CASH TRANSFERS FOR OLDER PEOPLE REDUCE POVERTY AND INEQUALITY

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Abstract

The paper discusses the poverty and inequality reduction properties of non-contributory pension in Brazil, South Africa and Bangladesh. It examines the development of non-contributory pension programmes in the countries involved, and the institutional factors behind their extension and current sustainability. It also examines the incidence of non-contributory pension programmes on poverty and inequality.

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INTRODUCTION. NON-CONTRIBUTORY PENSIONS IN DEVELOPING
COUNTRIES

Few developing countries have established large scale non-contributory pension
programmes for older people (Schwarz 2003).[1] Among them, Brazil and South Africa
have two of the largest such programmes. Bangladesh provides an example of a newly
established programme in low income countries.

In South Africa, the non-contributory pension programmes was first established in
1928 for poor whites and coloured and was subsequently extended to cover blacks,
reaching full parity in 1996. In Brazil non-contributory pension programmes in rural
areas were first established in 1963, they expanded in the 1970s, but especially in the
early 1990s after the 1988 Constitution incorporated the right to social security for all.
In urban areas, non-contributory programmes are less well developed. In Bangladesh,
a cash transfer programme for destitute older people was introduced in 1997.

The paper addresses two sets of related issues. Firstly, the paper examines the
development of non-contributory pension programmes over time, as institutions for
poverty and inequality reduction. A key objective is to identify the main factors
explaining the establishment, growth, and sustainability of these programmes in the
context of highly unequal societies. The focus of this section will be on the
development of non-contributory pension programmes in Brazil and South Africa.
Secondly, the paper reviews the available evidence on the incidence of these
programmes on poverty and inequality. The focus here is on evaluating available
evidence on the extent to which non-contributory pension programmes reduce poverty
among beneficiary households, facilitate household investment, reduce inequality, and
support capabilities.

The paper is divided into three sections and a conclusion. The next section outlines
summary information on the non-contributory pension programmes. The following
section covers the institutional development of the programmes and draws some
implications for the development of institutions for equity and development in
developing countries. The final section discusses in turn the incidence of non-
contributory pension programmes on poverty, household investment, equity, and
capabilities. The main findings are then summarised in the Conclusion.

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[1] Non-contributory pension programmes describe cash transfers to older people which entitlements are
not based on a lengthy record of contribution to a pension plan. These include cash transfers for poor
older people, assistential pensions, and old age grants, and exclude disability and survivor pensions.

2. NON-CONTRIBUTORY PROGRAMMES IN BRAZIL, SOUTH AFRICA, AND BANGLADESH

This section provides a brief description of the non-contributory pension programmes. Table 1 below summarises the key features of the programmes.

South Africa

A social pension (SP) benefit (640 Rand in December 2002) is paid to men aged 65 and over and women aged 60 and over. Benefit entitlements are means tested on the income of the individual beneficiary, and his/her spouse, but not on the income of other household members. The programme was established in 1928 as a means of ensuring a minimum standard of living in retirement for whites and coloureds who did not have an occupational pension (van der Berg 2001). Subsequently, the programme was extended to blacks (1944), but with different conditions for entitlement and benefit levels.[2] In the 1980s and 1990s, there was a gradual move towards parity in benefits, which was completed in 1996 with the introduction of non-discriminatory regulations. Blacks are now the main beneficiaries. In 1993, there were just above 1.5 million old age pension being paid, with 1.2 million being paid to blacks (van der Berg 2001). The most recent estimate is that there are 1.9 million beneficiaries of the state old age pension (Committee of Inquiry into a Comprehensive System of Social Security for South Africa 2002). The programme is reasonably well administered, and reaches the poorer rural areas. The programme is funded through general taxation, absorbing 60 percent of social security expenditure, and 1.4 percent of GDP in 2002. It is widely acknowledged that the old age pension has had a significant impact on poverty among Africans (Ardington and Lund 1995), and that it produces a substantial redistribution of income in the country (Committee of Inquiry into a Comprehensive System of Social Security for South Africa 2002).

Brazil

Limited provision of non-contributory pensions for workers in the rural sector dates back to 1963, but entitlements were restricted to the very old. The scheme was gradually upgraded during the 1970s, but coverage was limited to heads of poor household and benefits remained low. The 1988 Constitution incorporated the right to social protection for all, including workers in the rural sector and in informal employment. This led to a range of reforms being implemented from 1991 to establish a new rural old age pension, referred to as *Prêvidencia Rural* (PR) below. As part of the reforms, the age of pension eligibility was reduced to 60 for men and 55 for women. Entitlement to old age, disability and survivor pensions was extended to workers in subsistence activities in agriculture, fishing and mining, and to those in informal employment. Whereas prior to 1991 only heads of household were entitled to a pension, the reforms extended entitlement to all qualifying workers, thus expanding coverage to female rural workers who were not heads of household. The value of the pension benefits was raised from 0.5 to 1 minimum wage (200 Reais in December 2002). Entitlement is conditional on workers demonstrating an engagement in agricultural or subsistence production, and not having contributed to social

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[2] Benefits for blacks were subject to more stringent means tests and were less than one tenth of the benefits received by whites (van der Berg 1997).

insurance or acted as employers. The contributory requirement is replaced by proof of economic activity.[3] A key aspect of the programme is that access to pension entitlements does not require earnings or inactivity tests.

In urban areas, provision of old age assistance pensions is much less developed. A social assistance pension *Renda Mensal Vitalícia* (RMV) was introduced in 1974 paying a flat rate benefit of one half the minimum wage to older or disabled people who could not provide for themselves. To be entitled to the RMV, individuals needed to be 70 years of age or over and have at least 12 months of contributions to social insurance. Following the 1988 Constitution, a new social assistance pension, the *Beneficio de Prestação Continuada* (BPC) was introduced in January 1996, paying one minimum wage to disabled or elderly people aged 67 and over living in urban or rural areas with per capita household income no greater than a quarter of the minimum wage. Entitlement, including the means test, is reviewed every two years. The conditions for entitlement under the BPC are tougher than under the *Prêvidencia Rural*.

In December 2000, there were 4.6 million beneficiaries receiving an old age pension under the *Prêvidencia Rural* programme, 0.3 million old age RMV beneficiaries, and 0.4 million old age BPC beneficiaries.[4] The fiscal cost of the *Prêvidencia Rural* programme, including disability pensions, has been estimated at 1 percent of GDP (Schwarzer and Querino 2002b), while the cost of the RMV and BPC programmes should be around 0.2 percent of GDP given the smaller number of beneficiaries. Excluding disability pensions, a reasonable estimate of the cost of providing old age non-contributory pensions in Brazil is 1 percent of GDP.

Bangladesh

An *Old Age Allowance Scheme* (OAAS) was introduced for the first time in Bangladesh in 1997-8. A separate programme targeting poor widows and destitute women (Assistance Programme for Widowed and Destitute Women APWDW) was later established. The OAAS pays a monthly allowance of around US$2 (Tk.$ 100) a month to the 10 oldest and poorest members (5 men and 5 women) of each ward of the union, the lowest level district. The APWDW adds a further 5 beneficiaries per ward. The programmes are financed from general government revenues, through budgetary allocations in the five-year plan. The annual budget allocation for the OAAS programme is Tk500m or around 0.02 percent of GDP. Adding the APWDW programme, the total cost rises to 0.03 percent of GDP. There are 40311 wards in 4479 unions in the country, so the targeted number of beneficiaries for the OAAS when the programme is fully operational is 403,110, and the APWDW is a further 201,555. The Ministry of Social Welfare manages the programmes. Selection of beneficiaries is necessary because the ceiling number of allowances is insufficient to cover all poor older people. Wards committees do the selection on the basis of the age, economic status, and health status of prospective beneficiaries (beneficiaries are

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[3] The partial integration of rural pensions within the social insurance system in Brazil has generated uncertainty over the conditions for entitlement for rural pensions in the future. The legislation replaces, for rural workers, the contribution record requirement with a requirement of economic activity (including household and informal production), only for the period 1992-2007. There is uncertainty over what rules will apply after 2007 (Schwarzer and Querino 2002a).
[4] These figures exclude beneficiaries of disability pensions under the three programmes.

landless with annual income below US$ 50). The programmes are therefore targeted on the extreme poor and destitute (Begum 2003; Rajan, Perera et al. 2003). The ward committees include public officials, elected representatives, local elites, and at least one social welfare officer. Early evaluations concluded the programmes have been well received by local communities and they are reasonably well targeted, but are insufficient in number to cover the poor groups targeted, and are also insufficient in value to pull beneficiaries above the poverty line (Begum 2003).

Table 1. Old age non-contributory pensions - Programmes summary

	South Africa	Brazil		Bangladesh
	SP	**PR**	**BPC (RMV)**	**OAAS/APWDW**
Beneficiary groups (age of entitlement)	men (65) and women (60) with low incomes	men (60) and women (55) in subsistence or informal agriculture	men and women (67)	15 oldest and poorest in each ward (10 women)
Targeting	means test	workers outside social insurance plans	means test	community selection
Value of benefit	US$70 a month	US$ 70 a month	US$ 70 a month	US$ 2 a month
Beneficiaries	1.9 m	4.6m	0.7m	0.7m
Annual cost as % of GDP	1.4	0.8	0.2	0.03
Finance source	government revenues	2.2% tax on sale of agricultural produce (10%) plus subsidy from social insurance (90%) (*de facto* government revenues)	government revenues	government revenues
Year established in current form	1994/6	1993	1996	1997
Institutional context	gradual move to parity with renewed social contract	1988 Constitution and renewed social contract	1988 Constitution and renewed social contract	Five Year Plan 1997-2002

Source: (van der Berg 1997, 1998; Schwarzer and Querino 2002a; Barrientos and Lloyd-Sherlock 2003a; Begum 2003)

2. NON-CONTRIBUTORY PENSIONS AS INSTITUTIONS FOR EQUITY AND DEVELOPMENT

This section considers the institutional environment leading to the establishment and development of non-contributory pensions in the three countries involved, and examines their current sustainability.

2.1. Development of non-contributory pensions in Brazil, South Africa and Bangladesh

A brief discussion of the development of non-contributory pension institutions is needed to embed the analysis that follows.

In South Africa the social pension can be traced back to 1928, when means tested old age grants were introduced for white and coloureds. Blacks were explicitly excluded.[5] The social pension was extended to blacks in 1944, but with lower entitlements and stricter conditions. The extension of social pension provision to blacks, in spite of its discriminatory basis, had significant implications for the development of social policy in South Africa. As the Taylor report notes, the extension of the social pension to blacks embodied a universalistic, if discriminatory, principle, in contrast to apartheid's 'labour-welfare' nexus focused on protecting 'the labour market position of white workers' (Committee of Inquiry into a Comprehensive System of Social Security for South Africa 2002). It is therefore not surprising that after legislation established full parity in entitlements in 1996, the social pension has been looked upon as a basis for the development of a comprehensive social security system in South Africa.

