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Ageing Demographic

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Abstract

This paper argues for retirement policy formulation and reforms to re-orient towards greater reliance on non-contributory means tested pensions as a primary retirement income delivery structure. These pensions will become more relevant as the number of contingent workers increases in the global north; and have the potential to reach informal workers in emerging economies who have exhausted their earnings capacity. We show that this kind of pension structure can be efficient, equitable and sustainable. If properly designed, it is especially well-suited to an ageing demographic. We briefly discuss the Australian model as an example of how well this can work.

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John Piggott Director ARC Centre of Excellence in Population Ageing Research (CEPAR) University of New South Wales Sydney 2052 Australia j.piggott@unsw.edu.au Population ageing and recent labour market trends pose significant challenges to social security systems around the world. According to the United Nations (2017), developed regions (Europe, North America, Australia, New Zealand and Japan) will see their elderly populations more than double by 2050, while their working age populations will continue to decline, threatening the sustainability of traditional earnings-related social security plans. Further, the decline of the traditional workplace raises new challenges for pensions that rely on the workplace as an anchor for pension fund membership.¹ And fast growth of the contingent workforce in many countries have and will have serious implications for coverage and adequacy of contributory, earnings-related pensions.² Retirement system restructure to ensure fiscal sustainability, adequacy and equity in the context of these fundamental demographic and labour market changes remains a major challenge for the governments of the global North.

In developing countries, changing macro-demographic environments are causing the traditional family support system to break down while many of these emerging economies have seriously deficient social protection policies, especially for the elderly. Major social policy development, including establishing comprehensive retirement income support structures will be required to avert large scale poverty among older cohorts and ameliorate pressures leading to increasing inequality.

In this article, we argue for a re-orientation of pension policy formulation and reform towards non-contributory, means tested pensions. Such pensions provide benefits to all people above age and residency thresholds, subject to means. Appropriately calibrated, they can deliver adequate income to older cohorts, including those outside the reach of traditional pensions, such as rural workers, the very poor with limited labour force experience, and frequently, women. And in the future, many of today's contingent workers. Because the maximal benefit is a flat rate, and the benefit itself is means-tested, it is an affordable and sustainable design. It can go a long way to meeting the poverty-alleviation-related sustainable development goals set by the United Nations in 2015.

Means tested pensions are not uncommon, with about a third of countries worldwide having some form of a targeted public pension program (Chomik et al 2018). But in most cases such pensions are targeted at the very poor, and in many cases are an extension of a more general non-age related welfare program. By contrast, we are advocating the development of a structure which delivers an age-based transfer large enough to be the major source of income for older people in, say, the bottom half of the income distribution. Rather than being directed towards the destitute, it targets the affluent. Until recently, this type of pension design has been little analysed. But over the last decade, a substantial literature has developed which supports this type of pension design as offering an attractive efficiency equity trade-off, while being sustainable and equitable in the face of an ageing demographic.

Broad structure

Means tested pensions are designed to provide a poverty alleviating income stream to older cohorts from some access age to the end of their lives. In an important sense, they are tied to needs, not entitlements earned through a contribution history. They have a distinctive feature that tailors the level of pension benefits to individual economic status – paying a higher benefit to poorer pensioners and reduced or no benefit to well-off seniors. This is done by

¹ See Mitchell and Piggott (2016).

² See, for example, Katz and Krueger (2016) and Gallup (2018) for the US workers engaged in the gig economy.

setting up a "maximal benefit" (benchmarked to economy-wide average wages) and then applying a "taper" rate at which the maximal benefit is withdrawn in relation to the pensioner's income or assets. Means tested pensions may also include a "disregard" – an income or asset threshold up to which the maximal benefit is paid, to ensure that the pension for those seniors most in need is not impacted by small values of income or assets.

Through these three parameters, governments can effectively control the generosity, coverage and overall cost of the program. By implication it also controls the required tax rate and base to fund the program. These outcomes are necessarily and continuously impacted by changes in labour supply and saving behaviours of individuals. This means that the means tested system has the capability to adapt to demographic change.

