Establishing Comprehensive National Old Age Pension Systems

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The world is ageing rapidly. Older people currently comprise 12.2% of the world’s population, with 67% living in developing countries. By 2050, the proportion globally will reach 21.2%, with 80% in developing countries. As the world ages, ensuring income security in old age becomes an increasingly important policy issue. Historical and contemporary experience demonstrates that the only means of guaranteeing income security for older people is through access to a pension. Old age pensions are defined as regular and predictable cash transfers to older people from government or private institutions that are not dependent on their continuing engagement in the labour market.

However, only 48% of the world’s older people have access to a pension and, unless major reforms are undertaken across developing countries, this proportion is likely to fall (ILO, 2014). While 93% of countries have some form of pension in place, in many developing countries coverage of older people is low. So, while, in Western Europe, 92% of older people receive a pension, with average national expenditure at 11.1% of GDP, in Asia and Africa coverage is 47% and 21% respectively while expenditure is only 2% and 1.3% of GDP (ILO, 2014). Furthermore, much of the expenditure in developing countries is directed towards the more privileged sectors of the population, such as civil servants and formal sector workers, with those in the informal and subsistence sectors missing out.

Old age pension policy has significant gender dimensions. Despite women comprising the majority of older people, their access to contributory pensions is well below that of men. Furthermore, since women receive lower wages than men during their working lives and spend less time in the labour force due to care responsibilities, their income from contributory pensions is inferior to that of men (Kidd, 2009).

The absence of pensions causes significant challenges for older people and society. Despite growing frailty, many older people are obliged to continue working in old age, often in insecure and low paid employment. As they become less able to work, their families are expected to care for them. Yet, many families taking on this responsibility have to reduce their investments in their own children and income generating activities, while many carers of older people have to withdraw from the labour force. This financial burden acts, in effect, as an ad hoc tax imposed on working families – in particular, those on lower incomes – by those governments unwilling to invest in old age pensions. Furthermore, due to widespread poverty and migration, many older people are left secluded and insecure, without any family support, living out their final years in extreme poverty and hunger.

In a growing number of developing countries, debates are intensifying on how best to achieve both universal pension coverage and adequate incomes in old age. Some argue for an expansion of contributory social insurance pensions financed through payroll taxes while others stress pensions financed by general government revenues. Fortunately, a number of developing countries have already

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1 “Older people” refers to those aged 60 years and above. Source of population figures is UN DESA’s 2012 Revision of the World Population Prospects, Population Division, Population Estimates and Projections Section at http://esa.un.org/wpp
achieved universal pension coverage, offering many lessons for countries wishing to embark on the same path.

This paper discusses the policy options available to developing countries committed to offering universal pension coverage and maximising the incomes of older people. It presents a basic model of a pension system comprising up to three tiers that can be adapted to the circumstances of all countries. The model is based on evidence from both developed and developing countries. However, the paper does not examine the more detailed design challenges facing pension systems: those interested in these challenges are recommended to read Barr and Diamond (2010).
1. THE AIMS OF A PENSION SYSTEM

Pension systems have two core objectives:

- To ensure that everyone has access to a minimum income once they reach old age; and,
- To enable working age people to undertake consumption smoothing, by giving up some income during employment which they can draw on once they retire, thereby providing themselves with a higher income in old age.

Alongside these two objectives, pensions offer insurance against the [welcome] risk of long life, guaranteeing people an income for as long as they live. In a sense, old age and pension systems are a form of a lottery. The winners are those living long lives who, as a result, gain a significant overall income throughout old age; the losers are those who die early and receive much less. Yet, in terms of income security in old age, everyone wins.

2. A THREE-TIERED PENSION MODEL

Across developed and developing countries, there is a great diversity of pension systems. Yet, those systems offering both universal coverage and the fulfilment of the objectives of the pension comprise up to three basic tiers, although within each tier there is a range of design options, some of which are more successful than others. The three potential tiers of the pension system are described in more detail below.

2.1. Tier 1 pensions

Tier 1 pensions are financed from general government revenues and are often known as a “social pension.”2 The main purpose of a Tier 1 pension is to provide older people with access to a minimum income. As a result, the value of the transfer is often low when compared to many contributory pensions. Nonetheless, as Figure 1 indicates, the value as a percentage of GDP per capita varies greatly across developing countries. While there are many reasons for these differences in values, to a large extent they depend on the level of coverage. Tier 1 pensions with higher coverage tend to be more popular, with policymakers increasing their value in response to greater political pressures, in particular within a democratic context. In contrast, when Tier 1 pensions are targeted at the “poor,” the value of transfers is often much lower, reflecting the political weakness of those living in poverty.3 While many countries pay Tier 1 pensions at a flat rate to all recipients, in some the value of the transfer varies depending, for example, on the marital status of recipients or their residence.4

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2 Although Bismarck is often regarded as the founder of Tier 2 social insurance pensions, in reality Bismarck’s initial proposal was for a universal Tier 1 pension, to be financed from a tax on tobacco. His proposal was defeated by the Reichstag, which agreed an insurance based model, ironically known as the Bismarckian model (Palacios and Knox-Vydmanov, 2014).