The extension of the social pension to include blacks led to a rapid increase in the number of black pension recipients, but, because of the differentiated entitlements, their share of benefit expenditure lagged behind. The share of blacks among pension beneficiaries (share of total benefit value) rose to 60 (19) percent in 1958, 70 (43) percent in 1978, and 81 (67) percent in 1993. These figures reflect gradual increases in pension entitlements for blacks relative to whites in the 1970s and 1980s, until full parity was achieved in the mid 1990s. These resulted from a combination of a reduction of benefit levels and tightening of the means test for the minority of whites who qualified, and a rise in the level of the benefit for blacks. This was made possible by a favourable set of institutional and political factors (van der Berg 1997). In the context of apartheid, it was especially helpful that discrimination in the labour market made the social pension of marginal value to whites. This lowered the degree of opposition to the changes compared to other areas of public expenditure. As van der Berg notes, equalisation "was thus most readily accomplished where political resistance to reducing white benefit levels was the least … the small number of white who qualified under the means test were poor and politically marginal" (van der Berg 1998, p.6). The implications for public finances of incorporating blacks presented greater difficulty, but the large differential in benefit levels for whites and blacks, together with increases in budget allocation, smoothed out the changes. In terms of

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[5] According to van der Berg, the exclusion of blacks reflected the then dominant view of social policy, embodied in the 'civilized labour' perspective, "that people accustomed to modern life-styles and consumption patterns had greater need of social protection than those in rural subsistence agriculture" (van der Berg 1998, p.6).

the drivers of change, enlightened officials and those opposed to the apartheid regime supported the universalisation of the social pension along non-racial lines. There was evidence supporting the view that the social pension had a strong impact on poverty among blacks, and especially those in rural areas.[6] The politicians were fully aware of the instrumental value of the social pension, as it helped "confer political legitimacy on the homeland system and the tricameral parliament" (van der Berg 2001, p.188). Cash transfers provided a much needed injection of liquidity into the homelands, thus helping to stem migration to South Africa's urban centres.

In Brazil, the right to social security was incorporated into the Constitution in 1934, but it specifically excluded rural and informal workers. It led to the development of social insurance institutions, health insurance, pensions, work-related injuries insurance, for specific groups of workers. This is common among countries in the region. It was consonant with the import substitution industrialisation development model dominant in Latin America, which relied on a strong state redirecting resources from agriculture to industry, and was sustained by political alliances involving the middle classes and formal workers (Barrientos 2004). The development of rural social movements in the 1950s and 1960s led to the formation of the *Ligas Campesinas* in the 1960s agitating for agrarian reform. The progressive government of João Goulart responded by establishing the *Estatuto do Trabalhador Rural* in 1963, which set up the *Fundo de Assistência e Previdência do Trabalhador Rural* (FUNRURAL). This programme was intended to provide limited social insurance for rural workers, financed by a 1 percent tax on the sale of rural produce. FUNRURAL did not get very far. It was intended more as a political/programmatic intervention than a fully fledged social insurance for rural workers, its financial base was inadequate, and the military overthrew Goulart in 1964.

The military government initially downgraded FUNRURAL, restricting it to providing health insurance. Interestingly, the military later restructured and expanded FUNRURAL (a new programme PRORURAL was set up in 1971 to be managed by FUNRURAL) restating old age cash transfers for rural and informal workers, aged 65 and over, who were heads of household. The benefit was equivalent to one half of the minimum wage. Schwarzer outlines the key factors explaining this change of policy (Schwarzer 2000): (i) enlightened officials, committed to ILO policies, pushed for the universalisation of social insurance which at he same time helped secure a unified administrative social security system under their control; (ii) cash transfers were seen as an effective means to stem migration into the cities and as a stimulus to the local rural economy and to the development of basic services infrastructure in the countryside; (iii) the military saw an instrumental value in the programme in terms of reducing social unrest and opposition to the restructuring of the agricultural sector;[7] and (iv) as a means to co-opt the rural trade unions into the state (rural trade unions played a key role in identifying beneficiaries, in the absence of contributory or

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[6] The Taylor Commission's analysis of 1993 data concluded that "over a quarter of household income in the second and third deciles came from state old age pensions. Indeed, the presence of an old age pensioner in the household was often the main reason for lifting households out of abject poverty" (Committee of Inquiry into a Comprehensive System of Social Security for South Africa 2002, p.24).
[7] Schwarzer notes that the referral process for accessing FUNRURAL pensions involved local officials so that "holding a position such as local director of FUNRURAL in small towns was an important way of promoting a political career in those days" (Schwarzer and Querino 2002a, p.74).

administrative registers among informal workers, and providing/ arranging health care).

In urban areas, the establishment of a non-contributory pension programme was more difficult due to concerns, especially among government and trade unions, that it would undermine the contributory social insurance programme. However, in 1974/5 the military government introduced a social assistance pension for the destitute elderly and disabled, the *Renda Mensal Vitalícia*, paying one half of a minimum wage to those aged 70 and over with no other means of support. This applied to both rural and urban areas, but required at least 12 months of contributions to formal social insurance. Given the strong opposition to non-contributory pensions, the programme was implemented with considerable caution (Schwarzer 2000).

The end of two decades of military dictatorship led to a fundamental rethinking of social security, and a renewal of the 'social contract' enshrined in the 1988 Constitution. This restated the right to social protection for all, including informal and rural workers and households (Delgado and Cardoso 2000c). It also embodied a commitment to an integrated system covering social insurance and social assistance. Legislation introduced in 1991 to 1993 produced significant changes in the rural and urban non-contributory pension programmes. A new *Prêvidencia Rural* programme replaced FUNRURAL/PRORURAL in 1993, extending entitlements to all age qualified individuals and doubling benefits to one minimum wage. The *Renda Mensal Vitalícia* was replaced for new beneficiaries in January 1996 by the *Beneficio de Prestação Continuada* with the age of entitlement expected to be gradually reduced from the current 67 to 65 years of age in 2005,[8] with a means test threshold of a per capita household income of a quarter of a minimum wage. The *Beneficio de Prestação Continuada* does not require a contribution record, as the RMV did, but it is intended that entitlement will be reviewed every two years.[9]

In Bangladesh, the introduction of the Old Age Allowance Scheme in 1997 followed concern with old age poverty in the Third Five Year Plan (1985-90) and the Fourth Five Year Plan (1990-95), and budget allocation in the Fifth Five Year Plan (1997-2002). Public policy on older groups had focused on public pensions for civil servants and public corporations, on which the vast majority of the relevant budget has been spent.

2.2. Non-contributory pensions and the development of solidarity institutions in developing countries

It is very important not to overlook the unique way, in the context of developing countries, in which non-contributory pensions, and especially the social pension in South Africa and *Prêvidencia Rural* in Brazil, became established. In South Africa, the social pension developed into a universal and gradually non-racially discriminatory programme, in the midst of the highly discriminatory and unequal institutions of apartheid. The social pension is seen as the foundation for a future

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[8] This has not materialised because of opposition to the bill regulating this change. Underlying opposition to the bill are strong concerns that equalising the age of entitlement for social insurance pensions (currently 65 for men) and for public assistance pensions would undermine incentives to contribute to the former.
[9] This has not been implemented in full due to administrative difficulties.

comprehensive social security system (Committee of Inquiry into a Comprehensive System of Social Security for South Africa 2002). In Brazil, *Prêvidencia Rural* developed in the context of institutions that explicitly excluded informal and rural workers and which were based on the contributory principle. *Prêvidencia Rural* developed against these two overriding principles of welfare provision, and is perceived as a key programme in extending social protection to informal workers (Delgado and Cardoso 2000c; Schwarzer and Querino 2002b).[10]

Non-contributory pension programmes are not about pensions in the conventional sense

In developed countries, a stylised model of the development of solidarity institutions engaged in welfare production is graphically described as ever expanding concentric circles centred on formal and unionised workers and on a narrow range of benefits in which old age and retirement pensions are dominant. Over time, more vulnerable workers and their households were co-opted, and the range of contingencies covered expanded.[11] The path of development of welfare institutions is described as moving 'from the strong to the weak'. The nature of non-contributory pension programmes and their dynamics appear to obey an altogether different logic.

Mulligan and Sala-i-Martin have sought to develop a 'positive' theory of programmes supporting the old across a range of developed and developing countries through identifying common characteristics in the relevant programmes (Mulligan and Sala-i-Martin 1999b, c). They find that the strongest common feature across these is that they induce retirement, and conclude that the "main lesson from cross-country and historical comparisons of programs for the elderly is that … programs appear to be strongly related to labour markets – contributions are a function of labour income while benefits are a function of labour income and labour force status" (Mulligan and Sala-i-Martin 1999a, p.11). This has the implication that the vast majority of programs for the elderly cannot be described as anti-poverty programs. The non-contributory programmes under examination here are very different. In all three countries, non-contributory pension programmes were adopted specifically to deal with old age poverty, are not directly linked to labour market,[12] do not require earnings-related contributions, and most importantly do not explicitly require withdrawal from the labour force except for implicit constraints arising from the means test. They are explicitly anti-poverty cash transfer programmes based on age. It would be more appropriate to consider non-contributory pension programmes not as pensions, but as cash transfers tagged on the old (Case and Deaton 1998).

For all three countries studied here, the adoption of non-contributory pension programmes arises from the failure of social insurance or occupational pension plans to extend beyond workers in formal, and especially public, employment. This is an obvious, but far reaching, point. In Latin America in particular, the expectations implicit in social policy in the post WWII period were that social insurance schemes

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[10] Schwarzer and Querino raise the issue whether the framework of rural pensions supporting subsistence and household production could also be applied effectively to household production in the urban sector (Schwarzer and Querino 2002a, pp.118-119)

[11] See Atkinson for a discussion of social insurance (Atkinson 1995).

[12] Except for the fact that economic activity is a factor in the identification of *Prêvidencia Rural* beneficiaries.

would gradually co-opt more vulnerable groups until universal coverage was achieved. These expectations did not materialise. Furthermore coverage of social insurance has shrank in the 1980s and 1990s (Barrientos 2004). Developing countries appear not to be capable of replicating the 'strong to the weak' dynamics observed in developed countries. The experiences of Brazil and South Africa suggest one important explanation, namely that entrenched inequality precludes the gradual co-option of more vulnerable groups into social insurance institutions.[13] In Brazil, rural-urban and formal-informal divisions set definite limits to the expansion of social insurance. In South Africa, racial discrimination further entrenched inequality.[14]

Why the focus on old age poverty?

It is an interesting issue why concerns with old age poverty and pension programmes take priority over other vulnerable groups and other welfare programmes.[15] The priority afforded to support for the older poor is sometimes questioned on efficiency grounds.[16] It can also be questioned in the context of maximising poverty reduction expenditure.[17] There is evidence from attitudinal surveys, across societies and age groups, to the effect that concerns over old age poverty are strong and widely shared.[18] There is a direct association existing between old age and poverty (Barrientos, Gorman et al. 2003). This is as true for developing countries today as it was true for developed countries as they industrialised. In relative terms, stronger concerns with old age poverty, and greater political support for programmes supporting the old poor, can be rationalised in a number of ways - and the points that follow fail to exhaust those provided by the related literature. Atkinson suggests that support for poor older people by the population at large is more likely to be forthcoming because old age is more easily verifiable and less subject to moral hazard, when compared to unemployment insurance for example (Atkinson 1995). Mulligan et al. note the fact that non-contributory pensions are incentive compatible in the sense that recipients are less likely to alter their labour supply or saving behaviour (Mulligan and Sala-i-Martin 1999b).[19] Lund suggests that support for older people is more likely to be forthcoming as most people expect to be old one day, but perhaps not unemployed, or single parent, or disabled (Lund 1999).[20]

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[13] Bourguignon discusses how inequality undermines middle class support for insurance pooling (1998, p.28).

