norway and Canada, a person who meets the age requirements and has resided in the country for at least 40 years as an adult is entitled to a non-contributory pension varying from 9% of per capita GDP in Iceland to 21% of per capita GDP in Denmark. (See table 4.) The benefit is the same regardless of the marital status of the pensioner, and in each country it is subject to recovery from high-income beneficiaries. But—and this is the surprising part—in each country a pensioner with a full basic pension and no other income receives a supplement boosting the value of the pension to 30% of per capita GDP in Norway and Canada, 35% in Iceland and 41% in Denmark. In Canada and Denmark these amounts are reduced for pensioners sharing accommodation with a spouse or partner.

**Table 4**  
**BASIC PENSIONS IN COUNTRIES WITH RECOVERY-CONDITIONED PENSIONS AND MEANS-TESTED SUPPLEMENTS, CIRCA 2003**  
(Percentage of per capita GDP)

	Basic Pension		Basic Pension + Supplement	
	Single	Couple	Single	Couple
Denmark	21	21	41	31
Iceland	9	9	35	35
Norway	17	17	30	30
Canada	14	14	30	25

**Source:** Author's calculations from data in table 2.

In each of the four countries displayed in table 4, the basic pension is far below the socially accepted minimum income for a pensioner, otherwise there would be no need for supplements. The

<sup>16</sup> Spending on pensions in Mauritius actually increased because at the same time the age of eligibility for men (65 years) was lowered to that for women (60 years). There was a single old age pension at the time, equivalent to 18% of per capita GDP. (For details, see Willmore, 2003, pp. 4-5 and 11-12.)

basic pension alone serves no anti-poverty purpose. Its value could be added to that of the supplement to yield a single social assistance pension. It is likely that we observe the co-existence of the two types of pension because the four countries are in transition from quasi-contributory, residence-based pensions to non-contributory, means-tested pensions. If the basic pension is indexed, formally or informally, to prices, then as real wages and per capita income rise so will the socially acceptable subsistence pension, and the basic pension will become less and less important. This is only a hypothesis, but it is likely that historical data would show supplements increasing in importance relative to basic pensions.

Social assistance pensions target the poor, so are preferable to the minimum pension guarantees of contributory systems, which exclude the poorest and most vulnerable members of society. Nonetheless, as a tool to reduce fiscal costs they have no advantage over recovery-conditioned pensions, and they have a number of disadvantages. First, ex ante identification and screening of applicants increases administration costs compared to a system which encourages self-selection and ex post repayment. Second, bureaucrats are given discretion in processing applications, providing opportunity for corrupt behaviour. Third, even with efficient and honest officials, it is difficult to determine how much, or whether, a partial pension should be allowed, which can result in perverse incentives, discouraging saving for retirement as well as continued work in old age.<sup>17</sup> Fourth, assistance pensions when tightly targeted come to be regarded as charity, which reduces their political appeal and discourages applications from the eligible poor.

Why, then, do governments overwhelmingly prefer social assistance pensions to recovery-conditioned pensions? Potential beneficiaries do communicate information to Government in “a system that rewards cheating and penalizes honesty” (Sen, 1995, p. 12), but this is true regardless of the pension system, and it is true for tax collection systems as well. Government can punish failure of a pensioner to declare income in the same way it punishes (or should punish) failure to pay taxes. Imagine the costs and potential for corruption if determination of taxes to be paid were handled in the same way as determination of eligibility for an assistance pension. Each taxpayer would be visited regularly by a tax official, who would determine the amount of tax payable. Instead, governments everywhere rely on taxpayer honesty in filing returns, while punishing fraud uncovered in routine audits. Why not apply the same principles to non-contributory pensions?

Governments apparently believe they can target the poor more accurately with ex ante controls than they can with ex post punishment. Little is known about how well targeting works at present, much less how effective it might be with recovery-conditioned pensions, but a recent study of Costa Rica suggests that ex ante targeting may not be terribly effective. Costa Rica provides a social assistance pension equivalent to 9% of per capita GDP to approximately 20% of its population over the age of 65. The programme began in 1974 and over the years authorities have made a great effort to reach the poorest and most marginalized in Costa Rican society. It is surprising, then, that Durán (2002, table 16) reports that 40% of these assistance pensions go to persons classified as “non-poor” while 32% of the elderly living in extreme poverty are forced to make do without a pension. A better way to reach the poor would be to make this modest pension available to all residents who qualify by age, subject to recovery from other income. Education and zero tolerance for fraud should suffice to keep transfers out of the hands of the non-poor. The total amount transferred would increase somewhat, but administrative costs would surely fall, and the assistance is more likely to reach those who most need it.

More generally, why target at all? Why not replace social assistance pensions with a system of universal pensions? The reason typically given is that, with a given budget, targeting allows

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<sup>17</sup> There is equally strong disincentive for saving and work in recovery-conditioned pensions if the benefit is clawed back at the rate of 100% from earnings or other income. The point is that it is easier to reduce the benefit at a modest rate with ex post recovery than it is with ex ante targeting.

governments to provide a larger pension to those who need it (Holzmann et al, 2005, pp. 95-97). One should observe, then, more generous pensions in those countries with the tightest targeting. There are limited data to test this, but what information is available (Willmore, 2001) suggests the opposite: countries with tightly targeted social assistance pensions tend also to provide low benefits relative to living standards (per capita GDP).<sup>18</sup>

India and the United States have tightly targeted social assistance pensions for those aged 65 years and older. India's National Old Age Pension Scheme provides benefits to 4% of this age group. Supplement Security Income (SSI) in the United States benefits 6% of the same age group in that country. India's non-contributory pension is equivalent to 5% of its per capita GDP. The maximum SSI pension is the equivalent of 17% of per capita GDP (13% at the couple rate) and the average SSI pension is 9% of per capita GDP.

South Africa and Australia, in contrast, exclude only the relatively affluent, providing basic pensions to 88% and 66% of their respective age-qualified populations (65 years for men and 60 for women). Not only does this coverage exceed by far that of India and the United States, the pensions are also more generous: 32% of per capita GDP for South Africa and 37% (28% at the couple rate) for Australia. Moreover, in both South Africa and Australia, most pensioners receive benefits at the full rate.

Four data points will not convince the sceptic that tight targeting is associated with reduced benefits for the poor, but a similar pattern has been observed for government spending on medical care and other social services (Korpi and Palme, 1998; Gelbach and Pritchett, 2002). The overall size of a budget is variable and politically determined, and reducing the number of beneficiaries reduces overall support for a programme. In the words of Korpi and Palme, "The greater the degree of low-income targeting, the smaller the budget tends to be".

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<sup>18</sup> The information on India, the United States, South Africa and Australia that follows is from Willmore (2001).





### III. The Bonosol: a universal pension for bolivians

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Bolivia, one of the poorest countries in the Western Hemisphere, in 1997 became the first country in the region to provide a pension to all its elderly citizens, regardless of their income or participation in the formal or informal paid labour force. No *country* in Latin America and the Caribbean has yet replicated this extraordinary achievement, although one large city has.<sup>19</sup>

Article 12 of Bolivia's pension reform law (*Ley de Pensiones*, 29 November 1996) promises each resident citizen aged 65 years or older an annual pension known as *Bono Solidario*, or *Bonosol*. The amount was set for the first five years at 1,300 bolivianos, equivalent to 248 US dollars, and indexed to the value of the US dollar. This modest sum amounts to approximately 25% of Bolivia's low per capita income, and 85% of the average income of those living in extreme poverty (Von Gersdorff, 1997, p. 13). Only citizens who resided in Bolivia and were at least 21 years of age on 31 December 1995 are eligible to receive the Bonosol. Unless the law is modified, the last cohort of elderly Bolivians will begin receiving their Bonosol in the year 2039. As these elderly pensioners die off, the programme will gradually come to an end. Article 13 of the same law provides for a funeral grant equal to 1,100 bolivianos, indexed also to the US

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<sup>19</sup> Since February of 2001 the municipal government of Mexico City has provided all residents 70 years of age and older with free medical care, free public transportation, and a modest pension equal to one-half the minimum wage (Laurell, 2003). The only condition of eligibility, other than age, is that an applicant must reside in the city for at least three years prior to commencement of the benefit..

dollar, payable to the person who pays the funeral expenses of any resident who was receiving, or would have been eligible to receive, the Bonosol from age 65. The rest of the pension reform law refers exclusively to contributory pensions.

A universal, non-contributory pension is included in the same package with reform of the contributory pension system (see appendix A) because one type of pension supports the other. The Bonosol was expected to free contributory pensions from “guarantees of minimum pension or minimum return guarantees on the portfolio, thus leaving Bolivia’s Government with very few contingent liabilities compared to other countries that have reformed their pensions systems and of course compared with countries that have not yet reformed them” (Von Gersdorff, 1997, p. 13).

The Bonosol was immediately popular in Bolivia. Indeed, some argue that it was too popular. During 1997, 364,000 beneficiaries received Bonosol payments totalling 90 million US dollars, or 1.1 percent of GDP (see table 5). Including costs of private administration and costs of funeral grants, total expenditure for the first year of the Bonosol was perhaps 100 million dollars. The incidence of fraud—persons under the age of 65 claiming the Bonosol—was thought to be high because the best estimates of the over-65 population at the time was 303,000, implying that there were 20 percent more claimants than elderly persons in the population. The Population Division of UNDESA has since revised estimates of Bolivia’s elderly population in the year 1997 upwards, to 324,000 aged 65 or older. This suggests that the initial number of recipients of the Bonosol exceeded the target population by ‘only’ 12 percent. This is still indicative of fraud, but possibly at a lower level. Any estimate of the degree of fraud is speculation, for no-one has studied access to or ‘takeup’ of the Bonosol by the aged. It is quite possible that large numbers fail to claim pensions that are rightfully theirs while younger persons fraudulently receive them, one type of error cancelling out the other in the aggregate statistics.

The Bonosol is financed with assets from a unique privatisation programme known as “capitalisation”. Under capitalisation, private investors acquired 50 percent of the shares and management control of five large public enterprises in exchange for a commitment to undertake capital expenditure in the acquired enterprise. The shares and control of each public enterprise were transferred to the investor who offered the most attractive package. A total of 1,653 million US dollars was invested in this way, so the assumption is that the “capitalised” enterprises must be worth twice this. Private investors paid US\$1,653 million for half the shares so, by this reasoning, the other half must be worth this much also, and these are the assets that finance payments of the Bonosol.

Financing the Bonosol in this way was attractive for three reasons. First, by making the programme independent of the government’s treasury, it reduced the political risk that funding would be cut off. Second, it made possible the economically necessary but politically unpopular transfer of large enterprises from public to private hands. Even the IMF (2005a, p. 41), which advocated using the proceeds of privatisation to reduce the budget deficit rather than finance the Bonosol, admits that “without this concession, the privatizations would probably have been unviable politically.” Third, the new pension fund administrators (AFPs) could earn fees for managing the collective capitalisation account, thus enabling them to charge lower fees for management of individual accounts of the contributory system.

