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CONCEPTUALISING SOCIAL SECURITY AND INCOME REDISTRIBUTION

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Conceptualising Social Security and Income Redistribution

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Abstract

In this paper I offer a conceptualisation of social security and income redistribution schemes which highlights the strong overlaps between the two. Indeed, it is virtually impossible to disentangle the two in practice. The major conclusion is that any assessment of one cannot proceed without taking account of the other. I advocate an integrated approach where both types of schemes are considered jointly, especially in assessing major reform proposals, or in protecting the poor in the face of increasingly more frequent systemic crises.

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[*] Cornell University: T.H. Lee Professor of World Affairs, International Professor of Applied Economics and Management, and Professor of Economics. This is the keynote address to the International Social Security Association's Policy and Research Conference, Luxembourg, 29 September –October 1, 2010. The paper presents perspectives drawn from a number of papers I have written over the years, some of which are given in the references.

1. Introduction

In this paper I define social security broadly as state schemes of contributions and benefits in the face of specified contingencies—unemployment, ill health, old age, disability, etc. The list can be broadened but the basic conceptual structure is common. In return for contributions into a state scheme, individuals or households receive benefits when the contingency arises. Much is written about the detail of such schemes—eligibility criteria, financial sustainability, implementation problems, etc. These details are being affected seriously by periodic systemic crises and medium term global trends. But in this paper I want to return to the conceptual core of the arguments surrounding social security. In Sections 2 and 3 I discuss whether social security can be disentangled from income redistribution, and the extent to which income redistribution is itself a form of social security. In Section 4 I argue that it is difficult to separate social security and income redistribution from each other, and that it is important to take an integrated view of these two types of policy instruments. Sections 5 and 6 provide two illustrations of these arguments: recent proposals for reform of Social Security in Mexico, and protection of the poor from the impacts of macroeconomic crises. Section 7 concludes.

2. Income Redistribution Through Social Security

Consider a society of identical working individuals, all of the same age. Suppose there is unemployment risk, in that the firm in which an individual works may face a decline in demand and hence the worker may lose his job. If workers are risk averse, they will have a demand for unemployment insurance—they would be willing to make contributions in return for benefits when unemployment strikes. But who will supply this insurance? It could be the firms themselves—who could keep workers on during hard times (the benefit) in return for lower wages in good times (the contribution). Or it could be insurance firms who could offer unemployment insurance, in principle. There are well known problems of insurance markets which prevent such insurance markets from operating, or at least from providing complete insurance to workers.

One answer is for the state to step in and offer such insurance, using its powers to monitor and to compel participation in order to overcome the informational problems in private insurance markets. The critique of this line of argument is not against its logic, but rather against the ability of the state to implement the scheme as per the design. Sticking with the logic for now, pure insurance requires that contributions and benefits match actuarially. While at any instant there may be a surplus or a deficit in the scheme, over the long run inflows and outflows are balanced. What happens if they are not? What happens if benefits exceed contributions in the actuarial sense? Clearly, this is not then social security pure and simple, but redistribution to workers over the long run and on average, from somewhere else.

But from where? It could be from general taxation, in which case it is effectively redistribution from those who are net tax payers. Or it could be from a more specific source, say from a levy on firms' profits. For both general taxation and firm taxation, we have to look of course at the true incidence of the tax once market forces have played out. For example, part of the tax on firms could be passed on to workers through lower wages as demand for workers falls. In any event, when contributions and benefits in a social security scheme do not match in actuarial terms, the scheme cannot be disentangled from income redistribution.

Now take the case where the scheme in question is indeed actuarially balanced, in that contributions and benefits match over the long run and on average. In this sense there is no (net) redistribution between those in the scheme and those who are not. But suppose now that workers within the scheme are not identical—some have higher wages than others. The question arises immediately of whether contributions and benefits are or are not tied to wages. Of course they could be so tied as to essentially replicate a separate actuarially balanced scheme for each wage level. Indeed this contribution/benefit structure is a useful benchmark to have, because any deviation from it must imply redistribution across different wage levels. If benefits are uniform but contributions track wages then, in the setting where total contributions and benefits are balanced across wages taken as a whole, there is redistribution in favor of lower wages. But if contributions are more uniformly structured than benefits, then there is redistribution in favor of higher wages.