[14] Alesina et al. suggest that an important reason why the US does not have European style welfare states is the heterogeneity of its population groups (Alesina, Glaeser et al. 2001)

[15] Mulligan and Sala-i-Martin pursue this issue in detail in the context of contributory programmes (Mulligan and Sala-i-Martin 1999b, c, a).

[16] James, for example, notes that "one can argue that priority for social assistance should be given to young families with children, who have their entire lives ahead of them" (James 2001).

[17] In the context of South Africa, van der Berg suggests that changes in poverty and vulnerability require a remodelling of social assistance with a greater focus on unemployment (van der Berg 2002). For Brazil, Paes de Barros and Carvalho argue for the need to rebalance social expenditure away from pensions and towards families with children (Paes de Barros and Carvalho 2004).

[18] See for example the evidence from Latinobarometro suggesting that a higher proportion of respondents support greater public expenditure on pensions (83.7%) than on unemployment insurance (73.4%) or defence (32.4%) (de Ferranti, Perry et al. 2000, p.4). Support for pensions is also shown to be consistent across age groups.

[19] Although younger household members could do so. See the next section for evidence on the incidence of pension receipt on the labour supply of older people. See also Jensen for a discussion of 'crowding out' (Jensen 2004).

[20] Some explanations proffered for the strong pension programmes in developed countries do not apply to developing countries, for example the view that pension programmes in developed countries are

What kind of institutional and political environment made possible the development of non-contributory pensions in the countries studied?

What are the main factors behind the development of non-contributory pensions as institutions for poverty and equity reduction? Remarkably, there are important similarities in the reasons provided to explain the extension of non-contributory pension programmes in Brazil and South Africa:

- In both countries, enlightened government officials committed to universalising welfare institutions (van der Berg 1997; Delgado and Cardoso 2000c) supported the extension of non-contributory pension programmes. In the case of Brazil, government officials also aimed to consolidate and control the disparate administrative bodies engaged in social security.

- Perhaps more importantly, in both countries the non-contributory pension programmes involved an explicit redistribution from urban to rural areas justified by the need to prevent, or reduce, migration from rural to urban areas. In this context, cash transfers to poor older people appeared to be a politically acceptable instrument to inject purchasing power into rural areas. This is interesting because one could think of other, perhaps more effective, means to encourage rural development. One possible explanation is that pensions, as opposed to other types of transfers, are less likely to create work disincentives.

- In both countries, non-contributory pensions were seen by unpopular regimes as instrumental in reducing social unrest, arising from the homelands system in South Africa, or agricultural liberalisation and landlessness in Brazil. This is an important piece in the puzzle why regimes otherwise strongly opposed to redistribution did in fact support it in these two countries.

- A renewal of the social contract in both South Africa, with the gradual dismantling and final fall of apartheid, and Brazil, with the 1988 Constitution after two decades of dictatorship, is a key factor in the extension of non-contributory pension programmes. These events encouraged debate and consensus around the need to establish and uphold on rights to social protection for all.

What makes non-contributory pensions politically sustainable?

The institutional sustainability of non-contributory pension programmes in Brazil and South Africa results from a number of factors:

- The programmes embed a range of desirable redistribution. Non-contributory pensions combine redistribution to the poor with life course redistribution. As noted above, social preferences on life course redistribution are strong. They also combine urban-rural redistribution, reflecting equity considerations

supported by a gerontocracy (Mulligan and Sala-i-Martin 1999a), sustained by powerful interest groups around older people with considerable leisure time and unified around a single issue.

combined with instrumental or functional considerations, such as the perceived need to reduce migration to urban centres.

- Non-contributory pensions are especially effective in addressing old age poverty among women, and can therefore play a role in reducing discrimination and exclusion.

- Non-contributory pensions are perceived to be effective, they are reasonably well targeted (more strictly, they are tagged on the old – rather than targeted), abuse of the system is not a significant issue, and the administration of the benefit is reasonably effective and low cost.[21] This will be covered in more detail in the next section below.

- Non-contributory pensions have proved flexible in responding to problems arising from social and economic change. HIV/AIDS in South Africa, as well as labour migration, have led to a rise on the share of households without middle age members, and in which grandparents take up a primary care role. The social pension is generally perceived to be an affective and key instrument to support these households. In Brazil, *Prêvidencia Rural* is generally agreed to have played an important role in facilitating economic transformation in the rural sector, and in protecting households from the adverse effects of such change (Delgado and Cardoso 2000a).

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[21] In fact there are some administrative issues associated with the programmes, delivery and cost in South Africa (Van Zyl 2003) and corruption and poor targeting (Saboia 2003), but these are not of a scale capable of undermining political support for the programmes.

It may be helpful to summarise the main findings in this section:

- Non-contributory pension programmes in Brazil and South Africa developed against adverse institutional environments: racially discriminatory social policy in South Africa and segmented social insurance in Brazil.

- Non-contributory pension programmes follow a different logic and dynamics than that shown by formal programmes supporting older people. The former are focused on poverty reduction, entitlements are not directly determined by labour market factors, and they do not encourage retirement from the labour force. Their development path has not followed the 'strong to the weak' dynamics.

- The development of non-contributory pension programmes reflect widely held concerns with old age poverty, and are a core foundation of solidarity institutions.

- Instrumental factors combined with natural reservoirs of political support and social contract renewal are key to explaining the expansion of non-contributory pension programmes in the 1990s.

- The perceived effectiveness of non-contributory pension programmes, and their capacity to combine redistribution to the poor with life course redistribution, redistribution from urban to rural areas, and from men to women, are important factors in ensuring political sustainability.

3. EQUITY, POVERTY AND CAPABILITIES

The findings from a number of studies indicate that the incidence of non-contributory pension programmes is strongly associated with positive outcomes in a wide range of variables. The available evidence from these studies suggests that non-contributory pension programmes reduce poverty among older people and their households, enable investment in human and physical capital within beneficiary households, strengthen intergenerational solidarity and transfers, insure poorer rural communities against the adverse effects of agricultural reform, and encourage local economy activity.[22] This section considers the incidence of non-contributory pension programmes in Brazil, South Africa, and Bangladesh on poverty, household investment, inequality, and capabilities.

3.1. Pension income and poverty

A small number of studies have focused on the incidence of non-contributory pension programmes in Brazil and South Africa on poverty. Lund identified the poverty reduction and promotion effects of the social pension in South Africa, and has traced the expanding literature (Lund 1993; Ardington and Lund 1995; Lund 1999). Deaton and Case looked at this issue in the context of a 1993 nationwide household dataset and confirmed that the social pension has large effects on poverty. Their analysis showed that around 35 percent of Africans survived on less than US$1 a day, and that this "figure would be 40 percent if the pension incomes were removed and there was no off-setting change in pre-pension incomes" (Case and Deaton 1998, p.132). Studies using more recent data have confirmed the poverty reduction effects of the social pension, albeit less directly through estimating the correlation existing between the presence of pensioners in a households and measures of income and poverty (Leibbrandt 2001). In Brazil, researchers at the *Instituto de Pesquisa Econômica Aplicada* (IPEA) have investigated the incidence of the rural old age pension and have concluded that the programme has significant effects on poverty (Delgado and Cardoso 2000b; Delgado and Cardoso 2000c; Schwarzer 2000; Schwarzer and Querino 2002b). Delgado and Cardoso compared households with a pension beneficiary against households without one, and found that the incidence of poverty was higher among the latter. The proportion of beneficiary households who were poor was 38.1 percent in the Northeast region and 14.3 percent in the South, whereas among non-beneficiary households poverty incidence was 51.5 percent and 18.9 percent respectively (Delgado and Cardoso 2000a). To my knowledge, there are no studies on the incidence on poverty of the urban non-contributory pension programme in Brazil, or the non-contributory programmes in Bangladesh.

Using comparable data from Brazil and South Africa from a dedicated household survey (see Appendix One), reliable and comparable estimates of old age poverty can be constructed (Barrientos 2003c). These are applied to two measures of household

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[22] See inter alia (Ardington and Lund 1995; Lund 1995; Møller and Sotshangaye 1996; Case and Deaton 1998; Ferreira 1999; Fultz and Pieris 1999; Lund 1999; Saad 1999; Sagner and Mtati 1999; Carvalho 2000c, a; Case and Wilson 2000; Delgado and Cardoso 2000c, a; Duflo 2000; Schwarzer 2000; Case 2001; Devereux 2001a, b; van der Berg 2001; Bertranou, Solorio et al. 2002; Brumer 2002; Camarano and Pasinato 2002; Committe of Inquiry into a Comprehensive System of Social Security for South Africa 2002; Jensen 2002; Lund 2002; Schwarzer and Querino 2002b; Barrientos 2003b, a; Barrientos and Lloyd-Sherlock 2003b; Dieden 2003; Werneck Vianna 2003).

income, one incorporating all household income, and a second measure excluding pension income. The differences in the poverty estimated on these two measures of household income yield an estimate of the incidence of the programmes on poverty. [23] The comparison answers a hypothetical question: what would be the impact on households with older people if the pension benefit were withdrawn? The estimates are explained and described in Box 1 below. These show that the withdrawal of the pension income, in the absence of second order effects, would increase the incidence, intensity, and inequality of poverty.

Box 1. TIPS for non-contributory poverty programmes in Brazil and South Africa

The poverty estimates below are based on adult equivalent household income, obtained by applying an equivalence scale to aggregate household income. The adjustment takes account of the comparative 'cost' of children (0.5 of an adult) and economies of scale in the household (extra adults count for 0.75 of the first one). The poverty lines used were the levels of the pension benefit at the time of the survey, which is 640 Rand in South Africa and 200 Reais in Brazil.

The comparison of poverty measures with the full income of the household and with after subtracting pension income is presented in Figures 1 and 2 below for Brazil and South Africa respectively. The Figures are in TIP, the 'Three 'I's' of Poverty', format (Jenkins and Lambert 1997), sometimes referred to as the cumulative poverty gap curve. The figures provide a graphic representation of the incidence, intensity and inequality dimensions of aggregate poverty. The distribution of incomes y in a population of n units, can be ranked in ascending order as $y_i = (y_1, y_2, \ldots, y_n)$. The poverty line is z. The vector of poverty gaps, the difference between a unit i's income yi and the poverty line z, associated with y is therefore $g_{yi} = max [z - y_i, 0]$. The cumulative poverty gap curve adds the poverty gaps from the poorest units, that is $TIP(g; k/n) = \Sigma^k_{i=1} g_{yi} / n$, for integer values $k \leq n$. For non-poor units the poverty gap is zero, so that the point at which the curve becomes horizontal indicates the share of the population that are poor on the horizontal axis. The length of the curve therefore indicates the incidence of poverty. The same point indicates on the vertical axis the average poverty gap, that is the poverty gap resulting from dividing the aggregate poverty gap among the total number of units. The height of the curve therefore provides an indicator of the intensity of poverty. The degree of concavity of the curve indicates the inequality dimension of aggregate poverty. If the incomes of the poor were equally distributed, and therefore poverty gaps were equal, the curve would be a straight line.