**Table 5**  
**BOLIVIA: BONOSOL PAYMENTS, 1997-2004**

*(Measurement unit indicated in each column)*

	Target Population (thousands)	Beneficiaries (number)	Individual Payment		Total Transfer	
			(US\$)	(% of per capita GDP)	(million US\$)	(% of GDP)
1997	324	364 261	248	24.4	90.3	1.1
1998	335	318 544	60	5.6	19.1	0.2
1999	346	340 420	60	5.9	20.4	0.2
2000	357	334 411	60	5.9	20.1	0.2
2001	369	351 206	60	6.3	21.1	0.3
2002	381	-	0		-	-
2003	392	411 063	229	25.6	94.3	1.2
2004	404	410 024	227	24.0	92.9	1.1

**Source:** Estimates of the author, based on data from UN World Population Prospects: The 2002 Revision; Escobar and Nina (2004, table 16, p. 21); news reports posted at [www.bolivia.com](http://www.bolivia.com) and [www.hoybolivia.com](http://www.hoybolivia.com).

**Note:** Figures exclude payments for funeral expenses. The 60 dollar payments, known as *Bolivida*, were paid in arrears beginning in 2001. The Bonosol was reinstated in 2003, with payments set at 1,800 bolivianos.

Nonetheless, the scheme has a severe drawback: the capitalisation shares that are supposed to finance the Bonosol are not liquid and have no market-determined value. The Government *assumes* that the shares backing the Bonosol are worth as much as private investors paid for an equal number of shares: US\$1,653 million. This is not necessarily true. In fact, it is very likely that they are worth less, possibly much less. The private investors, after all, have purchased half the shares *and* managerial control of each enterprise. The remaining shares are entitlement only to one-half of all future *dividends* of the enterprise. This is not necessarily the same as one-half the future *profits* of the enterprise, since it is possible for those in control, using transfer prices, charges for royalties and technical assistance, and other creative accounting, to transfer profits abroad. It is also possible that, in retrospect, the new owners simply bid too much for one-half the shares. In any case, dividends accruing to the capitalisation fund have amounted to only US\$40 to US\$48 million a year, far too little to cover the US\$100 million a year requirements of the Bonosol. In 1997, the first year of the Bonosol, there was a financing gap of US\$45 million that the private administrators of the trust fund (AFPs, Administradores de Fondos de Pensiones) bridged by borrowing from commercial banks in US dollars at an annual interest rate of 11%. Early in 1998, the AFPs suspended payment of the Bonosol due to lack of liquidity.

A new government took office in late 1997 and introduced legislation converting the Bonosol into a much smaller entitlement of US\$60 called “*Bolivida*”. This was paid to the elderly for years from 1998 in arrears beginning in early 2001. For reasons that are not clear, the number of beneficiaries fell to levels well below the numbers in the target population. The intent was to make the programme financially viable, using only the cash dividends generated by the shares held in the trust fund. As transfers amounted to only about US\$20 million a year, this goal was easily achieved. (See table 5 once again.) President Gonzalo Sanchez de Losada, responsible for the 1996 pension reform law, returned to power in August 2002 and reinstated the Bonosol under the old rules, with some minor changes. The value of the Bonosol was set at 1,800 bolivianos (equivalent to US\$229) for five years, this time without indexing. At the beginning of 2008, and every five years thereafter, its value is to be determined by an actuarial study of the value of the trust fund and the life expectancy of the beneficiaries. The funeral grant is set at 50% of the value of the Bonosol (initially 900 bolivianos).

The Sanchez de Losada government made no attempt to pay the Bonosol in arrears, not even for 2002, a year in which not even the Bolivida was paid. For this reason, there was ample cash in the trust fund to cover Bonosol payments for the year 2003. Beginning in 2004, however, a cash flow problem emerged. The solution adopted was to order the AFPs to purchase, on behalf of the owners of individual accounts, shares from the trust fund at their capitalized value (initially US\$1,653 million) plus retained dividends. If the shares of the capitalized enterprises are overvalued (as argued above), this amounts to a cross-subsidy from individual accounts to the collective Bonosol account. More seriously, unless the value of the Bonosol is reduced drastically in the future, sales of shares of the capitalized enterprises will not be sufficient to finance the programme. The current government is well aware of this problem, and has indicated that it will be necessary to finance the Bonosol partially with general government revenue beginning in 2006 if the value of the Bonosol is to be kept at 1,800 bolivianos.

Approximately 4.5% of Bolivia's population today is 65 years of age or older, so the financial cost of providing each of them with a Bonosol of 1,800 bolivianos (24% of per capita GDP) is 0.24 times 0.045 or approximately 1.1% of GDP. The proportion of the population older than 65 years is expected to increase in the future, to 6.5% in 2025 and to 12% in 2050 according to the medium variant of the UN population projection. If the Bonosol is kept at 24% of per capita GDP, i.e. if its nominal value increases with increases in nominal per capita GDP, the cost of Bonosol payments will represent 1.6% of GDP in 2025 and to 2.9% in the year 2050. One way to reduce these costs is to deny the Bonosol to those who have other pension income, but so few elderly Bolivians receive other pensions that this would produce little in the way of fiscal savings. "Pension-testing" the Bonosol would also increase opportunities for fraud and corrupt behaviour, and would discourage the poor from participating in the contributory pension scheme. Another possibility is to recover (claw back) the pension from all income of the more affluent elderly. This amounts to ex-post targeting and, again, would produce little fiscal saving in a country as poor as Bolivia. If costs must be reduced, it is preferable to increase the age of entitlement. If this were set at 70 years rather than 65, the cost of the same Bonosol in 2050 would be 2.0% rather than 2.9% of GDP (see table 6). Another alternative is to provide a reduced Bonosol, say one-half the value, for those under the age of 70.

**Table 6**  
**BOLIVIA: PROJECTED BONOSOL TRANSFERS**  
(Percentage of GDP)

	Population 65+	Population 70+
2004	1.1	0.7
2025	1.6	1.0
2050	2.9	2.0

**Source:** Author's calculations, using the medium variant of the UN population projection and assuming a Bonosol equal to 24% of per capita GDP.

**Note:** Excludes cost of funeral grant and administration expenses.

The cost of the Bonosol is not low, but benefits go to the entire population of elderly. The annual fiscal cost of reform of the contributory scheme is four times greater, and benefits go to the few, none of whom are poor. Actual costs of reform of the contributory system are more than twice those projected at the beginning of the reform, largely because of fraud, but also because of increased generosity in transferring income from taxpayers in general to the small number of salaried employees (fewer than 12% of the labour force) who participate in the contributory scheme. (See appendix A).

The Bonosol is a godsend for the poor of Bolivia. It is well-known that intra-family safety nets can fail, especially when entire families live in poverty (see box 1). Martinez (2004), analysing household survey data, estimates that rural households increase their consumption of food on average by nearly 165% of the value of the Bonosol grant. This multiplier effect is possible because families in rural areas are able to invest the Bonosol in animal stock and vegetable gardens. In urban areas, the effect on food consumption is smaller and the effect on non-food consumption higher, but in neither urban nor rural areas is there “significant evidence that ... beneficiaries are increasing transfers to other households, or increasing expenditures on typical adult goods, such as tobacco (Martinez, 2004, p. 4). The World Bank and the Inter-American Development Bank, in a joint report (2004, vol. 2, p. 99) use strong language to recommend “The Bonosol should be maintained, as it represents a strong redistributive policy with minimum fiscal impact.” For the World Bank, this marks a reversal of earlier views that questioned the worth and the wisdom of the Bonosol,<sup>20</sup> whereas the views of the IMF continue to be quite negative.<sup>21</sup>

**Box 1****THE HUMAN DIMENSION OF BOLIVIA'S BONOSOL**

I lived in the countryside till I was 80. I remember six of my children well, though I had ten. Four died shortly after birth. My husband used to beat me up and I cried tears of blood. I started to go blind.

After my husband died, my brother-in-law said, ‘Come to the city and cook for me and my daughter.’ My eyes were bad. After a month living in La Paz, he still wouldn’t take me to the doctor. I got down on my knees and took off my hat and begged him. So finally he took me to be treated. I was in hospital for 13 days. I came out with new eyes.

After two years my brother-in-law said, ‘You have to go; I have had enough of you.’ There was a neighbour from my community, an older woman. She gave me a corner of a room. I lived with her for some years, and then I came here to the awichas.

Here I live well. The Bonosol has been a great help. I used to have to collect twigs to build a fire, but with the Bonosol I’ve been able to buy a little gas stove. Now I can buy dried meat and chicken and bones – it’s really fancy.

Now I want to die. You don’t know how much you suffer at this age. I can’t cook for myself and my eyes hurt in the light. I have saved 1,200 bolivianos (US\$156) for my funeral. I know when I die, the awichas will cry for me. They will call my name, ‘Victoria’. They will remember me.

HelpAge International, Ageing and Development (17 (February 2005), p. 2.

<http://www.helpage.org/images/pdfs/AandD/ad17eng.pdf>

Doña Victoria Mamami lived with the awichas (grandmothers), a communal house in La Paz, Bolivia for the last 8 years of her life. She died in 2003 at the age of 92.

<sup>20</sup> The World Bank’s 1999 Public Expenditure Review for Bolivia states (p. ii): “Given the fiscal challenges currently facing the Bolivian economy, the option of using the Bonosol as an instrument to distribute privatization receipts might, in retrospect, not have been the best alternative.”

<sup>21</sup> “The much advertised link between capitalization and pension reform turned out to be less tight than initially suggested: rather than funding the new individual pension accounts, capitalization shares were used to create a new entitlement, the “Bonosol”, which paid a minimum pension to all retirees, including those that retired under the old system” (IMF, 2005a, p. 8.).



## **IV. Non-contributory pensions in Antigua**

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### **Age assistance pensions**

In December 1993 the government of Antigua introduced Age Assistance Pensions financed by Social Security contributions and administered by the Social Security Board. The amount of the pension was set at EC\$136.50 (US\$50) a month, then equal to about 8.7% of per capita GDP. Coverage is restricted to those 65 years of age or older at that time (60 years of age in the case of the blind and the severely disabled). The stated intent of the legislation was to provide pensions for those who, because of their advanced age, never had an opportunity to contribute to Social Security. Nonetheless, 65 years seems a very low cut-off on those grounds for a contributory scheme that had come into effect twenty years earlier, and initially required only three years of contributions to qualify for a pension. The assistance pension was programmed to end when the last recipient died. In addition to age, there is a 15 year residency requirement, and an income test: income from all sources cannot exceed EC\$5,000 (US\$1850) a year, equivalent to EC\$417 (US\$154) a month.

In the first month of the programme, 245 elderly citizens qualified for a pension. Take-up grew for four years, peaking at 859 in 1997. (See table 7.) The number of beneficiaries then decreased steadily to 459 in 2004. If this trend continues, 2005 will record only 410 non-contributory assistance pensions. The actuary who reviewed the Social Security fund in 1999 reported that, as of 31 December 1998,

80 percent of the recipients of assistance pensions were female (Perez, 1999, p. 30). This is not surprising since, relative to the male of the species, women live longer and participate less in the paid labour force. The nominal value of the pension was unchanged through 2004 so, as a percentage of per capita GDP, fell from 8.7% in 1993 to 5.8% in 2004. In February of 2005 the government increased its value to EC\$255 (USD\$94) a month, equivalent to 10.4% of per capita GDP. The cost of the programme, as a percentage of GDP, doubled from 0.03% to approximately 0.06%. Because of reduced numbers, despite increased generosity, the programme's total cost as a percentage of GDP is well below the costs incurred from 1994 through 1999. (See table 7 once again).

