

**What's Right about an Old System?: Myths and Misinformation Surrounding the
U.S. Social Security System**

Teresa Ghilarducci
Department of Economics
University of Notre Dame
Notre Dame, Indiana 46556
Phone: 219-631-7581/ Fax: 219-232-3086/ Ghilarducci.1@nd.edu

For the Century Foundation collection on "New Perspectives on Economics" edited by
Jeff Madrick

June 13, 1999

Americans Lost Confidence in Social Security

One of the most startling about-faces in American politics occurred in 1994 when the sacred became unsacred. In and outside the Beltway, especially after President Nixon agreed to index benefits to inflation in 1972, the 1935 New Deal program, Social Security, was seldom challenged. Opinion polls, policy makers, and economists agreed Social Security fostered social stability, a sense of national community, served the deserving and needy, and was so popular its basic structure remained sacrosanct. Politicians only occasionally mused it could be altered; for example, President Reagan mentioned to reporters in 1982 on a Los Angeles tarmac that Social Security could be made voluntary. The public's radar screen detected and rejected this libertarian trial balloon. Time magazine declared it was President Reagan's first setback and he immediately called for a bipartisan commission – the Greenspan Commission (named after its now famous chairman, Alan Greenspan) – to solve a real financial shortfall. Social Security was going to run out of money in a matter of months.

Ironically Social Security is financially healthier than it was in 1983, but the public's view of the system is more dismal and uncertain. A 1998 poll shows that only 20% of adults expect to receive benefits at current levels (Hart, 1998). In contrast, 46% of adults surveyed in 1983 felt Social Security would have the money to pay benefits (National Commission, 1983).

Another concrete sign of political turnaround was an unprecedented split in the 50-year old Quadrennial Social Security Advisory Council's report that was released in January 1997. (The President appoints an Advisory Council every four years to review the system's finances and effectiveness and issues a partially political report. The Council contains three representatives from business, three from labor, one self-employed representative, and five members from the general public. The Social Security system's Trustees, on the other hand, issue an annual technical financial report.) This time a substantial minority of the 1994-96 Social Security Advisory Council floated the privatizing trial balloon. The Council divided between proposals to maintain the system's fundamental social insurance structure and those that carved out private individual accounts by diverting payroll tax revenues from the Social Security system. The

economists from Watson-Wyatt, a pension consulting firm, and a Washington think tank that advocates market-based solutions — the American Enterprise Institute — led the privatization group. Those advocating raising revenues and trimming benefits in order to maintain the current program were the three labor representatives and two public members, including Robert Ball, a chief spokesperson for maintaining the system and a former Social Security chief commissioner.

The Social Security debate has not been about economic and wage growth, demographics, or inflation. The two sides accept the Social Security Trustees' basic projections that the system faces a deficit in 33 years. Rather, the Social Security debate is based on political and economic ideology. On one side are organized labor, women's and civil rights groups, and organizations of the aged that favor maintaining the system as it is. They claim government's function is to insure risk by spreading it and that privatization would erode the middle-class's old age and disability insurance and a successful anti-poverty program. On the other side stand the financial industry and well-funded conservative think tanks and lobbying groups who champion individual control and self-reliance. They want to reduce government, enhance private finance markets, increase individual control, and boost work effort among the aged.

When Americans are polled over two thirds want Congress to strengthen the system's finances, while at the same time, 62% of the respondents in the same poll want money to be diverted from the system to create private accounts. Americans can't both strengthen the system and divert money away from it. Much of the seeming contradiction is based on confusion and dis-information. But the poll findings also reveal a wisdom that can't be easily dismissed. Americans want government to protect them against risk, but they also want improvement. The fact that real wages have barely risen in the last two decades, while the stock market and profits have soared, suggest that workers reasonably feel they are left out and want a piece of the action.

Furthermore, though the system is popular — evinced by the fact that most people want it strengthened — most people also underestimate the system's benefits. Over 50% cannot name any other benefit provided by the system other than conventional retirement benefits. Most Americans view Social Security as a retirement fund into which they pay benefits. Extending that idea, they think they should judge the system on its ability to

have "high rates of return," and the ability of workers to get their "money's worth." But, the comparison is wrong. Social Security is insurance not an asset with rates of return. The false comparison, which was so seductive at first because the early cohorts got much more in benefits than they paid in, laid the intellectual foundation for current privatization proposals.