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[23] This is an imperfect estimate because it does not account for second order effects from the withdrawal of the pension benefit. To the extent that the withdrawal of the benefit encourages other household members to pursue additional income generating activities, the poverty reduction effects of the non-contributory pension programme are overestimated. But to the extent that the pension income supports income generating activities, the estimates from this approach underestimate the effects of the programme on poverty. On this see the discussion in the next section.
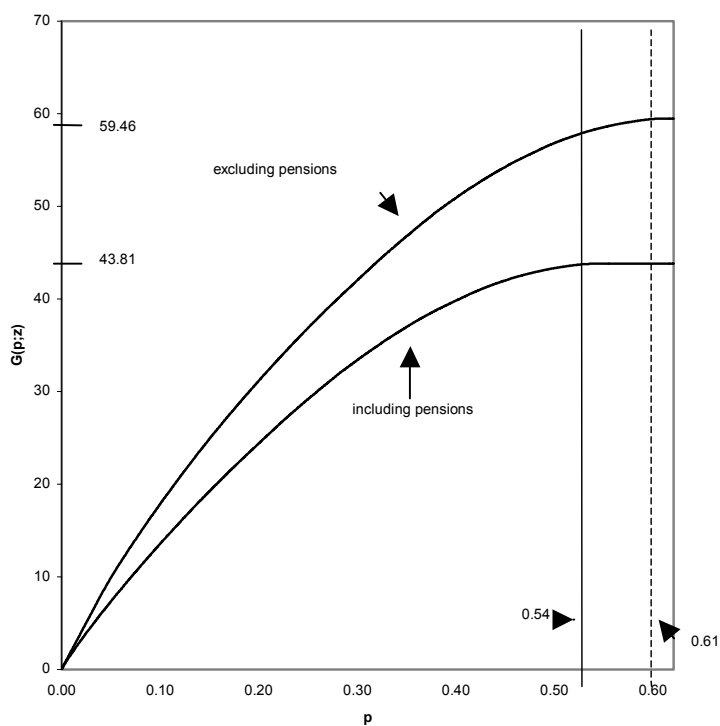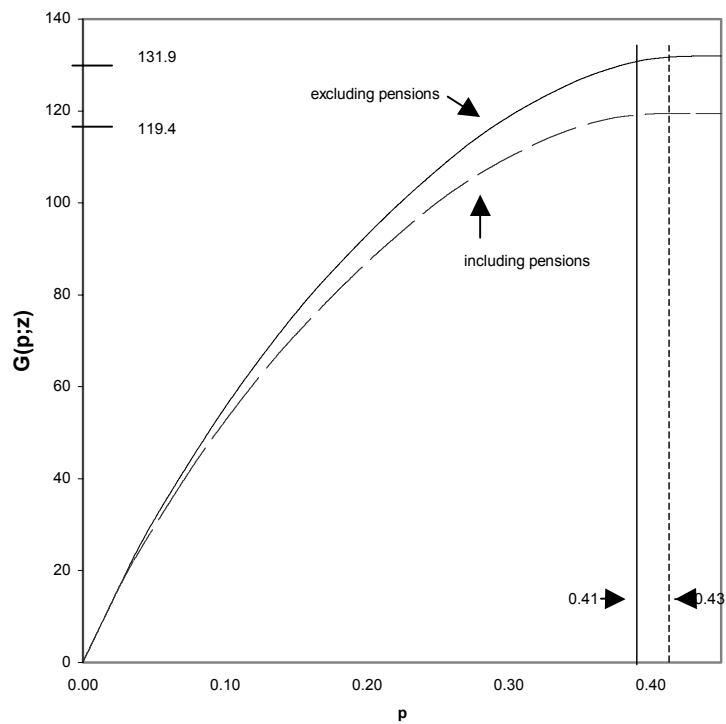
Figure 1. TIP curve, Brazil sample

Figure 2. TIP curve, South Africa sample

The Figures show that the withdrawal of the pension income, in the absence of second order effects, would increase the incidence, intensity, and inequality of poverty. For South Africa, the Figure shows that withdrawing the pension income would have a marginal effect on the incidence of poverty, increasing the poverty headcount from 41 to 43 percent among individuals in the sample (households with older people), but a much larger effect on the average poverty gap from 119.4 Rand to 131.9 Rand, an increase of 10.4 percent. For Brazil, the Figure shows that withdrawing the pension income would lead to a rise in the incidence of poverty in the sample of households with older people from 54 to 61 percent, and would have a large effect on the average poverty gap, as it increases from 43.8 to 59.4 Reais, an increase of 35.6 percent.

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In interpreting the figures for the poverty impact of non-contributory pensions, it is important to keep in mind that the analysis is premised on pension income being shared within the household,[24] and is based on adult equivalent household income. The relatively small effect of the non-contributory pension on poverty incidence in South Africa reflects the larger household size in that sample, with pension income divided more extensively than in Brazil.[25] The stronger effect from withdrawing pension income on the average poverty gap than on poverty incidence is encouraging, as it suggests pension income works better at lifting the incomes of the poorest than at taking those just below the poverty line above it.[26]

Barrientos estimates the impact of pension income on the probability that an individual in the sample is poor within in a multivariate model and finds that living in a household with a pensioner reduces the probability of being poor by 18 percent in Brazil and 12.5 percent in South Africa (Barrientos 2003c).[27]

In Bangladesh, household data from the 2000 Bangladesh Demographic and Health Survey enables a limited analysis of the incidence of the non-contributory pension programmes on poverty. It is possible to identify in the data programme beneficiaries for the OAAS and APWDW, although not separately. The brief analysis that follows targets exclusively households in the sample with at least one member aged 57 and over, the age of eligibility for the OAAS. This is helpful in seeking to identify the beneficiaries of the old age cash transfer programme within the subset of households with an eligible member.

An interesting issue is the extent to which non-contributory pension programmes reach poor households. Recall that the programme specifies a fixed number of beneficiaries per ward, with beneficiaries selected by local committees. The 2000 Bangladesh Demographic and Health Survey does not capture data on household income or expenditure, but a range of household asset variables enable the

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[24] This was confirmed by survey responses to questions on pension and income sharing.

[25] Median household size was 3 in Brazil and 5 in South Africa.

[26] The TIP curve shows the impact of pension income on the poverty gap averaged across the full sample, but a measure of the impact of pension income on the poverty gaps of the poor only is also appropriate. Withdrawing pension income would increase the poverty gaps of the poor by 40 percent in Brazil and 81 percent in South Africa (Barrientos 2003c).

[27] These are marginal effects computed from a probit model with a 0,1 poverty indicator as the dependent variable, and a range of household and individual characteristics as well as income sources as independent variables (Barrientos 2003c).

construction of a 'wealth index', which can be used to classify households according to their socio-economic status. Filmer and Pritchett have shown "a correspondence between a classification of households based on the asset index and consumption expenditures" (Filmer and Pritchett 1998). Table 2 below shows the location of non-contributory pension beneficiaries within quintiles of households classified according to the wealth index. Taking households in the lowest two quintiles as poor, the figures show that the programme is reasonably well targeted, as 77.2 percent of households with a beneficiary are in the lowest two quintiles. The probability of having a pension beneficiary in the household is significantly higher for households in the two lowest quintiles, at 6.4 and 6.0 percent respectively, than for better off households.

Table 2. Location of households with non-contributory pension beneficiaries among eligible beneficiary households, Bangladesh 2000

Quintiles of wealth index	Distribution of households with a pension beneficiary in each quintile (%)	Percentage of households in each quintile having a pension beneficiary
Q1 Lowest	39.6	6.4
Q2	37.6	6.0
Q3	15.8	2.5
Q4	5.9	0.8
Q5 Highest	1.0	0.2

Own calculations from Bangladesh Demographic and Health Survey 2000 data. Eligible beneficiary households are households with at least one member aged 57 or more. Figures are for a weighted sample of these households.

While the non-contributory pension programmes in Bangladesh score reasonably well on vertical poverty reduction efficiency, leakages to the non-poor are one third or less, their coverage of the poor, horizontal poverty reduction efficiency, is low, with only 6.4 of eligible households in the poorest quintile being able to access the cash transfer.

3.2. Equity and non-contributory pensions

What is the effect of non-contributory pensions on income inequality? In order to focus on the distributional effects of pension benefits, it is assumed that government revenue collection is, at least, not regressive. To the extent that non-contributory pension benefits go to poor households, pensions should contribute to reduce aggregate income inequalities. This is an under-researched issue. Leibbrandt and Woolard examine the factors contributing to household income inequality in South Africa in a multivariate model and include the share of old age pensioners as an explanatory variable (Leibbrandt 2001). They find that among black households, pensions "make a negative but very small contribution to inequality", and when only rural black households are included in the analysis, they find the correlation of pensions with the log of income to be "slightly positive" (Leibbrandt 2001, p.152). This is consistent, they argue, with pension benefits going to the poor, but not the poorest, black households.

It is possible to take a different approach to the question and link up the evaluation of income poverty with concerns with inequality (Duclos and Araar 2004). This approach works by focusing on measuring the contribution of inequality to poverty. Measures of poverty focusing on poverty gaps, enable a decomposition of the poverty measure into a contribution of the average level of poverty on the one hand, and the contribution of the inequality of poverty on the other (See Appendix Two for clarification). An advantage of this approach is that it incorporates a parameter of aversion to inequality. For the samples of households with older people in Brazil and South Africa, the analysis fails to provide supporting evidence for the hypothesis that pension income increases inequality.

3.3. Non-contributory pensions and household investment

This sub-section will briefly review the available evidence on the extent to which non-contributory pensions facilitate household investment in human and physical capital. This is related to the pension contributing to higher household income, but also to the regularity and reliability of pension benefits, enabling households to plan for the future.[28] This is important in the context of persistent inequality and poverty. To the extent that non-contributory pensions can facilitate asset accumulation in beneficiary households, they could have longer term effects on poverty and inequality. Box 2 outlines the relevant findings in the literature, and Box 3 raises issues of gender differentiation in the effects of the pension on human capital investment.

Box 2. Non-contributory pensions facilitate household investment

- Delgado and Cardoso argue strongly that the *Prêvidencia Rural* in Brazil has been effective in generating a transformation of subsistence agriculture, to sustainable household production (they define this as production capable of generating a surplus). They find that a significant proportion of beneficiaries of the rural pension in Brazil reported using part of their pension to purchase seeds and tools to support agricultural production (Delgado and Cardoso 2000b). Barrientos and Lloyd-Sherlock did not find a similar effect in South Africa, but findings from qualitative surveys reveal a great deal of informal economic activity among pensioners (Barrientos and Lloyd-Sherlock 2003a).