While not the primary focus here, it is important that a non-contributory pension is complemented by mandatory retirement saving for those who can afford it (Hayek 1960). This can be either funded or unfunded, a social security plan or a workplace pension – what is important in this context is that these entitlements count against the means test at retirement.

Economic benefits

Like any other tax-financed financial transfer, retirement income transfers impact on incentives at two points in economic transactions: when the tax is levied, and when the transfer is received. These two points of price distortion are both relevant in assessing the efficiency and equity effects of a tax-transfer policy.

To capture both these points of intervention, it is necessary to adopt an economy-wide conceptual framework. Indeed, there are complex interactions between the effective tax rates facing those eligible to receive transfers, those not eligible, and those who are being taxed to finance it. First, while a means tested pension program will impose high effective tax rates on those receiving a partial benefit, where withdrawal of the pension is operative, many individuals potentially impacted by a universal pension will be unaffected by a targeted pension. The taper rate will impact on this. The lower the taper rate, the lower will be the incentive impact, but the more people will be affected. This is demonstrated in Figure 1, showing the association between the means tested pension and private resources under the two taper rate cases – lower Taper₁ (red schedule) and higher Taper₂ (blue schedule). The lower taper implies lower tax rates with a smaller impact on incentives of those receiving a partial pension, but there are more beneficiaries (depicted by a wider range of private income or assets) that are impacted by this lower taper rate, compared to the higher taper scenario.

Furthermore, as the taper rate is reduced, the overall revenue requirement of the program will increase, and this will require higher tax rates to be applied to others in the economy, probably workers. If they already pay high taxes, as in developed countries, then the incentive impacts are likely to be severe. If the economy is less developed, with low tax rates, it is likely that the tax imposition will retard the development of the formal sector. Overall, the best design will involve a somewhat subtle trade-off between keeping a low tax rate for potential beneficiaries and keeping the tax-burden of the economy at affordable levels.



Over the last decade, a substantial empirical literature has been developed which offers strong guidance on the best means-tested designs, and illuminates other economic impacts.³ Broadly speaking, these analyses show that a sharp taper dominates a shallow taper. The major welfare and macroeconomic improvements come from the reduced number of pensioners confronting the sharper taper, and the reduced income taxes needed to finance the program, for any given maximal benefit. The case for means testing public pensions strengthens under population ageing because of an adjustment mechanism embedded in means tested pensions that automatically adjusts pension benefits to demographic change. If richer people live longer, and there is a single access age, then sharper means testing improves the equity impacts of a social pension by redistributing pension benefits to pensioners with limited private resources and shorter life expectancies. A further refinement separates out capital and labour income – offering more lenient taper treatment to the latter. This is shown to improve overall economic benefit further. A corollary to this is that focusing the taper on income from capital amounts to a capital tax. Yet overall negative impacts are limited, because the relatively affluent, whose labour supply and saving is disproportionately important, receive no benefit, so their behaviour is not impacted.

These programs therefore have direct policy relevance for pension reform in the global north, and for social security design in the global south. They are also directly relevant to the OECD's concern to prevent ageing unequally (OECD, 2017a).

³ It is summarised in Chomik et al (2015) and Kudrna (2016).

A real live example: Australia's age pension

The Australian age pension represents the main source of income in retirement for most retired Australians.⁴ The age pension is needs-based and has always been means-tested Eligibility is based on age (currently 65.5 and increasing to 67 by 2023) and residency (minimum 10 years), but not on work history and past earnings. Benefits are financed through general tax revenues. They are linked to full time male average earnings, with the maximal rate for a single pensioner set at 28% and for each member of a pensioner couple at 75% of the single rate. By implication, benefits are indexed to wages.

