

The Social Security Time Bomb

The Social Security Act of 1935 created the first of the Social Security programs — provision for old age retirement. Amendments and new legislation since then have added benefits for dependents and survivors (1939), disability (1956), and health (1966). Moreover, types of employment covered have been expanded, minimum retirement ages have been reduced, benefit levels have been increased, and, of course, the tax rates and the taxable base have been increased. At mid-1976, about 125 million Americans had Social Security earnings credits and about 35 million Americans were receiving monthly Social Security benefits. The annual total of benefits paid has exceeded annual contributions to the Social Security programs by more than \$4 billion during recent years.

That the Social Security system will be able to continue to provide the benefits promised is most improbable. In fact, if the impoverished state of the system does not become more widely realized and the appropriate measures taken, the system probably will become bankrupt by the end of the the next decade.

Demographics and Prices

Demographic changes and increasing prices have doomed the Social Security system as it currently is designed. These developments indicate that if retirement benefits are not to be reduced, contributors would have to be taxed to such a degree that most workers would be impoverished.

The "baby boom" that began near the end of World War II continued to a peak in 1957. During this period the fertility rate increased substantially. However, since 1957 the fertility rate has decreased sharply to a record low in 1975 (the most recent year for which data are available). The persons born during the "baby boom" now are working and contributing to Social Security. Before long, however, (shortly after the turn of the century) a "retirement boom" will begin, as these persons reach retirement age.

In the meantime, fewer women will have reached child-bearing age because of the downward trend of birth rates that already has occurred. Should the fertility rate remain low (and we are unaware of any reason for it not to do so), this, combined with the smaller population of child-bearing-age women, would have reduced drastically the working-age population. As a result, the number of beneficiaries of Social Security in relation to contributors will increase dramatically, and workers will be required to contribute much larger amounts than did the retirees.*

Increasing prices, when combined with demographic changes, necessitate that Social Security contributions increase rapidly to extremely high levels if benefits are

*A more complete discussion of the demographic factors contributing to the Social Security problems is presented in *Research Reports* dated April 12, 1976.

not to be reduced. Table 1 shows projected expenditures for Social Security as percentages of taxable payroll (employee and employer contributions combined) under specific price assumptions (assumed demographic changes are included). Such expenditures will increase considerably over the next 75 years. If we assume prices increase 5 percent yearly, by 2050, under optimistic assumptions about future fertility and birth rates, about 28 percent of payrolls will be claimed by Social Security for retirement coverage. This percentage would be higher with more rapid rates of price increase. If, for instance, the average annual rate of price increase were 6 or 7 percent over the next 75 years, the percentage of payroll claimed by Social Security would be 30 to 35 percent by 2050, or about 3 times that currently.

That the working public could or would meet such payments is inconceivable. Many taxpayers may refuse to contribute to the program. Such has already been the case when workers have had a choice. According to the *Wall Street Journal*, government units (for whom participation in Social Security is voluntary) employing 500,000 workers may pull out of the Social Security system during the next 2 years. Unfortunately, private employees do not have this alternative, unless they can prove that it conflicts with their religious convictions. We understand that an increasing number of persons have been recognizing the contradiction between their participation in the Social Security swindle and their personal religious beliefs.

To Fund or Not To Fund?

Considerable controversy has surrounded the question of funding for the Social Security program. Many analysts have claimed that the program was intended to be fully funded as would be any private insurance program. However, according to Robert J. Meyers, former Chief

Table 1
PROJECTED EXPENDITURES AS PERCENTAGES
OF TAXABLE PAYROLL UNDER SPECIFIC
PRICE INCREASE ASSUMPTIONS

<i>Calendar Year</i>	<i>Prices up 3%</i>	<i>Prices up 4%</i>	<i>Prices up 5%</i>
1974	10.1	10.1	10.1
1980	10.3	10.4	10.4
1990	10.9	11.5	11.8
2000	11.3	12.2	12.8
2010	13.2	14.6	15.8
2020	17.0	19.2	21.3
2030	20.0	23.3	26.5
2040	20.8	24.9	28.7
2050	19.7	23.9	27.9

Source: Report of the Panel on Social Security Financing, February 1975.