- The regularity of pension payments and the links to financial providers improves access to credit by beneficiary households. This is reported for South Africa (Ardington and Lund 1995) and for Brazil (Schwarzer and Querino 2002b). Schwarzer and Querino note that "the electronic banking card that each beneficiary receives is often used as proof of creditworthiness.." (Schwarzer and Querino 2002b, p.15).

- Enrolment rates of school age children have been found to be higher among pension beneficiary households for South Africa (Duflo 2003) and for Brazil (Carvalho 2000b). In South Africa the main reason given by pensioners for

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[28] Economic theory predicts that regular income streams raising a household's permanent income are more likely to lead to saving and investment, than one-off or uncertain transfers.

> sharing their pension benefit with relatives living elsewhere was to finance the costs of education (Barrientos and Lloyd-Sherlock 2003a). See also Box 3.

- The health status of children and older people is higher in beneficiary households in South Africa (Case 2001).

- Studies in Brazil (Schwarzer 2000) and South Africa (Ardington and Lund 1995) report that beneficiary households invest in improvements in their housing after first receipt of the pension.

- Some studies have focused on households dynamics associated with pension receipt. Carvalho finds a propensity for older women pensioners to live independently (Carvalho 2000a). Studies for South Africa find no evidence for this, but they do find evidence that household dynamics around the time of first pension receipt is consistent with labour migration of younger household members (Edmonds, Mammen et al. 2001; Bertrand, Mullainathan et al. 2003).

- Studies for both Brazil and South Africa find a labour supply effect on older people associated with pension receipt (Bertrand, Miller et al. 2000; Carvalho 2000c).

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Box 3. Households and cash transfers – 'younger girls are taller in households where there is a pension-eligible woman' – Lessons from South Africa and Brazil

In unitary households (where the household is assumed to act as a single unit), household resources are assumed to be allocated independently of the identity of the source or the recipient. Thus, if a cash transfer programme is introduced into a unitary household, it should not matter whether the cash transfer is targeted at one household member or another, since all household members should benefit from the extra income.

However, a number of studies have concluded that the identity of the income source does matter. Duflo (2000) examined the impact of the old age pension on the height-for-age of co-resident children, and found that the 'pension improves the nutritional status of children (girls in particular) if it was received by a woman, but not by a man' (Duflo 2000, p.9). She estimates that "pensions received by women improved the height for age Z-scores of girls by 1.16 standard deviations, and their weight for height Z-scores by 1.19 standard deviations (Duflo 2000, p.21). Along similar lines, Carvalho (2000b) examined the impact of an extension in old age pension entitlement on school enrolments among 10-14 year-old children in rural Brazil. Since 1991, the rural old age pension in Brazil has doubled in value and has been paid to *all* household members eligible to entitlement, lifting the previous restriction of one recipient per household. School enrolments for children co-resident with pensioners increased, with the increase more striking for girls than boys. In households with male pensioners, child labour fell and school enrolments for boys

rose, whereas in households with a female pensioner, child labour fell and school enrolments for girls rose.

This suggests that (i) pensions are beneficial for children; (ii) the gender of the beneficiary appears to matter, and has different outcomes for girls and boys; and (iii) non-contributory pensions can ameliorate intra-household inequalities and empower vulnerable household members.

(Barrientos and DeJong 2004)
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There is no comparable evidence for whether non-contributory pension programmes in Bangladesh contribute to household investment. The pension benefit is much lower in Bangladesh than in Brazil or South Africa, and the coverage of the programme is very limited. As with most developing countries, extensive co-residence suggests that, at least potentially, non-contributory pension programmes in Bangladesh could facilitate household investment. According to data from the Bangladesh Demographic and Health Survey 2000, over four fifths of households with a member aged 57 and over, and two-thirds of households with a pension beneficiary, also contain children below the age of 15 include children.

3.4. Non-contributory pensions and capabilities

The WDR aims to focus on equity evaluated in the capability space. The capability approach developed by Sen argues persuasively that human development should be evaluated in the capability space (Sen 1985, 1997, 1999). A schematic representation of the capability approach can help pin down the relevant equity issues, these are outlined in Table 3 below. From left to right, people have assets and entitlements. The distribution of assets is a key equity issue here, which can be evaluated using asset and entitlements of households. The presence of well-functioning markets together with the presence of institutions facilitating the enforcement of rights, enables the transformation of assets and entitlements into commodities, broadly understood. Key equity issues here include the extent of access to markets, fairness in the distribution of entitlements and opportunity, and access to insurance against market and entitlement uncertainty. Income and expenditure measures provide a monetary value of the capacity of households to purchase commodities.

Table 3. Equity issues in the capability approach

Evaluation Space	Assets & entitlements		Commodities		Functionings		Capabilities
Transformative tools		Markets & rights		Properties characteristics		Agency Choice	
Equity issues	Distribution	Fairness Access Insurance Opportunity	Distribution Quality	Heterogeneity Learning & Basic outcomes	Range of available functionings Basic functionings	Freedom Autonomy goal-rights	Human development
Evaluative instruments	Households asset and entitlement base		Income and expenditure	Education and health outcomes	Achievement of basic functionings	Opportunity sets	

Commodities have properties or characteristics enabling functionings (i.e. possible beings and doings). The capacity to transform commodities into sets of functionings is very heterogeneous in the population (pregnant mothers have higher nutritional demands, illiterate people cannot get functionings out of books or newspapers, veggies will not get functionings out of meat products). Equity issues here must take account of heterogeneity, but education and health status, as well as information, are key. The distribution of education and health outcomes and the extent to which basic outcomes are achieved, could provide evaluative instruments (e.g.HDI). The space of functionings provides another area for evaluation. Enlarging the range of available functionings is an important equity issue here, but concerns with minimum or basic functionings are also important (Sen 1985). The transformation of available functionings into capabilities necessarily focuses on values and agency, as they define the capacity to select from available functionings the beings and doings that people value. A largely theoretical literature has focused on opportunity sets and their evaluation as the key evaluative tools. Equity issues here involve agency, not just in terms of freedom of choice, but also autonomy and collective transformative agency.

The capability approach demonstrates the limitations of an analysis of poverty and inequality focused solely on income or expenditure, or even assets. It also suggests that different equity issues are relevant in the different spaces for human development evaluation identified in Table 3 above for the capability approach. At the same time, methodological tools for the application of the capability approach are not settled, especially compared to the methodological tools available for the analysis of income poverty.

In terms of identifying the incidence of non-contributory pension programmes on capabilities, a way forward is to develop a multidimensional analysis of well being,[29] that is to construct a range of indicators of well being, identify deprivation thresholds for each of the indicators, and to compare deprivation scores across pensioner groups. The methodology and construction of the indicators is detailed in Appendix Three. The indicators of well being cover access to safe drinking water, schooling, life satisfaction, health, safety, social participation, political participation, financial control, durable assets, debt services, income, and expenditure. The strategy adopted is to count the number of deprivations for each individual and then to compare these across pensioner groups. This delivers the simplest approach to multidimensioned evaluation (Barrientos 2003a). As will be shown below, this simple approach is capable of providing some evidence on the likely incidence of non-contributory pension programmes on the well being of older people.[30]

The comparison of the distribution of deprivation scores across pensioner groups distinguishes three separate groups of people aged 55 and over in the Brazil sample:

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[29] In the capability approach, well being and freedom are the two components of the evaluation of human development. Evaluating freedom has greater complexity (see the literature on opportunity sets) and will not be attempted here.

[30] An important limitation of this approach is that differences in deprivation across pension status groups may reflect the influence of factors other than the eligibility rules of pension programmes in allocating individual to pension status groups.

those who are not receiving a pension (non-pensioners or *np*)[31]; those who are receiving a non-contributory pension (non-contributory pensioners or *n-cp*); and those who are receiving a contributory pension (contributory pensioners or *cp*). In the South Africa sample, two groups can be distinguished, those who are not receiving a pension (*np*); and those who are receiving a non-contributory pension (*n-cp*).[32]

For the Brazil sample, the mean number of deprivations among contributory pensioners is 4.84, among non-contributory pensioners is 5.3, and among non-pensioners is 5.54. For the South Africa sample the stark inequalities across urban-rural and blacks-coloured groups made it necessary to separate the sample into three groups: coloureds, urban blacks, and rural blacks. Mean deprivations observed for non-contributory pensioners (non-pensioners in brackets) among coloureds are 3.3 (3.84), among urban blacks are 4.85 (5.35), and among rural blacks are 7.13 (7.26). Mean deprivations are lower for non-contributory pensioners than for non-pensioners across all groups and across the two countries. Box 4 below considers the distribution of deprivations.

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Box 4. The distribution of deprivations across pensioner groups: Non-contributory pensioners have fewer deprivations than non-pensioners

The Figures below focus on the cumulative distributions of deprivation across pensioner groups. Figure 3 shows the cumulative distribution of deprivations for the Brazil sample, while Figure 4 does the same for the South African sample. The curves can be easily interpreted. A point in the curve indicates on the vertical axis the proportion of the sample that has the number of deprivations in the horizontal axis, or less. For Figure 3, for example the better off 30 percent of contributory pensioners have around 3.5 deprivations or less, while the better off 30 percent of non-contributory pensioners have around 4 deprivations or less, and the equivalent group of non-pensioners have around 4.5 deprivations of less. It follows that where a distribution is to the left of another, this indicates a lower incidence of deprivation.

For the Brazil sample, contributory pensioners have a lower incidence of deprivation a than the other pensioners groups. Non-contributory pensioners have lower incidence of deprivation than non-pensioners, except among the better off 5 percent of pensioners.[33] Turning to the South Africa sample, Figure 4 shows that non-contributory pensioners have lower incidence of deprivation than non-pensioners among coloured and urban black groups. This is shown very clearly in the Figure. The situation is less clear-cut for older people in rural areas, as the distributions criss-cross each other.

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[31] The non-pensioner category includes those aged 55 and over not receiving a pension (contributory or non-contributory).

[32] In the South African household survey, the Survey asked whether respondents received occupational or private pensions, but very few reported receiving one. There are many employer and private pension plans in South Africa, but they are focused on public servants and formal employment (van der Berg 1998; Aitken 1999). It is customary for these pension plans to pay retirement benefits as a lump sum. This explains their low incidence in our sample.