Social Security is Social Insurance

The Social Security program, like most insurance programs, requires defined benefits to be paid when certain contingencies are met. For instance, fire insurance pays a defined benefit house burns. Thus, fire insurance insures against one risk of owning a home. The Social Security system insures against the risks of selling one's labor—that is of starving when you can't sell it. Without such insurance, capitalism would be less popular. Political commentator E.J. Dionne makes this point,

Social insurance was a wise admission on the part of supporters of competitive economies that citizens would take the risks such economies require only if they are provided with a degree of security against old age, unemployment, the sudden death of a spouse or the vicissitudes of health (Dionne, 1999).

Social Security actuaries estimate that the value of Social Security's disability insurance and dependent and survivor life insurance policies for a twenty-seven average-wage worker with two children is worth \$203,000 and \$295,000 (Century Foundation, 1997) respectively. In addition, the Social Security retirement benefit is an annuity indexed to inflation which is simply not affordable or available in private markets. The reason private annuities are very expensive is because people who predict they will live a long time (and insurance companies figure people know their own health status better than they do know) buy annuities — a guaranteed income for life — rather than invest in a mutual fund or bank account. People acting on better information than insurance companies is "moral hazard." Annuity companies know about moral hazard and they charge more to protect themselves against it. Furthermore, annuities indexed to inflation, like Social Security, simply do not exist in private markets.

The system now pays benefits to 30 million retired workers. Yet, 6 million younger people receive disability benefits, and another 7 million children and older

dependents of beneficiaries receive Social Security income. All these benefits are paid for by payroll taxes on current workers. Most of the benefits are determined by the amount earned and the number of years worked. Workers who retire with substantial assets are not penalized; the benefits are not means tested. In 1962, 69% of Americans over 65 received some Social Security income; in 1994, over 92% of the aged received Social Security.

The Social Security system has competing goals. Achieving most of these while lowering the costs of the tradeoffs mark a successful program. Common goals are 1.) Providing adequate benefits— even if people live a long life and in times of inflation; 2.) Ensuring horizontal equity, which means similarly situated workers receive similar benefits, is another goal; 3.) Vertical equity means that high and low income workers are treated fairly; 4.) Efficiency requires good service and low administrative costs and minimal distortion of economic decisions such as labor effort and job growth, and 5.) The system helps the economy remain stable and on a healthy growth path.

A quick run through this checklist shows that the first goal, the adequacy, has not been challenged. Social Security eliminates most old age poverty. Over eight percent of the aged are poor, half of the aged would be without Social Security. The progressive benefit structure is responsible for much of the poverty fighting success of the program. Low income workers obtain 70% of their pre-retirement earnings and higher income earners average a 25% replacement rate. Since the 1970s these rates have been constant in real terms (after adjusting for inflation). Horizontal equity is achieved since the rules are national and workers with the same work history, mortality, morbidity and marital and dependent situation receive the same benefits. Some critics cite the progressive benefit structure as a way Social Security is not vertically equitable — higher income. Those who want to convert the system to private individual accounts argue that the current system inhibits economic growth. The system is very efficient — administration costs are low — .01% of contributions — and payments are reliably sent or automatically deposited.

Although it is an insurance program, the payroll tax funding the program is called a "contribution" and what most workers get from the system are "pensions." These are the same terms used and results experienced under popular savings-account programs

like defined-contribution pension plans, for example 401(k) plans. But, Social Security, it is not a savings program. However, to most people it looks like one. Why the confusion? Ironically, the original framers intended to be ambiguous.

The Pitfalls of Mixing Metaphors

Back in 1935 politicians adopted the word "contributions" —FICA stands for the Federal Insurance Contributions Act — to describe payroll taxes. President Roosevelt said many times that the terminology was meant to protect the system, making payers act like owners (Derthick, 1979). In fact, the system flourished because an increasingly prosperous work force paid into an old age, survivors, and disability fund that could thus afford ever-increasing benefits. Current benefits to the aged and other recipients are paid from what current workers pay in a —"pay as you go," or PAYGO, designed program. (Between 1983 and 2016, workers pay into a growing trust fund, because contributions exceeded benefits, which makes the system a mixture of a PAYGO and advanced funded program.) The public was sold on a savings metaphor however. They were told that as workers/owners they got a good return on their "contributions." The metaphor of savings has obscured the system's function, blurred debate, and ironically has in the last decade done the opposite of what President Roosevelt intended. It was also promoted and extended by economists, as we shall see.

