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Social Security Reform, with a focus on Italy

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Social security reform is a hot topic in many countries. The debate is often heated, and, like most political debates, not always enlightening. With a program so big and so controversial, economists have naturally weighed in with a variety of proposals. There is considerable disagreement among economists on the best way to go. This disagreement should not disguise areas of agreement. First, economists widely agree on some aspects of what makes a good program, and, therefore, what are examples of poorly-designed programs. Second, economists generally agree on the economic analysis of different proposals. Economists reach different policy proposals largely for reasons not related to economic analysis – differences in values and differences in political analyses.

Primary in the value differences among economists is the weight they put on protecting future generations relative to the weight on protecting the poorer members of every generation. That is, economists are concerned about doing more saving in order to help future generations and economists are also concerned about programs that provide income to poorer members of both current and future generations. Both of these matter to all economists, but the relative importance of these two objectives varies widely. This matters in the social security debate since social security is important for how many resources are left for future generations and social security is an important part of how many resources are transferred to those who are less well off.

In addition to differences in values, there are differences in political analyses. Policy proposals must reflect political forecasts in two different ways. In a democracy, no proposal is ever adopted intact. So economists disagree on the relationship between proposals and what may happen in the next wave of legislation. More important to the disputes is the question of how current legislation is likely to affect future legislation. Social security legislation will not freeze the social security program forever. Economic and demographic variables will change in unpredicted ways. Moreover, social security programs themselves can set in train political forces that affect future legislation. So economists also disagree on the link between current political outcomes and future political outcomes. Combine this with different values and it is easy to have wide disagreements.

Today, I want to concentrate mostly on places where economists agree. I will proceed in three steps. First, I will describe agreements on what are poorly-designed programs. Second, I will discuss the effects of increasing the funding of social security. Economists generally favor more funding for social security in order to help future cohorts, although there are disagreements about how much funding and how to organize the funding. And third, I will discuss issues around protecting living standards after retirement.

Since I will be using the terms, let me start with some definitions. A defined benefit (DB) program is one that has a benefit formula that relates monthly benefits to the history of earnings covered by the pension plan. The monthly benefit might be set as a single-life annuity or joint-life, to cover both husband and wife. Indeed how alternative systems would treat women is a significant part of social security debates in some countries. More significant in the historic workings of DB systems is that benefits have been based on earnings subject to tax, not taxes actually paid. Since systems have commonly had significantly increasing contribution rates over time, this has been part of the mechanism that has transferred large amounts to the early cohorts; early cohorts received benefits based on their earnings even though their contribution rates were low.

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A defined contribution (DC) system, on the other hand, is one that mandates contributions, accumulates resources in individual accounts based on actual returns on portfolios, and then converts the accumulated account value to a benefit stream through some combination of annuitization, lump-sum availability, and restricted monthly withdrawals. A DC system can also have a redistribution mechanism, either inside or outside the system of accounts.

There are a host of differences between well-designed examples of the two types of system, but one of the important ones is the focus of attention - DB systems focus attention on benefits relative to the history of earnings and so also on replacement rates; DC systems focus attention on taxes paid, and so also on redistributions. In democratic societies, this difference in focus, in framing in the vocabulary of cognitive science, can have an important effect on political outcomes. While some people talk of DC systems as being transparent and DB systems as not transparent, I think it is more suitable to think of this as an issue of framing rather than of transparency. Elements that make some issues more salient tend to make others less salient. Well-designed DB and DC systems have similar levels of efficiency in their impacts on the labor market, although any provision of insurance or redistribution requires some interference with labor market incentives. A well-designed system has a good balance of labor market distortions, insurance and redistribution.

The 1995 reforms very slowly phase in a system that is a hybrid of the DB and DC models. Commonly called a notional defined contribution (NDC) system, the 1995 reform resembles a DC system in having individual accounts that “accumulate” all the contributions of a worker, and then convert that sum into an annuity at retirement. Moreover, it uses the vocabulary of a DC system. However, it also resembles a DB system in that the “accumulation” is not based on the rate of return on a portfolio, but on the growth rate of the economy. And it resembles a DB system in that the rules for converting the accumulation into an annuity are to be legislated from time to time, not left automatically to actuarial methods.

