A Primer for Social Security Reform

Social Security's pension program and Medicare are very successful and very popular. The funding of these programs has become alarmingly problematic and they are not sustainable as presently formulated; serious reform is needed. In creating and managing these programs, short sighted, cut and paste politics, largely driven by ideologies and partisan conflict, produced complicated funding and benefit systems. Supporters and attendant experts have fashioned intricate rationales for the various peculiarities of these programs that are not at all helpful in thinking about reform, especially as a basis for public discussion. All of the present reform proposals start from these conceptual frameworks and propose various tinkerings with the present systems. Actually a few simple and familiar concepts provide foundations for pension programs and health insurance. They bring into focus the main issues for reforming Social Security's pension program and Medicare and provide a precise way of assessing the tinkerings with the present systems offered by the experts. In addition it accommodates the concerns of both liberals and conservatives.

A central notion is insurance, the means by which a large group of people join together to spread the risk of large unpredictable expenses. Personal liability auto insurance is a familiar example. For an individual, injuring someone in an automobile accident is a very unlikely happening, but if it does happen it can involve extremely large costs. To spread the risk of this happening, a large group of people, holders of insurance with an auto insurance company, pay an annually fee. The amount each person must pay each year is adjusted so that the total amount paid in covers the total amount paid out for injury claims incurred by the members, plus overhead and profit; a very simple and useful arrangement, which free enterprise and individual responsibility enthusiasts do not object to.

A second important concept is return on investment, for example, in saving for retirement. If you put a dollar in the bank in an account earning 3% interest per year, a simple calculation reveals that in 20 years, your account grows to about $1.80. Put another way, the present price for a dollar to be paid to you 20 years from now would be about 56¢. In thinking about social security, the question will arise, you paid in 56¢ and get back $1.00, where did the additional 44¢ come from? A somewhat complicated question, but approximately, the answer is that the community at large paid you the 44¢. For example, if the 56¢ was invested in U.S. Treasury bonds, the 44¢ comes from interest on the bonds, which comes from income tax and corporate profit tax receipts.

Combining the concepts of insurance and return on investment provides the basis for a variety of our social institutions, for example, life insurance. A simplified version consists of a group of people, clients of a life insurance company, all of the same age, paying in a onetime payment. When a member dies, his designated beneficiary receives $10,000. An example of pooling the risk of dying young. An actuary figures out the amount of the one time payment using life expectancy tables and a good estimate of the relevant interest rates, which can be managed by investing in long term high-quality bonds. An approximate calculation goes as follows. Suppose he can plan on a 3% interest rate, he is calculating for the 65 year old group and on average 65 year olds live an additional 20 years. As we saw, $5,600 invested at 3% interest for 20 years yields $10,000, which gives the approximate amount of the onetime payments.

Pension plans work the same way as life insurance utilizing life expectancy tables and return on investment. Each year you pay in a certain amount, usually a fixed percent of your annual income, which is invested. If you survive to age 65, you receive a monthly payment for the remainder of your life (typically this is combined with life insurance.) The calculation of the annual percent of income to produce a specified pension is complicated but similar to the life insurance case.

Health insurance is much like auto automobile insurance. A large number of people combine to spread the risk of large medical costs, typically extended to cover almost all medical costs for a family. The insurance plan specifies a collection of medical services it

will pay for. When an insured person receives one of these services, the supplier, a doctor hospital, etc. sends a bill to the insurance company, which pays it. The amount each family pays each year is set so that for the year, the total amount paid to the insurance company equals the total amount the insurance company pays out in claims, plus overhead and profit. Although Medicare is usually not thought of this way, it can be viewed as a combination of health insurance and a pension; during your working life you pay in for health insurance when you retire.