Though the metaphor is confused and stale, the 64-year-old system has kept up with the times. The system has become more universal and adaptable. It has evolved with economic prosperity and what a pluralistic democracy wanted to pay for— working class insurance and a measure of comfort at the end of a working life.

The retirement portion of the system, the old age insurance (OAI), was established in 1935, survivor's and dependent's benefits four years later, (the "S" in OASI). The industries and occupations covered extended significantly in 1950 and disability insurance (DI) was introduced in 1956. Social Security refers to the Old Age, Survivors, and Disability Insurance (OASDI) program — not Medicare. (Medicare is an important source of security to the elderly; it was implemented in 1965.) Social Security benefits were gradually raised and expanded. In 1972 and 1977, President Nixon and Congress significantly improved the system by increasing benefits by 20%, indexed

earnings used in the formulas to wage increases so replacement rates stabilized, and indexing benefits to price inflation. These valuable provisions enabled the system to compensate for economic fluctuations — such as when inflation exceeded wage growth, chronic stagflation, and, later, when real wages lagged productivity. Thus, Social Security has evolved to cover more "risks" as the risks appeared. The upgrades naturally involved an increase in payments. Taxes, or more the palatably termed "contributions," started out at 2.0% of covered payroll in 1940 (paid equally by employers and workers) and have been raised to 12.4% in 1999. (The current rate is relatively low compared to 18 to 25% payroll rates in OECD nations.)

The benefit upgrades and tax increases also explain how privatization advocates can describe the system as a system gone wrong. As the system evolved, an inescapable development haunted system advocates who took public support for granted. A maturing pay-as-you-go system means that, over time, more recipients will have paid taxes throughout their working lives. Therefore, the "return" on taxes paid in terms of benefits received falls dramatically especially in comparison to the first cohort of beneficiaries who received lifetime benefits for a few years of paying taxes. Ida Fuller, the first recipient, started collecting in 1940 after paying in for just four years and she lived to be 100 years old.

Economists grabbed on to the savings metaphor in academic attempts to explain the system to themselves. Nobel prize winner, Paul Samuelson (1958), used the rate of return metaphor to describe pay-go systems. The cottage industry of "overlapping intergeneration models" developed after Samuelson's paper showed that the worker/contributors' "rates of return" are dependent on labor force growth and productivity (assuming pay matches productivity growth) of the younger cohort. The model simply wanted to estimate what workers could pay for benefits to non-workers. But the short hand was the computation of a number that looked like an investment rate of return. Samuelson clearly wanted to show that pay-as-you-go systems could clearly work as long as labor force and productivity growth are strong. Social insurance advocates framed their arguments in Samuelson's terms to show the system was solvent. But, the rate of return metaphor is clearly wrong in describing insurance. Comparing "rates of return" on fire insurance against the Dow Jones index would be ludicrous. The

strong post-WWII economy accommodated the intellectual sloppiness.

Furthermore, the "rate of return" argument is used to pit generations against each other. Cross-country comparisons shows a positive relationship between high tax rates and large ratios of beneficiaries to the total number of workers. And, in any one nation, younger cohorts do pay more taxes for benefits received than the earliest generations did — the Ida Fullers (World Bank, 1994 and Chen and Goss, 1997). This fact about maturing PAYGO systems is used to argue that Social Security lets the "old eat the young." Americans retiring between 1960 and 1968 (those who started work at about the inception of the U.S. system) received a 12.5% "return" while individuals who are twenty years younger received a 5.9% "return."

