

## The Financial Status of Social Security

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**Synopsis:** This essay addresses the financial status of the "Social Security Trust Fund". The Social Security Trust Fund is a short name for the "Federal Old Age and Survivors Trust Fund" (42 U. S. C. Sec. 401). The Social Security program was sold to the public in 1935 as an insurance program by which contributions made during one's working lifetime would be used pay benefits in retirement. The goal was to reduce poverty among the elderly, estimated at around 50% in the 1930's. Payments into the system are accomplished by direct withholding of a fixed percentage of income. Initially some occupations were exempt from Social Security taxes (known as FICA taxes) but now nearly all workers are required to contribute to it.

### 1 Revenues and Expenditures 1937 - 2013

Figure 1 shows the revenues collected by withholding against the expenditures made by the Social Security Administration (SSA) between 1937 and 1977 per the SSA website [1]. Nearly all the expenditures are in the form of payments to beneficiaries; the cost of administering the system has decreased steadily over time: in 1957, it was about 2.2% of expenditures, by 2013, was down to 0.74% of expenditures. Note that the black line in Figure 1 (revenues) tracks closely with the red line (expenditures); and that the system was mostly in balance throughout this forty-year period. For years in which the revenues exceeded expenditures (indicated by the green line), the excess was carried over into an account called the "Social Security Trust Fund" and are listed as assets within that fund. By law, these assets cannot be invested in marketable securities; they are restricted only to instruments backed directly by the "full faith and credit of the United States"; i.e., Treasury bonds.

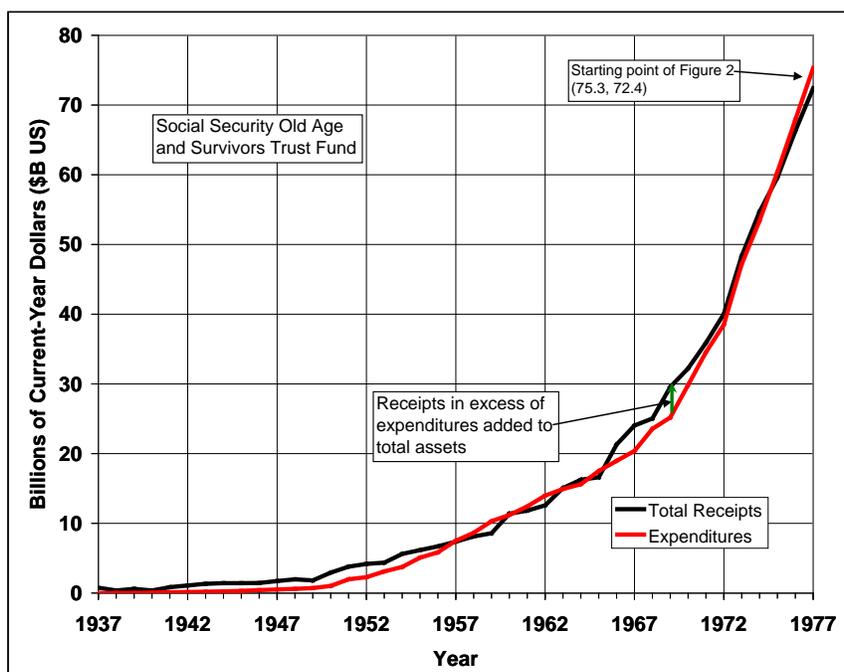


Figure 1: Social Security Revenues and Expenditures, 1937-1977

Figure 2 shows exactly the same data, but for the years 1977 to 2013. Because of the enormous increase in the FICA tax rates, the growth of population, the number of workers included in the system, and

the general depreciation of the currency, it is necessary to show the Y-axis of this chart in units ten times that shown in Figure 1. The end point of Figure 1 and starting point of Figure 2 are the same dollar value as shown by the respective notes. Starting in 1985, due to the "Social Security Amendments of 1983" [2], much more revenue was collected than was necessary to pay benefits, as shown by the large divergence between the two lines. The green line shows the growth from year to year of the assets in the Trust Fund. The idea of the reform bill was that large surpluses would be built up during the years when the "Baby Boom" generation was working, such that adequate assets would exist when that large generation began retirement beginning in 2011. Again, the excess of revenue over current expenses were invested in Treasury notes and added to the assets in the Trust Fund.

