

Privatization of Social Security: The Proposed 2% Plan



Damien Grierson

University Honors Project
Political Science Honors Thesis

Table of Contents

Section 1: The Great Depression and the Founding of Social Security

The Great Depression.....	1
The New Deal and Social Security.....	5
Social Security: 1935 to 1980.....	7
Social Security: 1980 to Present.....	10
Social Security as a Success.....	12

Section 2: The Coming Problem

Why a Crisis?.....	15
The Shortfall: Its Timing and Size.....	17

Section 3: Privatization: An Analysis

The Proposed Advantages.....	23
The Risks.....	25
Financing.....	25
Expected Returns on Equity.....	28
Equity.....	31

<u>Final Remarks.....</u>	33
----------------------------------	-----------

Table of Figures

Figure 1: The Great Depression GDP Fluctuation.....	3
Figure 2: The Great Depression Unemployment Rate.....	4
Figure 3: Poverty Status, 1999.....	12
Figure 4: Beneficiaries per 100 Covered Workers.....	16
Figure 5: Cohort Life Expectancies.....	17
Figure 6: OASDI Income and Cost Rates.....	18
Figure 7: OASDI Trust Fund Ratios.....	19
Figure 8: Equity Premium.....	23

Section 1:

The Great Depression and the Founding of Social Security

The Great Depression

The coming of the 20th century found Americans in a new economy, a recently industrialized one. In 1870, the decennial census reported 5.5 million people working in the agricultural sector of the economy with 5.1 million working in non-agricultural professions. The farm at this time was a family endeavor. Children grew old on the farm, taking over where their parents had left off. This family network formed the foundation by which the old-aged or disabled would survive when no longer able to work the fields themselves. The coming of the Industrial Revolution to America radically altered this cycle. The labor force dramatically shifted to the urban, non-agricultural sector of the economy. In 1900, 9.4 million worked in agriculture compared to 14.3 million in non-agricultural. By 1930 almost three times as many laborers (28.5 mil.) worked in the non-agricultural sector.¹ These young people flocked to the urban areas to make a living in the new factories, placing many apart from their extended family and thus ending the almost assured economic security this network had provided for so long. Thus was set the foundation for the coming of what is today called Social Security. It would be the Great Depression, beginning around 1929, that finally set the stage and acted as the catalyst for the coming of the Social Security Act of 1945.

On the cover, the post-World War I national economy appeared robust. The war had caused federal spending to increase to a rate three times larger than tax collections, but that spending had been to support the war effort. The war effort was massive and it was confined largely to the manufacturing sector. This investment in the manufacturing sector led to a boom in production in the decade that followed. Secondly, individual

¹ United States. Census Bureau. Historical Statistics of the United States, Colonial Times to 1970. (Washington: Government Printing Office, 1975), 126.

worker productivity saw astonishing increases, rising approximately 43 percent between 1919 and 1929. These factors, among others, led to an increase of gross national product of approximately \$63.6 billion, or 31 percent, between 1920 and 1929.² Unemployment rates followed the trend of economic strengthening as well. The decade before saw an average unemployment rate of 4.97 percent, including consecutive war-economy rates of 1.4 percent in 1918 and 1919. The 1920's had an average unemployment rate of only 4.61 percent despite a brief post-war recession that brought unemployment in 1921 to 11.7 percent.³

The 1920's was also the decade the United States public awoke to discover the stock market. The Dow Jones Industrial Average hit the 100 mark in early 1906 and took nearly 22 years to make it to 200 in 1927. It took only a year to gain the next 100 points, the index hitting 300 on the last day of 1928. The index had soared 48 percent in the year, the third best percentage gain ever. It was here in the stock market that the most glaring sign of trouble was displayed. On Monday, October 28th, 1929, the main headline of the *Wall Street Journal* announced that the "industrials" were down 38.33 points. The following day, "Black Tuesday," they fell another 30.57 points. At declines of 12.82 percent and 11.73 percent, respectively, these two days remain the second and third largest declines of the industrial average behind only "Black Monday" in 1987.⁴

The Great Depression did not begin overnight, but it had finally come to the collective consciousness of the nation. By February, the Federal Reserve cut the prime interest rate from 6 to 4 percent, but would add little more money to the economy for the next year and a half. In line with the laissez-faire economic policies of the time,

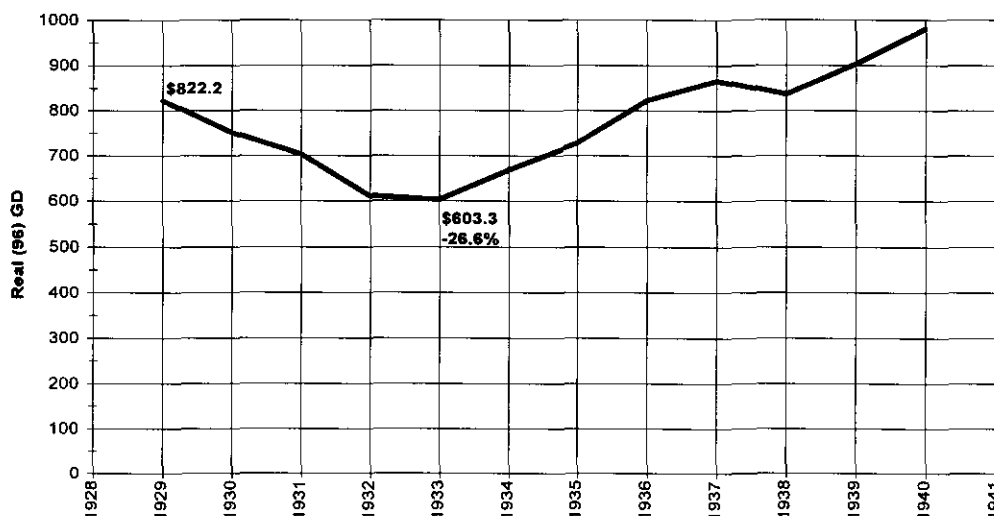
² Chained (1958) dollars.

³ Census Bureau, 135.

⁴ Dow Jones. "Dow Jones Averages." Online. Internet. 10 Feb. 2002.

Secretary Treasury Andrew Mellon announced that government would stand by as the market self-corrected, stating, "Liquidate labor, liquidate stocks, liquidate real estate...values will be adjusted, and enterprising people will pick up the wreck from less-competent people."⁵ The market did not self-correct as gross domestic product dropped \$822.2 billion in 1929 to only \$751.5 billion at the end of 1930, a decrease of approximately 8.6 percent. The unemployment rate, not to break with standard, climbed from 3.2 percent the year before to 8.7 percent.⁶ At one point in 1930, 54 percent of men aged 65 and over were unemployed and looking for work. Another quarter of this age bracket was temporarily laid off without pay.⁷

Fig 1: The Great Depression GDP Fluctuation
Source: Economic Report of the President, 2002.



One need only look to Figure 1 above to discover the rapid decline in the economic output of the United States. Having reached a relatively robust gross domestic product of \$822.2 billion in 1929, the post-market crash economy could only plummet.