I. Poor designs

In considering poor designs, I will discuss three elements on which economists widely agree. First is the importance of a single public program for retirement income, rather than multiple public programs for groups distinguished by industry or occupation. Second is the importance of good labor market incentives for young workers. And third is the importance of good labor market incentives for those eligible for retirement benefits.

A. Multiple programs

The social security reform in Chile, implemented in 1981, has caught the attention of the world. Both critics and admirers have learned many things from the Chilean experience over the last (nearly) twenty years. Also instructive is to consider the system Chile had before the reform. Then, Chile had many separate social security programs. This meant many separate bureaucracies and high administrative costs. Indeed, since unification and reform of these systems, while they are being slowly phased out, administrative costs have dropped dramatically.

This multiplicity of programs also meant different rules for different jobs, as has been the case here in Italy. A major effect of these multiple rules was a pattern of redistribution where the well-off and the politically connected particularly benefited at the expense of poorer and less-well connected workers. For example, in Chile the adjustment for inflation was more generous for white-collar than blue-collar workers. In addition to this politically unsatisfactory outcome, a system of different defined benefit programs does not work well for a modern economy, where labor mobility across jobs and across industries is a vital part of adapting to a continuously changing economic world.

Happily, Italy is on the way to a unitary system, although tax rate differences persist. In considering the speed of movement to the new system, it should be recognized that

Italy is moving away from a system that would not be satisfactory even if the demographic crunch had not made it unsustainable. Thus, a more rapid movement to the new system would be good for the economy.

A unitary public system does not mean that all workers in all jobs should make the same preparation for retirement. Obviously not. Some careers are naturally longer than others. Some workers and their families expect to live longer after retirement than others. The way to respond to this need is through a combination of individual savings decisions and provisions associated with jobs. Job-related pensions should be part of negotiations between employers and unions or nonunionized workers. In order to fit with a mobile labor force, these pensions need to be defined contribution systems. This approach, using supplementary DC pensions, also makes sense for civil servants. And the desirability of leaving room for this flexibility should be kept in mind when deciding how large a public system to have. That is, taxes to support mandatory retirement pensions should not be so large as to prevent supplementary pensions. It is also the case that labor market incentives depend on how large the system is. If tax rates are very high, that also is harmful to the efficiency of the labor market.

B. Labor market incentives for young workers

Social security taxes affect the decisions of workers and employers. Anticipation of larger future benefits as a consequence of current earnings also affect their decisions. These two causal links affect the choice of how big a social security system to have. More important, this underlies the importance of designing benefit rules that give good labor market incentives. In the past, in many countries it was common to base pensions on earnings in a small number of years and on the total number of years of service. Economists widely agree that such a system is a poor design for a national system. Harmful to the efficiency of the economy are the distortions of labor supply incentives and the creation of incentives to manipulate the formula by concentrating earnings in the small number of years that count for benefits. To give one example from my home city of Boston, the subway system bases pensions on earnings (not base pay) of workers at the end of their careers. As a result older workers do a great deal of the overtime work in the system. This has caused accidents when older workers, having put in too many hours, fall asleep at the control of trains. One need not go so far as endangering lives to see that such systems are harmful.

Not only is the use of a small number of years poor for incentives, but it also introduces an extremely capricious element in the redistribution that is done through social security. Those who happen to have good earnings years at the end of their careers are winners at the expense of others. Disproportionately, such winners are likely to be high earners. Reliance on a long period of earnings will change the pattern of benefits across workers to be more fair. This need not result in lower benefits on average – that depends on how benefit calculations are changed along with any change in the length of the averaging period used in benefit calculations. That is, fairness and efficiency can be improved without necessarily lowering average benefits.