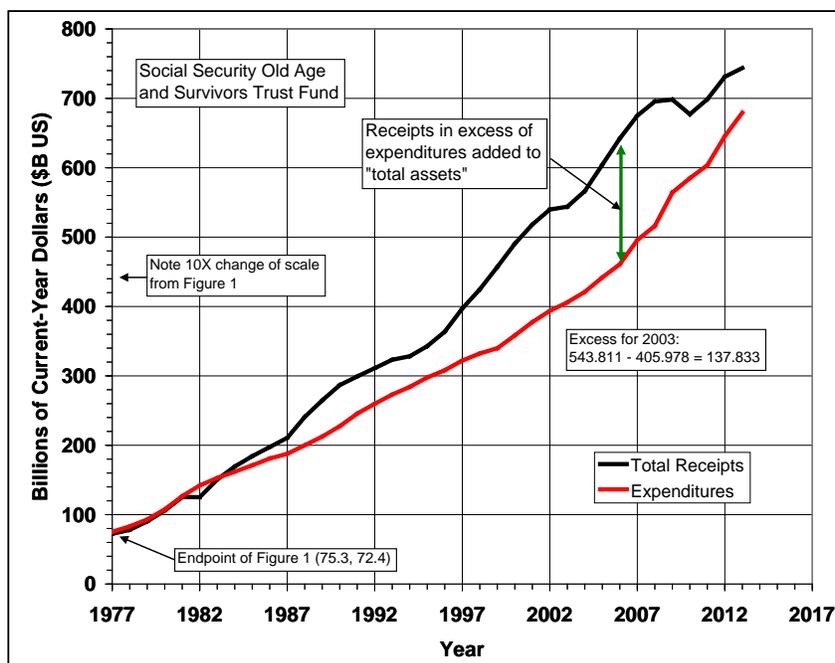


Figure 2: Social Security Revenues and Expenditures, 1977-2013

Figure 2 shows an example for the year 2003: the excess of revenues over expenditures was \$137.833 B. This amount was added to the assets of the overall Trust Fund.

## 2 Growth of the Trust Fund 1937 - 2013

It is difficult to see from Figures 1 and 2 the actual growth of assets in the Trust Fund. Again, based on data from the SSA website, Figures 3 and 4 indicate the financial status of the Trust Fund for the intervals 1937 to 1977 and 1977 to 2013 respectively.

Figure 3 shows that the total accumulated assets of the Trust Fund were \$ 32.49 B in 1977. The total accumulated assets in 1977 were fairly small since the program revenues and expenses were closely aligned between 1937 and 1977.

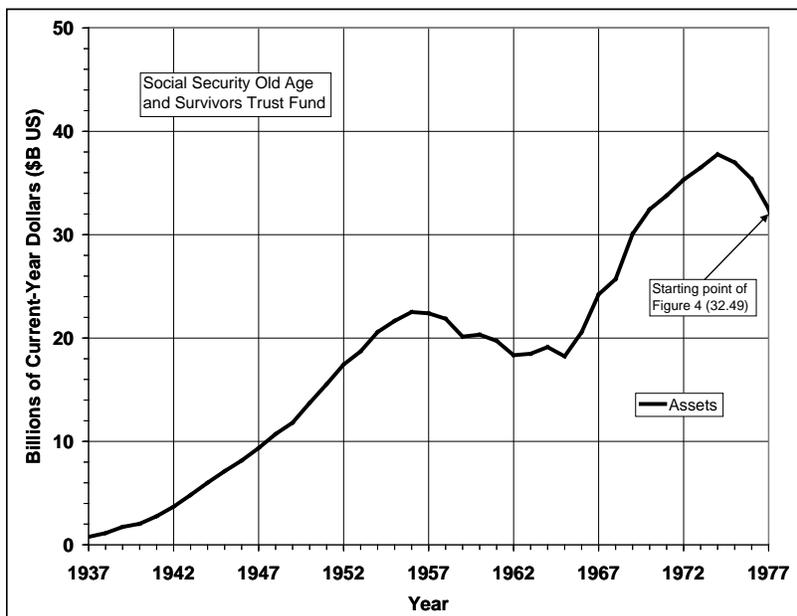


Figure 3: Social Security Trust Fund Assets, 1937 - 1977

Figure 4 shows the same data as Figure 3, but here the Y-axis is now 100X that of Figure 3 for the same reasons as stated before. Recalling the example from Figure 2 for the year 2003, it is seen that the growth of the Trust Fund was the same \$137.833 billion. By 2013, the total accumulated Trust Fund amount to \$2.763 trillion (a trillion is a thousand billion).