Actuary of the Social Security Administration, full funding never was intended in the original Act of 1935. Dr. J. Douglas Brown, a member of the Committee on Economic Security that planned the old age insurance provisions of that Act concurs. Apparently, the confusion has resulted from the Government's failure to correct this misunderstanding when it first arose. Some have reported that the Government "sold" Social Security to the public by encouraging the idea of its actuarial soundness by repeatedly suggesting parallels with private insurance programs. If private parties had constructed and sold such a plan to the public, they surely would have been jailed.

Dr. Edwin E. Witte, Executive Director of the Committee on Economic Security in 1935, reportedly wrote: "...if the attempt to build up any reserve is abandoned and a 'pay-as-you-go' system of financing is substituted, it will be possible at one and the same time to increase benefits and to reduce taxes. . . . If the people who are attacking the reserves succeed in convincing the American people that it is not necessary to pay any attention to accruing liabilities, we will have such a large increase in benefits that they cannot possibly be financed without a very great increase in taxes." Events have proved him a prophet in this connection.

The Social Security program by design has emerged as a *self-supporting, current-cost financing* program. This means: (1) that the sole source of dollars to pay benefits and expenses are the payroll taxes collected for the Social Security Funds and the interest earned on the invested balances of those Funds, and (2) that the balance in each Fund is a contingency fund only. Recently this balance was less than a full year's benefits.

This design for the program resulted from a bureaucratic determination of "actuarial soundness." The 1971 Advisory Council on Social Security redefined an actuarially sound social insurance program to be one in which "the expected future income from contributions and interest on invested assets will be sufficient to meet anticipated expenditures for benefits and administrative costs over the valuation period." However, the 1975 Panel on Social Security Financing reported that the phrase "satisfactory actuarial status" was preferable to "actuarial soundness," because the latter encourages the notion that a social insurance program is weak if its financing does not parallel that for a private insurance or pension program. (Private programs are required by law to accumulate reserves sufficient, in conjunction with future contributions, to provide the future benefits of the plans.) In effect, the Government has attempted to exempt itself from prudent policies, and although it can do so in law it cannot do so in practice. Sound is sound, for all programs.

In a recent article in the *Wall Street Journal*, Secretary of the Treasury William E. Simon made these remarks about the Social Security system:

"To put the point bluntly, I can see no way in which the government's current promises can be kept. For the problem is even worse than official projections suggest. High taxes are bad for the economy. By taking a big slice of the reward from human economic effort, they reduce the incentive to undertake the effort. As tax rates rise, the base upon which they depend therefore contracts. To counteract this shrinkage of the tax base, tax rates are forced higher still, causing the tax base to contract even further. Eventually we can visualize a situation where tax rates get so high that it's impossible to generate more revenue. . . . If we do not reduce the growth rate of Social Security benefits, an eventual

Table 2
CALCULATION OF AVERAGE MONTHLY WAGE OF MEN ENTITLED TO MAXIMUM MONTHLY BENEFIT

Years	Maximum Wage Base per Year	Covered Wages for Men Retiring in January	
		1975	1976
1956-58	\$4,200	\$12,600	\$12,600
1959-65	4,800	33,600	33,600
1966-67	6,600	13,200	13,200
1968-71	7,800	31,200	31,200
1972	9,000	9,000	9,000
1973	10,800	10,800	10,800
1974	13,200	13,200	13,200
1975	14,100	—	14,100
Total covered wages		\$123,600	\$137,700
Total years covered		18	19
Average yearly wage		\$6,867	\$7,247
Average monthly wage		\$572	\$604

Table 3
BENEFIT TABLE FOR PERSON
RETIRING JANUARY 1, 1975

Percent	Level of Average Monthly Wage	Primary Insurance Amount
119.89	First \$110	\$131.88
43.61	Next 290	126.47
40.75	Next 150	61.12
47.90	Next 100	47.90
26.64	Next 100	26.64
22.20	Next 250	55.50
20.00	Next 100	20.00
Total	\$1,100	\$469.51

