Social Security and Risks to Our Livelihoods in the Long Term

McKenna Lecture, St. Vincent’s College, January 27, 1999

Robert J. Shiller

How do we, as individuals and as a nation, protect ourselves against economic adversity in coming years? This question about our economic prospects over the long term is naturally a fundamental concern of all of us. We may know fairly well how we will do in the next year or two, but the longer term outlook may appear to be a great sea of uncertainty.

For young adults, there may be great concern about the kind of job they will have in ten or twenty years, and the economic environment they will face. They may wonder: will I be less valuable in coming years to my present employer, who will be therefore unwilling to raise my pay? Will I be laid off from my present job, and searching around as a not-so-young person with skills that are not so marketable? Will I be forced to move to some unappealing place away from my friends and relatives to accept even a marginal job? Will taxes be increased on my income? Will I find that the costs of housing, medical care, education for children, and other such things are outpacing my ability to earn income?

For middle-aged people, thinking ahead ten or twenty years to retirement, there are worries too, a little different from those faced by young workers. The middle-aged may wonder: Between now and retirement, will I continue to earn income as well as I did when I was younger? Is my portfolio of investments big enough to sustain me in retirement? Is there a risk that the market value of the stocks and real estate in my portfolio will decline in the future? Will social security really pay me what I expect now? Will problems of caring for my aged parents put a strain on my budget?

For people who are currently retired, the worries are again substantial and rather different. They may wonder: how will my investments do, now that these may now be my primary support? What if the stock market declines and I am left with half the money I now have? What if I live longer than I expect, and run through my accumulated savings? With the end of my life no longer so remote, what will the value of the inheritance I leave to family members or charitable organizations be?

All of these concerns are primarily about long-term changes in economic fortunes. From year to year, there is usually little apparent change in economic circumstances, but the gradual creep in our economic position may add up to a lot over years and decades.

We would like to have long-term forecasts in order to really understand our prospects, forecasts over decades. But such forecasts are exactly what economic forecasters do not want to give. They usually want to predict what will happen in the next few quarters or a year. The longer-term economic outlook seems just too uncertain for them to say much about.
People in all of these circumstances can enlist the help of financial planners, who will help them lay out a savings and investment plan, and help them avoid paying more taxes than necessary. But, these planners do not solve for us the fundamental problems, only reduce their severity. They can do nothing about our job prospects, or concerns about social security, for example.

**Existing Risk Management Institutions**

People in fact rely substantially on the government for the most important long-term risk management. If risk management is to be really effective, it is most important that it help out in the most desperate situations, and that is what the US government’s social safety net and social security, financed with income taxes, does.

Higher income people in the U. S really do pay more taxes, despite all the loopholes and all the efforts of wealthier people to avoid paying taxes. According to a 1998 study by the U.S. Congressional Budget Office, in 1999 families with children under 18 and two parents and with cash incomes (from 0 to $10,000) will pay a negative personal income tax, an effective tax rate of -17.0%. (And this figure does not count the additional benefits they receive in government services.) Taxes can be so negative because of the earned income tax credit. Other taxes, social security, excise, and the indirect incidence of the corporate income tax, offset this negative tax, but the total federal tax burden for these families is still slightly negative. In contrast, families with incomes over $200,000 pay 22.9% of their adjusted gross income in federal personal income taxes, and the combined effect of this and other federal taxes means that their total federal tax bite is about a third of their adjusted gross income. In short, in the United States takes more money from higher income person so that governmental services and benefits can be maintained for the poorer citizens for free.

The income tax system helps offset any unforeseen major income shifts. This is basic risk management. Even if we are doing well now, we are happy to see such a program in place for our own selfish long-term benefit, since something catastrophic could happen to our incomes. We ought to be happy to see such a program in place for others we care about, such as our children and grandchildren in the future, since it will save them in worst-case scenarios. People vote for income taxes not only out of altruism, but out of an instinctive recognition that the tax system provides risk management to all of us.