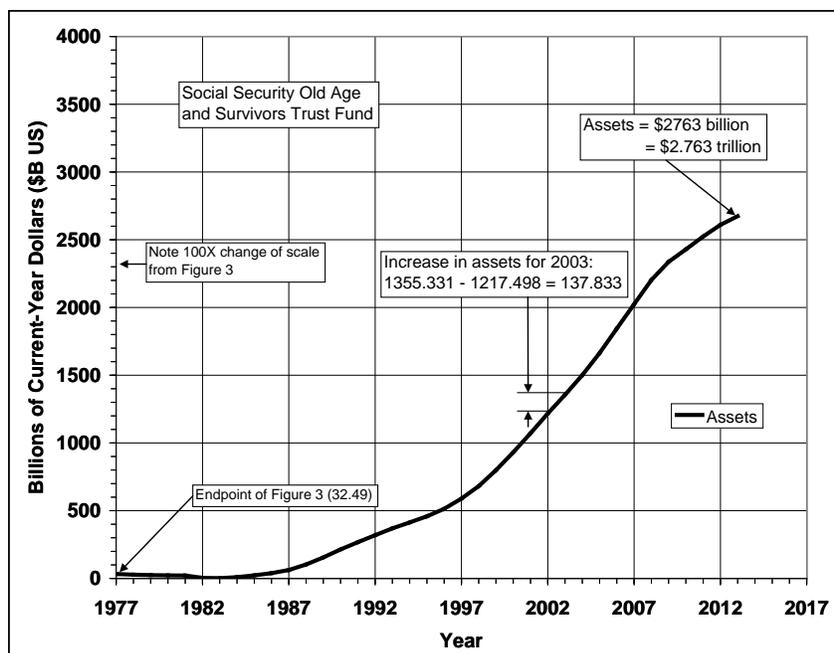


Figure 4: Social Security Trust Fund Assets, 1977 - 2013

### 3 The True Nature of the Trust Fund

Social Security Old Age Insurance does not function like real insurance. There is no contract between the worker and the SSA which legally obligates the SSA to actually pay benefits. Likewise, the Social

Security Trust Fund is not a trust fund in the usual sense: it contains no actual assets to be distributed to the claimants. The reason is simple: although the "Trust Fund" holds "assets" in the form of Treasury notes, they can only be used to pay claimants if the SSA takes them to the Treasury Department and demands payment. Since the federal government is the payer in general, and Treasury notes are its debt, the notes in the SSA "Trust Fund" are actually liabilities, not assets. They are "assets" to the SSA, but not to the actual payer; hence the Social Security "Trust Fund" is nothing more than an accounting fiction. When the day comes that the current-year revenues exceed current-year expenditures (expected to occur in 2021), the SSA will have to demand redemption of the Treasury notes from the Treasury Department. The Treasury Department, having no assets of its own, will have no choice but to go to Congress. Congress can then do any or all of these options: a) cut benefits to match the current revenues; b) raise taxes to make up for the shortfall; c) order the Treasury to sell more bonds and use that money to pay SSA who can then pay the claimants; or d) order the Federal Reserve to print the amount of currency necessary, credit it to the SSA for the SSA to pay the claimants. Option a) cannot happen because Congress would have to explain why benefits are being cut with such a large pool of assets with which to pay them. Option b) is the honest choice, and for that reason alone is out of reach for the ruling elite. Option c) will increase the national debt, and option d) will cause inflation.

So what is the true nature of the "Trust Fund"? It is a record of the largest theft-by-diversion in the history of mankind. Those payroll taxes were paid by the workers under the false notion that the revenue would be used to secure future Social Security benefits. No such thing happened: Congress spent all the excess revenue on other general budget items, and simply gave the SSA IOUs in the form of Treasury notes, falsely calling it a "Trust Fund". The Office of Management and Budget notes [3]:

These [Trust Fund] balances are available to finance future benefit payments and other Trust Fund expenditures – but only in a bookkeeping sense. These funds are not set up to be pension funds, like the funds of private pension plans. They do not consist of real economic assets that can be drawn down in the future to fund benefits. Instead, they are claims on the Treasury that, when redeemed, will have to be financed by raising taxes, borrowing from the public, or reducing benefits or other expenditures. The existence of large Trust Fund balances, therefore, does not, by itself, have any impact on the Government's ability to pay benefits.

#### **4 The True Purpose of 1983 Amendments**

The true purpose of the 1983 Amendments is now clear. President Ronald Reagan, who had served eight years as Governor of California, and had been educated as an economist, knew or should have known that Congress can not resist spending more than every penny it receives. He also knew or should have known that even an honest government cannot save money the way people do: what could the SSA have done with the excess revenue -- pile up mountains of cash in the basement of some office building? There is nothing else a government can do except spend it, which is why governments must always be restricted to collecting the revenue they need for the current year, and nothing more. The true purpose of the 1983 Amendments was to establish a means of raising extra revenue for Congress to spend without having to raise income or any other federal taxes. They could and did falsely claim that the revenue was to be used to make Social Security more secure. They then spent the money, leaving Social Security in exactly the same place financially as it was before.