The Social Security fund reportedly now has difficulty meeting its commitments. The requirement that it finance age assistance pensions contributes to this budget gap, but more important is the fact that the central government for years has accrued arrears with the fund with respect to its own contributions, as employer, and the contributions of its employees. The actuary reviewing the position of the fund at the end of 1998 noted that 44% of total assets were in the form of payments receivable from the central government. "As these receivables are not subject to interest accrual, the investment income is materially affected by the substantial amounts of payments and interest in arrears" (Perez, 1999, p. 14). These non-performing assets must now be even larger, as the government did not pay any of its Social Security obligations from 1999 through 2003 (IMF, 2004, statistic appendix table 6, p. 8). It is very difficult to know precisely what is happening with the social security scheme, as none of the seven actuarial reviews are in the public domain.<sup>22</sup> The IMF team that visited Antigua in September of 2004 noted "... while the SSS [Social Security Scheme] has so far been able to meet its obligations in a timely manner, problems could arise going forward since the SSS is already experiencing a cashflow deficit with current contributions below pension payments. Thus, it is important that the budget begin to meet at least the current contributions." (IMF, 2004, p. 12) It is not clear, however, whether current contributions, with government obligations included, are less than the revenue required for pension payments, or whether this deficit arises only if government fails to meet its obligation with regards to current contributions.

**Table 7**  
**ANTIGUA: AGE ASSISTANCE PENSIONS (NON-CONTRIBUTORY)**  
*(Measurement unit indicated in each column)*

Year	Beneficiaries	Monthly pension	% of per capita GDP	Annual Cost (\$000)	Cost as % of GDP
1993	245	136.50	8.7	...	...
1994	654	136.50	8.0	1 071	0.08
1995	766	136.50	8.3	1 255	0.09
1996	826	136.50	7.7	1 353	0.09
1997	859	136.50	7.2	1 407	0.09
1998	781	136.50	6.9	1 279	0.08
1999	762	136.50	6.6	1 248	0.07
2000	708	136.50	6.5	1 160	0.06
2001	626	136.50	6.5	1 025	0.05
2002	584	136.50	6.3	957	0.05
2003	519	136.50	6.1	850	0.04
2004	459	136.50	5.8	752	0.03
2005	410	255.00	10.4	1 255	0.06

**Source:** Unpublished data from Social Security Board (for numbers) and author's estimates (for cost and 2005 numbers).

**Notes:** Eligibility was supposed to be age >65 in 1993. That would have been 3884 persons aged >70 in 1998.

According to the 1999 Actuarial Review, 3365 age pensions (60+ years) were in force at the end of 1998. Assuming the age distribution of SS pensioners to equal that of the population, that implies that approximately 1690 age pensions (70+ years) were in force at the end of 1998.

1999 Actuarial Review (p. 30): "A total of 699 age assistance pensions were in force as of 31 December 1998, of which 80% were females". p.33: "in practice, a more liberal interpretation of the Act and Regulations seems to be in place" ... referring to assistance pensions.

The assistance pension of 136.50 was increased to 255 in February of 2005.

<sup>22</sup> The Seventh Review was completed in 2003, but not even high government officials have access to it. One copy reportedly is on the desk of the Minister of Finance. The Director of the Social Security Board was kind enough to provide me with a copy of the Sixth Review, but refused my requests to examine earlier reviews or the latest review.



## Government service pensions

In Antigua, Government has become an employer of last resort with the result that ministries are over-staffed with unskilled workers. As long ago as 1982, a Minister of Finance complained of low public sector productivity and low employee morale:

“Four, or at best, five hours of productive work daily, has become the norm in the public service, and in some notable instances it is as low as one hour. .... Some officers appear to be employed to do absolutely nothing. This is especially so – and I may add most embarrassingly so – among certain non-established workers [political appointees] who profess to actively support the government. The morale of the public service is appallingly low.” (Government of Antigua and Barbuda, 1982, p. 19; quoted in Nicholls, 2001, p. 112.)

More recently, the Chairman of Antigua’s Public Service Commission (2001) complained that Ministers are too often allowed “... to appoint officers ... bearing the nomenclature ‘Non-Established Worker’. The system has been so widely used that most public officers in the service of the Government of Antigua and Barbuda are non-established workers—estimated at sixty percent (60%) [of all officers].” He added “in many instances non-established officers fail to meet the minimum qualification threshold for entering the Civil Service”.

Central government employment exceeded 9,000 (13 percent of the population and nearly a third of the labour force) by the end of the last decade; nearly two-thirds were non-established workers recruited outside the civil service system (see table 8). Detailed employment data are not available for years after 1999, but data on central government wages and salaries reveal that expenditure on this account fell in the year 2000, then rebounded, remaining well above 50 percent of total central government revenue (see table 9). The IMF mission, citing figures for 2002, concluded “A significant downsizing of the public sector is needed—there are currently 13,000 central government employees, close to 40 percent of the labor force” (IMF, 2004, p. 4). Significant downsizing is no doubt needed, but the 2002 figure for central government employees seems inflated, since there was no surge in payroll that a 40 percent increase in workers would have produced (see tables 10 and 11 once again). Government statistics in Antigua are famously unreliable, however, so it is always possible that the wage data are misleading. Another possibility is severe wage compression might have allowed the government to hire large numbers of unskilled workers with little increase in expenditure on wages and salaries, but there is no indication that this happened.

**Table 8**  
**ANTIGUA: CENTRAL GOVERNMENT EMPLOYMENT, 1993-1999, 2002.**  
(Numbers and percentages)

Year	Established	Non-Established	Total	Percent of Population	Percent of Labour Force
1993	3 068	4 489	7 557	11.6	...
1994	2 915	5 400	8 315	12.5	29.5
1995	2 989	5 710	8 699	12.9	30.3
1996	2 956	5 198	8 154	11.9	28.5
1997	2 964	5 355	8 319	12.1	29.0
1998	3 267	5 532	8 799	12.6	30.7
1999	3 336	5 912	9 248	13.1	...
2000	...	...	...	...	...
2001	...	...	...	...	...
2002	...	...	13 000	17.3	37

**Source:** Government of Antigua and Barbuda, Ministry of Planning, Statistics Division. Social Statistics Digest - 2001 Edition, table 9.1; IMF Country Reports 99/146 (December 1999) and 04/367 (November 2004).

Table 9  
**ANTIGUA: CENTRAL GOVERNMENT WAGES AND SALARIES, 1994-2003**  
*(Millions of EC dollars)*

Year	Established	Non-established	Total	Percent of Total Revenue
1994	76.4	74.2	150.6	53.0
1995	77.8	76.3	154.1	54.2
1996	87.4	75.0	162.4	49.3
1997	88.6	77.1	165.7	49.5
1998	107.4	86.7	194.1	53.6
1999	105.1	102.1	207.2	53.9
2000	111.2	91.5	202.7	51.0
2001	113.5	99.0	212.5	57.7
2002	114.8	101.8	216.6	51.4
2003	119.1	114.1	233.2	54.2

**Source:** IMF Country Reports 99/146 (December 1999, Statistical Annex tables 13, 14) and 04/367 (November 2004, Statistical Appendix tables 5, 6).

**Note:** Total revenue includes capital revenue and grants.

Whatever their numbers, the jobs of non-established workers in Antigua today are vulnerable. While the Antigua Labour Party (ALP) was in power, non-established positions were secure so long as the worker remained loyal to the party. Following the defeat of the ALP in the general elections of March 2004, this is no longer true. Elloy de Freitas (2004, p. 3), Antigua's Director of Public Sector Transformation, quotes a typical post-election response of a non-established worker: "I know I am a political appointee. I know I am not qualified. What can I do to become established?"

Government employment rolls are bloated in part because non-established (fixed term) workers have no incentive to return voluntarily to the private sector. On the contrary, if a worker resigns or is dismissed, she becomes ineligible for a "compassionate pension" equal to two-thirds of final salary that is given from age 55 to all established workers with ten years or more of continuous employment. A worker who leaves public service before the minimum retirement age forfeits all pension rights. There is a compulsory retirement age as well—age 60—but this is not always rigorously enforced. "Civil pensions" for established workers are similar, but more generous: 75 percent of final salary from age 50. These are very young retirement ages for a country in which life expectancy at birth is 74 years. But receipt of a pension does not preclude continued work in the public or the private sector. After an additional ten years of public employment, the worker can retire with two pensions, each equal to 75% of final salary (two-thirds of final salary in the case of non-established workers).

Of the two thousand or so government pensioners in 2004, at least 123 were collecting two government service pensions, and one person was collecting four pensions.<sup>23</sup> This last individual would have had to have been more than 80 years old when she retired from her fourth government job.<sup>24</sup> There is no public information on the number of persons collecting both a pension and a

<sup>23</sup> These are calculations of the author, from a list of 2,256 pensions supplied by the Ministry of Finance. The 124 persons with two or more pensions is a lower bound resulting from a count of repetitions of identical names in the list. In many cases, one pension might be received by "John Smith" and another by "John Q. Smith". This might well be the same person, but we conservatively assumed that the beneficiaries are separate people when one is listed with a middle initial or name and another without.

<sup>24</sup> Two of the four pensions received by this person are "civil", i.e. for established workers, so she could have begun to receive her first pension at age 50.

salary from government. Pensions are not indexed, but the Eastern Caribbean dollar that Antigua shares with neighbouring countries is pegged to the US dollar in a currency-board type arrangement, so price inflation has been modest. Nonetheless, even modest inflation can have a large impact on pensions over time. With price inflation of 3.5% a year, non-indexed pensions lose half their purchasing power in twenty years; with 7% inflation, half is lost in just ten years.

In Antigua, the term ‘non-contributory pensions’ is widely regarded as a synonym for government service pensions. It is true that government workers do not contribute directly to these pensions, but they do contribute indirectly, since the pension forms part of their compensation package. In effect, these pensions are deferred wages, which shift the cost of remuneration of public servants into the future. With a minimum pension of \$750 a month, their fiscal cost now equals 1.22 percent of GDP (see table 10). The full fiscal cost is much larger, since workers have the right to request a reduced pension (75% of the full pension) in exchange for a ‘gratuity’ (lump sum) equal to 12.5 times the annual amount of the reduction.<sup>25</sup> Given the large number of government employees and prospective ageing of Antigua’s population, these costs will increase sharply in coming years.

Fiscal costs will also increase as a result of increases in minimum pensions, which are scheduled to rise from EC\$750 at present to EC\$900 in 2006 and EC\$1,000 in 2007. “Compassionate pensions” account for more than half (1,164) of the 2,130 government service pensions, but they tend to be much smaller than civil pensions, so account for a disproportionate share of costs associated with minimum pensions (see table 10 once again). Only 5 percent of compassionate pensions are EC\$1,000 or greater, while 45% of civil pensions are set at this level.<sup>26</sup> This reflects the lower skills and lower pay of non-established workers and, to a lesser extent, the fact that compassionate pensions are one-third rather than three-quarters of final wage.