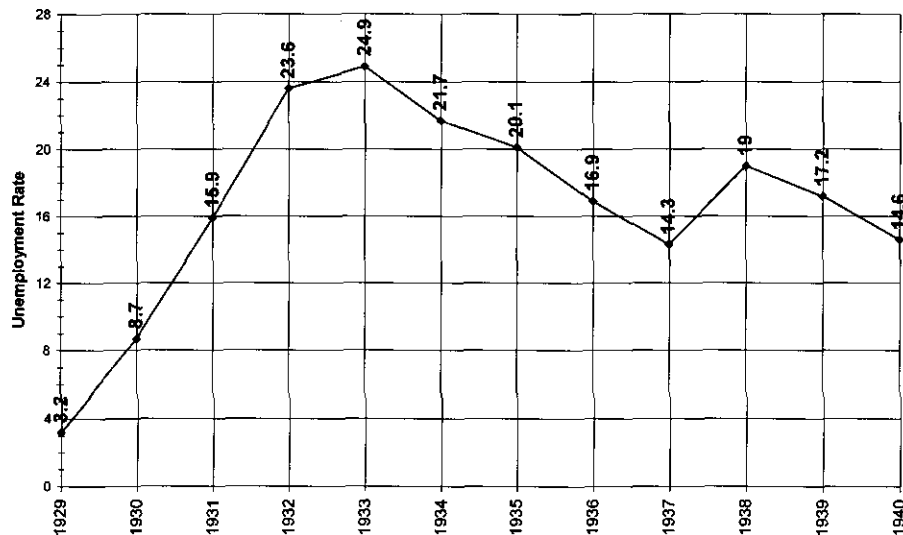
⁵ Cogley, Timothy. "Monetary Policy and the Great Crash of 1929: A Bursting Bubble or Collapsing Fundamentals?" Federal Reserve Bank of San Francisco. (26 March 1999). Online. Internet. 10 Feb. 2002.

⁶ Census Bureau, 104, 135.

⁷ United States. Economic Report of the President. (Washington: Government Printing Office, 2002), 75.

In the depths of the depression in the years 1932-1933, the economy reached a low point of \$603.3 billion, a drop of 26.6 percent from the 1929 GDP. The lowered production by the private sector meant a larger and larger proportion of workers were being left on the streets without a job.⁸

Fig 2: The Great Depression Unemployment Rate
Source: Historical Statistics of the United States, Colonial Times to 1970



The election year of 1932 saw unemployment reach a near-high 23.6 percent of the civilian labor force. Almost eleven million workers lost their jobs between 1929 and 1932, and many of these workers came to see the laissez-faire approach of the Republican Party to be inadequate in such times of need. Consequently, the Republicans under the leadership of then-President Hoover lost in a landslide to the Democratic Party. Stating in his nomination acceptance speech, "I pledge you, I pledge myself, to a new deal for the American people," Franklin Delano Roosevelt provided the nation with a new ideal.⁹ This new ideal helped Roosevelt capture an astonishing 57.4 percent of the

⁸ Census Bureau, 104.

⁹ Matlick, Rick. "FDR: Nomination Speech." Presidential Speech Archives. Online. Internet. 16 Feb. 2002.

popular vote and 472 of 531 Electoral College votes.¹⁰ Furthermore, Democrats were swept into control of the Congress.

The New Deal and Social Security

Franklin Roosevelt took office on March 4th, 1933, to a national economy in shambles. A fourth of the labor force was without work. Mortgage defaults had reached a quarter of a million the year before. Over a million Americans were without homes. Banks had failed in mass, 9,000 since 1929 and over 1,400 just the year before. Farm foreclosures, by the time of Roosevelt's inauguration, had reached the fevered pitch of approximately 20,000 per month. Something had to be done, but without a plan of action nothing could be achieved. Deciding first to attack the issue of the banking industry, Roosevelt embarked on a political mission that would save the financial industry, get millions of Americans back to work, and eventually create a system by which old-age was no longer associated with economic insecurity.

Pushing no less than 15 major bills through Congress in his first 100 days, Roosevelt quickly moved to stop the hemorrhaging economy. The day after his inauguration, he called a four-day banking holiday to provide his aides time to develop the Emergency Banking Relief Act, providing for the reopening of banks after review by examiners to ensure financial stability. It passed Congress in eight hours. A few days later, the first banks were reopened and the nation showed its faith by depositing more money than withdrawing.

Roosevelt then sought to alleviate the tremendous unemployment rate by creating a number of governmental agencies charged with the mission of sustaining and further developing the infrastructure of the nation. One such program created in 1933 was the

¹⁰ "Election Results 1932 and 1936." The New York Times. Online. Internet. 16 February 2002.

Civilian Conservation Corps (CCC). Primarily for unemployed males, this agency moved members to semi-military work camps where they would fight forest fires, maintain forest trails and roads, build flood barriers, etc. for the sum of \$30 per month, food, and medical care. Also created in this year were the Farm Credit Administration, the Federal Deposit Insurance Corporation, the Federal Emergency Relief Administration, the National Recovery Administration and the Public Works Administration. One major success of the year was the development of the Tennessee Valley Authority (TVA). It was the role of the TVA to develop a series of dams to help control the flooding that plagued much of the southeast, improve navigation of the major rivers to enable economic growth in the largely poor area, and, finally, to generate cheap electricity for the area. These actions worked, and the economy that seemed to be in a perpetual plummet began to slow its descent. The GDP decreased only 1.4 percent in 1933, and unemployment rose only slightly to 24.9 percent.

The road to recovery began for much of the nation in the initial years of the Roosevelt administration, yet the elderly and disabled still faced great hardship due to their inability to participate in much of the government-created work. Recognizing the plight of this segment of the population, President Roosevelt announced his intention to provide a program for Social Security, and soon thereafter, on June 8, 1934, he created the Committee on Economic Security. The eventual result of the research of this committee provided the foundation for the Social Security Act, signed in 1935 by Franklin Roosevelt who added, "The civilization of the past hundred years, with its

startling industrial changes, has tended more and more to make life insecure. Young people have come to wonder what would be their lot when they came to old age.”¹¹

Social Security 1935 to 1980

As may be expected with any form of legislation with such far-reaching consequences, the original act created a Social Security system somewhat different from the one we have today. The program was initially intended to act solely as a retirement fund for those workers aged 65 or older. It did not include additional money for the spouse or children, nor did it compensate the family in the event of a premature death of the worker as does the Social Security of today. Furthermore, unlike the current pay-as-you-go program (PAYGO), it was initially intended to be a fully funded program that set aside money from tax revenue, taken from both the worker and the employer, to help pay for the benefits of future retirees.

Despite the aforementioned differences, the payments soon began and modification to the law was quick to follow. Under the 1935 law, the government was required to pay benefits on a monthly basis starting in 1942. The money for retirees was needed as soon as possible, however, and to get the funds to the people, the government decided to pay a single lump-sum refund to applicants between 1937 and 1942. The first applicant for this lump-sum payment was a Cleveland motorman by the name of Ernest Ackerman, who retired one day after the beginning of Social Security program. With a single day's withholding totaling five cents, Mr. Ackerman received 17 cents in benefits.

¹¹ United States. Social Security Administration. A Brief History of Social Security (Washington: Government Printing Office, 2000), 3.

Amazingly, this payment was not the smallest ever made, rather this belongs to an individual that received a total Social Security benefit of five cents. As low as these payments are, the average lump-sum payment during this period was \$58.06.¹²

It was not long after the program began paying benefits in 1937 for Congress to recognize the need for changes. The first of these came in 1939. The amendment of this year altered the system by adding the aforementioned changes, the benefits for the spouse and minor children and survivor benefits paid to the family in the event of the premature death of the worker. It also increased the benefit amount and accelerated the start of monthly benefits from 1942 to 1940. With the program still relatively new in the 1940's, Congress saw little need to make any changes. The lack of changes may be considered surprising in light of the fact that the average Social Security retirement benefit was lower than the average benefit from the old-age welfare provisions¹³ of the Social Security Act.

The next major change came in 1950, increasing the benefit amount and setting the foundation to increase the number of eligible workers from the 50% of the workforce covered at the time. Prior to the passage of this amendment, only select workers were covered by the Social Security Act. While it did cover all workers in commerce and industry (except railroads), it did not provide benefits to such workers as regularly employed farm and domestic workers, non-farm self-employed workers, Americans working outside of the country for American companies, or even members of the

¹² Social Security Administration, 8.