Some of the governmental services and transfers to people who are unlucky in their personal incomes come under the heading of welfare. The 1996 welfare reform act may seem to have compromised the ability of welfare to insure against long-term economic misfortune. Since the act put a five-year lifetime limit on cash welfare benefits, welfare apparently does not protect people’s cash income against the worst sort of long-term economic risks. But, we can expect that when people start reaching the five-year limit, states will allow continuing subsidies for finding a job and keeping it, and in-kind benefits such as food stamps without a five-year limit. Moreover, we all still receive some very important other benefits, benefits such as education, police protection, and national defense. When all the benefits that are given for free to low income people are considered, we see that the system provides a floor on the standard of living for us all.
The Social Security System pays benefits as a function of contributions, and so it is not welfare. People who earn more, and therefore make more contributions, receive more in benefits. The system accepts some income inequality, and seeks to preserve these incomes. The system is supposed to be progressive, in its awarding of benefits, since higher-income people receive less than proportionally higher monthly benefits. But, this apparent progressivity is offset by the fact that the higher income people tend to live longer and collect more monthly benefits over their lifetimes.

The Social Security System was set up to allow some risk management for people who are not at the bottom of our socioeconomic ladder. Social Security has three main components. The acronym OASDI sums them up: Old Age Survivors and Disability Insurance. The biggest of these is the old age insurance (OAI) component that provides pensions after we retire. Next is survivors insurance (SI), which is really a government-sponsored life insurance. If you have been making social security contributions and you die with dependent children, they will receive some support, the amount depending on how much you have contributed. The third is disability insurance (DI). If you have been contributing to social security and become disabled, you will receive a monthly stipend, again depending on how much you have contributed.

Aggregate Risks versus Individual Risks

How, ultimately, does the government provide this social security to its citizens? Are the institutions analogous to the private institution of insurance? Or, does the system reduce risks for some people only by shifting these risks to be borne by others?

If the long-term risks to incomes were unique to each individual - uncorrelated across people - then the risks might be handled by a principle of insurance called risk pooling. If the insurance company writes thousands or millions of policies on individual independent events, then the company faces no risks. If we know that the risks are independent, then we can guarantee a fixed benefit and return to all parties. If it were so simple, insurance companies could insure us against all risks to our livelihoods.

But we have no way of knowing that long-term risks to incomes are independent across individuals. That is, there is fundamental uncertainty about the incomes in the aggregate, for the nation as a whole. If we do not even know what aggregate national income will be in coming decades, then we cannot promise any fixed benefits to any subgroup of the population, without transferring the risk of national income shortfalls to those of another subgroup.

The US government has a social security system that, on the face of it, promises to pay guaranteed real benefits to the elderly. If this promise is honored, and if national income should grow much less than expected, then the younger people will have to pay more in contributions or taxes. There is no escaping this fact: it the national income pie is smaller than we expected and if the size of the slice going to the elderly is kept fixed, then the size of the remaining pie, going to others, must be disproportionately smaller than expected.
I alluded at the beginning of my talk to the economic risks of young and middle-aged workers, as well as those of retired people. The Social Security System in its present form appears to deal with the risks of the elderly largely by increasing the risks of the young and middle aged workers.

The history of long-term national income trends shows that over decades there is considerable unpredictable variation in the growth rate of national incomes. Over a decade or two, the real per capita national incomes of some countries will double, others hardly change at all. Studies show that very little of this change in national income is forecastable. No one forecasted the remarkable boom of the Japanese economy in the postwar period, nor its sudden debacle in the nineties. Fifty years ago forecasters were extolling the outlook for Argentina, and thought that Korea was a backward country; little suspecting that it would be Korea that underwent an economic miracle and Argentina relative stagnation. There are many examples. With the rapidly changing global economy, the uncertainty about the future is as strong as ever.

The risks of national income shocks could be dealt with somewhat by financial hedging vehicles specifically designed for hedging national income risks. I call these “macro markets,” markets for long-term claims on national incomes, and I have been advocating for some years now their establishment. But, their establishment does not appear imminent now, and I will work on the realistic assumption here that US national income risk is an inescapable risk for all of us. It should be noted, though, that the absence of such markets may also have the effect of making us unaware of the uncertainty about the outlook for national incomes. The stock market lets us know, through its ups and downs, about the uncertainty about the outlook for corporate profits, but there is no such evidence about the uncertainty about the outlook for national incomes.