This redistribution can occur even if workers are identical in terms of wages but differ in terms of their degree of risk aversion. In this case the pooled scheme, actuarially balanced with identical contributions and benefits, will deliver more in terms of monetary equivalent benefit to some workers compared to others. There may not be redistribution in terms of actual monetary incomes, but the scheme is redistributive nevertheless—unless a different scheme can be implemented for each risk aversion level among workers.

I have developed the above argument, on the difficulties of separating out social security from redistribution, using the language of unemployment insurance. But it can equally well be developed in the same way across the range of social security contingencies. To confirm this, let us briefly look at the case of pensions. Again, start with identical workers each of who lives for two periods. There is a steady state with half the population old and half young. If the young can work but the old cannot, then there should be a demand among the young to save for retirement. Again, the reasons why such markets may not exist, or at least meet the demand fully, are well known. There may also be failures of information or imagination among the young in taking too optimist a view of their prospects when they retire. The state can come in and use its powers to address these failures, by compelling contributions from the young and guaranteeing benefits to the old. If the contributions and benefits match actuarially (as they would in "fully funded" schemes), then there is no net redistribution. But if they do not, if benefits exceed contributions, then there must be redistribution of some sort, either from outside the system (say taxation on firms, although we would again have to work out the true incidence of this tax), or from the currently young to the currently old (in a "pay as you go" system). Similarly, even if the scheme was actuarially balanced, there would effectively be redistribution if workers differed in their wages when they were young, or if individuals differed in their desires to save for old age.

One final point before I move to the next stage of my argument on social security and redistribution. Of course, when state social security schemes are introduced, they impinge on existing arrangements at the level of the individual, household, community and market. If a social security for retirement is introduced, this will naturally reduce the imperatives elsewhere for such a scheme—we might expect individual and household savings to fall as a result. This reaction from the market should be factored into any design of and, assessment of, social security. Indeed, the policy discourse on macroeconomic imbalances between the US and in China is closely related to this. The argument is that US households save too little because they have social security, and Chinese households save too much because they do not. This imbalance in savings rates, so the argument goes, is what translates into the trade imbalances and the consequent financial, monetary and political problems (in this view, the Chinese exchange rate as a policy instrument is a side-show). Thus the essential mismatch between China and the US is the mismatch between the coverage of their social security systems. If in fact redistribution is an integral part of social security as it is actually implemented, then, this must also be a mismatch in the degree of redistribution in the two countries.

3. Social Security Through Income Redistribution

Suppose we had a system of public expenditure and taxation that could enforce the following outcome: no individual or household is allowed to fall below a socially determined minimum level of wellbeing, and income transfers are used to implement this rule. When needs differ, as they would for adults and children, or able bodied and disabled, then the transfers would differ of course. It is also realized that this rule would have incentive effects, and that the revenue would have to be raised by taxation, and this would have its own incentive effects. All these factors would have to be taken into account in the design of this scheme.

When implemented this scheme for income distribution would have parallels with a scheme of social security. It would be directly analogous to social security on the benefits side, since by definition all of the contingencies that are currently covered by state social security schemes would be addressed, if the contingency were to lead to a fall in wellbeing below the social minimum. The contributions side is less clear since it would not be done contingency by contingency, but rather the contributions at any time would come from those whose well being is above the socially determined minimum. For the most part these would be people who are not currently facing contingencies of unemployment, ill health, old age and the like. But they need not be, especially if the base for contribution takes into account all sources of income.

What are the issues that arise with the above conceptualization of income redistribution to meet minimum needs? Let me set to one side that the way the revenue is raised is left unspecified, and this can be done in a number of ways, the effective tax rate being more or less progressive at the top end. Rather, the issues with the expenditure side of the scheme described above are those of information, incentives, political economy.