**Table 10**  
**ANTIGUA: FISCAL COST OF GOVERNMENT SERVICE PENSIONS, 2004**  
(Percentage of GDP)

	Compassionate	Civil	Total
Minimum pension	1 164	966	2 130
None	0.26	0.64	0.90
EC\$300 month	0.29	0.65	0.94
EC\$500 month	0.38	0.67	1.04
EC\$750 month	0.51	0.71	1.22
EC\$1000 month	0.65	0.79	1.44

**Source:** Author’s calculations from Antigua Ministry of Finance data.

**Note:** 124 multiple pensions were combined into single pensions. The civil category includes police and parliamentary pensions. Combined civil/compassionate pensions were classified as civil.

It is important to consider the purpose of government service pensions. If they are to lift the elderly out of poverty, why are they given to those who continue to work and why are there no survivor’s benefits? More to the point, why are they not given to all citizens, rather than only to those still employed by government from age 50 or 55 years? If their purpose is to lower current wage costs, why is there no relationship between length of service and size of pension? And what is

<sup>25</sup> If a worker has right, for example, to a pension of \$1,000 a month, she can opt instead for a reduced pension of \$750 plus a lump sum of \$37,500. In determining rights to a minimum pension, no distinction is made between those who select the full pension and those who opt for a reduced pension, providing an incentive—particularly for those with small pensions—to request a lump sum and reduced pension. Absence of indexing or survivor benefits also makes the lump sum an attractive option.

<sup>26</sup> These are the author’s calculations from a list of government pensioners and pensions provided by the Ministry of Finance.

the point of providing a windfall gain (in the form of increases in the minimum pension) to those already receiving a government pension?

Regardless of the historical reason for such a pension system, it is important to understand that these growing expenses can crowd out other spending, including spending on basic pensions for the general population.

## Targeting non-contributory pensions

Antigua has in place a system of minimum pensions that are targeted, but, with the exception of the assistance pension, they are not targeted to the elderly poor. Table 11 lists the amounts of various minimum pensions, what this represents as a percentage of per capita GDP, and the approximate number of pensioners that receive (or will receive) the benefit. To place these numbers in perspective, there are eight to nine thousand persons over the age of 60 in Antigua, and approximately two thousand over the age of 78. Age 60 is the qualifying age for a contributory public pension, and 78 is the minimum age required in 2005 to qualify for an assistance pension. Government service pensions can be received from as early as 50 years of age.<sup>27</sup>

**Table 11**  
**ANTIGUA: MINIMUM PENSION BENEFITS AS A PERCENTAGE OF PER CAPITA GDP**  
**(NUMBER OF BENEFICIARIES IN PARENTHESES)**  
*(Percentage)*

Year	Assistance Pension	Minimum Contributory Pension	Minimum Government Service Pension
2004	5.8% (450)	6.4% (2 300)	21.1% (1 100)
2005	10.8% (410)	14.8% (2 500)	31.8% (1 400)
2007	...	...	42.4% (1 600)

**Source:** Author's estimates based on national data. The 2007 estimate assumes no change in the number or size of public service pensions or in per capita GDP.

**Note:** Assistance pension from age 77 in 2004, 78 in 2005; contributory pension from age 60 and government service pension from as early as age 50. Someone receiving a minimum government service pension can simultaneously receive a minimum contributory pension. All government employees contribute to social security, so the true minimum pension for those 60 or older was 27.5% of per capita GDP in 2004 and 46.6% of per capita GDP in 2005.

The non-contributory assistance pension is targeted to the oldest and poorest of the population, reaching approximately 20% of the population aged 78 and older, but it is also the least generous, amounting to 5.8% of per capita GDP in 2004 and 10.8% in 2005. Minimum contributory pensions are somewhat more generous—6.4% of per capita GDP in 2004 and 14.8% in 2005—and benefit more people, perhaps a quarter of the population over the age of 60. (See appendix B.) A small number of widows, aged 50 years and more, also benefit from a minimum contributory pension, but its level is half that which would be in effect were the woman's husband still alive. The minimum government pension is the most generous—21.1% of per capita GDP in 2004, 31.8% in 2005 and programmed to increase to 42.4% in 2007—but it benefits fewer persons than the minimum contributory pension does, and an important portion of those benefited are younger than 60 years of age and/or still have employment income. Moreover, government pensioners older than 60 are entitled to two minimum pensions: one from government service and another from Social Security; for these fortunate pensioners, the combined minimum pension was EC\$650.15 in 2004 and EC\$1,100 in 2005.

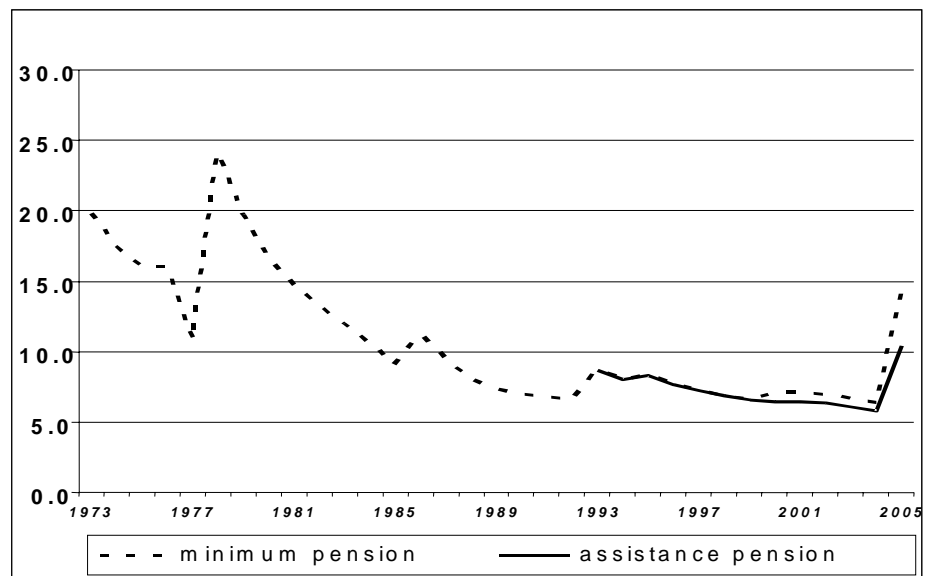
<sup>27</sup> It was unfortunately not possible to obtain information on the age distribution of government service pensioners.

In the early years of Social Security, the minimum contributory pension was more generous, possibly because there were few pensioners, so was very affordable. Figure 1 graphs the changing generosity of this benefit, as a percentage of per capita GDP, over the years (see also appendix table B1). At its inception, the minimum benefit was set at EC\$26, nearly 20% of the per capita GDP of 1973. GDP grew, while the minimum pension remained fixed, so the curve of figure 4 falls until 1978, when the benefit increased to EC\$65—24% of per capita GDP—the highest point experienced. There is steady decline in the benefit as a percentage of per capita GDP through 2004, despite nominal increases in 1986, 1993 and 2000. In February 2005 the minimum pension more than doubled, to EC\$350, but this amounts to only 14% of per capita GDP, far below the levels of 1973 or 1978. The assistance pension began in 1993 at the same level as the minimum pension. In June 2000 government increased the minimum pension, leaving the assistance pension unchanged. The UPP government, in February of 2005, retained this preferential treatment for contributory pensions, setting the minimum pension at EC\$350 and the assistance pension at EC\$255.

The government of Antigua, directly and through the Social Security fund, is spending a considerable sum on targeted non-contributory pensions. One can argue that the base pension for government service is contributory, since it forms part of the employment contract of a government worker, but the amount given to bring a pensioner up to an arbitrary minimum is non-contributory. Similarly, the income-related Social Security pension is clearly related also to contributions, but not the amount given to a pensioner to bring a benefit to a minimum level. In both cases, the top-ups are non-contributory. The entire amount of assistance pensions is non-contributory.

Data are very incomplete, but using the reasoning of the above paragraph, it is possible to estimate very roughly that spending on non-contributory pensions in Antigua today amounts to approximately 0.7 % of GDP, and that this will increase to 0.9% of GDP if the minimum pension for government service is increased, as promised, to EC\$1,000. This sum would go a long ways toward implementation of a universal, non-contributory age pension in Antigua.

**Figure 1**  
**ANTIGUA: MINIMUM CONTRIBUTORY AND ASSISTANCE PENSIONS**  
(% of per capita GDP)



## Old age pensions for all Antiguanans?

Old age pensions became an issue in Antigua's general elections of March 2004. The Antigua Labour Party (ALP, 2004), which had been in power continuously since 1976, promised voters increased benefits *and* lower taxes. These promises included a five percent increase in pensions retroactive to August 2003, price indexing of future benefits, and an increase in the minimum pension to EC\$500 (US\$185) a month retroactive to December 2001. The increase in the minimum pension applied presumably to Social Security pensions, since minimum government service pensions were already at this level.

The opposition United Progressive Party (UPP) promised elderly voters even more. The UPP Manifesto (2004, p. 23) promised "all citizens over 60 years of age will receive a EC\$1,000 (US\$370) monthly pension." UPP leaders provided few details, but they described the citizen's pension as a "minimum pension", with the implication that it would be 'pension-tested', i.e. given only to those without pension, with top-ups for those whose pensions are smaller than EC\$1,000. The new pension was to be set initially at EC\$750—50% higher than the ALP proposal, and covering all citizens, not just those affiliated with Social Security—increasing to EC\$900 in 2005 and EC\$1,000 in 2006. No estimates were provided for the cost of such a programme, nor was there any indication of how the pensions would be financed.

In a surprise victory, the UPP won 12 of the 17 parliamentary seats. The ALP retained only four seats. On the opening of Parliament on 29 March 2004, the new Government reaffirmed in the Throne Speech its intent to provide each citizen a "decent pension" in his or her old age:

"My Government takes the view that society has the obligation to make generous provisions to brighten the lives of our elderly in their golden years.

Conscious of this obligation, citizens over 60 years of age will receive a \$1,000 monthly pension.

As a fundamental principle, my Government will provide every citizen reaching the age of 60 years with a decent pension.

This \$1,000 pension will be introduced in three stages.

All persons 60 years and over will receive a minimum pension of \$750.00 per month, with effect [retroactively] from January 1, 2004.

All persons 60 years and over will receive a minimum pension of \$900.00 a month, to take effect on January 1, 2005.

All persons 60 years and over will receive a minimum pension of \$1,000.00 a month, to take effect on January 1, 2006" (Government of Antigua and Barbuda, 2004a).

The Finance Minister two days later repeated this promise, and assured Parliament "Provision has therefore been made in this Budget to facilitate the aforementioned payment to our pensioners. Subsequent Budgets will reflect a further increase in pensions from \$750 per month to \$900 per month as of 1st January, 2005 and to \$1,000 per month as of 1st January, 2006" (Government of Antigua and Barbuda, 2004b).

Despite the Finance Minister's assurances, his budget contained provision neither for a universal minimum pension, nor for increases in minimum benefits for existing pensions. Eventually, in January 2005, he increased minimum public service pensions to EC\$750 a month (from EC\$500), and promised to increase them further to EC\$900 in 2006 and EC\$1000 in 2007. In February 2005 government authorized the Social Security Board to increase contributory pensions to a minimum of EC\$350 (from EC\$150.15) and to increase the means-tested, non-contributory

“assistance pension” for the very old to EC\$255 (from EC\$136.50). Reference to provision of a EC\$1,000 pension to “all citizens over 60 years of age” was quietly dropped.

