Political equilibria, near substitutes, 
and the provision of income security in old age

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Abstract

The article sketches an analytical approach to the study of old-age pensions. The equilibrium-concept is brought back in, and near substitutes (less charged words than functional equivalents) are delineated. To enhance security for the majority rather than to redistribute to a minority is argued to be the common denominator behind old age pensions, as well as social security more generally. Old age pensions differ from other social risks in that a majority is likely to consider themselves bad risks, i.e. prone to live longer than average. For this reason, old-age pensions are likely to enjoy a stronger political backing than any other social security scheme.

Old age: a social risk

In the preambles to the 1948 UN Declaration of Human Rights, Art. 22, social security was defined as policy measures aimed at "protecting an individual in social situations and conditions in which his or her livelihood may be at risk" (Andreassen 1992:336). A social risk can be defined as one of those life situations or -conditions which increases the probability that an individual's livelihood may be in jeopardy. These life situations and -conditions include old age, disability, sickness, surviving a provider, pregnancy, maternity, unemployment and single parenthood, to mention the most obvious.

Lawyers and social security administrators have long regarded security as the almost self-evident objective behind social policies. However, most welfare researchers have nonetheless analysed welfare measures as if redistribution (and hence equality), rather than security, was their main rationale. Thus the standard explanation for the existence of welfare policies has been that they redistribute economic resources toward the low end of the income/wealth distribution. Vast empirical efforts have been made investigating if welfare policies really redistribute to the lower end, and/or if some welfare states redistribute more than others do. However, if redistribution was the main aim of welfare policy, then why do not low-income voters (and/or benevolent voters among the well-to-do) satisfy this demand simply by voting in politicians who install some type of an income transfer, or basic income, scheme? From an administrative point of view this is obviously the simplest and least costly way to achieve redistribution (Loftager 1996). Why do we instead witness the introduction of a multitude of different welfare schemes: old age, preretirement, surviving a provider, sickness, single
parenthood, unemployment, disability, work accident, rehabilitation, maternity, nursing... The list goes on and on, and most of these schemes can also be subdivided further, including ever subtler differentiation of eligibility and measurement criteria (which are difficult and costly to administer). If economic redistribution is the name of the game, then why so many welfare schemes?

This puzzle is solved if we instead assume security, rather than equality, as the underlying purpose of welfare schemes. Welfare schemes differ because social risks differ. Most importantly, providing security against social risks is to a varying extent beset by adverse selection and moral hazard-problems (Barr 1992). Moral hazard-problems in particular implies that compensation levels are set low and potential as well as actual applicants are monitored, in order to prevent over-use of the security device (i.e. the state behaves essentially as an insurance company). However, some social risks involve fewer moral hazard problems than others. Old age benefits in particular are immune to such problems since one can hardly speed up the ageing process in order to be among the beneficiaries. Social risks where moral hazard-problems are limited have an interest to lobby for separate schemes of their own, since benefit levels in such schemes can be set higher and monitoring is less necessary. Across time ever- more social risks (beginning with old age and work accident) have succeeded in being singled out for separate treatment of their own, resulting in schemes with different entry criteria, different benefit levels, and different degrees of monitoring. This is the rationale behind today's bewildering welfare complexity - a complexity that would be irrational if redistribution, rather than security, was the simple objective to achieve.

**Political equilibria and near substitutes**

An important propensity of risk is that risk has a spatial dimension: the distribution of risk represents a continuum within a population. Further, this distribution can be presented as unimodal: the dividing line is everywhere between good risks and bad risks. These propensities imply that it is possible to speak meaningfully of a median with regard to the distribution of risk. Third, it is a common assumption within economics that a majority of the population is at least moderately risk averse (cf Quirk 1976:302 ff.). If so, the individual representing the median will also be risk averse, and will thus display a preference for security devices. Given these assumptions, we can identify equilibria in welfare politics simply by applying the median voter theorem:
If \( x \) is a single-dimensional issue, and all voters have single-peaked preferences over \( x \), then \( x_m \), the median position, cannot lose under majority rule. (Mueller 1989:66)

By moving risk, and security, to the forefront in the study of welfare policies, we are thus able to identify well-defined theoretical equilibria in welfare politics. Applying the median voter theorem, the policy vis a vis a social risk should be in equilibrium (implying no design changes in existing welfare measures) to the extent that the median voter is satisfied with the ratio between costs and the level of security received.