3 See Sen (1995) and Pritchett (2005) for a further discussion on the political economy of social security.

4 When pensioners are married, some countries – such as New Zealand – reduce the value of individual pensions. There are also examples – such as India and Viet Nam – where regional governments top up the value of pensions using their own resources.
2.2. Tier 2 pensions

Tier 2 pensions are mandatory contributory pensions for employees, which are financed by contributions deducted from salaries and complemented by additional contributions from employers. They are frequently managed by government – often through parastatal organisations that report to government Ministries – although in some countries, such as Chile, they can be run by the private sector, with government providing oversight. By deducting contributions from salaries, governments are able to offer people higher incomes in old age, with the value of pensions linked to the size of their contributions or their wages. Box 1 outlines the basic design options for Tier 2 pensions.

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5 Source: Authors’ own research and the Pension Watch database at: http://www.pension-watch.net/about-social-pensions/about-social-pensions/social-pensions-database. There are some examples not included here – such as Argentina and Uruguay – where the coverage of the social pension is low, but in a context of almost universal coverage. In these cases, the value of the social pension is relatively high, but this is influenced by the broader universal coverage of the system. There are some recent social pensions – such as in Kenya and Uganda – which have higher values of pensions but they have not been included because they are still essentially small-scale pilot programmes and have not yet been influenced by political economy factors.

6 In practice, many Tier 2 pensions are subsidized from general government revenues, often because they are actuarially unsound.
Tier 2 pensions are mandatory because, left to their own devices; younger people are likely to prioritise current consumption over income security in old age. However, there are examples of countries – such as the United Kingdom and New Zealand – that make it mandatory for employees to join schemes but, subsequently, allow them to opt out (see Box 2).

Box 2: New Zealand – a three tier pension system with an opt-out option from Tier 2

The first tier of the New Zealand pension system comprises a flat rate state pension – financed from general government revenues – known as the New Zealand Superannuation. It is available to everyone aged over 65 years with 10 years residence (with at least 5 years from age 50 years). The state pension is paid at a reasonably high level of – before tax – €1,240 per month (although married couples and those living with others receive less as individuals). The second tier comprises the KiwiSaver pension – which was introduced in 2007 - into which all new employees are enrolled and can subsequently opt out (while existing employees can opt in). The third tier is a set of voluntary occupational pensions. The system is effective since New Zealand has the lowest rate of old age poverty in the world (Kidd and Whitehouse, 2009)

However, mandatory contributory pensions are unable to provide universal coverage: only 31.5% of the global working age population are members of contributory pension schemes (ILO, 2014). There are multiple reasons for this low coverage including: in countries with high levels of informal and subsistence sector employment, it is extremely challenging to collect contributions from workers outside the formal sector; many people of

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7 For a fuller description and analysis of the types of contributory pensions, see Barr and Diamond (2010).
working age have low incomes and are unable to contribute; and, a relatively high proportion of the working age population is outside the labour force, such as mothers caring for children and people with severe disabilities. Furthermore, in some countries, the level of contributions can comprise a high proportion of wages, thereby acting as a disincentive for employees and employers to enter schemes.

2.3. Tier 3 pensions

Tier 3 pensions are voluntary and designed for those with higher incomes who want to invest more so that they can receive a higher pension income in old age. Tier 3 pensions are run by the private sector and the function of government is to regulate them so that members enjoy protection from weak or fraudulent fund management. Often voluntary schemes are linked to employment, with businesses providing their employees with access to a private pension. In developing countries, only a small proportion of the workforce can access voluntary pensions, since few people have sufficient income to set some aside for old age.

3. OPTIONS FOR THREE TIERED PENSION MODELS

The focus of this paper is on the design of the entire pension system, rather than describing the options for the design of each tier. Its main aim is to describe how the overall success of any pension system in achieving the twin objectives of a minimum income for all older people and consumption smoothing depends, to a large extent, on the design of Tier 1.

There are three basic options for Tier 1: a means-tested scheme for older people living in poverty (often known as a Zero Pillar); a universal scheme providing a flat rate pension to all older people (often known as a Citizens’ Pension); and a pension-tested scheme that withdraws some or all of the Tier 1 pension from those receiving a Tier 2 pension.