The important lesson is to base benefits on many years. The US DB system uses the 35 best years (relative to the wages generally in the economy). Chile's DC system bases benefits on the payroll taxes paid in all years (compounded by the rate of return until retirement). Both of these approaches do a good job of labor market incentives. Evaluation of the exact details of design is complex because of the interaction with other labor market interventions and issues of insurance against earnings fluctuations. Avoidance of national systems using a small number of years is an important message, the exact details among good designs are less important. Happily, Italy is also moving away from reliance on short earnings periods. The quicker the move, the better.

C. Labor market incentives for retirement

The impact of social security on retirement depends on two separate rules. One rule is the determination of when workers can first retire and claim retirement benefits. The second rule determines the financial consequences of continuing to work and so delaying the start of benefits beyond the point of first eligibility. Economists recognize that it is difficult to form a precise judgment on exactly when workers should first be eligible to claim benefits - there are many different effects coming from a change in early eligibility and some of them are extremely difficult to measure.

But economists are agreed that a delay in the start of benefits should trigger a significant increase in eventual benefits. As a rough approximation, the increase should be what is called actuarially fair. That is, the increase in benefits should cost social security about as much as is saved by not paying benefits for a year for the typical worker. I say about as much since there is nothing magical about exact fairness, and some arguments why some deviation from exact fairness may be a good thing. But approximately fair is important.

Flexible retirement options are important. The age for first eligibility for benefits needs to be set low enough so that once there are significant numbers of workers for whom retirement makes good sense, they have access to benefits. But setting this age in recognition of a significant minority of workers implies that most workers should continue working beyond the age at which they are first eligible for benefits. And they will not continue working if the financial penalty for delaying benefits is too large. To avoid such a large financial penalty, benefits that are delayed need to be significantly increased. So approximate actuarial fairness is needed to make sense of a good policy of first eligibility.

In recognition of the fact that with suitable incentives many workers will continue working beyond the first eligibility age, benefits do not need to be set as high as otherwise, thereby lowering the cost of financing benefits. Indeed, this suggests a package – that first eligibility age, benefit levels and benefit increase rules need to be thought about together. Moreover, as in the US, where desired, private pensions can be used to finance the time from an earlier retirement until the first eligibility age for public pensions.

Happily, Italy is moving in this direction, but again, very slowly, indeed too slowly. There are two issues here. One is the continuation of rules that give eligibility to full benefits based on years of service rather than age. This is unusual in national systems in advanced countries. I have not seen much study of the advantages and disadvantages of a years-of-service eligibility requirement in a national (as opposed to firm or industry) system. But whether it is a good idea or a bad idea, it needs to be combined with benefits that are smaller if claimed when first eligible and larger if claimed later, with both the level of benefits and the increase with delay based on life expectancy of the worker. And life expectancy depends far more on age than it does on just how long a full career was for a healthy worker. So if there is not a speedup in the movement to the new flexible retirement ages between 57 and 65, there should be an adjustment of how the years-of-service rules work. Benefits should be lower if claimed right at first eligibility and larger for those who continue working enough beyond the point of first eligibility. While some workers would get lower benefits and others would get larger ones, efficiency in the economy would improve. In addition, there should be serious review of whether a first eligibility age of 57 is too low – it is lower than is commonly found elsewhere.

Similarly, the rules in the 1995 reform that stop benefit increases with delayed claiming at age 65 are not good rules. Either benefits should continue increasing with the age at which they start beyond age 65 (as is done in the US between ages 65 and 70) or benefits should be paid whether the worker retires or not (as is done in the US after age 70). One rule or the other should be followed to avoid having large financial penalties for continued work past age 65.

II. Funding

I turn now to the issue of funding of social security. Populations are aging. Without large changes in retirement ages, there must be a trend of rising taxes and/or declining annual benefits. Adding some funding (or more funding) to a basically pay-as-you-go (PAYG) system can reduce this trend, although funding at levels that are politically plausible do not change the direction of the trend over the next few decades, just the magnitude. A funded system can finance part of benefits out of the excess of the rate of return over the rate of growth times the level of funds. This helps to lower future taxes for any level of benefits or to allow larger benefits for any level of taxes.