Table 4
CALCULATION OF MAXIMUM MONTHLY BENEFIT
FOR PERSON RETIRING JANUARY 1, 1975

Percent	Level of Average Monthly Wage	Benefit Amount
119.89	First \$110	\$131.88
43.61	Next 290	126.47
40.75	Next 150	61.12
47.90	Remaining 22	10.54
Total	\$572	\$330.01

Source: Social Security Administration.

financial crisis is inescapable. Unlike other such crises, this one will be too big to solve using other sources of money to bail out the program. The country's GNP is just not large enough to support the increases that I think would be necessary to bail the program out in the middle of a crisis."

Benefits and Indexing

In summary form, Social Security retirement benefits are calculated as follows: The average monthly wage of a retired man is based on his covered wages for all years of employment beginning with 1951, excluding the 5 years of lowest wages. Table 2 shows the calculation of the average monthly wage for men aged 65 retiring in 1975 or 1976 who are entitled to maximum monthly benefits. Table 3 shows the benefit table in effect on January 1, 1975. The primary insurance amount is calculated by multiplying the percent factors by the amount in each level, and by summing the products. The various levels of average monthly wage add to \$1,100 a month (\$13,200 per year). For a person retiring in 1976, this total was

\$1,175 (\$14,100 per year). As these totals increase, additional levels are added to the table. Table 4 shows how the maximum monthly benefits are calculated for a person aged 65 retiring on January 1, 1975. Note that because the illustrative average monthly wage was only \$572, only the first 4 levels of Table 3 are used in the calculation, and the benefit is \$330.01.

The 1972 amendments to the Social Security Act provided for these two types of automatic adjustments designed to keep Social Security benefits rising in step with wages and prices: (1) Benefits are to increase automatically with increases in the CPI (Consumer Price Index) whenever the CPI increases 3 percent or more during a year. On this basis, benefits were increased in June 1975 and June 1976. These increases will be reflected in larger percent factors used to calculate benefit amounts (see the first column of Table 3). (2) The maximum wage base per year is raised automatically during the January following an automatic benefit increase. Such increases have occurred in January 1975, 1976, and 1977 (see the second column of Table 2).

Although these cost-of-living increases received considerable recognition during the time of enactment, they have become troublesome. For persons who have not yet retired, prospective Social Security benefits have increased at a rate larger than the increase in the CPI. The wage base of a person who has not yet retired increases shortly after the CPI increases, but Social Security benefits also are indexed. Thus, when he retires, he will have a larger average monthly wage (on which his benefits are calculated), and he will be eligible for higher initial benefits. As the system currently stands, the greater the rate of price increases, the greater the underfunding of promised benefits. Table 5 shows the relationship between higher average monthly wages, increases in the CPI, and the resulting over-indexed benefits. Clearly the benefit increases exceed increases in the CPI by a considerable margin.

Over-indexing of Social Security benefits has combined with the demographic factors described earlier to produce the explosion in the requisite tax rate shown in Table 1. These rates have caused enough concern that many analysts and politicians have advocated changes to eliminate over-indexing. The correction of the over-indexing problem is referred to as decoupling. Two of the proposals for decoupling are: (1) Prior years' earnings used to determine benefits should be indexed to changes in the CPI. Thus, an average *real* monthly wage would be used for that purpose. (2) Prior years' earnings should be indexed to changes in money wage levels—not to changes in the CPI. Thus, an average *relative* monthly wage would be used to determine benefits.

Inasmuch as the current method for calculating initial benefits of a retiring person is a combination of both of these methods, either would serve to decouple. Both suggestions apply only to the way a benefit is initially determined at retirement. After retirement, benefits would be indexed to the CPI (or other price index) as they are under current law.

Table 5
PERCENTAGE CHANGE FROM YEAR EARLIER
FOR PERSONS RETIRING IN JANUARY

	1976	1977	1978 ^e
Average Monthly Wage	+5.6	+8.1	+8.3
Consumer Price Index	+8.0	+6.4	+5.0
Over-Indexed Benefits	+13.0	+13.4	+9.1

^e Estimated.