The informational problems arise in determining the wellbeing of individuals (or households)—their needs and the resources they have to meet them. Assessing each individual or household at regular intervals, to ensure that those below the threshold are not excluded and those above the threshold are not included, is a costly exercise. The response to this can be twofold—indicator targeting or self-targeting. With indicator targeting, a relatively easily observable marker—such as unemployment status, age (elderly or infants, for example), gender, location or quality of residence, etc.,--is used to determine the transfer. The correlation between the indicator and individual wellbeing, determined through a small but representative sample survey, is used to modulate the transfers across different indicator groups, it being accepted that there will be errors of inclusion and exclusion. With self-targeting, the scheme is designed so that only those with relatively low wellbeing will apply. Examples are subsidies on low quality grains (which the well off would not wish to consume) or public works schemes at relatively low wages (which would not be attractive to those already in well paid employment).

The incentive problems arise because in a scheme such as this there is little to be gained for someone with wellbeing below the threshold by exerting effort to get up to the threshold ,since the threshold level is met in any case by the scheme. Of course the person may not be capable of doing so (for example because of disability), in which case the issue does not arise. But if the capacity exists, then the incentive effect must be present—in terms of income, the scheme effectively imposes a 100% marginal tax rate on the very poor through the structure of its generosity. The response to this is to taper the withdrawl of benefits, but this comes at the cost of lower benefits for those below the threshold.

Finally, there is the political economy problem. A scheme which focuses on benefits only for those below the social minimum, which means that those above the minimum pay for these benefits through their contributions to general taxation, creates a political divide at the social minimum. While some currently above the minimum will realize that they could well end up below at some stage and so might support the scheme, those who expect on average to be above the minimum are unlikely to have such political interest, or at least to have it strongly. The budget for such a scheme, which comes from taxation above the social minimum, is thus likely to be low. It is of course well recognized that the way to generate this support is to set the threshold for receiving benefits relatively high, so as to weave together the interests of the middle strata with those of the very poor.

The above suggests that departures from the pure scheme of redistribution to achieve a social minimum for all will come in three forms: (i) schemes that use indicator targeting or self-targeting, (ii) schemes that taper benefits as the social minimum is approached but, (iii) schemes that continue the benefits above the social minimum to the middle strata.

In fact, what we see in developed and developing countries alike are a plethora of redistributive schemes, with different rationales. In developing countries we see schemes of food subsidies (in many cases not well targeted to the poor but reaching to the middle strata), public works schemes, a public health system (which often does not deliver service to the very poorest), conditional cash transfers (which give families cash in return for some action such as keeping children in school), etc. In the formal sector of developing countries, in other words those parts where employment relationships are (in principle) governed by state regulations, social security schemes familiar from developed countries can be found. Public sector workers, in particular, often have a full range of benefits for old age, ill health, loss of employment, etc. It is argued that these schemes are not fully funded and are a major charge on the fisc, requiring in effect a transfer from the rest of the population, most of which is poorer on average than these public sector workers, through the general taxation system. In developed countries of course social security schemes are widespread. I have argued in the previous section that these schemes cannot be seen independently of a redistributive component. But there also exist schemes which are directly redistributive in intent, which directly assess income and resources and make transfers conditional upon them.

4. Social Security And Income Redistribution: An Integrated Perspective

Let me recap my definitions of social security and income distribution. Social security is a state scheme which provides benefits when certain contingencies arise, and collects contributions to finance these benefits. Income redistribution is the use of state expenditure to transfer resources to individuals or households conditional on their characteristics, financed by taxation of individuals, households and firms, also conditional on their characteristics.