Figure 4 shows that the "assets" in the Trust Fund amounted to \$798 billion. We need look no further for proof of a diversion than the statement in President Bill "Perjurer-in-Chief" Clinton's 2000 Budget proposal [4]:

In his State of the Union address, the President unveiled his proposal to save Social Security by using some of the projected budget surplus to strengthen the system and by investing a portion of the surplus in equities to raise the rate of return. These actions will substantially improve the program's fiscal position, strengthening it until mid-century. It will require tough choices and a bipartisan approach to fix Social Security and to reach the President's overall goal of saving the Trust Fund at least until 2075. During this year, the President will work with Congress to restore the system to

fiscal health, and to address his other priorities including protections for the elderly at high risk of poverty.

**Devote 62 percent of the budget surplus for the next 15 years to Social Security:** The Administration proposes to set aside 62 percent of the projected unified budget surplus of the next 15 years for Social Security. This amounts to more than \$2.7 trillion in additional resources available to meet Social Security benefit obligations.

There never was a budget surplus. There was never going to be a budget surplus. The plan and result was to spend everything and lull the working taxpayers into a false sense of security by maintaining the illusion of a Trust Fund.

## 5 Why Social Security is Not a Ponzi Scheme

Some analysts and economists have claimed that the Social Security system is nothing more than a Ponzi scheme. I believe I can show that there are enough differences between the two to demonstrate that this claim is incorrect.

Let's begin by reviewing what Ponzi scheme is. It was named for Carlo Ponzi, a Boston businessman who talked people into investing in a plan to earn a profit through arbitrage of international reply coupons (IRC). An IRC is an international agreement by which nations agree to deliver mail from other nations within their postal system. Ponzi's plan was to take advantage of the difference in postal rates among the various nations participating in the IRC treaty. His plan fell through with great losses because the overhead on each transaction was too high. Ponzi's plan started as a legitimate enterprise, but he turned it into a fraud when he started realizing losses. He then diverted money provided by new investors by using it to pay off the original investors, while also taking a cut for himself. In honor of Mr. Ponzi, any investment plan in which early investors are paid off with funds provided by new investors instead of profits is now called a Ponzi scheme. Instead of earning money by wise investing, the fund managers camouflage their losses by sending out false financial statements. When necessary, they make payments to the original investors by robbing the newer investors. This continues until the management runs out of new investors, or the operators steal everything they can. Normally, Ponzi schemes attract investors by claiming to have invented some secret stock market advantage, or by claiming to have discovered some hidden trading tactic that is always profitable. With that background in mind, here are five reasons why Social Security is not a Ponzi scheme.

1. "Investing" in a Ponzi scheme is voluntary, "investing" in Social Security is not. If you are working, whether for wages or in business for yourself, you are inducted into the system except for some very narrow exceptions (usually involving employment by a religious institution).

2. A Ponzi scheme, although fraudulent, is ultimately subject to Securities regulation, thus incurring a legal obligation to conduct the business honestly (although they have no intention of doing so). Social Security is not subject to any regulation except by Congress; the Social Security Administration is under no legal obligation to pay benefits: it operates solely on the whim of Congress.

3. Because a Ponzi scheme is set up to be nominally subject to regulation, an investor can demand to get his money back at any time. However, no one can get their Social Security "investment" back until they meet age or disability requirements set by Congress.

4. A Ponzi scheme is based on attracting a small number of wealthy people to invest in it; thus it robs the rich when it fails. Social Security is based on forcing a large number of poor and middle class people to participate; thus it will rob the poor and middle class when it fails.

5. Ponzi scheme managers send out false financial statements to give the illusion that it is solvent in the short run. The Social Security Administration publishes honest financial statements that prove that it is insolvent in the long run.