Proposed Solutions to Financing Problems

In addition to the proposals already discussed for decoupling, there have been numerous other suggestions for ways in which to improve Social Security financing. Some might have merit if presented as part of a massive attempt to overhaul the system. The most obvious such suggestions for change are those that pertain to the base and rate. Increases in the base would increase the funds collected, but probably by only a small amount. However, increasing the base would entitle some retiring workers to higher levels of initial benefits, thus offsetting some of the desired effect. Increasing the Social Security tax rate, as President Ford proposed last year and probably will again in his new budget, seems to be politically unacceptable, because such taxes are viewed to be highly regressive. Although the progressive nature of benefit payments more than offsets the regressive aspects of the tax, rate increases of the magnitude required probably would not be accepted by the public.

As a result of the exodus of many governmental employees from the Social Security system, some analysts and politicians have suggested that this option should be prohibited by law. Some would extend the mandatory idea to the extreme of requiring *all* employed to be covered by Social Security. We cannot imagine how these proposals would relieve the funding shortfall except in the very short run. Presumably, persons in this larger group would be retiring in the same proportion as other members. Therefore, little if anything would be gained.

Two other possibilities mentioned are to reduce benefits of those persons with higher levels of income and to increase the retirement age. Both would involve a breach of promise and neither seems probable from a political point of view. In connection with the latter suggestion, the crisis in Britain has not deterred miners there from threatening strikes in order to gain much lower retirement ages.

Full Funding, Or?

The possibility of full actuarial funding of the program continues to be supported by some. Of course, this is the only possibility that does not involve a breach of promise, but that it would be accomplished is most improbable. For this to occur, tax rates would have to be increased substantially in the near future and the accumulating reserve would have to be invested in the private sector in order not to retard capital formation and economic growth. The political possibility of this being done is nearly nil. Politicians have demonstrated an inability to tax now for future benefits; their practice has been to provide benefits now and worry about the future later.

In a decade or two, the magnitude of underfunding will have increased further and the demographic trends will have made the accumulation of an adequate reserve virtually impossible. A decade or two after that, the payment of promised benefits will become impossible. That young persons of today paying Social Security taxes ever will receive the benefits promised is highly improbable.

The assumptions used in estimating the future financing burden of Social Security may be relatively optimistic. If the economy stagnates or worse during coming years (which our analysis suggests is probable), the recent downward trend in the birth rate well might continue. If it does so until after the peak number of women of child-bearing ages is reached in a couple of more decades,

an even more precipitous decrease in births would be probable. In this event, the critical point of unacceptably high Social Security taxes would be reached much sooner than the official figures suggest.

In conclusion, we doubt that those younger persons opting out of Social Security today, later will regret their having done so.

CURRENCY AND GOLD VALUES

Describing the values of currencies and changes among them has become a complicated task during recent years. The value of anything is what it can bring in an exchange. When currency units were gold by weight and fineness, the value of one currency in terms of another simply involved the relative weights and fineness. To illustrate, a dollar used to be 1/35th of an ounce of gold nine-tenths fine, until the relationship between the currency unit (dollar) and gold was changed by law.

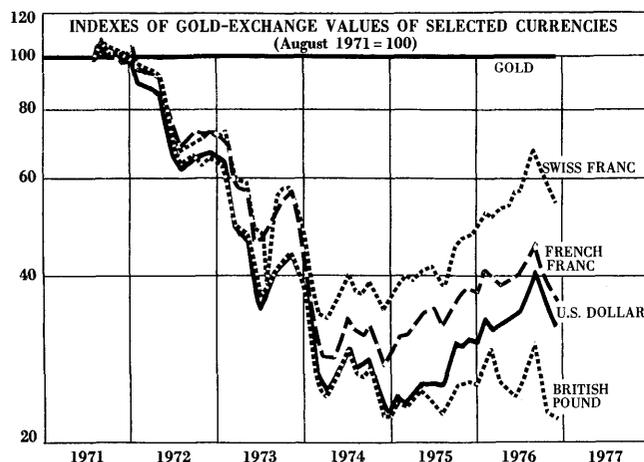
Although the "dollar" officially remains a specified amount of gold, the Government no longer maintains the relationship between paper currency and gold by redeeming the paper currency on demand. Consequently, there is no benchmark unit of value for the paper dollar.