We note that our simple examples are fairly accurate descriptions of the present private pension plans and pre-1970 health insurance. Social Security's pension program (SS) and Medicare (MC) are very different, especially with respect to funding. The benefits of MC are about the same as private insurance. SS is "Old Age Survivors and Dependents Insurance" reflecting a quite complex collection of benefits, but from an actuarial point of view, not significantly different from our simple model in calculating tax rates needed to fund a persons benefits. Funding of SS and MC differ in principle from our simple models. The amount one pays for MC is proportional to income, being a percentage, specified each year, of income, while the benefits are independent of income and in addition may provide health insurance for a spouse. With SS, the payroll tax is a percent, specified each year, on SS income, which is income up to a maximum, also specified each year, in 2005 12.4% of income up to $90,000. Pension benefits consist of a basic pension proportional to SS income plus pensions for dependents and additional percents for low-income people – two levels, low and medium low. The additional benefits for dependents and low-income workers are certainly socially justifiable but the way they are financed is dubious, inasmuch as this community benevolence is paid for by payroll taxes rather than from general revenue.

We modify our simple models to accommodate the funding peculiarities of SS and MC and set forth fairly comprehensive models in which most people receive in benefits what they paid for in taxes, based on insurance and return on investment considerations, much like private insurance (putting to rest the whining about the terrible "entitlements" when in fact, if you concede that a dollar twenty years from now should cost a lot less than a dollar now, SS has been subsidizing the general budget since the 50's as reflected in the present small SS trust fund.) In addition, provisions are made for socially justifiable benevolence. (We concede that for most SS supporters and experts, thinking this way very seriously departs from their economic model and is for some, grievously immoral.)

In our new models, largely autonomous federal agencies set up by Congress would administer SS and MC, collecting payroll taxes, investing them, probably in Treasury bonds, and paying benefits. We assume present benefits are preserved. The budgets would be entirely separate from the annual Congressional Budget and appropriations process, as it had been for SS before 1980. Should benefits be changed, payroll taxes should be correspondingly changed.

For MC, think about the system in which there were neither low-income people nor dependents. Since MC benefits are independent of income, the total monthly payroll tax would be the same for all workers and the tax amounts set by an actuarially sound, prudent system closely mimicking what private insurance could offer, with the company having a very high credit rating and power to collect premiums (as does the U. S. government.) Have the actual payroll tax made up of two parts, a payroll tax as above, with the amounts appropriately reduced for low-paid workers, plus a percent of all incomes set at a rate to make up for low paid workers' reduction and costs of covering non-working spouses. Applying the same approach to SS, calculate a basic payroll tax rate that would fund the present pension benefits for a single person with income each year above the SS maximum wage (percentage wise, the lowest rate over the various SS income levels) and make this the "basic rate" for all workers. Add to the basic tax a payroll tax on all income that would fund the additional benefits provided for dependents and lower paid workers. Probably a fairer way of paying for these special benefits would be to increase the interest rates on Treasury bonds going into the SS Trust Fund. The U.S. insistence on a largely free enterprise system for its

economy is on the whole very beneficial, but it does have a down side for a significant fraction of the population. Simple social justice implies that the price of our free enterprise system should include amelioration of its down side, in the case of SS, higher pensions for low paid workers, which is made additionally plausible by the observation that very low pensions would almost certainly revive Old Age Assistance funded from general revenues. The tax rates would be calculated so as to provide an actuarially sound system, for example, keeping the trust fund, at each point in time, at a level covering all pension obligations dictated by the pension formulas applied to each persons annual income up to that point in time (the pension promised to someone who had only been working for a few years would be quite small.)

An early philosophical position in thinking about SS was that it provided all workers with a basic pension making one leg of a three legged stool supporting retirement, the other legs being personal savings and employer provided pensions. With the third leg becoming shaky, a possibly popular addition to SS, especially for people who often change employers, would be to allow individuals to increase their basic tax rate with proportionate benefit increases. This would probably be objectionable to some conservatives but it seems unfair to bar people from taking advantage of the efficiency and reliability of the Social Security Administration.

Investing in stocks and corporate bonds instead of treasury bonds offers a possibly attractive option but it would have little effect on rate of return inasmuch as return from an efficiently managed portfolio for defined benefit programs such as SS and MC would be very close to being independent of choice of plausible investments.