## 6 History of How Social Security Has Been Funded

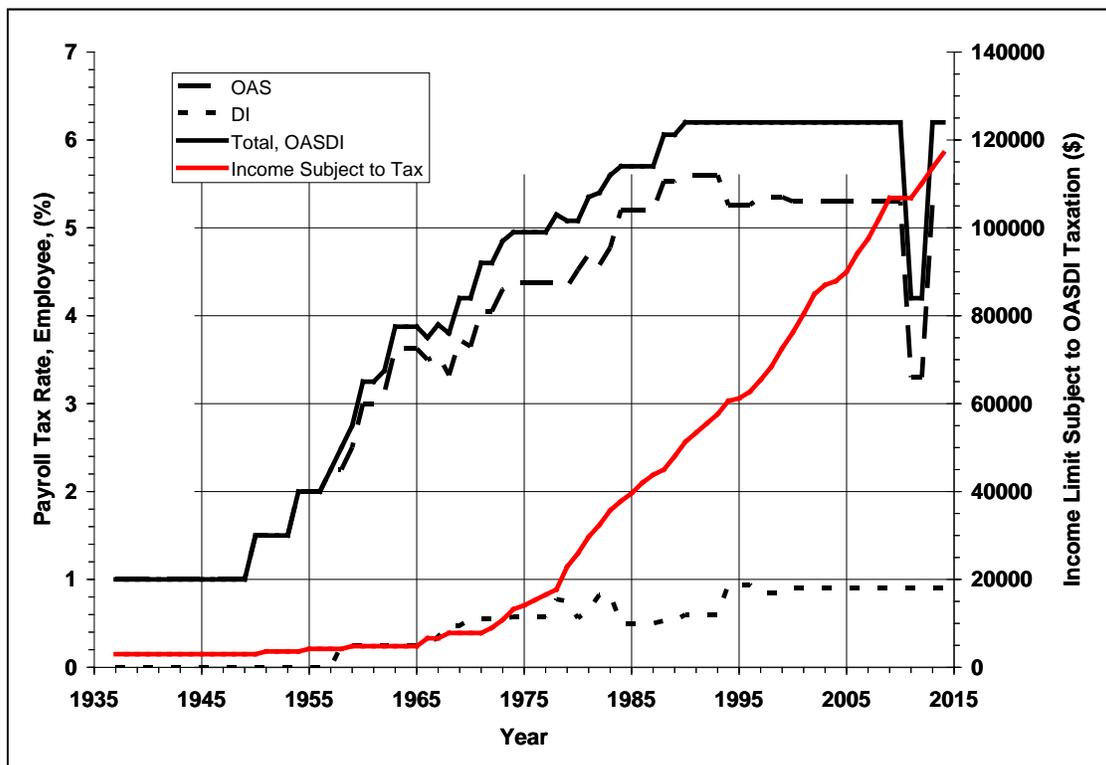
Having reviewed the false and hypocritical notion of a viable Social Security Trust Fund, we turn now to a historical review of how the program has been funded since it was established in 1935. It is not administered, as has been shown, as a traditional Ponzi scheme. The Social Security system has always been funded as a regressive payroll tax. That is, it is financed entirely by a straight percentage of income, no deductions, no exclusions, and no exemptions. It is regressive in the sense that the poor and the middle class pay the same fraction of their income, meaning that the burden upon the poor is greater in relative terms than the burden on the middle class. A tax rate of say 5% represents a different number of dollars per paycheck to the poor and the middle class. Suppose a working poor person earns \$20,000 per year (about \$385 per week), and a middle class person earns \$50,000 per year (about \$960 per week). If the tax rate on both is 5%, the poor person pays about \$20.00 per week in Social Security taxes, whereas the middle class person pays about \$48.00. So, the middle class person pays a lot more; but, the \$20.00 paid by the poor is more important to him insofar as providing necessities for his family than the \$48.00 paid by the middle class person. Thus the economists say that this type of tax is regressive upon the poor.

Figure 5 provides a historical view of the tax rates and maximum income to which the tax applied, in then-year dollars. The black lines (tax rates) are read from the left scale, red line (income) on the right. The tax rates are broken out into two sections: Old Age Survivors (OAS), which is for retirement benefits, and Disability Insurance (DI). The DI tax and benefit was not created until 1956.

There is one important point to make about the left scale of Figure 5: this scale is labeled "Tax Rate, Employees". But an equal tax rate is additionally paid by the employers. That means the total tax rate on incomes is double the tax rates shown on the left scale. In 2014, the total tax rate for OASDI is 12.4%. There is nothing on Figure 5 that should be surprising to even the casual observer. You can see the typical progression of tax rates as well as the increasing maximum income level to which Social Security taxes are levied. The increase in the tax rate is due to the general expansion of the program; first to help the elderly poor, then to help the elderly middle class, and now as a general middle-class generic benefit. It is always the same with government programs: the goal is to expand it until everyone believes they are benefiting from it. Then it becomes politically impossible to curtail it, as people will believe they are being short-changed if the program is reduced.

But there is another tangible benefit to the government from programs like Social Security: if everyone depends on it during their retirement, the government controls their lives. People tend to do what the government tells them if their income depends on the government. You can see a dip in the tax rates for 2011 and 2012. This was done as a temporary measure to put more money in people's pockets, in hope that it would help the economy come out of the 2008 recession. It didn't work, as evidenced by the fact we are still in a recession in 2014.