Option 1: Means-tested Tier 1 pensions

Tier 1 pensions targeted at older people living in poverty are common, and are found in 53 countries (ILO, 2014). Such schemes are often known as Zero Pillar pensions, with the name reflecting the inadequacies of their design. Figure 2 illustrates the basic design of a three-tiered pension system with a means-tested Tier 1 pension and a mandatory contributory tier with minimal coverage, which is common in many low- and middle-income countries. The main failing with this pension system is a large coverage gap. While those living in poverty and those who have worked in the formal sector can access pensions, a large number of older people in the middle of the income spectrum are left without. While, in theory, these people may not be regarded as “poor” since they probably live in households with incomes above the poverty line, they themselves almost certainly have to continue working in old age or rely on financial support from others, placing them in a disadvantageous position as dependents. In effect, a Zero Pillar model can leave a large “missing middle” without pensions, providing no guarantee of income security to working age people once they reach old age.

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8 See Holzmann et al., 2005.
There are, however, some countries – such as South Africa and Australia – that provide much higher coverage of means-tested Tier 1 pensions, reaching over 70% of the older population. In reality, these pensions should be regarded as using affluence testing rather than poverty targeting to determine eligibility: rather than identifying those living in poverty – which is the case with most means testing – their aim is to exclude affluent older people. However, when contributory pensions are taken into account, pension coverage in these countries is almost universal. Nonetheless, as noted below, affluence testing can generate perverse incentives that are in danger of undermining the entire pension system.

A range of disadvantages with the Zero Pillar option arise from the process of means testing. Experience in developing countries indicates that it is impossible to accurately target pensions at the poor. For example, in Chile – the model for the Zero Pillar pension system following Pinochet’s reforms in the 1970s – despite high administrative capacity, around half of intended beneficiaries were excluded from the Zero Pillar pension (Arenas de Mesa and Mesa-Lago, 2006; Valdes Prieto, 2002). Targeting pensions at “the poor” can also create perverse incentives. Pensioners may be unwilling to work or invest, preferring to remain in poverty so that they do not lose the pension. Indeed, older people can deliberately throw themselves into poverty in old age so as to be able to access the Zero Pillar pension. For example, despite being relatively effective in terms of coverage, both Australia and South Africa have experienced people taking their savings out of their contributory pensions as lump sums prior to retirement so that they can qualify for the means-tested pension. Furthermore, when means tests are undertaken on the basis of household rather than individual income, older people may be encouraged to move out of their children’s houses and live independently so that they are assessed on the basis of their own incomes and, as a result, qualify for the means-tested Tier 1 pension.

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9 Source: Authors’ own creation.
10 Recent reforms in Chile have seen it move to a form of pension-tested system that enables it to bring the “missing middle” into the pension system (Barr and Diamond, 2010).
Option 2: A universal tier 1 pension model

A second type of pension model is based on governments establishing a universal Tier 1 pension, offering a pension to all older people (see Figure 3). Around 36 countries – both developed and developing – have established universal pensions. They offer a range of advantages over means-tested options: they are the best means of ensuring universal pension coverage since no older person is excluded by design and registration should be simple, since people often only have to provide proof of age to qualify; they do not generate perverse incentives since people receive the pension irrespective of their income; they do not undermine the expansion of Tier 2 pensions, since no one in receipt of a contributory pension is excluded from the Tier 1 pension; and, they are administratively simple to deliver and, therefore, particularly appropriate for middle- and low-income countries. Unlike Zero Pillar pensions, universal pensions can be regarded as “entitlements” – or Citizens’ Pensions – since everyone is guaranteed access as a right, in recognition of their “contributions” to the nation throughout their working lives. Indeed, Citizens’ Pensions can be regarded as pay-as-you-go pensions that are funded via citizens’ contributions to the tax system (often through indirect taxes such as VAT).

Although universal pensions are more expensive than means-tested pensions, paradoxically they are, as a result of their popularity, financially more sustainable. As discussed earlier, since they are offered to everyone – including as a future promise to the current working age population – support for them is usually widespread, in particular among those constituencies of the population that are politically strong. Since political leaders can reap electoral rewards by investing in universal pensions, they are more willing to support them. The political support for universal pensions – or, at least, those with high coverage – is indicated by the level of government investment: while it is rare for means-tested pensions in develop-

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12 Some universal pensions, however, have additional criteria, such as proof of residence.
13 In its classic publication – *Averting the Old Age Crisis* – the World Bank (1994) summarized many of the advantages of universal pensions: “Administratively, this is the simplest structure, with the lowest transaction costs for the public pillar - an important advantage in developing countries with limited institutional capacities and incomplete record-keeping systems. It avoids the disincentive to work and save inherent in means-tested plans. Its universal coverage helps ensure that the poverty reduction objectives are met, [and] provides a basic income for all old people.”
14 Source: Authors’ own creation.
ing countries to cost more than 0.3% of GDP, many universal pensions cost more than 1% of GDP, reaching over 4% of GDP in Georgia. Furthermore, as indicated by Figure 1, the value of universal pension transfers also tends to be higher than those targeted at the “poor.”