But funds must come from somewhere. For an advanced country, funds come from currently raising taxes, cutting benefits or finding some other source of revenue (which would have an alternative use). Raising taxes now in order to have lower taxes in the future reduces the trend toward higher taxes. So the purpose of funding is to increase the burden on current generations in order to lower the burden on future generations. This can be seen, for example, in the proposal of Modigliani and Ceprini who want to allocate revenues to pensions now in order to lower revenue needs in the future. This would be similar to a budgetary decision to raise taxes or cut spending in order to decrease the public debt. (Provided, of course, that the cut in spending is not a cut in public investment.) Economists see advantages in smoothing tax rates and foresee large tax increases or benefit cuts (or both) in the future and so they generally favor more funding, although there is considerable disagreement on how much.

Economists recognize that there are two aspects to increased funding, both of which matter. One is the growth of national capital and the other is strengthening the fiscal position of social security. The growth of national capital increases resources available in the future; strengthening the fiscal position of social security affects the political process, which will determine how costs and benefits will be allocated across different cohorts in the future. So funding that is associated with increased national savings is what economists tend to favor, since that accomplishes both goals. But funding that is merely relabeling or shuffling of liabilities, for example by issuing more national debt in order to fund accounts, does not by itself increase national capital.

Economists also recognize that this intergenerational redistribution is the real gain from increased funding; that a widely-made argument for funded individual accounts is not right. Let me present and correct that argument. Some analysts and politicians compare the long-run return on assets with the long-run return in a PAYG system, which, as is well-known, is the rate of growth. Since long-run rates of return exceed rates of growth this is sometimes presented as a pure gain. But it is wrong to analyze policy by considering only the long run, not including the short-run costs and benefits associated with going to a different long run. It would be wrong to say that having the rate of interest exceed the rate of growth implies that a funded system is better. Once the analysis is done fully, then it is seen that there is no gain for everyone that is available from funding per se, just an intergenerational redistribution.

This correct argument can be seen by considering the infinite horizon present-discounted-value (PDV) budget constraint for social security. Defining benefits in terms of individual accounts does not change this constraint per se, although it may be bundled with benefit cuts. The constraint is changed by raising revenues or lowering benefits. So, taking some social security revenues and moving them into individual accounts leaves behind a revenue gap that must be filled. Similarly, issuing more national debt in order to fund individual accounts also leaves a revenue gap that is needed to finance this debt. Combining the need to fill this revenue gap with the other effects of creating the accounts leaves the PDV constraint roughly unchanged. This simple arithmetic is altered to the extent that the rate of return on assets can be changed. But whether individual accounts raise or lower the rate of return on assets is a complex economic and political question.

Some people have argued that a gain for everyone is available by bundling analysis of static efficiency improvements in social security with funding. But those short run gains are available without funding, so this is misattribution, unless it really is the case that the short run gains are not available politically without such bundling. In politics bundling does matter, but such bundling at this stage of debate, at least in the US, is not necessary for reform.

If more funding is wanted, there are multiple alternatives. Funding can be in government bonds or in a diversified portfolio. Funding can be in a central fund controlled by a government agency or in individual accounts controlled by individual workers. And realized returns on funding can affect retirement benefits in a variety of ways. The central gain from funding, that of accumulating resources to benefit future cohorts, is similar whichever route one takes. By and large, portfolio diversification is a plus. And portfolio diversification can be done with or without individual DC accounts.

The presence of many available routes to building a diversified fund is not just a theoretical option, since we have seen different countries consider and go down different routes. Funding a central diversified portfolio within a DB system has been done in Sweden for years, has started in Canada and Switzerland and has been proposed by the finance minister in Ireland and the Clinton administration in the US. Funding with a central fund within a DC system has been done by the provident funds of Malaysia and Singapore. And funding can be done with worker choice over portfolios made available by private providers within a DC system, as was pioneered in Chile and followed in other Latin American countries, implemented in the UK, and is starting soon in Sweden. Thus, choosing a level of funding and a degree of portfolio diversification is economically unrelated to the choice between DB and DC systems.