**The Pay-As-You-Go Nature of Social Security**

The US Social Security System is run primarily on a pay-as-you-go basis. This means that the contributions that workers make today are used immediately to pay the benefits of currently retired persons, they are not invested. Actually, a component of the contributions is invested in the Social Security Trust Fund, but the trust fund amounts to less than a trillion dollars, far less than the estimated $9 trillion present value of future social security obligations.

The US Social Security System has not always been described to the public as a pay-as-you-go system. Some of the talk from the Social Security Administration has suggested that contributions to Social Security are invested. But the investment is mostly only symbolic, it is only an investment in trust that the future US government will make good on the suggestions that the current government has provided for Social Security benefits.

In a fundamental sense, there is nothing new about the pay-as-you-go basis for social security. From time immemorial, care of elderly has been pay-as-you-go. Each set of generation helps, when they are young adults, their children and, when they are middle-aged, their elderly parents. One feels a debt to one’s parents for the care one received while a child, one repays this to them when middle-aged by caring for them when they are old and incapable. Thus, when one is young one “saves” in the form of creating an indebtedness from one’s children, not by buying stocks, bonds, or physical capital.
The pay-as-you-go US Social Security System may be regarded as merely a formalization of this ancient system that makes it function better. Relying exclusively on family for sustenance in old age is intrinsically risky: the essential burden one places on one’s children when old is a function of how well one’s children do in earning income. If children make a lot of money, then they can easily afford to buy services to take care of their parents, hiring in-home services so that their parents can continue to live in their own home or putting them in a comfortable retirement home. But, if children do not make a lot of money, they may be forced to do the necessary things themselves or take their parents into their own homes, homes which are likely to be small and cramped if their income is short.

When the U.S. Social Security System was established in 1935, the first generation to retire received far more benefits than they contributed, and this is often described as a “windfall” to them. However, there is no clear windfall, since the so-called windfall may have been to some extent a formalization by the government of the already existing obligation to them from their own children. In some cases at least, the middle-aged people at the time when Social Security first started paying generous benefits were able to give less care to their aged parents because the parents were now being supported by the government. These young made social security contributions in lieu of caring for their parents. To the extent that this is the case, the elderly did not receive more services overall. Instead, the advent of social security was just a seamless government continuation and formalization of older customs.

Formalizing the system of parental care into the Social Security System has certain advantages over the older family-based system, in eliminating random elements. Some people have no children, or have children who die young. Some people have children who do not care about their parents, and neglect them. In older days, the extended family might exert pressure on uncaring children to take up the burden of caring for their parents, and other relatives or caring friends might step in their place, but such a mechanism is not secure. Having the government manage a pay-as-you-go social security system eliminates such uncertainties.

The pay-as-you-go nature of social security, as opposed to a fully invested system, is in some sense inevitable. The alternative idea that each person would build up savings to live off of in retirement, rather than relying on children, assumes that it is possible to do so with some reliability. But, there may be no really reliable savings vehicle for the nation as a whole. Both corporate stocks and corporate debt ultimately depend for their returns on the success of the nation’s corporations, which is not assured. These investments may turn out badly just because the economy may turn out badly. It seems to be widely assumed today that the stock market is perfectly safe, because it has always done quite well over long periods of time. But, we have no way of knowing whether the future will really be like the past. Government debt may be viewed as perfectly safe, but that safety can be assured by the government only by promising to tax others in this country, so it is not a safe vehicle for the nation as a whole to save. U.S. Government debt is not even an investment vehicle at all for the country as a whole unless the government itself invests the money it raises through its debt in something else.
The Importance of Saving

One way of dealing with risks to our livelihoods is just to save more. The more savings we have, the more cushion that we have against possible threats to our incomes. And, because of the high available yields and the law of compound interest, a little saving goes a long way. The MIT economist James Poterba has estimated, using national income and capital stock data 1959-1996 that the real return to investments in capital in the nonfinancial corporate sector has been 8.5% before corporate taxes, and 5.1% after taxes. The after-tax return can be compared with the average real (inflation corrected) return on a portfolio of corporate stocks and corporate bonds over this same period, which was 6.6%. These numbers suggest that there may be very high returns on saving through investments in such vehicles.