¹³ The 1935 Social Security Act established a number of state-administered programs that are today considered "welfare." Among these was the Old-Age Assistance provision which provided money payments to needy individuals 65 years of age or older, regardless of their contributions through the retirement program.

uniformed services.¹⁴ The amendment was the first addition of certain worker classifications since the inception of the program, and this action would mark the beginning of additions for decades to come. The 1950 amendment also introduced the Cost-of-Living Adjustments (COLA) to the system. Prior to the change, a worker could expect to receive the same amount for the remainder of his or her life, thus failing to account for the slowly decreasing purchasing power of the dollar over time. The initial adjustment was a 77 percent increase, but future adjustments required Congress to enact special legislation. It would be 1972 before these COLAs were made automatic annually. The addition of Social Security benefits to the disabled between the ages of 50 and 65 came in a 1956 amendment. The next two years saw the minimum age for these disabled-worker benefits lowered to age 50 and the spread of these benefits to dependents. With time, the minimum age for the disabled worker's benefits was lowered to workers of any age.

The next major change came with the Social Security Amendments of 1972. The original Social Security Act provided programs for the needy aged and blind individuals, and, when combined with the addition of disabled workers in 1950, these three programs became known as the "adult categories." It was only a matter of time before the set-up that allowed states to administer the programs with federal money became an overlapping, convoluted mess that required organization. In 1971, the needed order came in the form of the Supplementary Security Income, the federalized form of the "adult categories," and its assignment to the Social Security Administration (SSA). From its

¹⁴ United States. Social Security Administration. "Old-Age Assistance." History of the Provisions of Old-Age, Survivors, and Disability Insurance. Online. Internet. 14 April 2002.

inception to the end of the 1970's, the Social Security Act received numerous alterations, yet there were even more drastic changes to come in the following two decades.¹⁵

Social Security: 1980 to Present

The Social Security program was obviously a success by the beginning of the 1980's, taking what was once one of the poorest segments of the population and lifting it from poverty, yet there were questions and difficulties on the near horizon. First among these was the problem of a short-term financial crisis. In order to head off a possible collapse of the system, President Ronald Reagan appointed a blue-ribbon panel, the Greenspan Commission, to look into the pending financial problems and provide suggestions for corrective legislation. Signed into law in 1983, these new amendments allowed for the first coverage of federal employees, began the taxation of Social Security benefits, paved the way for raising the retirement age beginning in 2000, and finally, legislated increasing the reserves in the Social Security Trust Funds. For the time being, the actions of the president and Congress kept the program solvent.

The next major changes came under the leadership of President Bill Clinton in the mid to late 1990's. The first modification came in 1996 when legislation altered the rules for qualifying for disability benefits. With America's increased focus on individual responsibility in alcoholism and/or drug addiction, the Congress passed a law stating that disability benefits are not to be granted if either of the aforementioned afflictions were a material factor in the disability. That same year came another modification. Under the guise of "welfare reform," SSI eligibility was removed for most non-citizens and the

¹⁵ United States. Social Security Administration. A Brief History of Social Security (Washington: Government Printing Office, 2000), 8-12.

eligibility rules for awarding children disability benefits tightened. The most recent change to the system resulted from the signing of "The Senior Citizens' Freedom to Work Act of 2000." Prior to the passage of this bill, those senior citizens who collected Social Security benefits while employed saw their benefits reduced under a Retirement Earnings Test (RET). The act eliminated the RET for those workers at or above the Normal Retirement Age (NRA) allowing approximately 900,000 people to enjoy full benefits despite employment.¹⁶

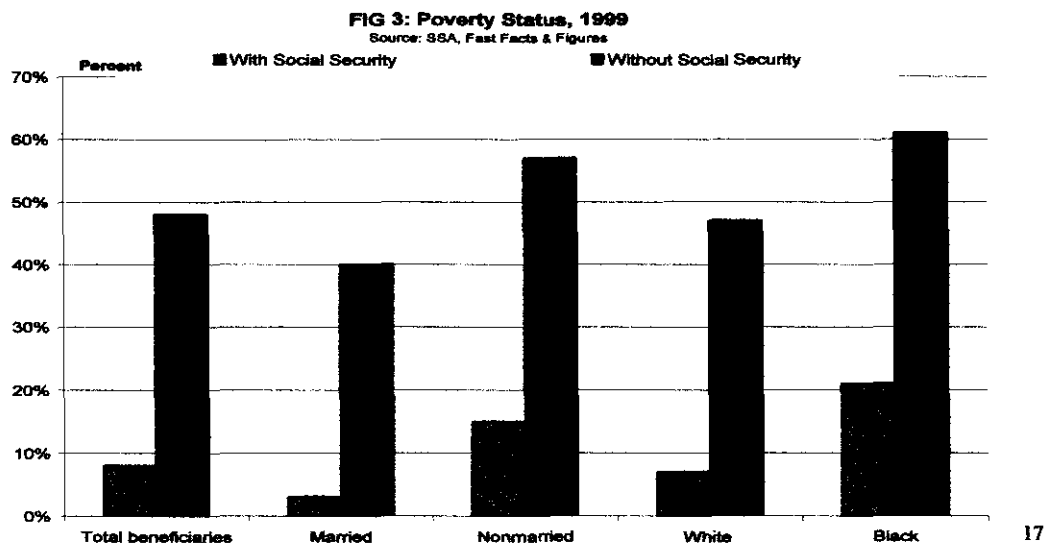
Social Security as a Success

Today, Social Security is often referred to the "third rail" of politics and for good reason. It has become an institution of our country, a basic right guaranteed to every citizen. The success of the program in raising the elderly and disabled from the grasps of poverty, as explained in the following paragraphs and shown through diagrams may be described only as astounding.

In 1962, the earliest year for which data are available, 69 percent of the elderly received income from Social Security. Since that time, the level of income and its breakdown has changed substantially. The median income of the aged in 1962 was \$15,808 for married couples and \$6,213 for a non-married person. At that time, over one-third of the aged population received income from a job in order to make ends meet. By 1999, the median income for a married elderly couple had increased to \$31,402, while the non-married made a median annual income of \$12,531. Furthermore, Social Security now goes to 90 percent of the elderly population and allows them the enjoyment of an earned retirement; only 22 percent now receive income from employment. Today, Social

¹⁶ Social Security Administration, 12-14.

Security benefits make up 50 percent or more of income for 64 percent of the aged population. Nearly a third of the aged (29%) receive 90 percent or more of their income from the benefits. Probably the most tell-tale sign that Social Security is a tremendous success is the percentage of the aged population that would be in poverty status without Social Security payments.



Despite the over threefold increase in the use of private pensions as a source of retirement income and the increased use of income from assets, without Social Security, nearly half of all elderly citizens would be below poverty level. Frighteningly, well over half of those of African-American ethnicity or those who are unmarried would live in poverty.

The Social Security Act was a move by our government to return the sense of security in old-age that the people had before the Industrial Revolution. The nation had changed, and worse, had hit hard times in the Depression. Thus for the first time, the government was required to throw off the yoke of laissez-faire policy to aid the everyday citizen and affect our daily lives. It has worked and worked beyond anyone could have

¹⁷ Data are based on family income rather than individual income to conform to official measures of poverty.

imagined, but now there is the possibility of future trouble for the program, and it is to this that we turn next.