[33] An important literature considers the conditions for stochastic dominance in the context of multidimensioned deprivation, and for continuous deprivation functions (Atkinson and Bourguignon 1982; Bourguignon and Chakravarty 2003; Duclos, Sahn et al. 2003); Atkinson extends this to the counting approach for continuous deprivation functions (Atkinson 2003).
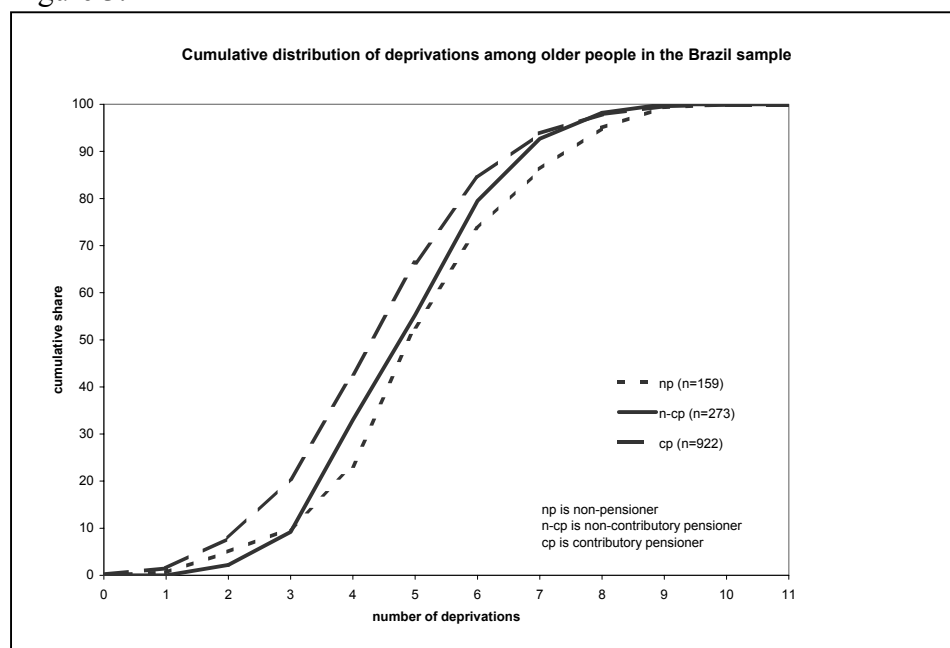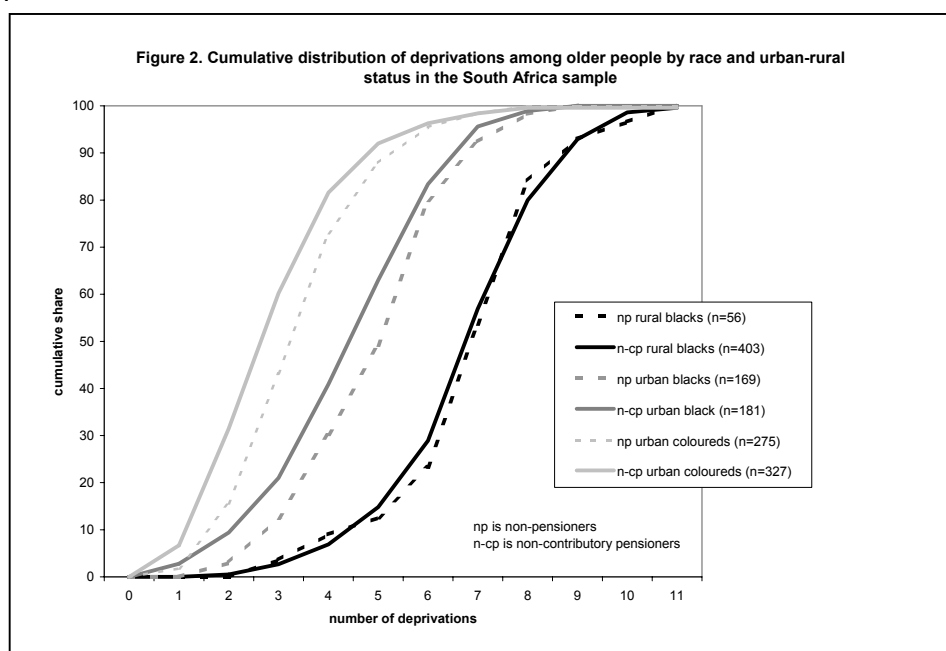
Figure 3.

Cumulative distribution of deprivations among older people in the Brazil sample

np (n=159)
n-cp (n=273)
cp (n=922)

np is non-pensioner
n-cp is non-contributory pensioner
cp is contributory pensioner

Figure 4

Figure 2. Cumulative distribution of deprivations among older people by race and urban-rural status in the South Africa sample

np rural blacks (n=56)
n-cp rural blacks (n=403)
np urban blacks (n=169)
n-cp urban black (n=181)
np urban coloureds (n=275)
n-cp urban coloureds (n=327)

np is non-pensioners
n-cp is non-contributory pensioners

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The analysis demonstrates that over a range of indicators of well being non-contributory pensioners have lower incidence of deprivation than non-pensioners, except that is for the rural black group in the South Africa sample. It would be difficult no to conclude from this that non-contributory pension programmes lead to improved functionings and capabilities. Multidimensioned analysis of deprivation

confirms and strengthens the findings from the previous sections.[34] Receipt of non-contributory pensions is associated with lower deprivation and, by extension, with higher levels of well being.

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[34] The findings from the multidimensioned analysis strengthen the findings from the analysis of income poverty for a number of reasons: monetary indicators may not accurately reflect well-being when missing or imperfect markets, or social exclusion, limit the transformation of assets and entitlements into commodities (see Table 2 above); or where factors limit the transformation of commodities into functionings; or where factors limit agency. In South Africa, for example, there is anecdotal evidence of abuse of older people by other household members and stronger evidence that pensions ensure older people are respected and their voices heard (Møller and Sotshangaye 1996).

CONCLUSION

The paper set out to examine two sets of related issues: (i) the development of non-contributory pension programmes over time, as institutions for poverty and inequality reduction; and (ii) the available evidence on the impact of these programmes on poverty and inequality.

The main findings from the paper as regards (i) are:

- Non-contributory pension programmes in Brazil and South Africa developed against adverse institutional environments: racially discriminatory social policy in South Africa and segmented social insurance in Brazil.

- Non-contributory pension programmes follow a different logic and dynamics than that shown by formal programmes supporting older people. The former are focused on poverty, entitlements are not directly determined by labour market factors, and they do not encourage retirement from the labour force. Their development path has not followed the 'strong to the weak' dynamics.

- The development of non-contributory pension programmes reflect widely held concerns with old age poverty, and are a core foundation of solidarity institutions.

- Instrumental factors combined with natural reservoirs of political support and social contract renewals are key to explaining the expansion of non-contributory pension programmes in the 1990s.

The main findings from the paper as regards (ii) are:

- Non-contributory pension programmes have significant poverty reduction properties, and these are stronger for poverty gap measures of poverty than poverty incidence. Non-contributory pension programmes reduce the probability of poverty among those living in households with beneficiaries.

- The contribution of these programmes to reducing inequality is under-researched, but there is no evidence that the programmes increase inequality.

- A range of studies using a variety of methods and datasets has concluded that pension receipt is associated with household investment in human, physical, and social capital. This suggests that non-contributory pension programmes can have longer term effects on poverty and inequality, especially in terms on investment in the human capital of co-resident children.

- Evaluation of the well being of older people with a range of well being indicators suggests that non-contributory pension programmes can support and promote functionings and capabilities among poorer and vulnerable groups.

Appendix One. Description of the household survey data for Brazil and South Africa

The data used in this paper comes from household surveys implemented in 2002 in Brazil and South Africa (Barrientos and Lloyd-Sherlock 2003a).[35] A common survey instrument was used in the two countries with the aim of enabling full comparability. The surveys targeted households with older people and included a household component, implemented on the 'most knowledgeable person in the household', and an additional supplement for household members 55 years of age and older, implemented on the older persons themselves. The questionnaire covers household location, housing, and demographic information; employment, income and expenditure, health care, and self-reported well being. The older person supplement covers pensions and other state benefits, health status, social participation and transfers.

In South Africa, data was collected on 1111 households in Cape Town and the Eastern Cape. The sample of urban households from Cape Town includes 324 Black households and 413 Coloured households. The rural sample includes 374 Black households. In Brazil, data was collected on 1006 households, 250 from the Municipality of Rio de Janeiro, 255 from the Metropolitan Region in Rio de Janeiro, 269 from the urban areas under the Municipality of Ilhéus, and 232 from rural areas in the same Municipality. The sample was constructed by selecting census cells (Enumerator Areas in South Africa and Setores Censitários in Brazil, on the basis of socio-economic - and in South Africa ethnic composition - indicators. Within the sampled cells, households were visited randomly, and interviewed if they had an old age member .

Descriptive statistics for the samples are reported in Table A1 below. The survey instruments and field reports are available at http://idpm.man.ac.uk/ncpps.

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[35] The data was collected as part of a research project on "Non-contributory pensions and poverty prevention in developing countries? A comparative study of South Africa and Brazil", funded by the Department for International Development of the UK Government, and with the participation of Peter Lloyd-Sherlock and Helena Legido-Quigley from the UK, Monica Ferreira and Valerie Møller from South Africa, João Saboia and Maria Lucia Werneck Vianna from Brazil, and Mark Gorman and Amanda Heslop from HAI. Further information is available at http://idpm.man.ac.uk/ncpps.

Table A1. Descriptive Statistics

	Brazil		South Africa
Sample:			
Households	1006		1111
Individuals	3253		5560
Individuals 55 and over	1354		1400
Household characteristics:			
Household size	3.2		5.5
Mean age	43.1		31.9
Mean number of children	1.2		2.5
% rural	26		36
% female	54.3		54.4
% black (non-white in Brazil)	69.7		65.1
Mean number of durables	5.5		3.8
% in work	24.0		13.4
% having expenditure shock (last 12 months)	11.1		19.8
% households receiving income from:			
Non-contributory pensions	25.6		63.3
Public transfers (other than n-c pension)	10.0		25.4
Employment	49.3		44.4
Public contributory pensions	65.3		-
Private employer pensions	0.4		8.2
Rent	4.5		0.4
NGOs and Church organisations	0.5		-
Private transfers	22.0		13.2
Older people (aged 55 and over):			
Entitled to n-c pension (self-reported)	24.9u	8.9r	62.7
Receiving n-c pension	14.6u	5.8r	59.1
Difficulty in accessing n-c pension	6.9		11.0
% report none/little own-use of n-c pension	96.0		81.6
% giving money to relatives living elsewhere	5.5		8.3
% spontaneously reporting 'none' when asked for 3 goods things in life	0.3		14.3

r = rural
u = urban

Appendix Two: EDE poverty gap measures and the contribution of inequality.

Duclos and Araar link up the evaluation of income poverty with concerns with inequality (Duclos and Araar 2004). This approach works by focusing on measuring the contribution of inequality to poverty. Measures of poverty focusing on poverty gaps, enable a decomposition of the poverty measure into a contribution of the average level of poverty on the one hand, and the contribution of the inequality of poverty on the other An advantage of this approach is that it incorporates a parameter of aversion to inequality. The benchmark is provided by the equally distributed equivalent (EDE) poverty gap, that is the poverty gap which if assigned equally to all units would yield the aggregate poverty measure observed (Duclos and Araar 2004). This is equivalent to the average poverty gap. Supposing we are concerned with inequality and wish to give a greater weight to the poverty gap of the poorer in our chosen poverty measure. Weighting the poverty gaps by the poverty gaps themselves by taking powers α of the poverty gap would achieve this. The parameter α can therefore be interpreted as describing aversion to inequality, giving a greater weight in the poverty measure to larger poverty gaps. The difference between $EDE_{\alpha>1}$ and $EDE_{\alpha=1}$ is a measure of the contribution of inequality to the poverty measure.