The UPP in opposition may well have had the best of intentions, but, once in office, had to face the harsh reality of a budget constraint. The government of Antigua for years had incurred large budget deficits, financed for the most part with commercial bank loans and by making payments in arrears. The deficit of the central government exceeded ten percent of GDP in 2001 and 2002, and fell slightly in 2003 only because Antigua has no central bank and was unable to secure financing for a larger deficit. (See table 12.) An IMF mission that visited the country in September 2004 reported

“... a proliferation of a culture of non-payment. As financing sources dried up, increasing recourse was made to earmarking of revenues to creditors and the government simply ran arrears to domestic and external creditors, private suppliers, and social agencies—the Social Security Scheme, the Board of Education, and the Medical Benefits Scheme. Matters came to a head in late 2003, when the government began to run arrears on wage payments.” (IMF, 2004, p. 22)

As we have shown above, the expense of large numbers of public employees and government service pensioners, combined with government’s unwillingness to increase taxes or reform the tax system, is the primary reason for Antigua’s financial woes.

**Table 12**  
**ANTIGUA: CENTRAL GOVERNMENT REVENUE AND EXPENDITURE**  
(Percentage of GDP)

	Total Revenue	Total Expenditure	Overall Balance
1994	21.0	26.4	-5.4
1995	21.3	26.2	-4.9
1996	22.5	24.3	-1.7
1997	21.4	25.9	-4.5
1998	21.7	25.6	-3.9
1999	21.9	27.4	-5.5
2000	21.7	26.7	-5.0
2001	19.2	30.3	-11.1
2002	21.5	32.2	-10.7
2003	21.0	29.1	-8.1
2004	21.0	27.3	-6.3

**Source:** IMF Country Reports 99/146 (December 1999) and 04/367 (November 2004).

To place things in perspective, it is helpful to calculate the cost of a universal pension in Antigua. This is a pension given to all elderly residents, irrespective of other pension and non-pension income. Abstracting from administrative expenses, this cost is the proportion of the population eligible for the pension times the ratio of the pension to per capita GDP (Willmore, 2001). If ten percent of the population become eligible for pensions equal to 20% of per capita GDP, the fiscal cost will be  $(0.1) \times (0.2) = 0.02$  or 2% of GDP. In Antigua, approximately 11% of the population is older than 60 years of age, 8.2% older than 65 and 5.6% older than 70. If we begin with any specific figure, for example the EC\$255 (US\$94) Age Assistance pension, it is possible to calculate the fiscal cost of providing a universal pension of this size to everyone older

than a specified age. EC\$255 a month amounts to 10.8% of per capita GDP, so the cost of giving this to all citizens over the age of 70, for example, would be  $(0.056) \text{ times } (0.108) = 0.006$ , or 0.6% of GDP. This is less than the amount that Antigua currently spends on (poorly) targeted non-contributory pensions! (Recall that ‘non-contributory’ includes the top-up of small Social Security and government service pensions required to bring them to current minimum levels.)

Implementation of universal pensions in Antigua is constrained by political will (or perhaps by the strength of favoured interest groups) rather than government revenue. If the Government chose to do so, it could provide smaller pensions to all older citizens instead of large minimum pensions to former government employees, many of whom are neither elderly nor poor.

This exercise can be repeated for any combination of monthly pension and age of entitlement. Calculations are shown in table 13 for five different levels of pension and three ages of entitlement. The levels of pension correspond to the current minimum Age Assistance pension (EC\$255), the current minimum Social Security pension (EC\$350), the previous minimum government service pension (EC\$500), the current minimum government service pension (EC\$750) and the promised minimum citizen’s pension (EC\$1,000). For these 15 combinations, fiscal cost as a percentage of GDP varies from 0.6% (EC\$255 from age 70) to 4.7% (EC\$1,000 from age 60).

The costs listed in table 13 are costs of a *universal* pension, not a *minimum* pension. Costs are reduced if benefits are denied to those with pensions larger than the minimum, and recovered, dollar-for-dollar, from smaller pensions. These fiscal savings come at price. A minimum pension transforms the first of a worker’s Social Security contributions into payroll taxes, since non-contributors and contributors alike are entitled to the same minimum benefits. This discourages participation in the contributory scheme, which is not the case with universal pensions or, for that matter, with the absence of non-contributory pensions of any kind. This disincentive will be larger, the larger the minimum pension. One way to reduce the disincentive is to recover the benefit from other pension income at a lower rate, such as 50% (50 cents per dollar of other pension income), rather than the punitive rate of 100%.

An example may help to illustrate this method of recovering benefits from other pension income. Suppose the minimum citizen’s pension is set at EC\$500 a month and the rate of recovery is set at 50%. All other pension income received would in effect be subject to a 50% tax until the full EC\$500 was recovered. A person with no other pension income would retain the full EC\$500 minimum pension, and a person with EC\$1,000 or more in other pension income would have no entitlement to benefits from the minimum pension. A person with EC\$100 of other pension income would return EC\$50, retaining a total monthly pension of EC\$550; one with EC\$400 other pension income would return EC\$200, retaining a total pension of EC\$700, etc.

The Government might want to add employment earnings to other pension income in order to recover the pension also from those who continue to work. The scheme would then become one that guarantees the elderly a minimum *income*, but not necessarily a minimum *pension*. When earnings are included in chargeable income, it is very important that the rate of recovery not be too high. A 100% rate would confiscate all earnings from continued work, and rates lower than 100%, but still high, would discourage the elderly from continuing in paid employment. A maximum rate of 50% would probably be a good compromise between labour market incentives and fiscal cost.

It is also possible to add income from investments and savings to that of pensions and earnings in order to recover the non-contributory pension benefit from a larger pool. This is especially attractive since income from investments and savings tends to be more important, the wealthier the citizen. In Antigua, this is not likely to be politically feasible since there is no tradition of taxing investment income; but it remains a possibility.



**Table 13**  
**ANTIGUA: FISCAL COST OF A UNIVERSAL CITIZEN'S PENSION**  
*(Percentage of GDP)*

Monthly	Age of Entitlement to Pension		
Pension	60	65	70
EC\$ 255	1.2	0.9	0.6
EC\$ 350	1.6	1.2	0.8
EC\$ 500	2.3	1.7	1.2
EC\$ 750	3.5	2.6	1.8
EC\$ 1000	4.7	3.5	2.4

**Source:** Author's calculations, based on age distribution of population in 2001 and per capita GDP in 2004.



## Conclusion

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A consensus exists that non-contributory pensions are essential to the World Bank's anti-poverty Pillar 1 (now known as a 'zero pillar'). It is simply not realistic to expect the poorest to participate in a contributory scheme, even if Government mandates participation.

More than ten years ago the World Bank praised non-contributory pensions given as an entitlement

“to everyone of pensionable age, regardless of income, wealth or employment history, as in New Zealand and the basic pensions paid by the Nordic countries. Administratively, this is the simplest structure, with the lowest transaction costs, for the public pillar—an important advantage in developing countries with limited institutional capacities and incomplete record-keeping systems. It avoids the disincentive to work and save inherent in means-tested plans. Its universal coverage helps ensure that the poverty reduction objectives are met, provides a basic income for all old people (coinsuring against low investment returns or high longevity), and might receive broad political support” (World Bank, 1994, p. 240).

Despite these advantages, few governments, not even those of the Nordic countries, offer their citizens a universal pension. The complaint is “total program costs are greater than for the other alternatives, because it is universal” (World Bank, 1994, p. 240). Nonetheless, as the cases of Bolivia and Antigua illustrate, governments willingly spend large sums on minimum pensions of the contributory and government service systems, the beneficiaries of which are frequently neither poor nor elderly. Since the money could

be used instead to finance a basic pension for all elderly citizens, such expenditure is a clear indication of lack of political will rather than lack of resources. Whether expenditure is pro-poor or not depends more on government priorities than the size of the budget (United Nations DESA, 2005).

Governments can reduce the fiscal costs of provision of a basic pension in any of a number of ways. Maintaining the principle of universality, costs can be reduced by decreasing the size of the pension or increasing the age of eligibility. Another possibility is to provide a modest pension for the ‘youngest old’ and a larger pension for the ‘oldest old’ who are less apt to receive family support or continue working, even on a part-time basis. In countries with very unequal income distributions, there is danger that “much of these benefits will go to the rich, who live longer but have ample support of their own” (World Bank, 1994, p. 240) but it is equally true that these same beneficiaries will have paid more in taxes over their working lives. This is why it is important to fund universal pensions from broad income or consumption taxes rather than payroll taxes.

Abandoning the principle of universality, costs can be reduced in three additional ways: (a) residency tests, (b) *ex ante* means tests or (c) *ex post* means tests. The third method of cutting costs is clearly superior to the other two.

By residency tests we mean a requirement of adult residency for a lengthy period—40 to 50 years—to qualify for a full pension. Those who reach the qualifying age with fewer years of residence are entitled to a proportionately smaller pension. I have labelled these “quasi-contributory” pensions, because each year of working-age residence counts as a contribution toward a pension, irrespective of whether the person actually works or not. Seven countries—the five Nordic countries, Canada and the Netherlands—have such a system. Most countries in Latin America and the Caribbean have only a small immigrant population, so conditioning pensions on length of residence would introduce administrative complexity while generating little in the way of fiscal savings. Also, this seems an arbitrary way to distinguish between the deserving and the non-deserving elderly. In sum, this is not a promising approach for countries in Latin America and the Caribbean to follow.

*Ex ante* means tests, embodied in social assistance pensions, are very common. Social assistance pensions are supposed to target the poor, so that benefits are not ‘wasted’ on the non-poor, but, despite their widespread employment, they are neither efficient nor effective. First, the cost of administration of such a scheme is high, since each potential beneficiary must be screened by a public employee, who determines whether or not the applicant qualifies. Second, even with competent, honest and dedicated bureaucrats, as appears to be the case in Costa Rica, targeting is crude, with large errors of exclusion and inclusion. Third, precisely because targeting is so crude, it is difficult to justify partial pensions. This discourages those close to the poverty line from saving, improving their home, or continuing to work in paid employment, out of fear of losing their entitlement to a pension.

*Ex post* means tests perform all the functions of *ex ante* tests, but do so more effectively, at lower cost, with fewer demands on public administration. These schemes ‘claw back’ or recover non-contributory benefits from other income of pensioners. Recovery-conditioned pensions are not widely used, but the concept merits consideration by governments that prefer to target the poor rather than provide universal pensions.

The overwhelmingly preference of governments for social assistance pensions (*ex ante* means tests) over recovery-conditioned pensions (*ex post* means tests) is an anomaly. When governments collect taxes, they apply *ex post* tests in the form of random audits, and expect taxpayers to comply voluntarily with the laws of the land. Fraud and mistakes are punished, at the

discretion of the State. So, why is disbursement of cash benefits to the elderly treated differently from collection of taxes? There is no obvious explanation, which is why it is an anomaly.

Recovery-conditioned pensions work very much like a negative income tax, except that the net tax collected is at most zero, and never positive. Each resident or citizen of a country is entitled to a flat pension upon reaching the age of eligibility, but she is also required to return part or all of it out of other income she receives during the year. The rate of recovery from other income can be set anywhere between 0% and 100%. There is a trade-off between fiscal savings and disincentives: high rates of recovery produce large cost savings but discourage saving for retirement or continuing to work past the age of eligibility for a basic pension. The ‘other income’ subject to recovery can be defined in any way: other pension income, employment earnings, income from savings and investment, or any combination of these. In this case there is no trade-off: a broader definition of income allows recovery of the same amount of benefit with a lower rate of recovery.