Section 2: The Coming Problem

The recent claims of a potential crisis facing the Social Security program are not the first that the nation has heard. Many might remember the crisis of the early 1980's that required the formation of a committee to examine the situation. With a few adjustments the problem was corrected, or at least postponed, for a period of time. Fast-forward to the present and there are new cries that the program needs adjustment. Despite these claims, the Congress has yet to touch the program out of the fear of political repercussions. It seems behind every solution there is a political entity left unhappy and potentially dangerous to the politicians that cast the vote to alter this stalwart of American society. If one should even consider increasing the retirement age at an accelerated pace from the current increase¹, cut benefits, or even means-test the benefits, there is the fear the American Association of Retired Persons (AARP) would immediately bring the strength of what is considered one of the most powerful, if not the most powerful, political interest groups to bear. Every politician knows that the demographic group most likely to vote is the elderly. With the expense (or recipient) side of the equation an obvious political liability, perhaps the politician can turn towards the revenue element. This simply means increase the tax rate, thus igniting the anger of every Social Security taxpayer; that includes the employee as well as the employer. The third option, the one this chapter is meant to address, is to simply claim there is no crisis.

Why a Crisis?

The first question to answer for the skeptic is where this financial crisis comes from. Dan Crippen of the Congressional Budgeting Office identifies in testimony before

¹ Under the 1983 amendments to the Social Security Act, the age for full retirement benefits will begin to slowly increase beginning in year 2000 from 65 to 66 by 2005 and then up to 67 by 2022.

the House Committee on Ways and Means two primary causes for the projected shortfall in Social Security financing: the aging and eventual retirement of the baby-boom generation and increased life expectancy, which will lengthen the amount of time people spend in retirement.² We will discuss each of these in the following paragraphs.

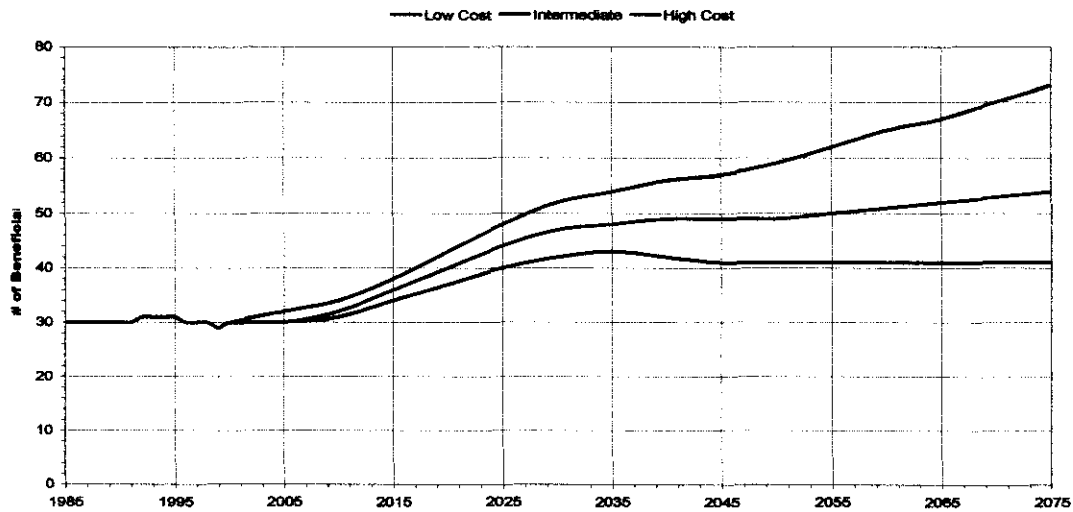
The simple fact is the population is getting older and doing so quickly. Current projections show that the population of individuals aged 65 and over will increase 101 percent between year 2000 and 2030. In this same time period, those under 65 years of age will increase only 13.9 percent.³ This has tremendous implications for the financing of Social Security. The Social Security program as a PAYGO system requires that the employees and employers of today pay through their taxes for the retirement benefits of the current aged population. Obviously, this requires that there be a relatively larger number of individuals in the workforce paying the tax than those receiving the benefits. Historically this has been the case. Since 1945, the highest number of beneficiaries per 100 covered workers has been approximately 31. This relationship may also be viewed from the perspective that at the lowest historic point, there were approximately 3.3 covered workers to each beneficiary.

Figure 4 demonstrates the upcoming problem. As the baby-boom generation retires, there will be a massive transfer of current workers to the side of retirees, thus drastically increasing the number of beneficiaries and simultaneously reducing the number of those who pay into the system.

² Crippen, Dan. "Statement of Dan L. Crippen, Director, Congressional Budget Office, on Social Security Financing before the Committee on Ways and Means, U.S. House of Representatives." CBO Testimony (9 Nov. 1999): 3.

³ United States Census Bureau. Online. Internet. 25 February 2002.

FIG 4: Beneficiaries per 100 Covered Workers
Source: 2001 Annual Report of the Board of Trustees



The high cost estimate represents a situation in which there are low fertility rates in the near future and reduced death rates. Using this estimate, we find that the number of Old-Age Survivors and Disability Insurance (OASDI) beneficiaries to every 100 covered workers is reduced from 3.4 in year 2000 to approximately 1.9 in year 2030. Granted, the high cost estimate may be a bit overblown, so let us examine the intermediate cost. It displays a decrease from 3.4 in 2000 to 2.1 in 2030. Even under the low cost estimates, using a high fertility rate and small reductions in the death rate, the ratio decreases to 2.4 beneficiaries for every 100 covered workers.⁴

Not only is the aged population growing at a rate much larger than the growth anticipated in the under age 65 brackets, but they are living much longer. In 1945, the average 65 year old male lived another 13 years and the average female another 15.4 years. By 1980, this same demographic, the 65 year old male and female, the anticipated number of additional years before death had risen to 14.7 and 18.9, respectively. As

⁴ United States. The Board of Trustees, Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. The 2001 Annual Report of the Board of Trustees of the Old-Age and Survivors Insurance and Disability Insurance Trust Funds. (Washington: Government Printing Office, 2001), 48.

Figure 5 displays, the medical advances and general increase in our health reveals that the time in retirement for the aged will only increase dramatically.

FIG 5: Cohort Life Expectancies						
Intermediate Assumptions						
Source: OASDI 2001 Report						
Calander Year	Male	Female		Calander Year	Male	Female
1990	15.6	19.2		2015	17.2	20.3
1991	15.6	19.3		2020	17.5	20.6
1992	15.7	19.3		2025	17.8	20.8
1993	15.8	19.3		2030	18.0	21.1
1994	15.8	19.4		2035	18.3	21.4
1995	15.9	19.4		2040	18.6	21.7
1996	16.0	19.4		2045	18.9	21.9
1997	16.0	19.5		2050	19.1	22.2
1998	16.1	19.5		2055	19.4	22.4
1999	16.2	19.5		2060	19.6	22.7
2000	16.2	19.6		2065	19.9	22.9
2005	16.5	19.8		2070	20.1	23.1
2010	16.9	20.0		2075	20.3	23.4

The baby-boom generation should begin reaching retirement age around the year 2010 and continue to retire in droves through 2030. Those reaching age 65 in 2010 can expect to live for another 16.9 to 20 years, gender dependent. This cohort will begin to receive full benefit at age 66 under current plans, thus they can expect to receive benefits for a full 15.9 to 19 years. By 2030, this remaining life expectancy will reach 18 years for males and 21.1 years for females.⁵