A major problem for SS and for the nation as a whole is the rising fraction of the population over age 65, due in part to the baby boomers, and the consequent fewer workers per retiree. If the amount of goods and services produced per worker per hour, that is labor productivity, continues to increase at a moderate rate as compared to the past, say 1% per year, and the resulting benefits are distributed in proportion to income, this is not too serious a problem. Over the next 25 years, instead of real income going up about 34%, the larger numbers of retirees would bring it to going up about 24%. But if our economy continues to be structured so that all of the benefits of increased productivity go to the rich, everyone else's real income would go down about 10%. In any event, with respect to SS, there would seem to be no reason the non-rich retirees should be singled out for especially unfavorable treatment.

A second major problem for SS, made more acute by the baby boomers retiring, is the financing of future SS benefits, a problem having its roots in Congress's shortsightedness, which on careful scrutiny, economists have justified in a variety of imaginative ways. Early in its founding, retirees who had only paid payroll taxes for a few years received pensions they would have earned from tax payments paid over their entire working lifetime, affectively downloading "Old Age Assistance" from general revenues onto payroll taxes. On day one, SS assumed a large debt serviced by payroll taxes. In recent years retirees receive benefits comparable to what their payroll tax payments and return on investment would yield, but so far, all benefits have been paid for out of payroll tax receipts, in contrast to payroll tax receipts plus return on investment. This was made possible by the large growth of the number of working people enrolled in SS and in early year payroll tax increases. By the 1950's this state of affairs enabled Congress to raise benefits without raising payroll taxes, described by some Congressmen as a financial miracle, righteously by some experts as " pay as you go" and by the more astute as a Ponzi scheme. Up until 1984 Congress arranged payroll tax rates and benefits so that tax

receipts equal benefit expenditures. In consequence SS's trust fund that should cover bought and paid for benefits, about $9 trillion, has only come to about $1.4 trillion due to increased tax rates since 1984. Our simple model was the arrangement envisioned by Roosevelt when SS was set up but repeated recommendations by his administration that tax rates be set so as to move in this direction were rejected by Congress.

A subsidiary problem of this financial situation is that experts have put forth "iron laws of economics" variously justifying these arrangements, which seriously and unnecessarily constraining thinking about reform. Of course our simple models also sets forth an economic framework, but its simplicity and social justice appeal provides a way of assessing any reform proposal, reducing the issues to two questions:

What changes will be made in present benefits?

Explicitly or implicitly, what will the rate of return on investment be? Most of the present reforms implicitly give a negative rate return; you get back some of the money you put in. In future, is the price of having a national pension system being required to forgoing the benefits of return on investment that are routinely available to the financially well off?

From this perspective some defining questions of social justice emerge. For example, tomorrow Congress could set up a SS System for workers presently entering the workforce, say retiring after 2045, using our revised SS model. Their payroll taxes would be substantially reduced from the present rates. Social justice questions:

Do the people retiring after 2045 have a special obligation, in contrast to the general taxpayer, to pay for the revenue shortfall due to their reduced payroll taxes?

Do the present workers who will retire before 2045 have a special obligation, in contrast to the general taxpayer, to pay for the present SS trust fund deficit, that is, pay for Congresses past mistakes?

Inasmuch as presently retired people are receiving pensions at reasonable levels and present tax rates should yield even higher pensions, the SS problem is largely a paper problem in federal bookkeeping, expenses inappropriately charged against payroll taxes instead of general revenue, which if corrected would bring the SS trust close to its proper level, of course including unwelcome financial obligations.

Our present SS and MC systems have very serious problems, which will of necessity be addressed in one way or another in the next few years. Our models provide reasonably comprehensible frameworks from which to view these problems, make clear the basic issues and set forth fundamental, basically political-moral decisions that will be made explicitly or implicitly in any reform plan. The bottom line of any reform proposal, however disguised, is how present benefits are changed and on an annual basis where and in what amounts does the money come from to pay for the benefits, payroll taxes on SS income, payroll taxes on all income, income taxes, corporate profit taxes, non-government securities.

Edgar H. Brown, Jr
brown@brandeis.edu