One word on the choice of assets. Long before reform, the Chilean social security reserves were invested in government bonds that were not indexed for inflation. The social security reserves were wiped out by inflation. While the world is more sensitive now than in the past to the costs of inflation, this does not mean that inflation is banished forever. Designing systems to react well in adverse circumstances is central for insurance and government bonds indexed for inflation can help.

III. Protecting living standards after retirement

The purpose of the retirement portion of social security is to protect the living standards of workers and their families after retirement. This involves two issues – the level of benefits a worker receives at the start of retirement, and what happens afterwards. Adjusting benefits for inflation, or some combination of inflation, wage growth, and rates of return, makes sense and is not in dispute. The exact indexing rule, and so sharing of risks, can be analyzed. What is done when a worker or the spouse of a worker dies should affect both initial and later benefits. With so much of the attention here currently focused on intergenerational issues, on not leaving too large a burden on future generations, it is important not to lose sight of the importance of social security for distribution within each generation. This issue is also important and is also best addressed sooner rather than later.

A. Income Distribution

There are two perspectives on social security and income distribution. One perspective is the level of retirement benefits relative to needs. Both the protection from absolute poverty and limiting the extent of drop in living standards during retirement are important. The second perspective is that of redistribution – incorporating both benefits and taxes, and best approached on a lifetime basis. Both perspectives are relevant for ethical concerns. Both perspectives are relevant for the workings of the system in terms of outcomes and incentives. And both perspectives are relevant for the politics of social security reform. Income distribution concerns include both limiting redistributions to the better off because of poor system design and ensuring adequate redistributions to the less well off.

Countries approach these multiple issues through a variety of institutions. To deal with the most serious poverty problems, countries typically have a minimum income program for the elderly, one that is conditioned on both income and sometimes assets as well. Such a program discourages work, tax compliance and savings. Such programs tend to provide a very low level of income guarantee. Such programs are obviously needed, but their disadvantages keep them small, leaving other needs unfilled.

Within social security, there are three parts to the distribution mechanism, which are generally used in different combinations. Some countries provide a guaranteed minimum social security benefit for workers who have had long enough careers. For example, this is done in Chile. Other countries have a process for determining benefits that contains a progressive element. This can come through a progressive benefit formula in a DB system, as in the US, or through a separate program providing, for example, a flat benefit (to eligible retirees) while having no explicit redistribution through the rest of the system. This is the approach taken in Argentina. These methods have the advantage of not directly distorting savings decisions since benefits are not lost because of savings outside the system. And while some countries rely exclusively on a payroll tax that falls just on the earnings that count for determining benefits, other countries tap other sources of tax revenue that may be more progressive, such as some of earnings that do not count for benefits or general revenues that may be financed by a progressive income tax.

Workers with higher earnings tend to live longer than low earners. Therefore, in the absence of some corrective mechanism, social security will redistribute from the poor to the rich. So explicit attention to distribution is called for from a lifetime perspective. That is, progressivity is needed somewhere in the overall system since high earners benefit at the expense of low earners in a linear system, such as that set up in the 1995 reform. And replacement rate needs are thought to fall with income levels, making a further case for progressivity in benefit determination in some form.

Economists recognize that no redistribution is possible without some distortion in incentives. Avoiding distortions in one part of social security may serve no purpose if the distortions are simply moved elsewhere. The two questions are to balance the level of redistribution desired with the efficiency losses from distortions and to design the incentives to avoid excessive distortions (for example as happens by both subsidizing and taxing the same worker in different years because of not using a lifetime perspective). Analysis of the comparison of approaches is complex and has not lent itself to a simple general answer. Guaranteed minima involve larger distortions on a smaller number of workers; broader redistribution involves smaller distortions on more workers. Thus the complexity in comparison.

What is important to keep in mind is that the NDC system which is the eventual system in the 1995 reforms has backwards redistribution in the absence of some mechanism for offsetting the fact that high earners tend to live longer than low earners.