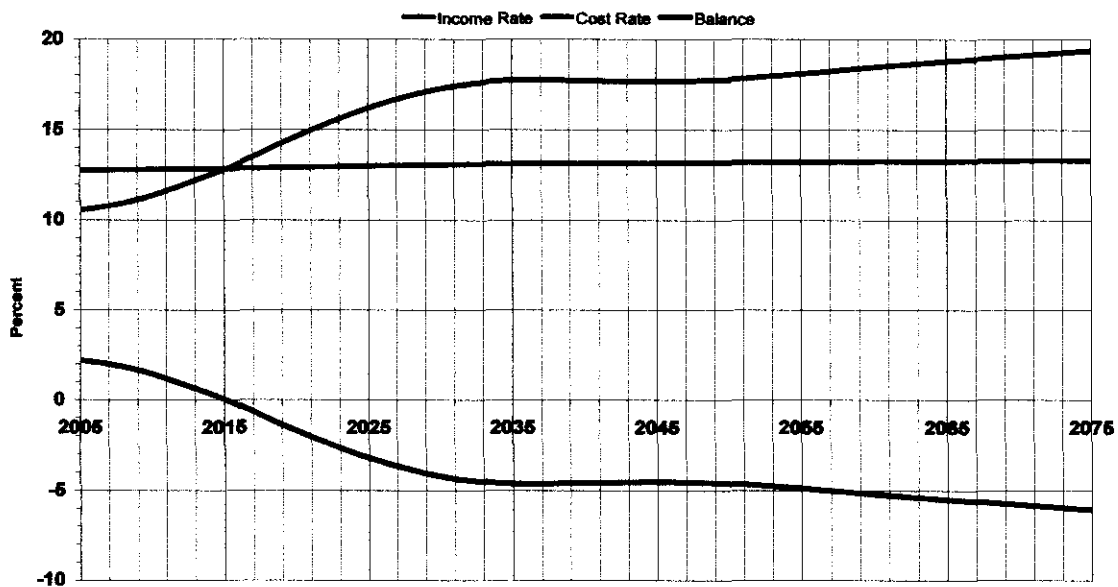
The Shortfall: Its Timing and Size

The name Social Security Trust Fund is a bit of a misnomer. Most trust funds in the private sector are comprised of money placed in the trust for safekeeping and growth, to be withdrawn at a specified time. The Social Security Fund, despite what many may believe, does not store away excess revenues to be used when they are needed. The

⁵ Board of Trustees Report, 76-77.

financial crisis of the early 1980s brought to the government's attention the need to shore-up Social Security for the future by increasing revenues to the point that there is an operating surplus. Since the changes to the program in 1983, the fund has shown a net increase at the end of the year, a net gain of 165.4 billion between 2000 and 2001 alone. However, this money does not remain in any sort of "account." Rather, it is converted into relatively low-yielding, yet financially safe, non-marketable Treasury securities. Simply put, this money is spent by the government but accounted for in IOUs from the Treasury to the Social Security Administration. Through this, one may see that there are really two benchmark years on the path to Social Security's troubles. The first of these is the year that revenues are exceeded by expenditures.

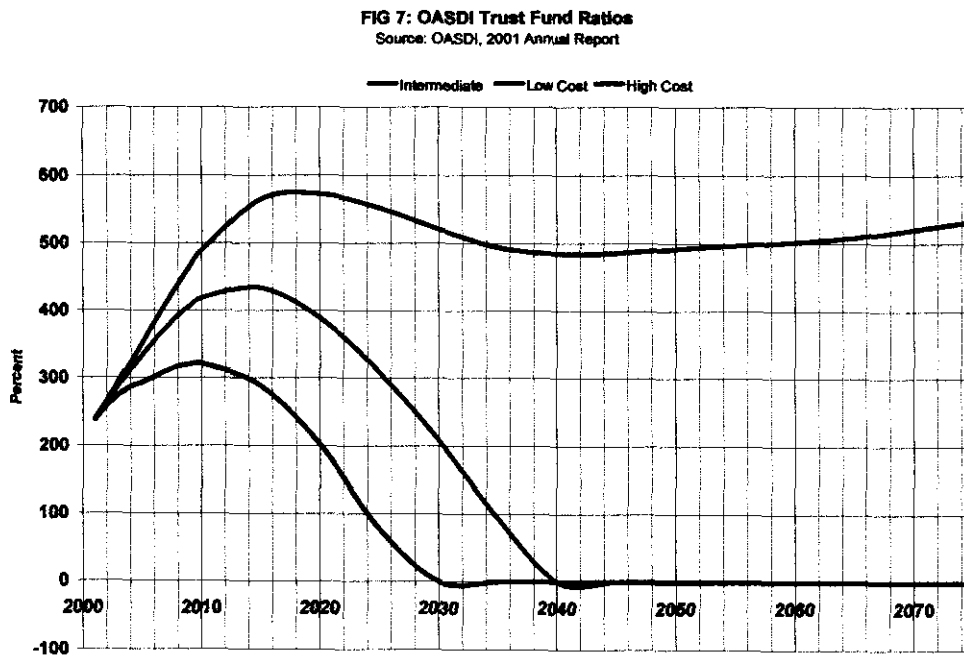
FIG 6: OASDI Income and Cost Rates
Source: OASDI, 2001 Annual Report



The above figure demonstrates the time at which OASDI expenditures are exceeded by the revenues under intermediate assumptions. For definition purposes, the annual income rate is defined by the OASDI Board of Trustees as "the ratio of income from revenues (payroll tax contributions and income from taxation of benefits) to the

OASDI taxable payroll for the year. The annual cost rate is “the ratio of the cost (or outgo, expenditures, or disbursements) of the program to the taxable payroll for the year.” The balance reveals the expected problem. Currently, projections place the 2005 balance as a percentage of taxable payroll as a positive 2.19 percent, but once one gets to the front edge of the baby-boomer retirees in 2010, this number drops to 1.46 percent. Under intermediate assumptions⁶, the balance turns negative in 2016 and continues to drop to a negative 6.05 percent by 2075. The high cost and low cost projections place the OASDI balance as going negative shortly after 2010 and in approximately 2020, respectively.

As noted earlier, there is more to the fund than just the yearly income and outgo. There is also the excess that is being placed into Treasury securities. After about 2016, the SSA will need to begin cashing in on these securities in order to maintain the full benefit payments. Figure 7 examines the tool commonly used to measure the financial



⁶ The Social Security Trustees use three different projections to present alternative scenarios. Those considered “high-cost” assumptions are the more severe projections, while “low-cost” are the more benign projections. “Intermediate” assumptions are those that the Trustees believe to be the most likely to occur.

viability of the fund. The trust fund ratio is defined as “the assets at the beginning of the year, including advance transfers (if any), expressed as a percentage of the outgo during the year.”⁷ Under the intermediate projections, the fund ratio will continue to increase from 239 percent in 2001 to a high of 436 percent at the beginning of 2014 due to the continued excess revenues from the yearly operation of OASDI. The fund ratio first heads down in 2015 because the increases in assets, both interest income and small excesses of non-interest income, begin to be outpaced by the annual cost of the program.⁸

The movement of the cost rate above the income rate in 2016 will mark the beginning of trouble for OASDI. At this point, the Social Security Trust Fund will have to begin redeeming the Treasury securities that have been accumulated over the years in order to pay full benefits to the retirees. This transfer from the general fund of the Treasury to the trust fund for Social Security may have tremendous implications on government finance. The Treasury, in order to repay the securities, will be forced to consider raising taxes, increasing deficit spending, or even defaulting on the payments. Nonetheless, the income from this maneuver will allow the program to remain in full operation until approximately 2038, when all funds will be exhausted. One may note the trust fund ratios under the other two projections. Using the high cost projection, OASDI is still able to hold on for a number of years, not being exhausted until 2027. Interestingly, the low cost projection keeps the program viable throughout the projected time period. Neither of these latter scenarios seems plausible, however, in the current national financial environment.⁹

⁷ Board of Trustees Report, 30.

⁸ Board of Trustees Report, 50-53.

⁹ Board of Trustees Report, 53.

The Old-Age Survivors and Disability Insurance program will not become extinct regardless of what the aforementioned numbers might show. It is true that the situation is not a bright one, but the program will still be able to pay approximately 75 percent of the benefits. The real question at this point is how the remaining 25 percent of the promised benefits will be paid. As it tends to be with everything, the earlier the nation gets started, the easier it will be on everyone. This leads to the following chapter, an examination of the current frontrunner for “saving” Social Security—privatization.