Once we have pinned down an analytically precise concept of equilibrium, we are simultaneously in a position to offer an analytical approach to change. Change (observed changes in welfare designs) should take place to the extent that various factors upset the present position of the median, or (alternatively) weaken or destroy existing "security institutions". In the first case, a changed median position should induce demand for a different cost/security ratio. In the second case, the median voter should redirect his/her demands to institutions which may serve as near substitutes to those that are no longer operative, in order to maintain preferred security levels (Quirk 1976 87-8). The median position might also change to the extent that the skewness of the risk distribution changes within the population. As with increased risk levels across the board, a shift in the distribution of risk should change the median position and thus induce a new series of design changes.¹

With this analytical framework in the back pocket, let us investigate if and how it can be applied to an analysis of income security in old age.

**Which social risks do old age benefits secure against?**

Old age benefits secure against three somewhat different social risks:

1) longevity
2) disability due to old age
3) unemployment due to old age

¹. To exemplify this point consider, for example, that the occupational structure of a nation gradually changes from occupations sheltered from competition till occupations exposed to competition. Assuming that occupations exposed to competition face higher unemployment risk, such a shift in occupational structure should change the distribution of risks, moving the median position in the direction of being willing to carry increased costs (for example, through taxation) in order to be insured against unemployment risk.
Securing against longevity implies securing against the risk of living longer than expected. Securing against disability due to old age implies securing against the risk of disability due to age weakening. Incidentally, pension ages started out in the late 19th century as "average disability ages" (Graebner 1980). They initially represented an age where a majority was supposed to suffer from some disability, and thus represented a cost-efficient way to offer disability insurance.

Even later, old age pension schemes also came to encompass security against the risk of unemployment due to old age. This has been an increasing problem during the 20th century, partly due to rapid technological and social changes (which have made previously acquired skills ever-faster obsolete), and partly due to institutional factors (such as seniority pay, and downward inflexible wage rates, which may create a widening gap between older worker's productivity and their wages). These are main factors behind reduced pension ages and/or more pre-retirement options.

Finally, one should draw a distinction between the risk of poverty in old age and the risk of not being able to maintain an accustomed standard of living after retirement.

**Delineating near substitutes to provide security in old age**

The majority of voters may in principle be satisfied with different welfare designs to meet their social security demands. Different measures can be perceived as near substitutes to the extent that their effect is the same: to safeguard the majority against various social risks.

*Tax-and-spend measures* crop up in national accounting systems, and are easy to operationalise in quantitative, variable-oriented comparative research. *Regulatory measures* to deliver social security are difficult to locate unless one conducts case studies of the countries in question. Examples: mandating occupational pensions and mandating sick leave paid by employers.

*Fiscal measures* can also be used, eventually in combination with regulatory measures. For example, tax subsidies can be used to boost occupational pension provision while simultaneously influencing the design of such schemes to encompass social and other objectives.
Providing income maintenance through tax-and-spend, regulatory and fiscal measures

Norway, Sweden and the US employ one single public superannuation scheme covering the whole work force. The decision-making process, administration and financing of the schemes are exclusively in the hands of elected bodies and the state. Since the government controls head and tail of these schemes, they represent pure tax-and-spend measures.

Iceland and Switzerland do not have public superannuation schemes. Instead, the state has mandated membership in a private superannuation scheme (“private” implying that the scheme is administered by private legal bodies, and financed by employers or employees). The state regulates the schemes, but does not have its own members on the Board of Directors. The UK used to have a public superannuation scheme (SERPS) set up along Swedish/Norwegian/US lines but allowed employers and employees to “contract out” of SERPS to enter mandated occupational or personal superannuation schemes instead. These mandated schemes enjoy tax privileges relative to others types of private savings. Britain thus employs a mix of public plus mandatory regulated and fiscally subsidised private schemes. Mixing several types of means to provide income-maintenance in later years is common in all countries- but the UK mix has no counterpart anywhere else in the world.