During recent years the value of the paper dollar has increased in terms of some currencies and decreased in terms of others. It also has decreased in terms of the SDR, which itself simply is a weighted average of the value of a group of currencies. In short, the value of the paper dollar is whatever it can be exchanged for at any given time.

The accompanying chart shows changes in the exchange values of selected currencies in terms of gold since August 1971, when the "gold window" was closed. The exchange relationship between each currency and gold on that date was assigned an index value of 100. The month-end gold-exchange values of each currency at subsequent dates were divided into the original value, and the resulting index values are shown in the accompanying chart. Thus, one can see how currency values have changed in terms of gold and in relation to other currencies since August 1971.

Note that all currencies in late 1976 had depreciated in terms of gold. Even the currency that had depreciated the least, the Swiss franc, had lost more than 40 percent of its value in terms of the historic monetary unit. The British pound had lost nearly 80 percent of its value during the past 6 years, and the U.S. paper dollar had depreciated about 70 percent since August 1971.

Many readers might be surprised to see that the paper dollar late in 1976 had depreciated since August 1971



more than the troubled French franc, although from early 1975 through late 1976, the paper dollar appreciated in terms of the French franc (indicated by the narrowing of the spread between the two curves).

Where Goes Gold?

The inverse of the index shown in the chart is an index of the price of gold in the currencies shown. This index reveals that the price of gold in Pound Sterling late in 1976 was about equal to that late in 1974. What reasonably might be expected to happen to the price of gold in paper dollars in coming years?

Until 1971 the efforts to maintain a definite gold relationship for the leading currencies was, in effect, a prolonged effort to lower the exchange value of gold for other things. Continued inflating (issuing of excess purchasing media) forced most prices upward, thereby reducing the exchange value of gold as long as the fixed relationship of gold to paper currencies could be maintained.

By 1971 the resulting distortion in the exchange value of gold for other things had become great. Our estimates indicated that an equilibrium price for gold in 1972 might have been in the range of from 70 to 150 paper dollars per ounce of gold, depending on the price index for other things that might be most appropriate.

During 1973 the exchange relationship between gold and pig iron or copper suggested that a paper dollar price of 140 might restore balance among the three commodities. However, about \$100 (paper) for gold was indicated in relation to a broad group of commodities and cost-of-living items.

In September 1975 we estimated that a gold price of \$130 (paper) was indicated in relation to an average of a comprehensive list of commodities at wholesale. In relation to copper, \$210 (paper) was indicated and in relation to pig iron \$400 (paper).

In view of subsequent developments, we estimate that about \$150 (paper) may have been an equilibrium price late in 1975. This is about half way between the 1974 high of 197.50 and the 1976 low of 103.50. Apparently, the speculation encouraged by the rapid upward adjustment after 1971 pushed the price of gold above a sustainable level (in the absence of a flight from any major currency); and the subsequent decline was accentuated by the U.S. effort to push down the price by means of Treasury and I.M.F. sales, as well as the forced liquidation of marginal speculative positions.

Such extreme fluctuations are "par for the course" for any marketable thing that has been made a medium for speculation by market manipulation. Until the final demise of the various paper currencies, which may not be for decades, more of the same would not be surprising. A general upward trend in the price of gold paralleling the rise in commodity prices from a level of about \$150 late in 1975, interrupted by violent swings above and below the trend line, seems probable.

PRICE OF GOLD

	1975 Dec. 31	1976 Dec. 23 Dec. 30	
Final fixing in London	\$140.25	\$132.35	\$134.75

Research Reports is published weekly at Great Barrington, Massachusetts 01230 by American Institute for Economic Research, a nonprofit, scientific, educational, and charitable organization. Second class postage paid at Great Barrington, Massachusetts 01230. Sustaining membership: \$9 per quarter or \$35 per year.