Note that I have omitted thus far any discussion about what is paid by the wealthy. That is because Social Security was envisioned as a program for the poor, then it became a program for the middle class. Therefore, since the poor and the middle class are the main beneficiaries, it was thought prudent (probably correctly), that taxes should be levied only on incomes up through the upper middle class levels; incomes above a certain amount are exempt because the maximum benefit paid corresponds only to incomes up to the middle class levels. So, there has never been a Social Security tax that was levied on all income. Besides, the wealthy have the means and contacts to make sure their tax burden is reduced to the maximum extent politically possible. Normally that comes in the form of special deductions and allowances, but in the case of a payroll tax, it comes in the form of a limit on the income subject to the tax.



**Figure 5: Tax Rates and Income Subject to Social Security Taxation, 1937-2014**

Some have exaggerated the growth in the income subject to taxation, claiming that the tax was miniscule compared to modern times. But in fact the growth in the level of income subject to taxation is an artifact of the high inflation rates we have had since the Federal Reserve gained power. In 1937, (the first year of taxation), the maximum amount subject to taxation was only \$3000; but keep in mind that \$3000 then went a lot further than the same amount now. In order to see a more accurate picture of the growth in taxable income levels, it is necessary to account for the effect of inflation. That can be done by normalizing the income levels to given year as a baseline by adjusting per the annual inflation rate. We chose to do so by normalizing the buying power of \$1.00 to the value of a 2014 dollar, as shown on Figure 6, by applying the cumulative inflation rates for each year [5]. The periods of high inflation (1939 - 1949, 1967 - 1980) and low inflation (1957 - 1965, 1983 - 2014) are also indicated. For example, one dollar in 1988 had the same buying power as \$2.00 in 2014; a dollar in 1949 would buy what \$10.00 would buy today; and a dollar in 1939 would buy what \$17.00 would buy today.

The next step is to compare the actual median income levels with the amounts subject to taxation [6]. Only data back to 1967 is available, and is shown on Figure 7. The red curve shows again the amount of income that is subject to Social Security taxation; the black curve is the median household income. It is easy to see that the levels subject to taxation were once approximately correlated with median income (assuming the trend from the 1930's was about the same as in the early 1960's), but is now in excess of twice the median income. Taxes have been going up steadily since the mid-1970's, measured in both the tax rate and the amount of income subject to the tax. No surprises there. Next we will consider the return obtained in the form of benefits for each generation of workers.

There is a third important point about the tax rates shown back on Figure 5. Financial advisors routinely explain that it is necessary for a worker to save and invest about 15% of his income throughout his working years, in order to have enough for retirement. Recalling that the true tax rate is double what is shown

on the left of Figure 5, it is easy to see that many people are already paying 12.4% into Social Security. But how many believe they can retire on Social Security benefits alone?