Common to all the above countries is that they draw a rather clear distinction between public and private (mandated) pension provision, in the sense that the institutions involved are either formally public or formally private. Continental-European countries (including Finland) rely more on schemes with a fuzzy mix between public and private elements. This is so since the social partners (employer and employee organisations) usually sit on the Board of Directors of such schemes, and have a say alongside state representatives both with regards benefits, financing and administration. Since the social partners are private bodies from a legal point of view, these arrangements must be regarded as formally corporatist.2 In the perspective employed here, they represent a bringing together of tax-and-spend and regulatory measures within the same scheme(s).

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2 Not to be mixed up with the informal corporatism often to be found in the small, Scandinavian countries. Scandinavia can to some extent be characterised as someone-have-spoken-together democracies, but there are very few formal corporatist arrangements around, in the sense that representatives of the state meets with representatives of the social partners on an equal footing.
Poverty relief through tax-and-spend, regulatory or fiscal measures

Most EEA (European Economic Area) countries provide poverty alleviation either through a minimum pension scheme or a standardised social assistance scheme ("social pensions" being something in between). Targeted minimum benefits (housing assistance, special benefits for the infirm etc.) top up standard minimum benefits. Northern Europe in particular has well-developed and generous minimum protection systems financed from general revenues. These represent clear-cut tax-and-spend measures.

A regulatory measure to provide poverty alleviation consists of providing children and/or siblings with a legal obligation to support destitute parents. This is often the case in Southern Europe, where minimum pensions financed from general revenues (tax-and-spend measures) are less developed than in the North.

Poverty alleviation can also be dealt with within earnings-related schemes. Groups outside the labour force can be granted superannuation credits for performing work in the informal sector, such as looking after pre-school children or frail relatives (Sweden, Norway, Germany). Or one may grant a superannuation credit depending on the number of children a woman gives birth to (France). Young people becoming disabled before they enter paid employment (including the born disabled) can be treated “as if” they earned an average income at the time of the event, thus granting them superannuation benefits (Norway). In all the above cases, security for groups who do not formally “contribute” is brought about by a combination of tax-and-spend and regulatory measures, since the state steps in and grants (regulates access to) superannuation rights even to those who do not “contribute” in a formal sense.

Finally, fiscal measures play a role also as regards poverty alleviation to the extent charitable organisations who care for the old and the inform enjoy tax privileges, and/or that gifts to such institutions are exempt from income taxation.
Different mixes – similar outcomes?

The argument so far has been that different countries employ different mixes of tax-and-spend, regulatory and fiscal measures to provide income maintenance, as well as poverty relief, in old age. This further implies that comparative research protects which focuses only on tax-as-spend measures are likely to paint a distorted picture of how much security that is provided across countries. Since regulatory as well as fiscal measures do not show up in national accounting systems, these security devices are usually impossible to capture unless one performs detailed and in-depth case studies of the countries one is interested in.

Does the above imply that all countries are more-or-less equal in the amount of old age security they provide, and that the differences we detect when focusing only on tax-and-spend measures are only an artefact of invalid operationalisations? Maybe. The idea of “near substitutes” does presume that differences between countries are likely to diminish, rather than to broaden, if more social security devices are brought into the picture (cf Castles 1988, Whiteford 1994). Thus as regards poverty alleviation in old age, the Scandinavian countries plus New Zealand have the highest old-age minimum benefits in the world. These countries have also scrapped previous legislation stating that children have a legal obligation to provide for poor and destitute parents. In contrast, Spain, Italy and Portugal have – at least until very recently – only provided rudimentary poverty relief for the elderly. But in these countries not only children but even siblings can be made economically responsible for poverty among the elderly (Millar and Warmann 1996). Moving on to Germany, France, Belgium and Austria, these countries have a long tradition of means tested “social pensions” or special provisions for poor pensioners within social assistance schemes. Minimum benefits are not as generous as in Scandinavia and New Zealand but more generous than in Southern European countries. They also provide children with a legal obligation to care for poor parents, but do not extend this obligation also to siblings. Thus it may seem that countries which score high on one poverty alleviation measure score low on others, while those who are middle-of-the-road with respect to one measure also are middle-of-the-road as regards others. As far as income maintenance is concerned, no country grants average income earners more than 100 per cent of previous earnings as pensions, and most seem to grant more than 50 per cent, in particular if tax-subsidised occupational pensions are brought into the picture (cf. MISSOC 1996, Council of Europe 1996). Essentially, however, we need more studies before we can be sure to which extent various ways to provide social security compensate each other (as the "near substitutes" hypothesis suggests) or cumulate (implying that differences between countries are even larger if more social security devices are brought into the picture).
In any case, the idea of “near substitutes” does not imply that there will be no prevailing differences left between OECD countries, if we were able to do a fine-grained analysis of the many security devices around. Similarities will always remain a matter of degree. Let me offer some cues as to which prevailing differences that are likely to persist in the area of pension provision. Briefly stated, I will argue as follows: A transition to democratic rule will usually imply that public pension initiatives moves away from privileged minorities (public servants, urban employees) to a majority of the population. All OECD countries, being established democracies, have made this transition. However, this majority may consist of the upper middle half, the majority-in-the-middle or the lower middle half. Which majority that is likely to receive the brunt of publicly provided, sponsored or stimulated old-age security devices within well-established democracies is likely to depend on differences in their underlying social structure (degree of occupational, religious and ethnic cleavage lines).