As described in Duclos and Araar (2004), the EDE poverty gap can be approached as a transformation of the FGT (not normalised) indices $P(z ; \alpha)$, so that for $\alpha>0$

$$EDE^g (z ; \alpha) = [P(z ; \alpha)]^{1/\alpha} \tag{1}$$

where z is the poverty line, g denotes the poverty gap, and α is an aversion to inequality/poverty parameter.

Note that $EDE^g_{\alpha=1} \equiv P_{\alpha=1}$, that is for $\alpha=1$ the EDE measure is equivalent to the average poverty gap measure. Also note that if poverty gaps were equally distributed, then $EDE^g_{\alpha} = EDE^g_{\alpha=1}$ for all $\alpha \geq 1$. An observed difference between $EDE^g_{\alpha>1}$ and $EDE^g_{\alpha=1}$ is therefore interpreted by Duclos and Araar as a measure of the 'cost of inequality'. Denoting the 'cost of inequality' $C_\alpha(g(z))$, a non-negative money metric measure, as

$$C_\alpha(g(z)) = EDE^g_{\alpha} - EDE^g_{\alpha=1} \qquad \text{for all } \alpha \geq 1 \tag{2}$$

it follows that the EDE^g aggregate poverty gap measure can be decomposed into

$$EDE^g_{\alpha} = EDE^g_{\alpha=1} + C_\alpha(g(z)) \qquad \text{for } \alpha \geq 1 \tag{3}$$

Table A2 below shows the EDE^g measures computed for the Brazil and South Africa samples on the measure of income including pension income, and separately the measure of income excluding pension income. The contribution of inequality to the EDE measure is shown on the lower panel.

Table A2. EDE measures for Brazil and South Africa (in national currency)

	Brazil		South Africa	
	full income	without pension	full income	without pension
α=1	43.8	59.4	119.4	131.9
α=2	66.4	86.1	216.0	232.3
α=3	79.0	101.7	276.2	293.8
α=4	87.6	113.0	319.6	337.6
α=5	94.2	121.9	353.4	371.2
α=6	99.6	129.2	380.8	398.1
Contribution of inequality (in national currency)				
α=2	22.6	26.6	96.5	100.4
α=3	35.2	42.2	156.8	161.9
α=4	43.8	53.5	200.2	205.7
α=5	50.4	62.4	234.0	239.3
α=6	55.8	69.7	261.4	266.2

The contribution of inequality to poverty is higher when the pension income is excluded. The contribution of inequality to the poverty rises with α, as expected, but it rises faster for the measure of income without the pension than for the measure of income including the pension, in both Brazil and South Africa. For the samples of households with older people in both countries, and the aversion to inequality parameters used, this can be interpreted to show that pension income does not increase inequality.

Appendix Three: The construction of well being indicators and deprivation thresholds.

A multidimensioned approach to well being implies that for a population n, the well being of person i can be described by an m-row vector x_i of non-negative attributes j, $j \in J$, with x_i being the ith row of an $n \times m$ matrix X. An (i,j) cell in this matrix describes the quantity of an attribute j observed for person i. The jth column of this matrix describes the distribution of attribute j in the population. The approach in the paper is to aggregate attributes at the individual level, and then combine these across population groups distinguished by their pension status.

The selection of indicators of deprivations should in principle target 'basic functionings'. This is strongly contested territory, and a substantial literature has emerged aiming to define a set of basic functionings (Doyel and Gough 1991; Sen 1993; Nussbaum 1999; Alkire 2002). In practice, data availability places important restrictions on the selection of indicators of deprivation, and imposes the need for a pragmatic but intelligible approach. The empirical work fixes on a range of indicators of achieved functionings rather than of capabilities, as the latter involves more demanding information on opportunity and choice (Brandolini and D'Alessio 1998).

Deprivation d_{ij} is a function of individual i's observed level of a particular attribute j, or $d_{ij} = f(x_{ij})$. An individual i is considered to be deprived with respect to an attribute j providing that the quantity of observed attribute is at or below a minimum level z_j established for that attribute. In the simple case where $f(.)$ is a binary function, $d_{ij} = 1$ if $x_{ij} \leq z_j$, and 0 if $x_{ij} > z_j$.[36]

A key issue is the aggregation of the different indicators to obtain a single measure of deprivation for individuals. There are two alternative strategies followed in the literature, the social welfare approach and the counting approach (Atkinson 2003). The social welfare approach formulates the problem of multidimensional poverty measurement as the minimisation of a welfare loss function (Bourguignon and Chakravarty 2003; Duclos et al. 2003). The applied work mainly follows the counting approach, which simply counts the dimensions of deprivation (Townsend 1979). This paper follows the latter approach. The aggregation strategy adopted in the paper will be to count the binary indicators of deprivation at the level of the individual. This measure can be interpreted in an ordinal scale, in that an individual showing a higher number of deprivations than another is considered more acutely deprived. The distribution of this individual measure of deprivation will then be compared across groups of older people with different pension status.

The strategy adopted here - involving the counting approach, binary indicators of deprivation, and the assumptions regarding the weights attached to different deprivations, and their relationship – delivers the simplest approach to multidimensioned evaluation (Barrientos 2003a). A description of the well being indicators, their construction, and threshold values, is in Table A2 below.

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[36] Brandolini and d'Alessio discuss in some detail alternative specifications for this function and for the determination of the deprivation threshold z_j (Brandolini and D'Alessio 1998).

Table A3. Well being indicators

Label	Description	Values	Deprivation
Education	Schooling reached	1 no schooling, illiterate 2 no schooling, can read and write 3 primary 4 secondary 5 tertiary	1,2
Health	Self-reported health status	1 very poor 2 poor 3 average 4 good 5 very good	1
Life satisfaction	Self-reported assessment "Taking everything into account, how satisfied is this household with the way it lives these days?"	1 very dissatisfied 2 dissatisfied 3 neither satisfied not dissatisfied 4 satisfied 5 very satisfied	1,2
Safety	Change in feeling of safety from two years before	1 worse 2 same 3 better	1
Social participation	Number of social organisations the respondent belongs to	0-8 (Brazil) and 0-10 (South Africa). Brazil: senior centre, church group, community organisation, sports club, school organisation, political party, trade union. South Africa as Brazil plus: women's club, stokvel, burial society.	0
Political participation	Number of citizen actions	0-4 (participation in community meeting, or general meeting, complaints to authorities, work for political candidate)	0
Financial control	Responses to the question: "How much of own money are you able to keep for yourself?"	1 none 2 very little 3 some 4 a reasonable amount 5 all	1
Debt service	Monthly debt repayments as proportion of total debt	1 if $x>0.5$; 2 if $0.5<x<0.2$; 3 if $0.2<x<0.1$; 4 if $0.1<x<0.01$; 5 if $x=0$;	1,2
Durables	Number of durables in household	0-11 (phone, stove electric or gas, stove paraffin or wood, electricity, tv, radio or stereo, fridge or freezer, sewing machine, car, bicycle, motorcycle)	1-5
Water	Main source of drinking water	1 other (river,dam,rainwater) 2 borehole 3 public tap/water carrier 4 piped water on site, neighbour 5 piped water in dwelling	1
Expenditure	Quintiles of equivalised per cap. household expenditure	1-5	1,2

REFERENCES

Aitken, I. M. (1999), 'South Africa: The Occupational Pension Scheme', *Journal of Pensions Management*, vol. 5, no. 1, pp. 69-75.

Alesina, A.; E. Glaeser and B. Sacerdote (2001), Why doesn't the US have a European-style welfare state?, Discussion Paper 1933, Cambridge Mass: Harvard Institute of Economic Research.

Alkire, S. (2002), 'Dimensions of Human Development', *World Development*, vol. 30, no. 2, pp. 181-205.

Ardington, E. and F. Lund (1995), 'Pensions and development: social security as complementary to programmes of reconstruction and development', *Development Southern Africa*, vol. 12, no. 4, pp. 557-577.

Atkinson, A. B. (1995), 'Social Insurance', in A. B. Atkinson (ed.) *Incomes and the Welfare State: Essays on Britain and Europe*, Cambridge: Cambridge University Press, pp. 205-219.

Atkinson, A. B. (2003), 'Multidimensional Deprivation: Contrasting Social Welfare and Counting Approaches', *Journal of Economic Inequality*, vol. 1, no. 1, pp. 51-65.

Atkinson, A. B. and F. Bourguignon (1982), 'The Comparison of Multi-dimensional Distributions of Economic Status', *Review of Economic Studies*, vol. 49, no. 2, pp. 183-201.

Barrientos, A. (2003a), Non-contributory pensions and the well-being of older people: Evidence on Multidimensional Deprivation from Brazil and South Africa, mimeo, Manchester: IDPM, University of Manchester.

Barrientos, A. (2003b), 'Pensions and development in the South', *Geneva Papers on Risk and Insurance*, vol. 28, no. 4.

Barrientos, A. (2003c), What is the impact of non-contributory pensions on poverty? Estimates from Brazil and South Africa, CPRC/DEPP Working Paper 33, Manchester: IDPM, University of Manchester.

Barrientos, A. (2004), 'Latin America: towards a liberal-informal welfare regime', in I. Gough; G. Wood; A. Barrientos; P. Bevan; P. David and G. Room (eds.), *Insecurity and welfare regimes in Asia, Africa and Latin America*, Cambridge: Cambridge University Press.

Barrientos, A. and J. DeJong (2004), Child poverty and cash transfers, Report 4, London: Childhood Poverty Research and Policy Centre.

Barrientos, A.; M. Gorman and A. Heslop (2003), 'Old age poverty in developing countries: contributions and dependence in later life', *World Development*, vol. 3, no. 3, pp. 555-570.

Barrientos, A. and P. Lloyd-Sherlock (2003a), Non-contributory pensions and poverty prevention. A comparative study of Brazil and South Africa, Report, Manchester: IDPM and HelpAge International.

Barrientos, A. and P. Lloyd-Sherlock (2003b), Non-contributory pensions and social protection, Issues in Social Protection Discussion Paper 12, Geneva: ILO.

Begum, S. (2003), Pension and Social Security in Bangladesh, mimeo, Dhaka: Bangladesh Institute of Development Studies.

Bertrand, M.; D. Miller and S. Mullainathan (2000), Public policy and extended families: evidence from South Africa, NBER Working Paper 7594, Cambridge MA: National Bureau of Economic Research.

Bertrand, M.; S. Mullainathan and D. Miller (2003), 'Public Policy and Extended Families: Evidence from Pensions in South Africa', *World Bank Economic Review*, vol. 17, no. 1, pp. 27-50.

Bertranou, F.; C. Solorio and W. van Ginneken (2002), *Pensiones no-contributivas y asistenciales. Argentina, Brazil, Chile, Costa Rica y Uruguay*, Santiago: ILO.

Bourguignon, F. (1998), Social protection in industrial countries: which lessons for LAC countries?, mimeo, Washington DC: The World Bank.