Recovery-conditioned pensions require a special income tax regime for those who elect to receive a non-contributory pension from the State. This, in effect, is a voluntary tax, one that can be legally avoided simply by not requesting a non-contributory age pension. Those who take advantage of their entitlement to a non-contributory pension have to reveal all the chargeable income they receive and include net pension benefits in the income they declare for payment of normal income tax. If only mild targeting is desired, no special tax regime is necessary: simply make the universal pension taxable as ordinary income. This is done successfully in New Zealand and Mauritius, two countries with a long history of flat, universal pensions.

Like everything in government policy, “the devil is in the detail”. What happens if a person accepts the pension, then files an income statement at the end of the year showing that he has income that was unanticipated, or at least not declared, at the beginning of the year? This type of behaviour can be discouraged by judicious use of penalties, much in the same way that taxpayers who have paid too little in monthly or quarterly tax payments have to make up the difference with penalties at the end of the year. Control of recovery of pension benefits is actually easier than control of tax payments, for tax liabilities continue to grow, year in and year out, whereas pension benefits can be suspended at any time.

To summarize briefly the main policy lessons: universal pensions have many advantages over targeted pensions. If targeting is desired, it is best done with *ex post* controls (recovery-conditioned pensions) rather than *ex ante* tests (social assistance pensions). For reasons that are not at all clear, governments almost always prefer *ex ante* tests to *ex post* controls in the case of non-contributory pensions. The worst type of old age pension, from the point of view of poverty relief, is a minimum pension tied to a contributory system or to government service, for this excludes the poorest and most vulnerable from benefits.



## **Appendix A**

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## CONTRIBUTORY PENSIONS IN BOLIVIA

### The Old Scheme<sup>28</sup>

Bolivia's public pensions date from the beginning of the 1900s, but its modern Social Security system was not set up until December, 1956. The compulsory scheme was supposed to be financed largely on a pay as you go (PAYG) basis with contributions from employees (2.5 percent of salary), employers (4.5 percent of salary) and government (1.5 percent of salary), but government never contributed to the fund, except as employer. Retirement age was 50 years for women and 55 years for men, with a minimum of 180 months of contributions (15 years of work). Benefits were equal to 30 percent of the last five years average salary, adjusted yearly by the 90 percent of general wage increases. For each additional year of contributions, beyond the 15 year minimum, benefits were increased proportionately. Twenty-five years of contributions, for example, could result in replacement of 50 percent of the average salary earned during the five years prior to retirement.

In the 1970s, labour unions began to add to the system a second, pre-funded tier, known as Complementary Pension Funds. Participation was in theory voluntary, but trade unions often mandated participation as a condition of employment. Eventually most contributors to the basic pension scheme participated also in one of 38 Complementary Funds, including eight for public universities and one for the armed forces. Contributions were made only by employees; rates varied from 3.5 percent to 12 percent of salary and averaged 6.3 percent of salary. Benefits also varied, but amounted on average to replacement of an additional 40 percent of salary. These additional benefits were not explicitly guaranteed by government, but "the discretionary interventions to bail out complementary funds in trouble created an implicit guarantee for them" (Von Gersdorff, 1997, p. 2).

Coverage of the system remained low, with fewer than 12 percent of the labour force contributing to Social Security. The number of active participants actually fell from more than 320,000 in 1980 to approximately 300,000 at the end of 1996, and two-thirds of those remaining were public sector employees. Over the same period, the number of pensioners increased from 62,000 to roughly 120,000. Whereas 5.2 contributors were supporting each retiree in 1980, by 1996 there were only 2.5 active participants for each retiree in the system. Cueva and Revilla (2003, p. 7) report "the old system did not present a cash-flow problem at the time, but was actuarially insolvent." Including benefits and contributions of the Complementary Funds, the deficit of the entire system amounted to 0.15% of GDP in 1993, 0.22% in 1994 and 0.23% in 1995 (Von Gersdorff, 1997, p. 5). Without reform, the *accumulated* deficit of the unreformed system was expected to reach US\$400 million (5% of GDP) by the year 2002 ((Von Gersdorff, 1997, p. 3), but *annual* deficits were projected to remain below 1% of GDP for twenty-five years. They were then expected to increase steadily as a percentage of GDP, peaking at about 2.8% in the year 2057 (Cueva and Revilla, 2003, figure I.1, p. 7).<sup>29</sup>

<sup>28</sup> This section is based on Von Gersdorff (1997, pp. 1-5), Cueva and Revilla (2003) and Escobar and Nina (2004, pp. 1-3).

<sup>29</sup> A World Bank/IDB report (2004, p. 89) erroneously states "Regular transfers from the Treasury to the public pension fund amounted to 1 percent of GDP in 1996, but were projected to increase to 5 percent of GDP by 2002." The quoted figures are for the cumulative deficit of the system, not the annual deficit. Moreover, the figures are gross; on a net basis the apparent deficit would most likely be more than offset by the funds accumulated in Complementary Pension Funds and arrears due the Social Security system from transfers equal to 1.5% of covered wages promised by Government but never effected.

## The new scheme

The same legislation that created the Bonosol on 1 May 1997 ended the old PAYG Social Security system and the Complementary Pension Funds, replacing them with pre-funded, individual accounts under private management. Contribution rates were set at 10 percent of salaries, plus 2 percent for disability and life insurance and 0.5 percent as a management fee for the pension fund administrators (AFPs), which charge additional asset management fees. Government assumed all liabilities of the old system, including those of the Complementary Pension Funds. There is no minimum pension or minimum return guarantee in the new defined-contribution system. The retirement age was increased to 65 years, but early retirement is allowed provided that funds accumulated in an individual account are sufficient to finance a pension equal to at least 70% of the contributor's average wages over the five years prior to retirement.

Primary external support and technical assistance for Bolivia's pension reform came from the World Bank,<sup>30</sup> but other international financial institutions (IFIs) lent support. The IMF (2005a, p. 25) "agreed with the Bolivian government and the other IFIs that a pension reform was necessary, in light of the financial unsustainability of the old system, its low coverage, and the hope that a fully funded system would stimulate private savings and growth. Hence, implementing a new pension reform law and establishing a regulatory system for privately managed pension funds was made a structural benchmark under the 1994-98 ESAF supported program." For the Inter-American Development Bank (IDB, 2004, p. 36), "justifications for transitioning from a PAYG to a fully-funded social security system were several, including (i) increase in the coverage of social security; (ii) stimulus for private investment, (iii) reduction in contingent liabilities; (iv) increase the correlation between lifetime contributions to social security and benefit payouts."

Initial reaction to Bolivia's radical reform was very positive. Von Gersdorff (1997, p. 9), a World Bank economist, expressed typical praise for the achievement:<sup>31</sup>

"Completely closing the old pension system at the start of the new pension system without a decades long transition is truly remarkable. It not only provides a clean cut with the past but it incorporates all workers, without exceptions for the president, military, police, oil workers, politicians, judiciary etc. *It has the benefit of substantially reducing the net present value of the Government liabilities*, gives a clear signal about the commitment and the permanence of the reform, simplifies the process of reform, supervision and management, reduces the compliance cost for enterprises, and is equitable among all sectors of the working population" (emphasis added).

After five years of reform, World Bank staff (Devesa-Carpio and Vidal-Meliá, 2002, pp. 30-31) continued to give the scheme high marks, predicting that because "the old system was shut down, except for those already qualifying for pensions, transition financing costs are expected to peak in 1998 at 2.24% of GDP and then gradually fall to reach 0.18% in 2037."

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<sup>30</sup> "In Bolivia the privatization of public enterprises was closely related with the pension reform process. The Bank was part of both processes from the very beginning. The process was supported by an adjustment credit and a number of technical assistance credits. One of the technical assistance credits specifically supported the pension reform." <http://www.worldbank.org/research/projects/ppreform.htm> - accessed 5 June 2005.

<sup>31</sup> See also Cole and Requena (1997, p. 162), who wrote: "One of the most important characteristics of the Bolivian reform is the change in the nature of the contributions. Under the previous pay-as-you-go system, the contributions from current income recipients were used to pay the pensioners, and this was viewed as a tax by contributors. The new system of individual capitalization will allow the contributors to accumulate their own pension savings in their individual retirement accounts administered by the AFPs."

Today virtually no-one describes Bolivia's pension reform as a success, for a number of reasons: (1) coverage remains as low as ever, for although the number of affiliates increased to 19% of the labour force, active contributors remain stuck at 11% (Escobar and Nina, 2004, pp. 11-13), (2) during the transition, very generous pensions have been awarded that are not justified by history of contributions; (3) this generosity has increased the fiscal costs of the transition, and these costs are borne by all Bolivians while benefits go to the few; (4) the creation of personal accounts has had no effect on capital markets, investment or growth because the AFPs invest almost exclusively in government bonds and short-term deposits.

Perhaps such an outcome should have been expected from a Chilean-style pension reform without Chilean-style fiscal austerity in a country with a long history of political patronage, clientelism, corruption and poor public services (World Bank, 2000). In any case, the costs have been much higher, and the benefits much lower, than promised. Cueva and Revilla (2003, p.11) go so far as to suggest "the need to present a favorable picture as part of the political marketing of the pension reform" as a factor contributing to the failure to anticipate what actually transpired.

From the beginning, it was known that Government would be assuming all liabilities of the old pension system, since contributions of active participants would no longer be available to pay the pensions of inactive participants. Instead, a subterfuge was used. AFPs were forced to purchase up to US\$180 million a year of government bonds, thus financing the transition by providing funds so that government could pay current pensions as well as the portion of future pensions represented by rights acquired through contributions to the old system. Only if the system expanded, i.e. coverage increased, would the AFPs be able to diversify by purchasing stocks, mortgages and other long-term financial instruments.

The fiscal costs of the transition were expected to increase sharply at first, then decrease steadily over time. This did not happen. As can be seen in table A1, pension costs as a proportion of GDP increased to 2.5% in 1997, the first year of the reform, then increased to 4% in 1998, reaching 5% in subsequent years. As yet there is no sign of these costs coming down, and they are responsible to a large degree for the fiscal crisis that Bolivia faces today. In 2004 pension expenditure of government accounted for more than 80% of the fiscal deficit, and in 2005 it is expected to account for more than 90% of a smaller, but still large budget deficit.

**Table A1**  
**BOLIVIA: PUBLIC SECTOR REVENUE AND EXPENDITURE**  
(Percentage of GDP)

	Average									
	1990-96	1997	1998	1999	2000	2001	2002	2003	2004	2005
Total Revenue	23.4	24	25.1	25.8	25	25.4	24.8	24.7	27.8	28.1
Pension expenditure	0.9	2.5	4.0	4.1	4.5	4.8	5.0	4.9	4.8	4.9
Other expenditure	26.4	24.8	25.8	25.2	24.2	27.5	28.7	27.9	28.7	28.4
Overall balance	-3.9	-3.3	-4.7	-3.5	-3.7	-6.9	-8.9	-8.1	-5.7	-5.2

**Source:** World Bank/IDB (2004), table 1, p. 3; IMF Country Report No. 05/147 (April 2005), table 2, p. 24.

**Note:** Pension expenditure includes government contributions as employer to the mandatory pension system in the years 1990-96. Data for 2004 are estimates; 2005 figures are projections.