If we can take any of these figures as a guide to returns in the future, then there are apparently some very important opportunities to improve our standard of living, coming from the compounding of the high return to investments. Suppose we can expect investments to earn 6% a year every year in real (inflation corrected) terms. Suppose a parent who is 30 years old begins investing $3000 a year in a tax-free fund on behalf of a child, and continues to do so until the parent retires at age 65. Then the accumulated fund will, continuing to earn 6% a year, provide an income of a real, inflation-corrected $21,000 a year in perpetuity for the child. This income is sufficient that the child would never really need to work for pay at all, could devote his or her entire life to other causes, and still could make a bequest to one child in the succeeding generation that would allow the same opportunity for that child. Note that these numbers are based on the assumption that the investment will do as well as the stock market has in the past few years.

There are various reasons why people do not take advantage of the opportunity afforded by this apparently high return. One of these reasons is that people are just impatient. They find it painful to save the $3000 a year suggested in the above example. If this were the only reason why people do not save more, we might say that perhaps they are even doing the right thing in not saving. If it is just so difficult to save now, then perhaps the pain of saving today outweighs the future benefits of saving.

But, there are many reasons to think that failure to save is not the result of any valid calculations weighing present pain want against future plenty. There appears to be a human characteristic of myopia when considering the distant future, an exaggerated feeling that the present is always filled with exigencies that require spending money now. Moreover, our institutions create subtle incentives not to save: savings are taxed, and there is a feeling that future savings may be taxed even more, as for example by means-testing of services or benefits.

For these reasons, it is important that national policy creates incentives for saving. The U.S. Congress has done so in various forms, by creating individual retirement accounts (IRAs), 401k plans, and the like. These plans eliminate the disincentive for saving caused by the government’s taxing savings, though they do not offer any positive encouragement to savings.

And yet savings rates continue to be low. The personal savings rate in the United States has been declining for years, and in late 1998 actually became negative. The negative saving rate may be
the result of optimistic expectations, as evidenced by record high consumer sentiment indicators in 1998, and by the record high price-earnings multiples in the stock market.

The President’s Universal Savings Accounts (USA Accounts) are an effort to try some more to encourage saving, by creating a positive incentive, that more than offsets the tax disincentive. President Clinton, in his 1999 State of the Union message, proposed that people should be able to contribute to the USA Accounts with tax-free dollars, as is the case now with IRA accounts and 401k plans. But, moreover, according to his plan, the US Government will match a portion of each dollar an individual voluntarily puts into a USA Account, and thus the government would be creating a positive subsidy to saving.

Revising Pay-as-you-go Social Security

In traditional families, the obligations between generations are naturally somewhat flexible, and responsive to incomes. If elderly parents did very well economically in old age, as for example if they had successful business dealings while still employed or if they invested in stocks and the stock market soars, then, when they are old, their middle-aged children will probably be expected to bear less of a burden of caring for them. If parents do very poorly in their investments, on the other hand, then they will expect their children to help them out more than expected.

The same flexibility generally applies with regard to the incomes of their children. If their children become very wealthy as middle-aged adults, because of a successful career, or because of successful investments, then they will tend to be expected to help out more their elderly parents. If, on the other hand, the children are thrust into poverty in their middle aged years, then their parents will tend to expect less of them.

The Social Security System does not now incorporate such flexibility. The fixed real benefits means that none of the risk is borne by the elderly retired persons. All of the risk is borne by the younger people.

The Social Security System should institutionalize this same flexibility. We can preserve the advantage that the social security system enforces children’s obligations to their parents in their old age, and insures parents against children’s incapacity or unwillingness to take care of them, but at the same time enforces flexibility about the aggregate ability of the middle-aged segment of the population to pay for their parent’s support.

Social Security’s Promises

Much current rhetoric about Social Security reform has it that the present system has been promised to the elderly, and so it cannot be changed. Changing the system would, it is argued, call into question the integrity of the US government.