Bourguignon, F. and S. R. Chakravarty (2003), 'The measurement of multidimensional poverty', *Journal of Economic Inequality*, vol. 1, no. 1, pp. 25-49.

Brandolini, A. and G. D'Alessio (1998), Measuring well being in the functioning space, mimeo, Roma: Bank of Italy Research Department.

Brumer, A. (2002), 'Gender Relations and Rural Social Security in Southern Brazil', in C. Abel and C. Lewis (eds.), *Exclusion and Engagement: Social Policy in Latin America*, London: Institute of Latin American Studies.

Camarano, A. A. and M. T. Pasinato (2002), Envelhecimento, condicoes de vida e politica previdenciaria. Como ficam as mulheres?, Discussion Paper 833, Rio de Janeiro: IPEA.

Carvalho, I. (2000a), Elderly Women and their Living Arrangements, mimeo, Cambridge MA: MIT.

Carvalho, I. (2000b), Household Income as a determinant of child labour and school enrollment in Brazil: Evidence from a social security reform, mimeo: MIT.

Carvalho, I. (2000c), Old-Age Benefits and the Labour Supply of Rural Elderly in Brazil, mimeo: MIT.

Case, A. (2001), Does Money Protect Health Status? Evidence from South African Pensions, mimeo, Princeton: Princeton University.

Case, A. and A. Deaton (1998), 'Large Scale Transfers to the Elderly in South Africa', *Economic Journal*, vol. 108, no. 450, pp. 1330-1261.

Case, A. and F. Wilson (2000), Health and well-being in South Africa: evidence from the Langeberg Survey, mimeo, Princeton: Princeton University.

Committe of Inquiry into a Comprehensive System of Social Security for South Africa (2002), Transforming the present- Protecting the future, Draft Consolidated Report, Pretoria: Committe of Inquiry into a Comprehensive System of Social Security for South Africa.

Committee of Inquiry into a Comprehensive System of Social Security for South Africa (2002), Transforming the present. Protecting the future, Draft Consolidated Report, Pretoria: Committe of Inquiry into a Comprehensive System of Social Security for South Africa.

de Ferranti, D.; G. E. Perry; I. S. Gill and L. Servén (2000), Securing our Future in a Global Economy, Viewpoints, Washington DC: The World Bank.

Delgado, G. C. and J. C. Cardoso (2000a), 'Condicões de reproducão econômica e combate à pobreza', in G. C. Delgado and J. C. Cardoso (eds.), *A Universalização de Direitos Sociais no Brazil: a Prêvidencia Rural nos anos 90*, Brasilia: IPEA.

Delgado, G. C. and J. C. Cardoso (2000b), Principais Resultados da Pesquisa Domiciliar sobre a Previdência Rural na Região Sul do Brasil, Texto para Discussao 734, Rio de Janeiro: Instituto de Pesquisa Econômica Aplicada.

Delgado, G. C. and J. C. Cardoso (eds.) (2000c), *A Universalização de Direitos Sociais no Brazil: a Prêvidencia Rural nos anos 90*. Brasilia, IPEA.

Devereux, S. (2001a), Can social safety nets reduce chronic poverty?, mimeo, Falmer: IDS, University of Sussex.

Devereux, S. (2001b), Social Pensions in Namibia and South Africa, IDS Discussion Paper 379, Falmer: IDS.

Dieden, S. (2003), Levels of poverty and income sources among South African households - a multinomial approach, mimeo.

Doyel, L. and I. Gough (1991), *A Theory of Human Need*, London: Macmillan.

Duclos, J.-Y. and A. Araar (2004), *Poverty and Equity: Measurement, Policy and Estimation with DAD*, Quebec: CIRPEE, Université Laval.

Duclos, J.-Y.; D. Sahn and S. D. Younger (2003), Robust Multidimensional Poverty Comparisons, mimeo, Québec: CIRPÉE, Université Laval.

Duflo, E. (2000), Grandmothers and granddaughters: old age pension and intra-household allocation in South Africa, Working Paper 8061, Cambridge MA: National Bureau of Economic Research.

Duflo, E. (2003), 'Grandmothers and Granddaoughters: Old Age Pensions and Intrahousehold Alllocation in South Africa', *Wold Bank Economic Review*, vol. 17, no. 1, pp. 1-25.

Edmonds, E.; K. Mammen and D. Miller (2001), Rearranging the family? Household composition responses to large pension receipts, mimeo, Hanover NH: Darmouth College.

Ferreira, M. (1999), 'The generosity and universality of South Africa's pension system', *The EU Courier*, vol. 176.

Filmer, D. and L. Pritchett (1998), Estimating Wealth Effects without Expenditure Data - or Tears: an Application to Educational Enrollments in States of India, Policy Research Working Paper WPS 1994, Washington DC: The World Bank.

Fultz, E. and B. Pieris (1999), Social Security Schemes in Southern Africa, Discussion Paper 11, Geneva: ILO/SAMAT.

James, E. (2001), 'Coverage under Old Age Social Security Programs and Protection for the Uninsured: What are the Issues?' in N. C. Lustig (ed.) *Shielding the Poor. Social Protection in the Developing World*, Washington DC: Brookings Institution Press and InterAmerican Development Bank, pp. 149-174.

Jenkins, S. P. and P. J. Lambert (1997), 'Three 'I's of poverty curves, with an analysis of UK poverty trends', *Oxford Economic Papers*, vol. 49, no. 3, pp. 317-327.

Jensen, R. (2002), 'Do private transfers 'displace' the benefits of public tranfers? Evidence from South Africa', *Journal of Public Economics*, vol. in print.

Jensen, R. (2004), 'Do private transfers 'displace' the benefits of public tranfers? Evidence from South Africa', *Journal of Public Economics*, vol. 88, no. 1-2, pp. 89-112.

Leibbrandt, M. (2001), 'Household incomes, poverty and inequality in a multivariate framework', in H. Bhorat; M. Leibbrandt; M. Maziya; S. van der Berg and I. Woolard (eds.), *Fighting poverty. Labour markets and inequality in South Africa*, Cape Town: UCT Press, pp. 130-154.

Lund, F. (1993), 'State social benefits in South Africa', *International Social Security Review*, vol. 46, no. 1, pp. 5-25.

Lund, F. (1995), 'Changing social policy in South Africa', *Social Policy Review*, vol. 7.

Lund, F. (1999), 'Understanding South African social security through recent household surveys: new opportunities and continuing gaps', *Development Southern Africa*, vol. 16, no. 1, pp. 55-67.

Lund, F. (2002), "Crowding in' care, security, and macro-enterprise formation - revisiting the role of the state in poverty reduction, and in development', *Journal of International Development*, vol. 14, no. 6, pp. 681-694.

Møller, V. and Sotshangaye (1996), '"My family eats this money too": pension sharing and self-respect among Zulu grandmothers', *Southern African Journal of Gerontology*, vol. 5, no. 2, pp. 9-19.

Mulligan, C. B. and X. Sala-i-Martin (1999a), Gerontocracy, Retirement, and Social Security, NBER Working Paper 7117, Cambridge MA: NBER.

Mulligan, C. B. and X. Sala-i-Martin (1999b), Social Security in Theory and Practice (I): Facts and Political Theories, NBER Working Paper 7118, Cambridge , MA: National Bureau of Economic Research.

Mulligan, C. B. and X. Sala-i-Martin (1999c), Social Security in Theory and Practice (II): Efficiency Theories, and Implications for Reform, NBER Working Paper 7119, Cambridge, MA: National Bureau of Economic Research.

Nussbaum, M. (1999), 'Women and Equality: the capabilities approach', *International Labour Review*, vol. 138, no. 3, pp. 227-245.

Paes de Barros, R. and M. Carvalho (2004). Targeting as an instrument for a more effective social policy. Foro de Equidad Social, Washington DC.

Rajan, S. I.; M. Perera and S. Begum (2003), Economics of Pensions and Social Security in South Asia: Special Focus on India, Sri Lanka and Bangladesh, mimeo, Thiruvanapuram, India: Centre for Development Studies.

Saad, P. M. (1999), 'Transferências de apoio entre geracões do Brasil: um studio para São Paulo e Fortaleza', in A. Caramano (ed.) *Muito além dos 60. Os novos odiosos brasilieros*, Rio de Janeiro: IPEA.

Saboia, J. (2003), Relatório final de pesquisa de campo sobre benefícios não-contributivos para os idosos no Brasil, Country Report, Rio de Janeiro: Instituto de Economia da Universidade Federal do Rio de Janeiro.

Sagner, A. and R. Mtati (1999), 'Politics of pension sharing in urban South Africa', *Ageing and Society*, vol. 19, no. 4, pp. 393-416.

Schwarz, A. M. (2003), Old Age Security and Social Pensions, mimeo, Washington DC: The World Bank.

Schwarzer, H. (2000), Impactos socioeconômicos do sistema de aposentadorias rurais no Brazil - Evidências empíricas de un estudio de caso no estado de Pará, Discussion Paper 729, Rio de Janeiro: IPEA.

Schwarzer, H. and A. C. Querino (2002a), 'Beneficios sociales y los pobres en Brazil: Programas de pensiones no convencionales', in F. Bertranou; C. Solorio and W. van Ginneken (eds.), *Pensiones no contributivas y asistenciales*, Santiago: Oficina Internacional del Trabajo, pp. 63-124.

Schwarzer, H. and A. C. Querino (2002b), Non-contributory pensions in Brazil: The impact on poverty reduction, ESS Paper 11, Geneva: Social Security Policy and Development Branch. ILO.

Sen, A. (1985), *Commodities and Capabilities*, Amsterdam: North-Holland.

Sen, A. (1993), 'Capability and Well-Being', in M. Nussbaum and A. Sen (eds.), *The Quality of Life*, Oxford: Oxford University Press, pp. 30-53.

Sen, A. (1997), *Inequality Reexamined*, Oxford: Clarendon Press.

Sen, A. (1999), *Development as Freedom*, Oxford: Oxford University Press.

Townsend, P. (1979), *Poverty in the United Kingdom*, Harmondsworth: Allen Lane.

van der Berg, S. (1997), 'South African social security under apartheid and beyond', *Development Southern Africa*, vol. 14, no. 4, pp. 481-503.

van der Berg, S. (1998), 'Ageing, public finance and social security in South Africa', *Southern African Journal of Gerontology*, vol. 7, no. 1, pp. 3-9.

van der Berg, S. (2001), 'Social policy to address poverty', in H. Bhorat; M. Leibbrandt; M. Maziya; S. van der Berg and I. Woolard (eds.), *Fighting poverty. Labour markets and inequality in South Africa*, London: Zed Press, pp. 171-204.

van der Berg, S. (2002), 'Devising Social Security Interventions for Maximum Poverty Impact', *Social Dynamics*, vol. 28, no. 2, pp. 39-68.

Van Zyl, E. (2003), 'Old Age Pensions in South Africa', *International Social Security Review*, vol. 56, no. 3-4, pp. 101-128.

Werneck Vianna, M. L. T. (2003), Seguridade social e combate à pobreza no Brazil: O papel dos beneficios não-contributivos, mimeo, Rio de Janeiro: Universidade Federal do Rio de Janeiro.