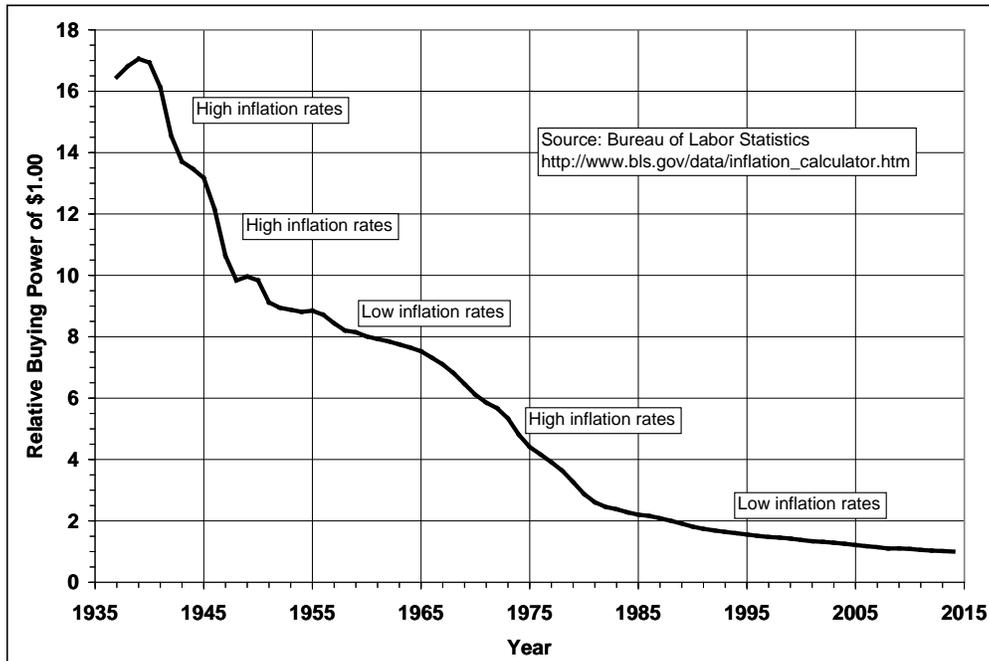


Figure 6: Relative Buying Power of \$1.00 Since 1937

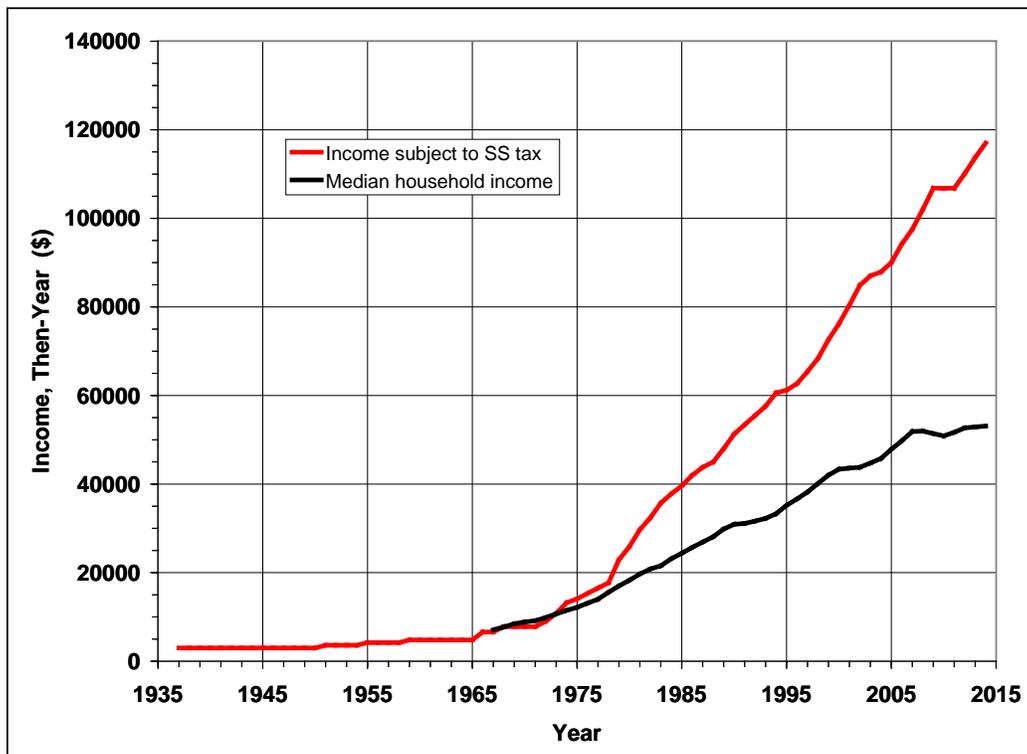


Figure 7: Comparison of Median Income and Income Subject to Social Security Taxation

## 7 The True Rate of Return on Social Security Contributions

We have seen that the total tax rate for OASD (12.4%, divided equally between employer and worker) approximates the savings rate for retirement as recommended by most financial planners (15%). It is important to evaluate which method of retirement financing offers the greatest benefit to the worker. To do so, it is necessary to evaluate the return on investment for Social Security vs. other retirement methods, such as 401(k) and Individual Retirement Accounts (IRA). Is the average worker better off paying into and collecting from Social Security, or would he be better off to invest and save on his own?