I have argued that as currently practiced these two activities of the state are strongly overlapping. To the extent that social security schemes are not self financing, and in the way that they set contributions and benefits, they in effect redistribute income between those in the scheme and those not, and redistribution occurs within the scheme as well. And, to the extent that income redistribution schemes use indicators like old age or ill health to determine transfers, and in effect finance these transfers from those who are of working age or in good health, they are implicitly operating a social security scheme, even when there is no explicit scheme with rules and regulations of eligibility criteria, the contribution principle, etc.

The central policy conclusion I want to draw from the above characterization, particularly for developing countries, is that we have to look at social security schemes and income redistribution schemes as an integrated whole, and not program by program as we tend to do now. Unless social security schemes are strictly self-financing, and most are not (even when the formal rules say they are, oftentimes this is only because of various accounting devices), they are part of the income redistribution system. Indeed, the non-self-financing nature of many schemes in developing countries makes them highly regressive. At the same time, since income transfer schemes are (i) are forced to use indicators to target (and these indicators are closely related to contingencies), (ii) should taper benefits as the social minimum is approached, and (iii) need to continue transfers some way above the social minimum to maintain political support, they share key characteristics with social security schemes.

What would be the broad parameters of such an integrated assessment of income redistribution and social security? In my view the anchor has to be the objective of achieving a social minimum and reducing inequality beyond this. We can then assess the extent to which each scheme, and the schemes as a collectivity, contribute to the objective, and what sorts of reforms could better help achieve this objective. This proposition is best discussed with concrete illustrations, and the next two sections provide these specific examples.

5. The Levy Proposal for Social Security Reform in Mexico

An important recent contribution to the debate on social security in developing countries is the book by Santiago Levy (2007), *Good Intentions, Bad Outcomes: Social Policy, Informality and Economic Growth in Mexico*. The book combines a sharp logic, backed up by a multitude of data sources, some of them quite novel, and with the bottom line of a big, bold policy conclusion which, even if one disagrees with it, is bound to set the terms of the debate in Mexico and beyond.

Here is the argument of the book in a nutshell. It proceeds in a number of steps. Mexican law makes the crucial identification of an employer-employee, boss-worker relationship (*la relacion obrero-patronal*). The relationship is defined in law and interpreted in courts. A worker who is in such a relationship is called a “salaried worker”. Levy estimates that 57% of Mexico’s labor force comprises salaried workers. Of the rest, 4% are unemployed, and 39% are non-salaried workers. The non-salaried labor force comprises a number of categories—self-employed and *comisionistas*, and sub-categories within these.

Employers are required by law to register salaried workers for social security. A registered worker receives a bundled set of benefits, financed by contributions from the state, the worker and (mainly) the employer. Many employers do not register their workers for social security. Levy estimates this number to be 19% of the labor force. Thus 38% of the labor force is salaried workers who are registered for social security. Levy calls this the formal sector. He groups together the non-salaried workers (39%), and the illegal, unregistered, salaried workers (19%) under the label of informal sector.

Non-salaried workers in also enjoy benefits of the type available to salaried workers. Over the years the government has introduced these to narrow the gap between the social security schemes available to salaried workers and, initially, nothing at all for non-salaried workers. Levy calls these social protection benefits. But unlike social security in the formal sector they are (i) conditional on not being a registered salaried worker, (ii) unbundled, and (iii) completely financed by the government. Thus they are (i) valued more by informal sector workers per peso spent, and (ii) a subsidy on working in the informal sector.

Thus, Levy argues, the informal sector is larger than it would otherwise be, given the pattern of social security and what he calls social protection but what I have referred to as income redistribution (there are other schemes under the income redistribution heading, such as the conditional cash transfer program Progresa-Oportunidades, which gives money to the mother in return for keeping children in school). In Levy’s view, for reasons which he details, this relatively large informal sector holds back dynamism and growth.

What is interesting from the point of view of my argument is that the two forms of redistribution—through the social security system and through the social protection system—are progressive in their own terms, but because the former is conditioned on employment status of a particular type while the latter is not, their joint presence alters the incentives for employment in that status. Levy's bold proposal is to replace both systems by a single overall redistributive scheme which transfers incomes to those in need by direct assessment, without conditioning on employment status of a particular type. Whatever our verdict on the details of Levy's analysis, and it is not without its critics, it is nevertheless an example of an attempt to view social security and income redistribution in an integrated manner, and is to be welcomed for that reason.

