

Dropping Out of Social Security

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Executive Summary

One reform plan under consideration for the U.S. Social Security system is privatization. When Chile converted its pay-as-you-go social insurance system to individual private accounts, it did so by issuing “recognition bonds” for previous contributions made by workers that were placed in each workers new account. People who were retired at the time of the reform continued to collect benefits under the old system. In this traditional conversion approach, bonds are paid off using general revenue when the worker retires. Many analyses of converting the U.S. Social Security system to individual funded accounts also phase out benefits based on past contributions. However, this approach actually overpays some individuals. For many younger, richer individuals, Social Security is actually a bad deal. In some cases, the present value of their payroll taxes is greater than the present value of the future Social Security benefits. Paying such individuals money to recognize past contributions gives them more than what Social Security is actually worth to them.

One alternative approach, which avoids this overpayment problem, is to allow people to drop out of the system. People who drop out will no longer have to pay payroll taxes but they will lose claims to future benefits. In this situation, the government will not need to pay benefits to people who are willing to leave the program. Therefore, it can avoid the overpayment problem. For those people staying in the system, the present value of their future benefits is greater than the present value of their payroll taxes (otherwise they would drop out). This means that if the government uses payroll taxes as the only revenue source, it

needs to increase the payroll tax rates to balance its budget. This increase in the payroll tax rate causes more people to drop out, which, in turn requires the government to increase the payroll tax more. This tax spiral continues until everyone drops out of the system.

To deal with this tax spiral problem, we propose an alternative dropping-out approach where the government, after allowing dropping-outs, uses general revenues to finance Social Security benefits. In this situation, since the government does not need to increase payroll taxes to balance its budget, it can avoid the tax spiral described above. Motivated by this observation, we run simulation models to better understand the welfare effects of two reform plans: the traditional conversion approach, where the Social Security system phases out with past contributions, and our dropping-out approach. In this *Issue in Brief*, we summarize our simulation procedures and also discuss the simulation results. Using our simulation results, we illustrate that our approach produces more favorable macroeconomic and distributional outcomes than the standard conversion approach.

Simulation Models

Our simulations generate two sets of trajectories: one is a set of trajectories on macroeconomic variables (e.g., per-capita output, capital stock, and wages), which illustrates how each reform plan affects the economy in general; the other is a set of trajectories on welfare changes, which illustrates different welfare effects of each reform across income classes. Focusing on these two effects, we run simulations for each approach as follows:

Traditional Conversion

Considering the traditional conversion approach, we first set the payroll tax rate to zero. To finance Social Security benefits during the transition period, we then increase income tax rates (recall that each worker would be receiving benefits based on their past contributions); as the benefits decrease, however, we gradually lower income tax rates. By following the same steps, we also run another simulation model where consumption taxes are used during the transition period. These two are the benchmarks; their results were compared below with those in the dropping-out conversion approach.

Dropping-Out Conversion

Considering the dropping-out conversion approach, we first allowed people to drop out of the Social Security system (people who dropped out would become exempt from payroll taxes but lose claims to future Social Security benefits). The payroll taxes were, however, collected from and the Social Security benefits were paid to people who chose to remain in the system. Income taxes were then increased to finance any gap between the benefits payable and the payroll taxes collected in each period. As before, by following the same steps, we also considered a consumption-tax alternative, where consumption taxes were used to finance gaps between the payroll taxes collected and benefits paid out.

In addition, we run simulations where the payroll tax rates were reduced in half after reform (this would encourage people to stay in the system); as above, gaps between Social Security revenue and expenditure were either financed by income taxes or consumption taxes.

Summary of Major Findings

Our simulations yielded four major findings:

- The larger the amount of wage-income taxes collected, the slower the adjustments in the economy. There are two important points to be made. First, as mentioned above, the traditional approach costs the government more than the dropping-out approach. This means that the government needs to collect more taxes under the first approach. As more money is extracted from the market, fewer funds are available for investments. Therefore, the economy grows slowly. The economic growth under the traditional approach is slower, in general, than that of the dropping-out approach. Second, increases in wage-income tax rates encourage people to work less. Increases in consumption taxes encourage people to consume less. This means that there are more funds available for investments and also more workers available for production under consumption-tax financing than income tax financing, and, in general, economic growth is faster.
- Larger increases in wage-income taxes mean smaller welfare decreases among the elderly at the time of reform, while larger increases in interest-income taxes or consumption taxes mean larger welfare decreases among them. The elderly do not work, because their working years are over, but they earn, because their savings earn interests. Therefore, wage-income taxes do not hurt the elderly, but interest-income taxes do. In addition, given

the same income levels, the elderly consume relatively more than younger people (because they do not need to save much); therefore, consumption taxes hit the elderly relatively hard. Therefore, income-tax financing is in general preferable to consumption-tax financing, and the dropping-out approach is in general preferable to the traditional approach for the elderly.

- Income tax-financing decreases the welfare of low-income people less than consumption tax-financing does. Low-income people are more or less exempt from income taxes, but they are not exempt from consumption taxes, which would hit them harder.
- Under the dropping-out conversion approach, how quickly young people drop out of the system influences how equally the effects are spread out across age cohorts. Under the dropping-out system, age groups choosing to stay in the system will be hurt the most, because they pay the payroll taxes as well as increased income or consumption taxes that finance the transition (recall that those who dropped are exempt from the payroll taxes). As more people choose to stay in the system, therefore, the initial negative welfare effects of the reform will be spread out across more cohorts. Therefore, welfare decreases for each age cohort will be smaller.

Conclusion

Under the standard conversion approach of the Social Security system to personal accounts, the government, after eliminating the payroll taxes, keeps paying people the benefits based on their payroll-tax payments in the past. Under this approach, the government compensates people more than what Social Security is worth to them. To avoid this overpayment problem in the standard approach, we have considered an alternative reform approach, where the government allows people to drop out of the system and also uses general revenues to finance any future gaps between the payroll taxes and the benefits payable. Summarizing our simulation models, we have compared macroeconomic and welfare effects of the two alternatives. In general, economic growth is faster under our dropping-out approach than the standard one. However, depending on the payroll tax rates applied and also the tax base used to finance the Social Security benefits, initial negative welfare effects of the dropping-out conversion fall on different income and age groups.

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