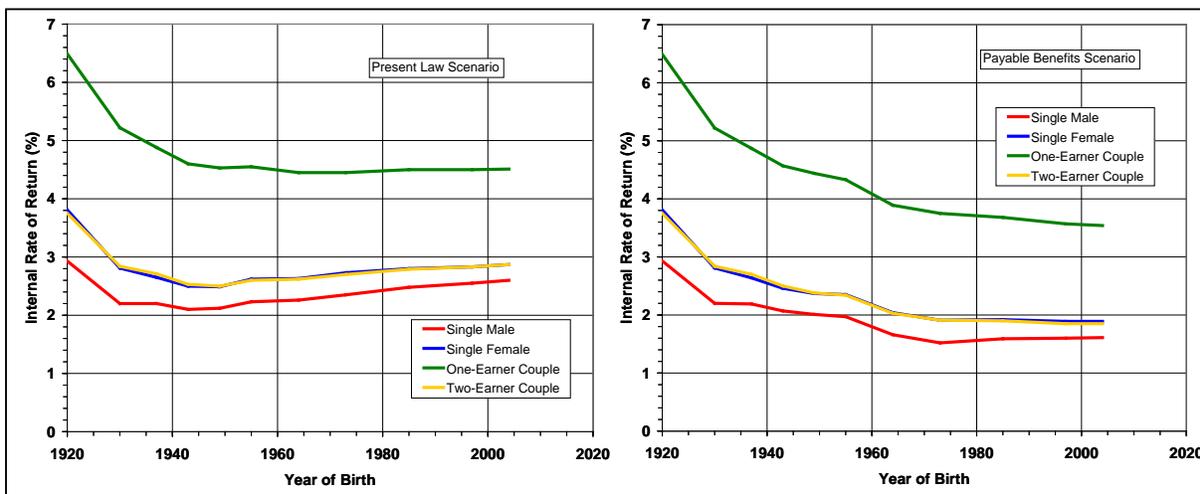
Fortunately, the Social Security Administration has conducted a study [7] that answers the question for the Social Security system. In its analysis, the SSA calculated the real rates of return for Social Security benefits as a function of income level and year of birth, assuming a worker retired at the nominal retirement age. It included a range of income levels from very low income to very high income, which is important because the benefits paid out are higher relative to income for low-income workers. The real rate of return is the interest rate necessary upon the taxes paid in order to finance the Social Security benefits received; i.e., it is the average annual rate of return necessary to finance the typical benefit received. The main assumptions underlying the calculations, all reasonable, are:

- a. Includes the amount of payroll taxes paid from start of work to retirement
- b. Workers enter the workforce at age 21 and retire at 65, and receive benefits according to their life expectancy
- c. Workers are assumed to earn at some fixed percentage of the average wage index for their entire careers (Median = 100%, Low = 25%; Very Low = 25%)
- d. For married couples, assumes there is neither death nor divorce prior to receiving benefits
- e. Families are assumed to include two children
- f. Takes into account the longer life spans (and hence increased time of benefit payment) of women

Figure 8 shows the results of the SSA study for median income earners. On the left side is the rate of return under the present benefit schedule. However, that is somewhat misleading, since the SSA program will begin to pay out more in benefits than it collects in revenue beginning in 2021. The right side shows the rate of return if current tax rates remain unaltered, and the SSA system is forced to cut benefits in order to remain solvent. But, it also assumes that the fictional "Trust Fund" is repaid such that the real reduction in benefits does not begin until 2033. Therefore, the right side values are somewhat optimistic, since there is no evidence that the \$2.76 trillion in "Trust Fund" "assets" that were "borrowed" ("stolen and spent") by Congress will actually be repaid out of general revenues, given the budget pressures that future Congresses will face.

There are several important features of the curves on Figure 8. First, the people who contributed the earliest, and began collecting benefits the earliest, have the highest rate of return. Although not shown here, workers with low and very low income levels have higher rates of return (Very Low is about 50% higher; Low is about 20% higher). The optimistic chart on the left shows the rates of return leveling out beginning with those born around 1960; the right charts shows the rates of return steadily decreasing. This behavior is due to two factors. First, is that the early participants paid a much lower tax rate and received relatively higher benefits, affordable at that time because the ratio of workers paying taxes to those collecting benefits was large. The second reason is that those born later spend most of their working lives paying high Social Security tax rates; the rate of return would be even lower if not for the fact that life spans have increased in the past several decades, and consequently benefits are paid over a longer period.

Secondly, not every type of worker receives the same general rate of return. Figure 8 shows that single males fare the worst in rate of return, and single-earner couples fare the best. Single females and two-earner families are about the same. The females obtain a better rate of return than their male counterparts mostly owing to longer life spans. The two-earner families fare worse than single-earner because benefits are not paid as individuals (as would be the case with an individual retirement account); the benefits are paid jointly to husband and wife, not commensurate with their actual tax contributions.



**Figure 8: Social Security OASDI Rate of Return, Median Income Workers**

The rates of return shown on Figure 8 are much worse than what is typically achieved by investing in stocks and bonds over the long run. Gay [8] has calculated that annualized total return above inflation from the stock market at about 6.6%, going back to 1926. Lind [9] has used historical data to project annualized rates of return of 2.3% for Treasury notes, 4.8% for U. S. aggregate bonds; 7.2% for international stocks; 8.2% for small-cap stocks, and 7.4% for S&P 500 investments. Brightman [10] has used historical data to show that the annualized returns on a 60/40 mix of stocks and bonds averaged 7.6% for the period between 1871 and 2010. Certainly all of these calculations involve simplifying assumptions, and there of course no guarantees that the next century will function the same as the past. But considering that there have been some bad economic times in the past century, it is reasonable to conclude that in the long run (which is the only one that matters for retirement planning), private investment offers a much better rate of return than a pay-as-you-go government system like Social Security.

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