The room for different outcomes in democracies

Both income maintenance and poverty alleviation during old age will to some extent be taken care of in well-established democracies. Very few will be allowed to starve or freeze to death, and few of those with stable working careers will experience a severe reduction in their “accustomed standard of living”. In this sense, the scope for differences in the provision of old-age security is probably less than with regard to security against other types of social risks (unemployment, disability, single parenthood etc.) This is so because “old age” in the only social risk where a majority in all countries is likely to regard themselves as bad risks, i.e. belonging among those likely to grow older than average. All social security schemes redistribute income from good risks to bad risks. In the case of old age, this implies redistribution from those who die early to those who die late. Thus for pure self-oriented reasons, a majority is likely to support old age pensions above all other social security devices, across all democratic countries. Thus it should come as no surprise that old age pension schemes are by far the most widespread social security devices in the world (Gordon 1988, US Dept of Health and Human Services 1992). They are much more common than unemployment benefits and family benefits. Within OECD countries, pension spending makes up a larger part of social spending than any other type of social transfer. Also, opinion polls suggest that pensions are the most popular of all types of social security the government provides (subsidised or free health care being the only other item enjoying a roughly similar level of popularity) (Coughlin 1980).
There are strong theoretical reasons to suspect that a majority will be at the receiving end of whatever old age security devices that are provided, or sponsored, by an elected government (Mueller 1989:448, see also Downs 1957, Goodin and le Grand 1987). This can be contrasted with autocracies, where public initiatives in the field of old age pensions – as well as in any other field – are likely to benefit a (privileged) minority at the expense of a majority. The fact that politicians in all democracies are heavily involved in providing income security during old age does not imply, however, that all working age people will receive the same amount of income maintenance once they retire. Nor does it imply that all of those who lived their working lives in poverty will enjoy the same amount of poverty relief once they enter retirement.

There are two main theories concerning the direction of redistribution in a democracy (and thus with regard to any social risk): Director’s law and the Meltzer-Richard hypothesis (Mueller ibid). Both assume that redistribution will go from a minority to the majority. But they differ in the assessment of which majority that will come out as winners, i.e. which groups of former working-age persons that will reap the largest benefits as pensioners.

*Redistribution from both tails to the middle*

Aaron Director assumed that redistribution from both tails of a distribution to the centre is more stable than redistribution toward one of the tails. This hypothesis has later become known as “Director’s law”, and holds that redistribution in a democracy will transfer resources both from the rich and the poor to the majority-in-the-middle.

A “pension regime” consisting of earnings-related pensions with cut-off points and no minimum protection is likely to redistribute from both tails to the centre of the income distribution, in particular if benefits are partly tax financed. The rich will receive less than middle income earners if there are cut-off points in the income used to calculate benefits, but no cut-off points in the amount of income that is taxed. Because of the contribution requirement, the poor (i.e. those with no or a very limited working career) will not earn pension credits. However, to the extent that these pensions are partly financed through general taxation, the poor help finance these pensions (in particular through consumer taxes).

The poor as well as the rich may also help finance this pension regime to the extent that earmarked pension taxes (“contributions”) are carried over into higher prices on the goods and services that the pension-favoured segment of the economy produce. If so, the poor and
In the Australian case the pension is “affluence-tested”, implying that the 30 percent richest are denied access. Nonetheless, a clear majority (including the median voter) benefit from this basic pension.

