Can Public Pension Reform Increase Saving?

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Many economists think that countries can boost national saving by privatizing public pension plans. The evidence suggests, however, that less radical reforms may be just as effective.

IN MOST COUNTRIES, public pension plans are defined-benefit plans financed on a pay-as-you-go (PAYG) basis, through payroll taxes that can be adjusted periodically to ensure that revenues are sufficient to meet current pension obligations. But since the pioneering work of Harvard professor Martin Feldstein more than twenty years ago, many economists have contended that when a country sets up a new PAYG plan, saving and capital accumulation start to decline, hurting prospects for growth. The first generation of retirees under a new system typically contributes much less than it gets back. These first retirees thus enjoy, in effect, an increase in wealth, which encourages them to increase their consumption spending. In addition, contributors view what they pay into the plan as a form of involuntary saving, rather than as a tax, and reduce their voluntary saving in order to maintain current consumption levels.

The aging of populations has made public pension plans worldwide extremely costly and has inspired many efforts at reform. Some countries have chosen to leave the basic design of their plans intact while raising the retirement age and lowering benefit levels. Others have introduced radical structural changes by replacing defined-benefit plans with privately administered defined-contribution plans. A heated debate has developed over the relative merits of these two approaches to reform and, in particular, over their impact on saving. It is not clear that radical reform necessarily increases saving more than the conventional approach. In any case, the political and social ramifications, as well as the economic consequences, of either type of reform must be taken into consideration before an informed choice can be made between them.

The pension windfall

The first retirees under a new PAYG system may well get a very good deal, because the expected present value of their pensions tends to be much greater than the value of their contributions. This happy state of affairs may be due to a number of reasons—for example, the first retirees may be eligible to receive a full pension after only 15–20 years of contributions. Current workers, even those who contribute over their full working lives, may also enjoy a windfall if programs are actuarially unsound and the present value of expected benefits is greater than the present value of expected contributions. This "social security wealth" may lead to an increase in consumer spending and thus a decline in saving.

The first generation of workers that contributes to the plan, whose payroll taxes effectively pay for the retirement benefits of the first generation of retirees, does not consider itself less wealthy—so the argument goes—because it does not view payroll contributions to the pension system as a tax but, rather, as a form of involuntary saving. These workers therefore continue spending at the same rate as before; to make up for the bite out of their paychecks, they either reduce their voluntary saving or borrow.

The upshot is that total consumer expenditure increases and saving declines (although, strictly speaking, saving need not decline if the establishment of a pension system induces workers to begin planning for an earlier retirement) and the economy is pushed into a low saving equilibrium—each generation saves less than it would have had the PAYG system never been established.

Proponents of fully funded plans argue that the establishment of such plans should not cause the saving rate to drop because they do not produce any windfall for the first retirees, who get back in benefits what they pay in contributions plus accumulated interest at market rates. A funded plan might not increase saving, but there would be no reason to suppose that it would decrease it.

The social-security-wealth argument is based on extreme assumptions about economic behavior, however—for example, that current consumption is not affected by current disposable income provided that expected lifetime income is not affected by changes in current income—and also ignores other forces that influence saving decisions. In addition, the evidence for the social-security-wealth effect is mixed; it is moderately

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strong in the United States, for example, but not for all industrial countries. Moreover, data requirements make empirical investigations beyond the industrial countries hazardous, and a generalization across countries is not possible.

Approaches to reform

The conventional approach to reforming public pension plans views the plans simply as tax-and-transfer systems; from this standpoint, a pension system can generate more saving by spending less and taxing more. The more radical approach to reform, which was pioneered by Chile, involves introducing an altogether different type of plan—a defined-contribution plan that is privately administered (although still subject to considerable governmental regulation).

Conventional reform. This approach seeks to mitigate, if not eliminate, the less desirable features of public pension plans without changing their basic design. Expenditures are reduced by raising the retirement age and/or lowering the replacement ratio (the ratio of pension benefits to pensionable income). The replacement ratio can be decreased in a number of ways—for example, by slowing the rate at which it increases with years of contributory service (accrual factors), increasing minimum contribution periods, or reducing maximum pension values. Given how high payroll tax rates are in most countries, they should not be increased—indeed, in many countries they should be lowered; perhaps the income base to which the tax applies could be broadened at the same time.

For reasons of social justice and political expediency, it is best to introduce changes to the pension regime gradually. Changing the rules of the game suddenly, so that workers on the verge of retirement find that their pensions are going to be half of what they expected, might go a long way toward improving the current finances of a public pension plan but would clearly violate the social contract. It is more acceptable to make drastic changes to the regime governing young workers, who will be able to adjust by modifying their saving behavior over the course of their working lives. A gradual approach means that average replacement rates and total expenditures change slowly, over time. Gradualism may not achieve drastic changes in the cash balance of the plan from one year to the next, but the cumulative effect can be sizable.