The Social Security Act provides a schedule of benefits that is indexed to inflation, and so the benefits schedule for each retiree is indeed defined in real terms indefinitely. But if one reads the Social Security Act, it does not literally “promise” to keep benefits indexed to inflation forever. It does not even say that it is the wish of Congress that the benefits never be changed again in real
terms. It merely specifies that benefits will increase at the rate of inflation, so that their real value is fixed, until “a law has been enacted providing a general benefit increase in this title.” Thus the law does not promise anything, it in fact anticipates a change in benefits later. Although the wording suggests that only an increase in benefits is anticipated, the omission of mention of possible decreases might be ascribed to nothing more than politically-motivated optimism.

Economists have on many occasions urged schedules of payments that are made over some time be tied to inflation so that, in the case that we do not get around to changing them in a while, the schedules do not get out of line. There have been some anomalies in the past when payments were fixed in nominal terms that the economists were reacting against. For example, when income tax brackets were fixed in nominal terms, inflation had the effect of pushing people into higher brackets and thus in effect raising taxes without any action of Congress. That problem has been fixed, and so too it seemed natural to specify that Social Security benefits be indexed to inflation.

It has now indeed become popular for people to speak of the indexed benefits as “promised” to the elderly. Indeed, President Clinton, in his 1999 State of the Union Address, used such language. The notion that social security benefits are a promise to the elderly has slipped into our way of thinking, without any formal Congressional resolution resembling a promise ever having been voted upon in our Congress. It is curious how national “promises” come to be made. I am reminded of the Vietnam era rhetoric that we had promised that we would never let the South Vietnamese regime fall, when in fact there was no formal promise to this effect. There too, the sense of a promise was the cumulative result of many statements by public figures who individually did not have the authority to make a promise for the country, but who collectively created the sense of a promise.

There is so much political rhetoric these days about “fixing” Social Security. What do these people mean, when they say that Social Security needs to be fixed? Usually, they are referring to the projected exhaustion of the Social Security Trust Fund sometime in the next century if benefits are increased every year at the inflation rate as defined by the consumer price index. Currently, it is projected that the trust fund will be exhausted by the year 2032. But, this exhaustion of the trust fund is just a consequence of an arbitrary assumption that social security benefits will continue indefinitely at their present level.

We should reconceptualize the true nature of our promise to the elderly in the country. The true promise is the one that each of us adopts as an obligation to our parents, and that we can naturally generalize to the nation. This promise is not to guarantee the real standard of living of the elderly in all circumstances.

Conclusion

President Clinton’s proposals for managing the nation’s risks are a step in the right direction, but we need to do more. The Universal Savings Accounts ought to encourage some saving, and will help provide more of a cushion against the vicissitudes of our economy, but they have not been enacted yet. Even if they are enacted, the President’s proposal, that 11% of the projected Federal Government surplus will be used to subsidize these accounts, shows that the subsidy to saving will be small. We should do more yet to encourage saving. The most important other thing to do,
besides encouraging saving, is to change the formulas for defining benefits and contributions in social security so that these are more responsive to the varying fortunes of the country and of different groups within our nation. This is the opposite of eliminating the earnings test for social security benefits that President Clinton has proposed. The present structure in which retirees bear no risk at all, and see their social security contributions guaranteed in real terms, seems great for the elderly, but it is not so great for other elements of our population who are in effect providing the guarantee. The younger people already have their own income concerns and needs, without also having to bear the burden of the risks of the retired. When the time comes, in coming decades when the level of our prosperity is finally observed, there is a good chance that the division between young and old created by social security system will not appear to be desirable, and there will be a pressure to change it. Then we will see that we never really meant the promises that were apparently made to the elderly to fix their benefits in real terms. It is far better now if we are more careful about the promises that we make. Making changes in the promises offered by social security will take some work, it will mean confronting how we will really handle the risks to our national incomes. We must get down to the task of defining the division of future national incomes, and not rely on some blithe optimism that investing social security contributions in the stock market will create anything like insurance or security for the future. The task of defining the obligations that different generations will have to each other under alternative economic circumstances in the future is not one that lawmakers are accustomed to already, and will require considerable thought. But, it is important that the benefit promises, and promises about future contribution rates, be made now with some basic good sense. This is the essential task for social security reform today.

References


Copyright 1999 Robert Shiller