Section 3:

Privatization – An Analysis

As many skeptics have pointed out, the ability to project the financial health of a program as large and as complex as Social Security decades out from the present is a troublesome task, but to fail to prepare for such a shortfall could be immeasurably detrimental to the national confidence in the program. For this reason, the nation has begun to pay at least a minute amount of attention to the problem. This attention gave us the, at times, comical debate between the "lock-box" idea and the push for a partial privatization in the presidential debates of two years ago. George W. Bush won out over Gore, and for that reason alone we will turn our attention to the Bush proposal of "privatizing" Social Security.

Before we examine this case, however, I must offer the caveat that few details have been offered by the administration since that time, thus making speculation on the actual structure of the plan a necessity. What is known is that the plan calls for voluntary personal retirement accounts. These accounts will be individually controlled and invested in securities of the beneficiaries choosing. It is not explicitly stated that the beneficiary will pay the brokerage fees and other costs incurred through the work of investing, but it is probably safe to assume that these costs would be borne by the investor. This assumption comes from statements of the administration that the government would keep out of any dealings in the securities industry, hence the importance of the accounts being privately controlled. The funding for these retirement accounts would come from the return of 2 percent of the worker's payroll tax. Rationale for the 2 percent number is difficult to come by. It is obviously more politically feasible considering the relatively small size. It would also prevent tremendous losses should the market turn sour for an extended period. Some individuals note that the 2 percent stems

from the projected 75-year actuarial imbalance of a 1.86 percent of taxable payroll deficit. However, this makes little sense considering a 2 percent reduction in the taxes would only serve to increase this imbalance. Nonetheless, it was the percentage given by the Bush campaign as the amount needed to sustain current benefits without other changes.

The Proposed Advantages

On the face, privatization seems like a reasonable plan to increase the benefits experienced by retirees. Most proponents of privatization cite a historical average of approximately 7 percent return on equities over the past two hundred years. This creates a historical equity premium, the value of equities over Treasury securities (considered nearly 100 percent safe investments), that has been increasing over the time period but still averages 3.5 percent. This increase in the premium is a result of the decline in the value of bond returns as investors saw less risk in government securities as the nation developed economically, thus it is not likely that the value of bonds will drop or rise drastically for the coming century. What this means to reveal to the typical American is that you should receive higher benefits in retirement

FIG 8: Equity Premium (percent)		
Source: Peter Diamond, Massachusetts Institute of Technology		
Period	With bonds	With bills
1802-1998	3.5	5.1
1802-1870	2.2	1.9
1871-1925	2.9	3.4
1926-1998	5.2	6.7
1946-1998	6.5	7.2

if you are able to invest a portion of your OASDI taxes into the market.¹

The proposed increase in benefits is generally enough to drive many to the side of privatization proponents, but there is also the implied increase in one of those bedrock American values, the freedom of choice. The stock market of the majority of the 1990s skyrocketed in value, driving many to want to take part in the seemingly endless economic boom. While many did become involved, there were those who did not have the ability to take part for one reason or another. The idea of placing a portion of Social Security into the market enables every working individual the opportunity to take part in the boom and to ideally reap the benefits. It gives citizens the ability to choose their “retirement fate.”

Finally, there is the belief among privatization proponents that the United States savings rate would be boosted by any level of privatization. Currently, the U.S. has a historically low savings rate. This low rate provides little money for capital investment, both domestically and abroad. Without accumulation of capital, the economy may remain depressed thus preventing growth of national income and wages. If the nation were to turn to a partially privatized plan, individuals who volunteered to invest would be placing their money aside rather than immediately spending via the PAYGO system. This investment would lead hypothetically lead to wage increases which would in turn would increase the revenues gained through the payroll tax. This chain of events, proponents claim, would lead to Social Security being self-sufficient without major overhaul.²

¹ Diamond, Peter. “What Stock Market Returns to Expect for the Future?” Estimating the Real Rate of Return on Stocks Over the Long Term. (Washington: Social Security Advisory Board, 2001), 17-33.

² Burtless, Gary and Barry Bosworth. “Privatizing Social Security: The Troubling Trade-Offs.” Brookings Institute Policy Brief #14 (March 1997). Online. Internet. 22 September 2001.

The current market may have tamed some of the ideas that any and all who venture into the private sector with their OASDI retirement income will come out winners. In case the bear market has not done so, we will now look towards the numerous possible problems that may arise under such a system.

The Risks

It is often said in the field of economics that there is no free lunch. The view that privatization, in any amount, is a cure all for the financial woes that plague the Old-Age Survivors and Disability Insurance should be tempered with such a saying. The program faces a number of difficulties, ranging from financing issues, to equity issues, to questions regarding the sustainability of the past centuries' equity premium. These are the seldom-heard problems with the president's plan.

Financing

It seems like such a small amount of money, two percent. Surely, the government can afford to take this money out of the OASDI tax revenues and give it back for individual investment accounts. One must recall how the Social Security Trust Fund works. The money is not stored away for future generations to draw upon in times of need. Rather, it is spent on the current retirees and any excess is placed in Treasury securities and thus spent by the federal government in the general budget. By taking two percent of the payroll tax and giving it back, the federal government loses approximately \$20.9 billion from the budget; money that, while very little relative to the overall budget of the United States, must be made up for in some way, lest we increase our deficit

spending.³ Furthermore, a two percent decline in payroll taxes serves only to increase the rate at which the income rate discussed in an earlier section falls below the cost rate.

Currently, the program is projected to begin having problems in 2016, but a decline of two percent in the payroll tax will push that year up to 2007, nine years earlier and very, very close on the horizon. This deficit will have increased to approximately 16 percent of projected benefits by 2015. By 2035, this deficit could be as high as 37 percent.

An earlier attempt at Social Security reform proposed by Senators Bob Kerrey and Daniel Patrick Moynihan four years ago addresses this problem. They also proposed a payroll tax cut of two percent to allow for voluntary investment in the stock market. In order to fix the projected shortfalls that would result, they proposed benefit cuts, such as raising the retirement age and adjusting the COLAs, and tax increases, to include raising the Social Security wage base. These adjustments added up to approximately a 35 percent cut from the formula.⁴ By going with the proposed plan, the government will face a decrease in general fund revenues and the trust fund will face the same fate without some form of unwanted adjustment, be it on the revenue or benefit side.

Under the rubric of financing issues may also come the costs of simply running a Social Security program that offers the option between privatization and remaining with the current system. There is little doubt that the transition from one system to another will require substantial expenses in the development of the bureaucracy that will run the eventual dualistic Social Security system. Furthermore, it should be anticipated that a system under which one can voluntarily take a percentage of payroll taxes or choose to remain within the current structure will require higher administrative expenses than are

³ Calculations using the OASDI 2001 Annual Report.

⁴ Sloan, Allen, "The 40% Social Security Cut," Newsweek, 2 July 2001.

currently incurred for a single system. Estimating these administrative costs is a difficult endeavor since we have no framework yet described by the administration. We can, however, turn to international examples similar to the proposed framework and use them to attain a general idea of the concerns.

One such approach to decentralized, individual accounts is in the United Kingdom. Studies in the U.K. found that administering privately managed individual accounts may be rather costly. The U.K. currently allows individuals to choose whether they would take part in a system of privately managed, decentralized accounts and annuities. A study of this system found that “over a typical career and retirement, the current market level of charges in the U.K. would reduce the value of an individual account by roughly 45 percent relative to its value with no charges.”⁵ Obviously, such a high number could be partially the result of further intricacies of the U.K. system and could be reduced substantially based on the structure of the U.S. system, but it allows us a “ball-park figure” to move from.⁶ Market rates in the U.S. for the typical mutual fund, a popular investment mechanism for the lay investor, costs from 1 to 1.5 percent annually of the amount invested. Social Security, by contrast, experienced overhead costs of 0.7 percent of contributions in 2000.