Option 3: Pension-tested Tier 1 pension model

A variation on a universal pension model system employs a pension tested Tier 1 pension (see Figure 4). A pension test is similar to a means test but has the advantage, if well implemented, of offering universal pension coverage. It involves withdrawing the Tier 1 pension from those receiving a mandatory contributory pension. Some countries – such as Thailand, Lesotho and Nepal – withdraw the Tier 1 pension entirely if someone is in receipt of a contributory pension. However, this can discourage those expecting to receive a contributory pension similar in value to the Tier 1 pension transfer from paying contributions during their working lives.

As Figure 4 indicates, a better option is to gradually reduce the value of the Tier 1 pension in line with the value received from the contributory pension. This tapering of the Tier 1 pension may reduce disincentives to enter the contributory system since all recipients of contributory pensions always receive more than from the Tier 1 pension alone (although the disincentive effect would depend on the rate of the withdrawal). Table 1 indicates the impact of a withdrawal ratio of 5:1 on a Tier 1 pension of €300 per month. Those with a contributory pension of €100 per month would have €20 withdrawn from the tax-financed pension, receiving a total of €380, while those with a contributory pension of €500 would have €100 withdrawn, obtaining a total pension income of €700 per month. Anyone receiving €1,500 or more would not benefit from the Tier 1 pension. Of course, if administrative capacity is limited, withdrawals could be done more simply: in the Maldives, for example, anyone in receipt of a contributory pension receives 50% of the Tier 1 universal pension.

15 Pensions with high coverage can also generate strong political support, by building alliances between those living in poverty and those in the middle of the income spectrum. South Africa’s pension, for example, reaches around 80% of older people, covering most of the voting block of the African National Congress ruling party. See HelpAge International, Pension Watch database for information on the costs of Tier 1 pensions: retrieved from http://www.pension-watch.net/about-social-pensions/about-social-pensions/social-pensions-database/.

16 Source: Authors’ own creation.
Table 1: Impact on overall pension income of a withdrawal ratio of 5:1 from the contributory pension, assuming a tax-financed pension of €300 per month

<table>
<thead>
<tr>
<th>Contributory pension income (€)</th>
<th>Amount of Tier 1 pension withdrawn (€)</th>
<th>Overall pension income (€)</th>
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<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>300</td>
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<td>20</td>
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4. IMPACTS OF PENSIONS

The impacts of old age pensions depend on their coverage and the value of the transfer. Those offering universal – or, at least, broad coverage – and higher value transfers have much greater impacts. Georgia’s universal Tier 1 pension reduces the national poverty rate from 37.5% to 20.1% while the poverty rate of older people falls from 51.8% to 18.7% (UNICEF and University of York, 2014). In Brazil, a combination of Tier 1 and contributory pensions paid at the level of the minimum wage almost eliminates old age poverty, which falls from a rate of 47.9% to 3.9% (Gasparini et al., 2007). Even in Nepal, where the Tier 1 pension is only US$7 per month, the poverty gap in households with over-70s is reduced by 27% (Kidd and Wylde 2011).

Pensions reduce the social exclusion of older people by incorporating them more strongly into kinship and social networks. Pensioners can continue as financial contributors to their networks even when they no longer work, thereby increasing their chances of receiving support from others when they need it. In South Africa and Brazil, for example, over 90% of pensioners have expressed satisfaction with their family relations (Barrientos and Lloyd-Sherlock, 2011). Indeed, in South Africa, the largest households are those with pensioners (Neves et al 2009). There is also good evidence of old age pensioners using their incomes to benefit children (see Box 3).