Table A2 shows clearly that the higher than expected costs of the transition are due both to larger than expected numbers of pensioners and increased generosity. Actual costs are an increasing proportion of expected costs, and were double expected costs by the year 2002. The excess number of pensioners is in part due to overly optimistic demographic projections—the mortality of the pensioners was much lower than predicted—but more importantly to fraud and

corruption in the system. Precise estimates are not available, but there is anecdotal evidence (e.g. Cueva and Revilla, 2003, p. 12) of widespread use of false documents supporting date of birth and contribution history, people receiving two pensions, and workers receiving a pension along with their salaries. The Department of Pensions set up to administer benefits under the old system estimates that only half the applicants meet minimum age requirements for a pension (World Bank/IMF, 2004, pp. 96-97). Only persons eligible for a pension under the old system as of 1 May 1997 are entitled to receive a social security pension, but the deadline for filing applications was repeatedly extended, ultimately to the end of 2001. This extra time for filing facilitated the presentation of fraudulent claims.

Table A2 also shows as a memorandum item that the inflow of contributions into the new individual accounts has been insufficient to finance the cost of the transition to the new pension regime. This is particularly true if one recognizes that a large portion of the contributions are earmarked for disability, life insurance, administration and management fees, leaving much less for purchase of long-term government bonds.

**Table A2**  
**BOLIVIA: PROJECTED AND ACTUAL COSTS OF THE TRANSITION FROM PAYG**  
*(Measurement unit indicated in each row)*

	1996	1997	1998	1999	2000	2001	2002
Projected costs (million US\$)		226	214	203	193	183	173
Actual costs (million US\$)		254	307	308	344	356	366
Difference (million US\$)		28	93	105	151	173	193
Difference (% of GDP)		0.4	1.1	1.3	1.8	2.2	2.5
Projected number of pensioners (old system)		121 351	117 763	114 291	110 860	107 438	...
Actual number	120 000	124 417	123 189	133 199	146 500	156 700	...
Difference	...	3 066	5 426	18 908	35 640	49 262	...
Projected cost per pensioner (US\$)		1 862	1 817	1 776	1 741	1 703	...
Actual cost per pensioner (US\$)		2 042	2 492	2 312	2 348	2 272	...
Memorandum item:							
Contributions to the new system (million US\$)		115	228	230	212	217	212
of which: provision for old age		79	157	158	146	150	152

**Source:** Revilla (2002), as reported in World Bank/IDB (2004, vol. 2, tables 5.2 and 5.3, pp. 93-94; Escobar and Nina (2004, table 3, p. 7) for contributions to new system.

Crude though the data are, it is revealing to compare the apparent cost to the treasury of fraud in the contributory system with the cost of fraud in the non-contributory system. There are some 50,000 excess pensioners from the old Social Security system, at a cost to the Bolivian taxpayer of more than US\$100 million a year. This excess cost is more than the cost of the entire Bonosol programme. Excess Bonosol pensioners number about 6,000 and cost less than 2 million dollars a year. In sum, Bonosol fraud is less than two percent of the cost to taxpayers of Social Security fraud. It is important to expose fraud and corruption wherever they appear, but it does seem odd that more attention has been directed to Bonosol fraud than to the much larger amount of fraud and corruption that exists in the old social security system.

Fiscal costs have been high not only because of fraud, but also because of increased generosity toward those retiring under the old system.

- In the year 2000, the minimum pension was increased from 335 bolivianos to 550 bolivianos a month. This was equivalent to an increase from US\$690 to more than US\$1,000 a year, at a time when those older than 65 years of age were receiving a Bolívica of US\$60 per year.

- In 2001, the minimum pension was increased again to 850 bolivianos a month—more than US\$1,500 a year, 150% of per capita GDP—while the Bolivida remained at US\$60 a year.
- Those who reached minimum retirement age under the old system with fewer than 15 years of contributions were given generous lump-sum settlements. Under the old system, and under the original reform law of November 1996, they would not have received any payments.

Costs most likely will continue to increase in the future. There is continuing pressure to increase minimum pensions for those who retired under the old system, and there is every reason to expect retirees under the new system to demand the same treatment. In addition, those who contributed more than 15 years to the old system, were younger than the minimum retirement age on 1 May 1997, and did not claim a pension with fraudulent proof of age, are lobbying for the right to retire under the rules of the old system, at age 50 or 55, instead of continuing to contribute to the new system (Cueva and Revilla, 2003, p. 8).

Unforeseen factors have increased fiscal costs as well, including effects of devaluation of the currency on pensions that were indexed to the US dollar instead of wages or prices. Also, the government assumed the liabilities of the Complementary Pension Funds, but their assets were never transferred to Government.

Bolivia's individual accounts in 2001 recorded the highest real returns (15.8%) of eight countries studied by Mesa Lago (2003, pp. 13-14, 18), followed by El Salvador (12.6%), Mexico (11%) and Chile (10.7%).<sup>32</sup> These extraordinarily high returns in Bolivia represent high debt servicing costs for the government, for they result exclusively from mandatory purchases by AFPs of dollar-indexed government bonds. The old PAYG system was overly generous and unsustainable, but this is also true of the new pre-funded system when all long-term investment is in government debt and real interest rates are so high. The 15-year government bonds issued specifically for sale to AFPs were dollar-indexed with a nominal yield of 8 percent. In 2003 new bonds were issued indexed to the consumer price index, with a real yield of 5 percent. The Bolivian treasury would like AFPs to accept the new CPI-indexed bonds in exchange for the old dollar-indexed bonds; so far the AFPs have successfully resisted.

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<sup>32</sup> Devesa-Carpio and Vidal-Meliá (2002, p. 11) report similar results for the year 2000, with Bolivia showing the highest real returns (10.9%) of eight Latin American countries.



## **Appendix B**

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## Contributory pensions in Antigua

Antigua's contributory pension scheme began in 1973 and from the beginning included public as well as private sector workers. Pensions must be drawn at age 60; there is no provision for early or late retirement and there is no lump-sum option. Participation is obligatory for all employed and self-employed persons aged 16 to 59 years, although in practice few of the self-employed make contributions. The scheme is designed to replace 50% of average covered earnings at age 60. Average covered earnings are defined as the average of the best five years from age 50, and neither covered earnings nor benefits are indexed. The pension payable is equal to 0.05% of average covered earnings for each of the first 500 weeks of contributions (for a "full pension" of 25%), plus an additional 1% for each 50 contributions in excess of 500, to a maximum of 50%. Maximum covered earnings are currently EC\$4,500 a month (US\$1,667). Pensions vest with 350 weeks of contributions (156 weeks if contributions commenced before January 1975).

Social Security pensioners are guaranteed a minimum monthly benefit first set at EC\$26 (20% of 1973 per capita income), then increased in stages to the current level of EC\$350 (14% of per capita income). (For details, see table B1.) These minimum pensions are not income-tested, so a government pensioner over the age of 60 in the year 2005 enjoys two minimum pensions: EC\$350 plus EC\$750, for a total of EC\$1,100 (US\$407). Social Security age pensions are not retirement-tested, so benefits are not reduced should a pensioner continue to earn a salary.

Social Security contributions in Antigua are 8% of covered earnings for the self-employed. For others, the contribution is split: 3% employee and 5% employer. In addition to age pensions, Social Security provides survivor benefits (see below) and sickness and maternity allowances (60% of covered earnings). Government workers do not receive sickness and maternity benefits (they receive more generous benefits on a non-contributory basis), so they contribute at a reduced rate of 2%, rather than 3%. Social Security only replaces income during periods of illness; direct costs of health care are funded by a separate 3.5% payroll tax.

The contributory pension scheme covers a large portion of workers in Antigua, aided by the fact that government employs large numbers of workers, and the informal sector very few.<sup>33</sup> In fact, contributors to Social Security appear to outnumber members of the labour force. Antigua's Social Security Board reported in 1998 a total of 30,226 "active insured workers", equal to 74% of the population aged 15 to 59 years (see table B2). That same year, the entire labour force, including informal workers and the unemployed, numbered less than 29,000.

There are three possible explanations for this anomaly, and they are not mutually exclusive. First there may be double-counting in the statistics: workers with multiple employers during the year may be listed with different accounts. Second, these numbers tell us nothing about the density of contributions; many of the "active" insured may have made very few contributions during the course of the year. Finally, there is reason to believe that Antigua's Social Security Board does not keep accurate records. Perez (1999, pp. 31-32) noted the number of age pensions in force at the end of 1993, then added to this the new pensions awarded from 1997 through 1998, and subtracted the number cancelled over this same period of time. This exercise yielded 3,174 pensions in force at the end of 1998, but *actual* pensions in force were much higher: 3,365. At least 191 records were missing. "At least" 191 records, because if cancelled records were also missing, the total missing would be higher.

A better measure of coverage of a pension scheme is the number of pensioners as a percentage of the relevant age group. At the end of 1998, the last year for which data are available

<sup>33</sup> Antigua's informal sector is thought to employ only eight percent of the labour force (Baker, 1997, p. 22).

to this researcher, there were a total of 3,365 Social Security age pensioners receiving an average monthly pension of EC\$391 (Perez, 1999, table 26, p. 32). The distribution of these pensions is known to be skewed, so the median pension must have been much lower, possibly no higher than the minimum pension of EC\$136.50 (US \$50) in effect at that time.<sup>34</sup>

The Statistics Division of Antigua's Ministry of Planning (Government of Antigua, 2001) estimates that the country was home to 7,775 residents aged 60 years and older at the end of 1998.<sup>35</sup> Since 3,365 of them were in receipt of Social Security age pensions, the apparent coverage of the system was 43%. It is understandable that the oldest were not receiving age pensions, for the programme began only in 1973, which means that those 83 years of age and older in 1998 would not have had an opportunity to make the required number of contributions for a pension at age 60. More realistically, we might set the target group to be those aged 60 to 79 years in 1998. These numbered approximately 6,525, indicating that roughly half the *relevant* old age population was in receipt of a Social Security age pension at the end of 1998. This is high coverage compared to other countries of Latin America and the Caribbean, but coverage is far from universal, and many of the pensions are extremely small, too small to insure against poverty in old age.

The calculations above ignore survivor's pensions. Social Security pensions—unlike government service pensions—provide survivor's benefits, but they are very modest. A total of 615 survivor's pensions, averaging EC\$144 monthly, were in payment at the end of 1998 (Perez, 1999, table 26, p. 32). A widow is entitled for life to 50% of the pension paid her deceased husband, provided she is at least 50 years of age when widowed. If younger than 50 years, she receives a pension for only one year. Surviving children receive a pension to age 16 (age 18 if they are in full-time study) equal to 20% of the pension of the deceased, provided the sum of all survivors' pensions does not exceed 100% of the pension of the deceased. A widower receives survivor's benefits only if, at the time of his wife's death, he is invalid *and* wholly maintained by her. Widow's and widower's pensions cease upon re-marriage or co-habitation as spouse with another individual. The minimum survivor's pension is 50% (20% in the case of children) of the minimum age pension.