Expected Returns on Equities

Probably the greatest incentive used by proponents for privatization are the anticipated gains by equity investments over the gains offered under the Social Security

⁵ Murthi, Mamta, J. Michael Orszag, and Peter R. Orszag. “Administrative Costs under a Decentralized Approach to Individual Accounts: Lessons from the United Kingdom.” Conference on New Ideas About Old Age Security, World Bank. September 1999.

⁶ The U.K. system does have a few major differences from what may be anticipated under the U.S. version. Namely, it did not regulate fees on individual accounts until April 2001, at which time charges were capped at 100 basis points. Secondly, the sales process is highly regulated, thus restricting competition and raising costs.

Trust Fund's non-marketable Treasury securities. The number most typically thrown out is the percentage of 7 percent returns, approximately 3.5 to 4 percent in equity premium. These same proponents tend to disregard the fact that Social Security would not have the trouble that it currently has if the economy were to continue to grow at the same rate it has in the past. Herein lies the problem with the 7 percent anticipated return: these estimates are based on the average past performance of the stock market. Despite this, the discussion to follow will reveal that the averages of past performance are a sketchy means of justifying future returns, but that they may nonetheless be fairly close to estimates.

The first issue with expected returns has to do with the volatility of the stock market. As John Campbell of Harvard University explains, the randomness of stock returns is extreme. Given an annual standard deviation of real return of 18 percent and 100 years past data, a single standard deviation above or below average could throw the average into a wild turn. A good year in which returns are two standard deviations above the average will see the overall average increase by 36 basis points. One can have over a 100 years worth of data and still see the same effect. Consequently, any projections of future benefits must consider the ability of historic averages to change relatively dramatically from year to year.⁷

The above explanation of problems arising from the use of historic average return rates may be taken further to reveal potential implications for the value of one's retirement dependent on the year of retirement. The upward and downward rollercoaster that is the stock market could leave the value of a person's retirement up to lucky timing.

⁷ Campbell, John. "Forecasting U.S. Equity Returns in the 21st Century" Estimating the Real Rate of Return on Stocks Over the Long Term. (Washington: Social Security Advisory Board, 2001), 17-33.

Take the following two illustrations of this idea as examples of this problem. Given two individuals that invest the same amount of money in the very same stocks over a forty-year period, the value at the time of retirement can be drastically different. A worker who retired in 1975 would receive less than half the real retirement income of the man who retired in 1969, despite the same investment amount, stock selection, and time in the market. The worker that retired on October 20, 1987, and purchased an annuity would receive 18 percent less in benefits than he or she would have gained had they retired in September. Granted, the proposal is for only 2 percent to be placed in the private accounts, but over the time of a workers employment, this money could reach a substantial amount. The possibility that returns on the workers investment may be independent of the investment decisions he or she made and rest solely on the time of birth and/or retirement year, even month, may undermine the basic equity goal of Social Security. As Edward Kennedy, the author from which these scenarios come states, "What will we tell him or her—'You have to keep working until the bulls return to Wall Street'?"⁸

The third and final issue that may be considered an aspect of equity returns is simply the value of those future returns. As stated earlier, proponents of privatization claim the future holds real rates of return on equities of approximately 7 percent based on the historical return on equities. The ability to forecast trends in the equity markets is a difficult task, but there do exist a few mechanisms by which one may gain a fairly strong understanding. Three analyses by John Campbell of Harvard, Peter Diamond of M.I.T.,

⁸ Kennedy, Edward. "Preserve, Protect, and Improve—Not Dismantle," in Social Security and Medicare: Individual vs. Collective Risk and Responsibility, ed. Sheila Burke, Eric Kingson, and Uwe Reinhardt (Washington: Brookings Institution Press, 2000), 127-134.

and John Shoven of Stanford suggest the use of the steady-state Gordon formula for this calculation.

The modern steady-state Gordon equity valuation model may be represented by the following formula:

$$k = \theta \frac{E}{P} + (1 - \theta) \rho$$

where k is the expected real return to equity, θ is the fraction of earnings paid out to shareholders via dividends or share repurchases, E is earnings per share, P is the current share price, and ρ is the return on equity. Firms tend to pay out anywhere between half and three-fourths of earnings in the form of dividends and net share repurchases, thus Shoven feels the use of 0.625 is a reasonable number for θ . He further states that the return on equities is approximately 8 percent, so ρ may be set at that level. This leaves the price-earnings ratio as the difficult hurdle to overcome. The current P/E ratio fluctuates around the mid-twenties, while the average historic P/E ratio of the last 75 years was 15. Thus, we may expect that average for the next 50 to 75 years will be approximately 20. Place the values into the model to get

$$k = (0.625)(0.05) + (0.375)(0.08) = 0.03125 = 0.03 = 0.06125$$

Using the modern steady-state Gordon formula and the anticipated figures we are given a long-run real return on equity of 6.125 percent, slightly lower than the purported 7 percent. However, the Social Security Trustees are anticipating a lower rate of long-run economic productivity, to the tune of 1.5 percent. To see the effects of lowered economic growth, consider a situation in which growth is reduced to 2 percent. If the economy is

growing at a slower rate, the need to retain earnings for capital investment is reduced, thus allowing firms to pay out a larger percentage of earnings to shareholders. This could likely push up θ to a level of 0.75. Redoing the math in the Gordon formula, one finds that the expected real return on stock to be reduced to 5.75 percent.⁹ All three of the economists mentioned in this section disagree with the Trustees' assessment of economic growth and support the earlier figure of a 6 to 6.5 percent real return.¹⁰

Equity

The numbers themselves, be they related to potential stock returns or to administrative costs a new dual program could incur, may not be the most controversial issues involved. Rather, this dubious honor may belong to the potential equity issues that could arise from the proposed change. As Hugh Heclo comments, "The essence of the Social Security program itself...is the priority of a common social bond with a common security package for all citizens."¹¹ The program was never designed to make anyone a millionaire. Instead, it was meant to create a shared risk and responsibility to keep even the poorest from the vicissitudes of life. Included in this intention was the belief that the better off should help the worse off as equals, not as givers and recipients. The current system does just that. It is true that the higher wage earner will receive more from Social Security upon retirement, but as a percentage of total payroll taxes over the working years, it is less than the low-wage earner will receive. If it were not for the creation of

⁹ Shoven, John. "What are Reasonable Long-Run Rates of Return to Expect on Equities" Estimating the Real Rate of Return on Stocks Over the Long Term. (Washington: Social Security Advisory Board, 2001), 17-33.

¹⁰ Campbell, John. "Forecasting U.S. Equity Returns in the 21st Century."
Diamond, Peter. "What Stock Market Returns to Expect for the Future?"

Shoven, John. "What are Reasonable Long-Run Rates of Return to Expect on Equities?"

¹¹ Heclo, Hugh. "A Political Science Perspective on Social Security Reform." Framing the Social Security Debate, (Washington: Brookings Institution Press, 1998), 67-89.

Social Security, many of these low-wage earners would not be able to enjoy the fruits of their labor, often a labor much more harsh than that the wealthy experience.