Given the impact of demography on pension finances, conventional reform must be farsighted and look beyond today's bottom line. Changes made now should lead to a permanent improvement in the plan's finances and forestall the potentially serious impact aging populations would otherwise have on financial balances (Mackenzie, Gerson, and Cuevas, 1997). Indeed, the best course may be to build up significant reserves by running surpluses over an extended period and thus to prefund future pension needs. Although such a plan would no longer be strictly PAYG, it would remain a defined-benefit scheme, managed and administered by the government, and its basic nature would be unchanged. Some plans considered to be PAYG, such as the US plan, are in fact partially funded in this fashion.

Will total saving increase if the finances of the public pension plan are improved through conventional reforms? It is generally thought that increases in public sector saving are offset, although only partially, by a decline in private sector saving. Hence, although an increase in the balance of the public pension plan may not be fully reflected in the behavior of aggregate saving, it should, under normal circumstances, lead to an increase in total saving. For the sake of illustration, it could be assumed that each percentage point of saving due to pension plan reform reduces private sector saving by 0.6–0.7 percentage point, as current and future pensioners strive to offset the impact of the reforms on their standard of living (Savastano, 1995).

The defined-contribution revolution. In a radical reform of its pension system in the early 1980s, Chile set up a defined-contribution system that is basically a compulsory saving plan. All Chilean workers (except the self-employed) are required to deposit 10 percent of their salary (subject to a ceiling), plus an amount for commissions and disability insurance, in an account with the pension company of their choice. The money can be withdrawn only upon retirement, either in regular installments or in a lump sum, for the purpose of buying an indexed annuity. Although the Chilean system is administered by private pension companies, it is subject to considerable regulation, particularly with respect to the investments pension companies are allowed to make. All contributors are assured of a minimum pension upon retirement, so that retirees whose accumulated savings are insufficient to finance an adequate pension are protected. This provision entails a contingent liability for the government.

The Chilean system has been highly praised. As a privatized system, it is said to be less vulnerable to political manipulation than PAYG systems because its terms are harder to change. To the extent that participants see their contributions as involuntary savings that yield an adequate rate of return, the system may eliminate the labor market distortions associated with a payroll tax. The payroll tax that finances a PAYG system can also be seen as a form of saving, if benefits are closely linked to contributions—that is, the bigger the contribution, the higher the return—but the implicit rate of return is often very low.

Radical reform and saving

Without discounting the advantages of a defined-contribution system, it is important to take a closer look at the virtue most often extolled by its proponents—the positive impact they believe the replacement of an unfunded PAYG scheme with a funded, typically private system will have on national saving. As noted, the introduction of a PAYG system can depress national saving because it creates social security wealth. In effect, an unfunded system results in a transfer of wealth to current workers and retirees, at the expense of unborn generations. Because funded systems involve no such transfer, no social security wealth is created and there is no depressing effect on national saving.

Personal saving should indeed increase when a funded, defined-contribution scheme is introduced, to the extent that individuals do not reduce their voluntary saving by the full amount of their mandatory saving in capitalized pension accounts. A reform that eliminates a defined-benefit system with restricted coverage and introduces a defined-contribution system with broader (and growing) coverage would, in practice, have much the same impact as the introduction of a brand-new defined-contribution system where none previously existed, and some increase in saving could be expected as the system expands to cover more people.

Many countries now considering the introduction of funded schemes already have extensive PAYG systems in place, however. The argument that *replacing* an existing PAYG scheme with a new, funded pension scheme will have a beneficial impact on national saving cannot be accepted uncritically. In the simplest example, if the mandatory contribution rate under the new, privatized system is the same as the payroll tax rate of the PAYG system being replaced and retirement benefits are equally generous, pension reform will have no impact on the disposable income or wealth of individuals who move from the old system to the new. The current generation of pensioners will also be unaffected. The government will run a larger deficit, but this will be offset exactly by the surplus of the private pension plans. Under these circumstances, there is no reason to expect the national saving rate to increase.

The contribution rate under the new system is a critical element. If it is higher than the combined payroll tax rate of the old system, the radical reform could lead to an increase in national saving, so long as individuals do not compensate for the increase in their pension saving by reducing their nonpension saving by an identical amount. When the contribution rate is increased, the increase in the public sector deficit arising from the need to continue paying pensions to existing pensioners would be more than offset by the surplus of the private system, and national saving would increase. Alternatively, if benefits for new or current retirees are reduced as part of the reform, national saving could increase either because the deficit the public sector runs to provide pensions to current retirees would be reduced or because current workers would need to increase their voluntary saving to achieve the level of post-retirement income they would have received under the pre-reform system.