**Table B1**

**ANTIGUA: MINIMUM SOCIAL SECURITY PENSION (CONTRIBUTORY)**  
(Measurement unit indicated in each column)

	<b>EC\$ Monthly</b>	<b>% of per capita GDP</b>
01-Mar-73	26.00	19.8
01-Aug-78	65.00	24.1
30-Jun-86	97.50	11.2
30-Jun-93	136.50	8.7
01-Jun-00	150.15	7.1
01-Feb-05	350.00	14.3

**Source:** Antigua and Barbuda Social Security Board, "Antigua & Barbuda Pension Increases". <http://www.socialsecurity.gov.ag> Accessed 22 April 2005.

<sup>34</sup> In 2004, according to Eddie Hunte, President of the Antigua and Barbuda Pensioners' Association, 53 percent of social security pensioners were receiving the minimum pension of EC\$150.15 ("Pensioners rest hope in upcoming budget", *Antigua Sun*, November 25, 2004). Government pensioners were receiving a second minimum pension of EC\$500, but this was not mentioned in the news story.

<sup>35</sup> Antigua's population statistics refer to mid-year rather than end-year, so this is the author's calculation from official mid-year estimates for 1998 and 1999.

**Table B2**  
**ANTIGUA: DISTRIBUTION BY AGE OF TOTAL POPULATION**  
**AND ACTIVE CONTRIBUTORS TO SOCIAL SECURITY, 1998**

*(Numbers and percentages)*

	Population	Active Insured Workers			Ratio of Insured to Population (%)
		Private	Public	Total	
55-59	2 006	554	594	1 148	57.2
50-54	2 221	948	912	1 860	83.7
45-49	2 912	1 318	1 091	2 409	82.7
40-44	3 819	2 001	1 347	3 348	87.7
35-39	4 644	2 635	1 510	4 145	89.3
30-34	5 860	3 166	1 594	4 760	81.2
25-29	6 497	3 141	1 513	4 654	71.6
20-24	6 711	2 563	1 232	3 795	56.5
15-19	6 195	573	330	903	14.6
not stated		2 708	496	3 204	...
Total	40 865	19 607	10 619	30 226	74.0

**Source:** Population estimates are from Government of Antigua and Barbuda, Ministry of Planning, Statistics Division. Social Statistics Digest - 2001 Edition, table 1.1. Active contributors are from Perez (1999), Sixth Actuarial Review of the Social Security Fund as at 31 December 1998, table 5, p. 12.



## References

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- Antigua Labour Party (2004). *Moving Forward: The Road Map to Antigua and Barbuda's Continued Progress* (Manifiesto of the ALP, St. Johns, Antigua). <http://www.antiguaelections.com>
- Baker, Judy L. (1997). *Poverty Reduction and Human Development in the Caribbean: A Cross-Country Study* (World Bank Discussion Paper No. 366, Washington, D.C., July).
- Cole, David C. and J. Bernardo Requena Blanco (1997). "Assessing the feasibility of the new Bolivian Pension Programs", in Joseph C. Brada (ed.), *The Deepening of Market Based Reform: Bolivia's Capitalization Program* (Woodrow Wilson International Center for Scholars, Latin American Program Working Paper No. 231, August 1997), pp. 156-173.
- Cueva, Simón and Ernesto Revilla (2003). "The growing fiscal costs of the pension reform", in Bolivia: Selected Issues (IMF Country Report No. 03/258, August 2003), pp. 6-14.
- Devesa-Carpio, José E. and Carlos Vidal-Meliá (2002). "The reformed pension systems in Latin America", Social Protection Discussion Paper No. 0209, World Bank, May.
- Escobar, Federico and Osvaldo Nina (2004). "Pension reform in Bolivia: a review of approach and experience. Grupo Integral Study No. GI-E6, June 2004.
- Freitas, Elloy de (2004). "Merge two streams of public employees: first draft of position paper/proposal", 26 April. <http://www.antigua.gov.ag/reform/articles/news042204.htm>
- Friedman, Milton (1968). "The case for the negative income tax," in *Republican Papers*, edited by Melvin R. Laird (Anchor Books, Garden City, New York), pp. 202-219.
- Fultz, Elaine and Bodhi Pieris (1999). "Social security schemes in Southern Africa: an overview and proposals for future development", Discussion Paper No. 11, ILO Southern Africa Multidisciplinary Advisory Team, Harare, Zimbabwe, December.

- Gelbach, Johah B. and Lant Pritchett (2002) "Is More for the Poor Less for the Poor? The Politics of Means-Tested Targeting", *Topics in Economic Analysis & Policy* 2:1, Article 6. <http://www.bepress.com/bejeap/topics/vol2/iss1/art6>
- Gill, Indermit, Truman Packard and Juan Yermo (2004). *Keeping the Promise of Social Security in Latin America* (Stanford University Press).
- Government of Antigua and Barbuda (1982). *Antigua and Barbuda Budget Speech 1982* (St. Johns, Antigua)
- Government of Antigua and Barbuda (2001). *Social Statistics Digest* (Ministry of Planning, Statistics Division, St. Johns, Antigua).
- Government of Antigua and Barbuda (2004a). *Antigua and Barbuda Throne Speech, delivered by Sir James Beethoven Carlisle, Governor General, at the State Opening of Parliament on Monday, March 29* (St. Johns, Antigua).
- Government of Antigua and Barbuda (2004b). *Budget Statement* (St. Johns, Antigua, 31 March).
- Holzmann, Robert, Richard Hinz and staff of the World Bank (2005). *Old-Age Income Support in the 21st Century: An International Perspective on Pension Systems and Reform* (World Bank, Washington, D.C.).
- IMF (2004). "Antigua and Barbuda", Country Report No. 04/367, November.
- IMF (2005a). "Bolivia: ex post assessment of longer-term program engagement", Country Report No. 05/139, April.
- IMF (2005b). "Bolivia: fifth review under the stand-by arrangement", Country Report No. 05/146, April.
- James, Estelle (1999). "Coverage under old age security programs and protection for the uninsured—what are the issues?" Pensions Publications Online, World Bank.
- Korpi, Walter and Joakim Palme (1998). "The paradox of redistribution and strategies of equality: Welfare state institutions, inequality, and poverty in Western countries", *American Sociological Review* 63:3 (June), pp. 661-687.
- Laurell, Asa Cristina (2003). "What does Latin American social medicine do when it governs? The case of the Mexico City government", *American Journal of Public Health* 93:12 (December), pp. 2028-2031.
- Mesa-Lago, Carmelo (2003). "Reassessing pension reform in Chile and other countries in Latin America", Asian Development Bank, 2003.
- Martinez, Sebastian (2004). Pensions, poverty and household investments in Bolivia, University of California at Berkeley, October. [http://emlab.berkeley.edu/users/webfac/bardhan/e271\\_f04/martinez.pdf](http://emlab.berkeley.edu/users/webfac/bardhan/e271_f04/martinez.pdf)
- Nicholls, Garth (2001). "Reflections on economic growth in Antigua and Barbuda", *Integration and Trade* 15:5 (September-December), pp. 105-144.
- O'Connell, Alison. (2004). *Citizen's Pension: Lessons from New Zealand* (Pensions Policy Institute, London, March). <http://www.pensionspolicyinstitute.org.uk>
- Palacios, Robert J. and S. Irudaya Rajan (2004). "Safety nets for the elderly in poor countries: the case of Nepal", World Bank Pension Reform Primer, June.
- Perez Montas, Hernando (1999). *Sixth Actuarial Review of the Social Security Fund as at 31 December 1998* (Antigua and Barbuda Social Security Board of Control, St. Johns, Antigua, August).
- Piggott, John and Edward Whitehouse (2001). "Pensions in paradise: modernizing the Mauritian retirement-income system", final draft, August.
- Preston, David (2001). *Retirement Income in New Zealand: The Historical Context* (Office of the Retirement Commissioner, Wellington, New Zealand).
- Public Service Commission of Antigua and Barbuda (2001). Recommendation from the Chairman to the Constitution Reform Commission (July 10). <http://unpan1.un.org/intradoc/groups/public/documents/CARICAD/UNPAN010776.pdf>
- Revilla, Ernesto (2002). "The Cost of Social Security Reform in Bolivia", IDB Report BO-0213.
- St. John, Susan (2005). "Retirement income policy in New Zealand". *The Economic and Labour Relations Review*, 15:2, pp. 217-239.
- St. John, Susan and Larry Willmore (2001). "Two legs are better than three: New Zealand as a model for old age pensions", *World Development* 29:8 (August), pp. 1291-1305.
- Schleberger, Eckard (2002). "Namibia's universal pension scheme: trends and challenges", ILO, ESS Paper No. 6.
- Sen, Amartya (1995). "The political economy of targeting", in *Public Spending and the Poor*, edited by D. van der Walle and K. Nead (Johns Hopkins University Press, Baltimore, Maryland), pp. 11-24.
- Subbarao, Kalinidhi (1998). "Namibia's social safety net: issues and options for reform", World Bank Policy Research Working Paper WPS 1996, October.

- United Kingdom, Department for Work and Pensions (2005). Review of Residency-based Pension Schemes, March. [http://www.dwp.gov.uk/pub\\_scheme/2005/mar/rev\\_res\\_based\\_pen\\_schemes.pdf](http://www.dwp.gov.uk/pub_scheme/2005/mar/rev_res_based_pen_schemes.pdf)
- United Nations, Department of Economic and Social Affairs (2005). *Citizen Participation and Pro-Poor Budgeting* (United Nations publication, Sales No. E.05.II.H.3, New York).
- United Progressive Party (2004). *Agenda for Change* (UPP Manifesto, St. Johns, Antigua). <http://www.antiguaelections.com>
- Von Gersdorff, Hermann (1997). "The Bolivian pension reform: innovative solutions to common problems", Policy Research Working Paper 1832, Financial Sector Development Department, World Bank, July.
- Willmore, Larry (2000). "Three pillars of pensions? A proposal to end mandatory contributions", United Nations DESA Discussion Paper No. 13 (June). An edited, slightly shorter version was published as "Three pillars of pensions: is there a need for mandatory contributions?" in *OECD Private Pensions Conference 2000* (OECD, Private Pension Series No. 3, Paris, 2001), pp. 385-397.
- Willmore, Larry (2001). "Universal pensions in low income countries", Initiative for Policy Dialogue Working Paper IPD-01-05, September.
- Willmore, Larry (2003). "Universal pensions in Mauritius: Lessons for the rest of us", United Nations DESA Discussion Paper No. 32 (April).
- World Bank (1994). *Averting the Old-Age Crisis: Policies to Protect the Old and Promote Growth* (Oxford University Press, New York).
- World Bank (1999). Bolivia: Public Expenditure Review, Report No. 19232-BO, 14 June.
- World Bank (2000). Bolivia: From Patronage to a Professional State, Bolivia Institutional and Governance Review, Report No. 20115-BO, 25 August.
- World Bank (2001). *Social Protection Sector Strategy: From Safety Net to Springboard* (World Bank, Washington, D.C.)
- World Bank/Inter-American Development Bank (2004). Bolivia: Public Expenditure Management for Fiscal Sustainability and Equitable and Efficient Public Services, Report No. 28519







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