To introduce the privatization of even 2 percent of payroll taxes is to risk the possibility that we as a nation would turn our eyes from the collective framework of OASDI and look instead towards individual choice and gain. We must consider the implications should the wealthy decide that they would rather risk their 2 percent retirement in the market, likely having the financial savvy to accumulate money, than provide it as a means of collective financial security. Given the opportunity to invest, the lower income individual would surely not be able to obtain the financial advice needed to make sound investments and would thus risk a portion of their retirement to the luck of the draw. Obviously, the vast majority of these individuals would decide to remain in the “old” program, reaping lower benefits than the wealthier classes. Simultaneously, the possibility exists that the wealthier segments of the population would seek to increase the portion of payroll taxes that may be invested, using status to gain political clout. With the passage of time, we risk the possibility that the mindset of Americans will turn from the sense that we share a commitment to adequate retirement pensions for all workers. In effect, privatization may provide the opportunity for better-off workers to break from the fate of others. It may seem a bit of an alarmist scenario, but there is the reality that we are a nation that values individual responsibility and gain through hard work. In changing Social Security, we must not forget another American value—fraternity.

Final Remarks

If one listened to the news media, one would believe that the American public has largely given up on the prospects of Social Security being there for them. The alarmist fantasies of some and the complacency of others has led to a massive amount of misinformation going to a public that is confused enough trying to grasp the basic tenets of the program. The nation, rather than trying to understand, simply throws its hands in the air and wishes the whole debate away. It is boring. It is complex. It requires difficult decisions. Oh, and it is well over a decade away. This is the problem that OASDI faces, a nation that does not mind the monster under the bed.

Social Security does not face the imminent doom that many claim is in its near future. The program today is alive and well, helping approximately 4.9 million Americans last year alone. The retired and disabled are receiving their checks in the full amount earned and anticipate continuing to for some time. After all, it is the federal government that pays the money, and it has never seemed to be in trouble before. However, it does face trouble in the future should we not work to fix it soon. It is true that we have many pressing issues right now, from a crisis in the Middle East to the threat of terrorism at home. These issues of today are what grab our focus, and thus the focus of our leaders. We are a population that lives in the short-run, and this is a long-run problem, thus we do not hear enough or see enough to realize the implications of our neglect.

Regardless of the attention it may get, the problem is coming and doing so soon. As section two explained, the baby-boom generation is coming to retirement in the next few decades, and this massive flux of workers to retirees will shift the balance a little too close to the retirees. A PAYGO system simply cannot operate if the workers are too few

to support the retirees. Secondly, we are living longer and longer. Without a shift in the retirement age, beyond what is currently taking place, people will remain in retirement longer than ever before, receiving Social Security along the way.

There are problems, but they are fixable with tough decisions. The idea at the front today is the belief that "privatization" is the solution. Proponents claim that the program could potentially raise benefits for all through investment in the stock market rather than in the low-yielding Treasury securities in which the money is currently placed. If only it were so easy. It is true that there is a strong possibility the real returns would be higher than they currently are, possibly by as much as 3 percent, but the road is fraught with danger. From potentially high administrative costs to returns that could vary dependent on the month of an individual's retirement, we face the possibility that such a solution is not the clear choice many think it is.

Perhaps what we need is a reevaluation of the purpose of Social Security. The nation in the early 1930's was one facing economic hardship and doing so largely together. The disabled and the elderly could find no work, no money by which to feed themselves and their families. Recognizing this, Franklin Roosevelt proposed the idea of a public pension plan to protect the elderly from the frightful experience of old age and death. From this came Social Security. Roosevelt once stated:

"We can never insure one-hundred percent of the population against the one-hundred percent of the hazards and vicissitudes of life. But we have tried to frame a law which will give some measure of protection to the average citizen and to his family against the loss of a job and against poverty-ridden old age."

The program was never intended to make any of us rich, but rather to prevent the least fortunate among us from starvation. It is the basic idea of each and every citizen collectively looking out for one another. The ability to invest two percent of our taxes could certainly be a beneficial idea, but do we risk opening a Pandora's Box? Will we one day be able to turn our backs on our neighbors and seek only self-gain, hoping more and more of the payroll tax might be invested? These are the kind of questions we need to ask ourselves when we make the decision of solving the Social Security problem, not whether we can make a bigger buck.

"Social Security...reflects some of our deepest values – the duties we owe to our parents, the duties we owe to each other when we're differently situated in life, the duties we owe to our children and our grandchildren. Indeed, it reflects our determination to move forward across generations and across the income divides in our country, as one America."

- William J. Clinton
February 9, 1998

BIBLIOGRAPHY

- Baker, Dean and Mark Weisbrot. Social Security: The Phony Crisis. Chicago: The University of Chicago Press, 1999.
- Burtless, Gary and Barry Bosworth. "Privatizing Social Security: The Troubling Trade-Offs." Brookings Institute Policy Brief #14 (March 1997). Online. Internet. 22 September 2001.
- Campbell, John. "Forecasting U.S. Equity Returns in the 21st Century" Estimating the Real Rate of Return on Stocks Over the Long Term. Washington: Social Security Advisory Board, 2001.
- Cogley, Timothy. "Monetary Policy and the Great Crash of 1929: A Bursting Bubble or Collapsing Fundamentals?" Federal Reserve Bank of San Francisco. (26 March 1999). Online. Internet. 10 Feb. 2002.
- Crippen, Dan. "Statement of Dan L. Crippen, Director, Congressional Budget Office, on Social Security Financing before the Committee on Ways and Means, U.S. House of Representatives." CBO Testimony (9 Nov. 1999).
- Diamond, Peter. "What Stock Market Returns to Expect for the Future?" Estimating the Real Rate of Return on Stocks Over the Long Term. Washington: Social Security Advisory Board, 2001.
- "Dow Jones Averages." Dow Jones. Online. Internet. 10 Feb. 2002.
- "Election Results 1932 and 1936." The New York Times. Online. Internet. 16 February 2002.
- Framing the Social Security Debate: Values, Politics, and Economics. Ed. R. Douglas Arnold, Michael Graetz, and Alicia Munnell. Washington: Brookings Institution Press, 1998.
- Kennedy, Edward. "Preserve, Protect, and Improve—Not Dismantle," in Social Security and Medicare: Individual vs. Collective Risk and Responsibility, ed. Sheila Burke, Eric Kingson, and Uwe Reinhardt. Washington: Brookings Institution Press, 2000.
- Matlick, Rick. "FDR: Nomination Speech." Presidential Speech Archives. Online. Internet. 16 Feb. 2002.
- Mitchell, Olivia, Robert Myers, and Howard Young. Prospects for Social Security Reform. Philadelphia: University of Pennsylvania Press, 1999.

Murthi, Mamta, J. Michael Orszag, and Peter R. Orszag. "Administrative Costs under a Decentralized Approach to Individual Accounts: Lessons from the United Kingdom." Conference on New Ideas About Old Age Security, World Bank. September 1999.

Shoven, John. "What are Reasonable Long-Run Rates of Return to Expect on Equities" Estimating the Real Rate of Return on Stocks Over the Long Term. Washington: Social Security Advisory Board, 2001.

Sloan, Allen. "The 40% Social Security Cut." Newsweek, 2 July 2001.

Social Security in the 21st Century. Ed. Eric Kingson and James Schulz. New York: Oxford University Press, 1997.

United States Census Bureau. Online. Internet. 25 February 2002.

United States. Census Bureau. Historical Statistics of the United States, Colonial Times to 1970. Washington: Government Printing Office, 1975.

United States. Economic Report of the President. Washington: Government Printing Office, 2002.

United States. Social Security Administration. A Brief History of Social Security. Washington: Government Printing Office, 2000.

United States. Social Security Administration. "Old-Age Assistance." History of the Provisions of Old-Age, Survivors, and Disability Insurance. Online. Internet. 14 April 2002.

United States. The Board of Trustees, Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. The 2001 Annual Report of the Board of Trustees of the Old-Age and Survivors Insurance and Disability Insurance Trust Funds. Washington: Government Printing Office, 2001.