6. Illustration: Protecting the Poor Against Macroeconomic Crises

In a series of papers and presentations over the past two years, I have argued that we should use the opening and the awareness created by the global financial crisis of 2008 to prepare ourselves for protecting the poor against the next macro crisis. The concern is motivated by (i) how long it took the international community to get its act together to provide support for social protection this time around (some of these schemes are only now getting off the ground, just as the crisis has abated from its peak) and (ii) the next crisis may be very different from the current one (recall that the crisis before the financial crisis was one of soaring food and fuel prices globally), and we do know when it will strike.

The twin uncertainties about macro level crises that developing countries face—uncertainty about crisis type and uncertainty about crisis timing—frame the issues that arise in designing a response for protecting the poor against future crises. The fact that the crisis could be one of a number of types (climatic, infectious disease, collapse of global demand for a key industry like tourism, unrest in neighboring countries, etc) requires that our ex ante design be *comprehensive*. The fact that we do not know when a crisis will strike, and indeed when it will recede, requires that the social protection system as a whole be *flexible*, both in the expansion phase when needed, and in the contraction phase when the crisis passes.

On this basis, I have proposed that we do systematic "stress testing" of the collection of social protection schemes, to see how the system as a whole would react to crises of different types, and what gaps and vulnerabilities are revealed in protecting the poor. Analogously to the stress testing of the financial system, I propose that we imagine macro level shocks to the economy and see how each scheme would respond according to its own rules and regulations, and therefore how the system as a whole would cope. Technical and political assumptions will have to be made in conducting such an exercise—on the latter, whether for example the increased budget needed for this or that program will indeed be made available. Put another way, we can produce alternative scenarios under various assumptions and these can be the basis for a discourse on reform of the system to achieve comprehensiveness and flexibility.

In the detailed discussions in my papers, I illustrate issues that might arise if such an exercise is conducted for food subsidies and for public works schemes. But where would social security schemes fit in? Unemployment insurance is an obvious one to take for a macro crisis whose effect manifests itself through a collapse in formal sector unemployment. Assessment done by the World Bank for some Eastern European and Latin

America countries indicate that this dimension of social security seems to work quite well in mitigating the impact of macro level crises, provided of course that the budget is made available to pay the increased unemployment benefit. A similar argument applies to schemes like India's National Rural Employment Guarantee, which offers at employment at relatively low wages at public works schemes. If agricultural employment were to collapse because of climatic factors, then this scheme would provide social protection for able bodied members of rural households. Although not formally a social security scheme (there is no workers' contribution to this for example) it seems to act in a similar redistributive manner to more formally constituted schemes of unemployment compensation. The question is again whether the budget will be made available as employment on public works expands. The device used in India is to make the guarantee a justiciable one, so that the government has pressure on it to find the budget.

Outside of unemployment insurance, it is not clear that formal social security schemes are as useful in helping the poor to cope with macro level crises. In principle public health insurance could help when an infectious disease becomes an epidemic. But particularly for climate induced crises that can destroy crops and property, it is not clear that retirement schemes or disability benefits can help much. It can be argued of course that this is not surprising since that is not their intent. But since some social security schemes can help at times of macro crises, this emphasizes the point that we need to take an integrated view of social security and income support schemes, and stress test both to identify gaps in coverage and speed of response.

7. Conclusion

In this paper I offer a conceptualization of social security and income redistribution schemes which highlights the strong overlaps between the two. Indeed, it is virtually impossible to disentangle the two in practice. The major conclusion is that any assessment of one cannot proceed without taking account of the other. I advocate an integrated approach where both types of schemes are considered jointly, especially in assessing major reform proposals, or in protecting the poor in the face of increasingly more frequent systemic crises.

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