All OECD countries provide some minimum benefits for the poorest alongside earnings-related pension schemes, but in most countries this benefit is meagre. Meagre benefits to the poor are indicative of a Director’s law type of overall redistribution.

**Benefits from above the median to below the median**

In contrast to Director’s law, the Meltzer-Richard hypothesis claims that redistribution in a democracy will be from those whose income is above the median to those below the median (Mueller op.cit.). This implies that the poor plus the lower middle classes benefit at the expense of the rich and the upper middle class.

Redistribution from above to below the median (Meltzer-Richard) is likely to occur in pension regimes consisting only of (generous) minimum pensions, or consisting of earnings-related pensions with low cut-off points plus generous minimum benefits. Cut-off points imply that the wealthy get low value for their contributions/taxes. A generous minimum means that the poor receive more than they are charged (through taxes) to help finance the “contribution” based scheme. Hence in such pension regimes both the poor and the majority-in-the-middle are likely to end up as net receivers – while the upper middle and wealthy will pay more for their pension security than they receive. Sweden, Norway, Denmark, New Zealand and Australia do to a varying extent confirm to this picture (Overbye 1998). They have chosen very different organisational devices to provide the working population with income maintenance, but they all provide generous minimum benefits.

**Redistribution from below the median to above the median**

To complete the picture, we should also consider a third possibility: that even in democracies redistribution might go from those whose income is below the median to those above the median. Redistribution from below to above the median may happen in a pension regime with no minimum provision plus no cut-off points in the earnings-related schemes. In this pension regime, the rich and the middle classes may both be at the receiving end, and there is nothing to compensate the poor for the indirect taxes and/or higher prices they must pay to help finance the scheme(s). Redistribution will be further tilted toward the upper middle to the

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extent that vesting and portability is limited (implying that those with unstable careers are also cut off from earning pension credits).

**Crisis? What crisis?**

If the primary objective of welfare measures - including pensions- was is to redirect resources toward the least fortunate in a society, we should expect such measures to be notoriously unstable, since they would then rest on normative commitments among the majority. Norms vary from fairly solid to very fragile, but norms commanding the majority to care for poor strangers probably belong among the fragile lot. Hence if welfare measures, which account for the bulk of public policies in any "modern" state, were based primarily on such sentiments, we should expect that the "welfare state" was always in crisis, or at least that a full-blown crisis might erupt any moment. If, on the contrary, the underlying purpose of the welfare state is to enhance social security for the majority, then the "welfare state" should stand on ground as solid as that of policies ensuring security against theft or invasion. The rulers of any modern state must find ways (near substitutes) to secure the majority of voters against major social risks, and the risk of old age is probably the most important of them all. Not because the elderly are necessarily any worse off than, say, the unemployed, disabled or single mothers – but simply because this is the social risk that a majority is most likely to experience themselves, and hence the social risk they are most eager to be insured against. Thus there is no “crisis” of the welfare state – at most, there is a “crisis” (risk of weakened support) as regards welfare schemes serving social risks only a minority believe they are exposed to.

It follows from the same line of reasoning that there is no strong reason to assume that a welfare state will necessarily eliminate poverty. The fact that all democratic states seem to insure the majority-in-the-middle against a severe drop in income once they retire, does not guarantee that the minority which lived in poverty during working age will receive a “decent” minimum once they enter retirement.

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4 And in any case, we should remember that many of the dismal poor will die before or shortly after retirement age anyhow. They represent the "good risks" who transfer resources to the "bad risks" within any pension regime.
Concluding comment

My hunch, for what it is worth, is that a Meltzer-Richard type of old-age provision (encompassing the poor, one way or the other) is more likely to emerge in small, ethnically and religiously homogenous democratic states with soft status differentials. In such countries the majority is likely to regard the poor as being part of the in-group rather than any out-group. Scandinavia (Norway, Sweden and Denmark) score high along all of these dimensions. A Director’s law type of redistribution is more likely to emerge if poverty during working life is correlated to strong ethnic, religious or occupational differences. If that is the case, a majority should have fewer scruples to cut the poorest off from the major security devices. Democracy may be sufficient to change the overall direction of redistribution away from privileged groups of the elderly to a majority of the elderly – but apart from small and homogenous nations, the real-life welfare state is not necessarily a state caring for the poor.
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