Some people think that there should be no overt redistribution within social security, with that left for annual tax and transfer mechanisms. I believe that is the wrong approach. First, social security includes redistributions that are not overt, as I have just described. Annual taxes and transfer are not well tailored to offset this lifetime effect. Second, measures based on annual income naturally look to total income (or at least both earnings and asset income). Social security looks only to earnings. Thus it is a tool that can avoid directly distorting savings decisions. Moreover, we are concerned about the lifetime poor and the temporarily poor differently, a distinction lost in annual measures. And in the context of social security we should remember that its purpose is to have appropriate floors on replacement rates, while recognizing that income in retirement also comes from other sources. The appropriateness of such floors naturally varies with earnings levels as well. And it should not be forgotten that political outcomes depend on the framing of issues. Framing redistribution in terms of appropriate replacement rates across earnings levels is a different framing from that coming from asking how much income to provide this year to the poor elderly. Particularly of concern are proposals that have poor distributional consequences and are presented with the possibility that maybe something will be done about income distribution later. The problem is that nothing may be done about this problem later.

B. Widows and widowers

Workers die, sometimes before retirement age and sometimes after. Thus it is important to design protection for the spouses of workers. This is obviously essential to protect nonworking spouses. It is also relevant even if both spouses have had a long career. For simplicity, I will consider only a death after retirement, assuming that the surviving spouse is also above the retirement benefit eligibility age. Two questions arise. One is how large the benefits should be for a survivor compared with the benefits received when both husband and wife were alive. And second, how to finance survivor benefits, an issue connected with redistribution across workers since one needs to adjust for family size when deciding which workers are needier than others.

While two can not live as cheaply as one, there are economies of scale in living as a couple rather than two separate people. This is particularly the case for elderly who live alone, rather than with their children. In the US, the evidence is clear that by and large, the elderly who can afford it prefer to live separately from their children. And the children who can afford it prefer that too. The basic approach of US Social Security is to give a survivor somewhere between ½ and 2/3 of what the couple had (with deviations based on the ages at which benefits were claimed). However, there is no good logic on how this fraction is determined in the US. Studies of living costs generally find that an individual needs roughly 70 percent of what the couple had to preserve the standard of living. So it is important to build in protection of spouses that will achieve something resembling this outcome.

An important part of financing such benefits is by adjusting the benefits of a worker (or both husband and wife if both worked) to reflect the financial advantage of survivor benefits. At one extreme, the expected cost of worker and survivor benefits can be the same as what the cost would have been had the members of the couple not been married. However, this assumes that the redistribution between single and married should not pay attention to marital status. And that does not appeal as an absolute principle. At the other extreme is the US approach, which provides spouse and survivor benefits with no cost to a worker, an approach that is much criticized. Some compromises can be readily designed. In sum, good survivor benefits financed by lower worker benefits are widely supported by economists.

Here in Italy, survivor benefits do reduce the benefit of a worker, but the size of the survivor benefit is conditioned also on the overall income of the survivor. This approach does not pay enough attention to the needs of the survivor relative to the needs of the couple. A better approach is to do income redistribution in a way that falls on both the times when both are alive and the times when only one is. Benefit rules for widows need to be revisited. These benefit design issues are important and should be addressed sooner rather than later, before expectations get too firm and political reform too difficult.

IV. Concluding remarks

Because of the unsustainability of the previous system, it was natural for the earlier reforms to focus on benefit levels. However, there are other improvements in the system that can be legislated without necessarily changing average benefit levels.

Changes in pension benefits should happen with considerable lead time, particularly when benefits may be lower than previously expected. If one is protecting expectations to some degree, then it is important to act early before even more of the expectations are strongly held. Moreover, it is best to consider all aspects of a system, including such details as the treatment of widows, early in the reform process, instead of fixing just some of the details and leaving the rest until the debate is more pressing and, most likely, more contentious. With the payroll tax rate already so high, improving the pattern of benefits is likely to entail increasing some pensions at the expense of lowering some others. This sort of improvement is best legislated well ahead of implementation.

Similarly, the sooner the remaining financial difficulties of the system are faced the better. Waiting until a crisis is on hand may be comfortable for today's politicians but makes tomorrow's problems more severe.

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