17 Source: Author’s own creation.
Old age pensions help children in a number of ways. Pensioners often have a special relationship with their grandchildren and invest in their wellbeing. In South Africa and Brazil, for example, pensioners share most of their pension with others (Barrientos and Lloyd-Sherlock, 2011). In fact, in South Africa, old age pensions have been shown to reduce stunting, with children living with pensioners being up to 5 centimetres taller (Duflo, 2000; Case 2001). Pensioners also help children attend school: in South Africa, the pension has resulted in an 8% increase in school attendance among the poorest quintile of the population; in Brazil, it has reduced the enrolment gap among girls by 20%; and in Bolivia, school enrolment is 8 percentage points higher in pensioner households (Samson et al., 2004; Carvalho Filho, 2008; Mendizabal and Escobar, 2013). When older people receive pensions, families can reduce their financial support to them and invest more in their own children: in South Africa, for example, older people receive lower remittances from their children once they benefit from the pension (Jensen, 2004); and, in Bolivia, rates of child labour are significantly less in households with pensioners (Mendizabal and Escobar, 2013). Furthermore, old age pensions can enable grandmothers to care for their grandchildren, allowing their mothers to find employment and increase overall family incomes, including through migration (Ardington and Lund, 1995; Posel et al. 2004).

Importantly, old age pensions enable older people to retain their dignity and self-respect in their final years. In South Africa and Brazil, over 90% of older people expressed satisfaction with the respect shown to them by others, with older people in South Africa investing in houses as a means of regaining their prestige (Neves et al., 2009). In Zambia, beneficiaries of a universal old age pension have found that people in their community have begun calling them “bosses” (Kidd, S.D. 2010). In fact, there is also evidence of pensions resulting in higher cognitive ability among older people (Aguila et al., 2011).

There are also significant economic benefits from investing in comprehensive pension systems. Older people themselves often use their pensions to invest in small enterprises or buy services from others. In Uganda, for example, around 70% of pension recipients have hired local people, increasing employment. By purchasing goods, pensioners generate greater demand in the economy. At a local level, this can be important for shops: in rural Namibia, for example, many local shops would close without the pension (Devereux, 2001). But, at a national level, consumption by pensioners can act as a stimulus to the economy. Thailand introduced universal pension coverage to stimulate its economy during the global recession while a key reason for China’s introduction of its Rural Social Pension in 2009 was to boost consumption. Simulations in Bangladesh have suggested that investing in a universal pension would have a similar

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18 Barrientos and Lloyd-Sherlock, 2011. The investment in houses as a means of building respect was also noted in Zambia (Kidd, 2010).
19 The universal pension in Zambia is a small programme in the Katete region.
20 Cf. Povel (2015) who discusses the negative impacts of living in poverty on cognitive ability.
21 Ardington and Lund, 1995; Devereux et al., 2005; Neves et al., 2009; Uprety, 2010; Covarrubias et al., 2011; and Bukuluki and Watson, 2012.
22 Personal communication: Stephen Barrett.
economic impact to investing the same budget in infrastructure and capital machinery (Khondker, 2014). Furthermore, pension funds generated by contributions from workers can be used as investment capital.

5. CONCLUSION

Globally, old age pensions comprise more than half of all investment in social security, averaging 3.3% of GDP across all countries (ILO, 2014). Yet, despite old age pensions first being introduced in the nineteenth century in countries such as Germany, Denmark, Iceland and New Zealand – which, at the time, were still developing – around half of older people worldwide continue to live in income insecurity, with no access to a pension. Yet, as New Zealand’s Minister of Finance declared in 2003: “The ability to retire in a degree of personal comfort, without worry and with dignity, is the least that citizens can expect in a modern, developed economy.”

In a rapidly ageing world, countries aspiring to a higher level of development should place a comprehensive old age – and disability – pension system at the top of their policy agendas. Nepal – which is one of the world’s poorest countries but offers universal pension coverage to everyone over 70 years – has demonstrated that a comprehensive pension system is within the grasp of all countries, if the political will is there. Countries investing in universal old age pension coverage will gain significant benefits, not only by ensuring income security for their oldest citizens but through broader economic benefits. They will also ensure that the fundamental right of older people to social security and an adequate standard of living – as set out in the Universal Declaration of Human Rights – will be realized. And, it is a right that will benefit women much more than men.

However, a comprehensive pension system should not rely only on government financing. As the New Zealand Minister of Finance also said, a nation’s citizens “cannot expect the state to maintain in retirement the incomes people became accustomed to during their working lives.” A multi-tiered pension system enables people to provide themselves with higher incomes in old age than can be offered by governments alone, but under the broad umbrella of government management and/or regulation. A comprehensive pension system is not a choice between government financing and contributions by employees: rather, it requires a well-designed combination of both, with the specifics of the design tailored to the particular circumstances of each country.

25 Nepal also offers pensions to certain categories of the population from 60 years, including Dalits, those in the poorest region of the country (Kamali) and single women.
6. BIBLIOGRAPHY