National saving could also increase if a radical reform led to fiscal retrenchment on the part of the public sector. As noted earlier, radical pension reform typically results in an increase in the public sector deficit because the pensions of current retirees must continue to be paid, although contributions from current workers have ceased. If the number of retirees entitled to pensions under the old PAYG scheme is high, the increase in the deficit could be so large that it makes fiscal retrenchment more palatable to voters than it otherwise would be. If the resulting increase in public sector saving is not fully offset by a decrease in private saving, national saving would increase.

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What is striking about the variables identified so far is that they are identical to those that would boost national saving under a conventional reform based primarily on increasing payroll taxes or reducing retirement benefits. Moreover, fiscal retrenchment has nothing to do with pension reform per se. Any fiscal retrenchment, whether or not it follows radical pension reform, would lead to an increase in national saving so long as the private sector does not fully offset the increase in public saving with a reduction in its own saving.

That said, there are some factors peculiar to a radical pension reform that could have a small but beneficial impact on national saving. First, the replacement of payroll "taxes" with pension "contributions" may reduce inefficiencies in the labor market. This could bring about an increase in the supply of labor, which could lead to increases in output and employment, and saving and capital accumulation. Second, the creation of a private pension fund surplus that needs to be invested may further the development of local capital markets, which could also have positive "spin-off" effects on economic growth and saving (although these effects would be negligible in countries with highly developed capital markets). Finally, if the return to saving is very high, and if radical reform is accompanied by fiscal retrenchment, so that at least some of the pension fund's surplus is invested in the private sector, economic growth could accelerate—leading to additional increases in national saving.

Problems with radical reform

While a radical reform of the public pension system may boost national saving, it is not without some potentially serious problems. First, there is the issue of who bears the risk of poor investment performance. The replacement of a defined-benefit scheme with a defined-contribution one essentially shifts the risk from the public sector—or the taxpayers—to the current generation of workers. In addition, defined-benefit schemes in many countries transfer wealth intragenerationally, from the more affluent to the less affluent, and thus have a progressive element. Replacement of these plans with pure defined-contribution schemes does away with this redistributive aspect (although it could be reinstated through an explicit tax and transfer program and a minimum pension guarantee).

In addition, experience suggests that the administrative costs of privatized pension schemes are much higher than those of existing public schemes. Advocates of privatized systems have pointed to the low administrative costs of certain stock market index funds in the United States. In some countries with privatized schemes, however, as much as 30 percent of retirement contributions are absorbed by administrative costs. Although these costs may decline over time, they are unlikely ever to drop to the low levels achieved by most public systems. For one thing, the need for extensive regulation of privatized systems—for example, to ensure that unscrupulous firms do not take advantage of investors, or that investments are limited to approved assets—will continue to add to costs.

Finally, the lack of efficient annuity markets in most, if not all, countries tends to make the payment of benefits under defined-contribution plans costly for retirees. At retirement, most contributors to a defined-contribution plan will want to convert the lump sum they have accumulated into a monthly annuity payment. However, even in countries with highly developed capital markets, these annuities are usually available only at a very high cost. In other words, at a reasonable interest rate, the expected value of the annuity payments is substantially lower than the lump sum being traded for them. Thus, retirees may find that the actual return on their contributions is much lower than they had expected. This problem might conceivably be mitigated by government intervention in the market for annuities.

Pensions: not just savings

Although those in favor of replacing public pension schemes with privatized, defined-contribution plans have argued that radical reform is needed to stimulate national saving, the impact of such a course of action is likely to be small unless contributions are increased or benefits lowered—the same measures used in conventional pension reform—or unless the government launches a fiscal retrenchment effort in support of the reform.

The greatest differences between the two types of reform may have less to do with their macroeconomic implications—such as their impact on saving, investment, and output growth—than with political and social issues, such as who should bear the risk of poor economic performance, to what extent the pension system should be used to redistribute wealth between and within generations, and even what is the appropriate scope of governmental participation in economic and financial activity. All pension programs, whether defined-benefit or defined-contribution, involve trading current income for a claim on future assets. Thus, they all require a decision about how current output should be divided between consumption and investment, and how consumption should be divided between current workers and retirees. This is an issue about which politicians will likely have as much to say as economists—if not more. Other issues also merit consideration—the most enthusiastic advocates of pension plan privatization, for example, argue that its impact on labor markets and employment is so beneficial that it practically pays for itself. It is important to remember that pensions are not only, or even primarily, about national saving. Indeed, the primary purpose of pensions is to ensure an adequate standard of post-retirement living for individuals, consistent with the resources available to society. A reform that jeopardizes this objective cannot be considered worthwhile, whatever its impact on national saving. F&D

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