Means test design

The age pension is subject to both income and asset tests. As illustrated in Figure 1, these tests are shaped around the maximal benefit that differs for single and couple pensioners; the disregard up to which the maximal benefit is paid; and the taper at which the pension benefit is withdrawn. The pension benefit paid to an eligible individual or household is then determined by test that results in a lower pension amount.

The income test distinguishes capital income and labour earnings, with the latter enjoying a more generous disregard to encourage mature age labour force participation. Beyond the disregard, the maximal pension is reduced at the taper of 50 cents for every extra dollar of assessable income.

The asset test is comprehensive, although owner-occupied housing is exempt. It also distinguishes between homeowners and renters, with the asset disregard being higher for renters. Beyond the disregard, the maximal annual pension is reduced at the rate of 7.8 cents for every extra dollar of assessable assets. Currently, the cut-off amount of combined assets for a couple owning their home to receive any age pension is A\$840,000 (12 times average annual earnings).

Outcomes

The Australian age pension is an affordable and sustainable program, with limited negative impacts on behaviour. Figure 2 offers estimates of international cost comparison. It shows public pension spending during 2013-2015 and projections for 2050-55 as a percentage of GDP (OECD 2017b). Australia's public spending on pensions is one of the lowest among OECD countries and far below the OECD average. Note that the figure of 4% of GDP for Australia includes not only the age and service pensions (about 2.9% of GDP in 2013-2015) that are means tested, but also spending on other public pensions (e.g., defined benefit pensions for public servants, plans that are now closed to new entrants.) Importantly, the projected expenditure for the 2050s is shown to decline slightly. This is mainly due to the means testing of the age pension and maturing mandatory superannuation with expected larger private savings at older ages.

When housing costs and imputed rent are included in the calculation, the Australian old age poverty rate is below the OECD average, indicating that the age pension also does a good job at poverty alleviation (Chomik et al 2018).⁵

⁴ It is complemented by privately managed and provided superannuation (Australia's term for private pensions) that forms the second "mandatory" and third "voluntary" retirement income pillars.

⁵ The OECD headline estimate of elderly poverty rates (OECD 2017b) is misleading. The calculation after taking account of housing costs is important because about 80% of elderly Australians own their home outright.

Australia has a century-long experience in administering the means test for the age pension. The approach is to integrate services and generate economies of scale and scope, with a single agency acting on behalf of client departments. The process involving assessment of income and asset information is streamlined, firstly processing an initial claim with the requisite assessment, and then dealing with current claims. The latter may require subsequent self-reported reassessment (financial investments are automatically re-valued). Administration tends to be cheaper than earnings related schemes, simply because all information for eligibility and payout is gathered at a single point in time, rather than over the whole of working life.



New Zealand Sweden

Canada

Estonia

Israel Korea

States

Jnited

Latvia urkev

Chil

Austral

Source: OECD (2017b).

Figure 2

Take-aways

Mexico

celan

We argue for and present evidence in support of a re-orientation towards non-contributory, means-tested, retirement policy structures. What might be termed an "affluence-tested" pension has economic impacts that are welfare-enhancing and can be calibrated to comprehensively address poverty among older cohorts with diminishing earning capacity, while keeping costs sustainable in the face of an ageing demographic. It has built-in adjustment mechanisms which enhance both economic efficiency and equity as populations age, and can reach those most in need, who often fall outside more traditional contributory programs. We posit the Australian system as a real live example of a non-contributory means tested pension that works well. The Australian example is seen as a model for the Global North. But the same non-contributory, means-tested approach can be adapted to emerging economies confronting rapid population ageing, a high informal sector which contributory systems cannot cover, and deficient social protection structures.

Hungary

Norway

Switzerland

Poland

Czech

Japan

reland Republic

OECD

Kingdom

Republ

ovak

Netherlands

Denmar

Spain

Luxembourg

France

German\

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Further, the age pension benefit is set just below the poverty line. Increasing the maximum pension benefit by a small amount would reduce old-age poverty more, for very little fiscal cost.

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