The declining "money's worth" argument is a starting point for advocates of transforming the system into private individual accounts. The Cato Institute's web page (more about Cato later) links to a youth magazine, Rolling Stone article by its Mencken research fellow, P.J. O'Rourke, who argues for privatization by complaining that 82 year olds get a 16.5% return, 67 year olds get 1.4% and

"if we are age 24 – 62, we can expect a return of between -.034 percent and –1.7 percent, and might be better off leaving the money in our old jeans and going through the closet when we retire."(O'Rourke, 1999).

In 1994 and 1995 an Internet search for the term "Ponzi scheme" would have found hundreds of articles and op-eds linked with criticism of the Social Security. One still sees this hackneyed and overused association with Social Security's pay as you go structure with a pre-WWI schemer by the name of Charles Ponzi who paid investors he had promised would earn high returns with money collected from new batches of eager investors. Just like a "Ponzi" scheme, Social Security, critics claim, has no real assets backing the promised Social Security benefits. But the rascal Ponzi had no assets; the U.S. government and Social Security Trust fund do. In fact, the same assets the Social Security trust fund owns, U.S. Treasury securities, are the most coveted assets in the world. Not so Charles Ponzi's promises. The major asset of the Social Security system is the U.S. work force.

Is Class Warfare Going To Be Fought On Social Security Territory?

There are powerful interests who would like to see the system changed. Whether

or not these interest groups are explicitly aware of their motivations, or are generous and well meaning, does not matter, the consequences are the same. These groups still benefit from radical reform. The privatizers want to make retirement something less than an entitlement and more like a commodity. The ability to pay for that commodity will be borne by workers; if they can't accumulate enough to retire than older people will have to work longer. Employers may gain if older workers flood labor markets and keep wages subdued the financial industry gains when millions of new individual accounts are created. The contested future of Social Security system is about the contested future of retirement and the debate can't be understood without understanding retirement as a hard won victory for labor.

Social Security has expanded to cover over 90% (from 16% at its inception) in of workers by 1995, making it a universal pension system. The expansion of total coverage was not organic. Political battles and coalitions between labor (those that paid into the system) and the aged (those that got benefits) supported Social Security upgrades (Derthick, 1979). In 1999, almost all union members are covered by Social Security (except some state and local workers) and 79% of union members are covered at work by a collectively-bargained pension plan. In contrast, only 38% of nonunion workers have a pension from the employer. The retirement idea was a hard fought fringe benefit and way of life for organized labor and an integral part of their collective bargaining strategies.

The importance of Social Security as a middle class pension can also be seen from its share of middle class retirement income. Most workers are middle class and become middle class retirees, family units with \$17,000 - 29,000 (in 1990) of income per year (U.S. D.O.L. 1992; Reno, 1993). Middle class retirees received under 40% of their income from Social Security in 1980. However, because of the erosion in pension benefits and coverage, wealth, and wages, Social Security made up 60% of retirement income to this group by 1990! Though a common description of the sources of retirement income is a three-legged stool, for the middle class, the retirement income security system is a pyramid. Think of the food pyramid. Social Security is the base – the grains, employer pensions make up the middle (fruits and veggies); and individual wealth and

savings are the fats and sugars, making up the small portion at the top.¹

Privatizing Social Security is a move that diminishes the system's benefits. Unlike the vast majority of the world's workers whose nations have forced retirement at a specified age — in France it is 60, in most other OECD nations the age is close to 65 — American workers can choose to their retirement age. The uniquely American 1978 Age Discrimination Employment Act prevents disparate treatment in wages, employment, and promotion when workers are over the age of 40. Despite the ability to work, ironically, since the 1950s, male workers choose to retire and when they have sufficient retirement income (Quinn, 1979). In 1950, more than 45% of men over the age of 65 were in the labor force. By 1980, 19% of males over 65 were working or looking for work; by 1994, that percentage dropped to 16.9% (Steurele and Bakija, 1994). One of the ways post-World War II prosperity was divided between labor and capital was that workers got leisure at the end of their working lives. One way American employers can get a welcome increase in the supply of labor — which depresses wages — is if older workers do not have enough pensions and are forced to stay working.

Graph one

Longevity and Work Effort: Males Over 65 1950 - 1993

Place about here

The gap between death and retirement shows a potential labor force ready to work if other sources of income — like Social Security and pensions — are made less certain and generous. In the year 2000, approximately 4.2 million Americans over the age of 65 are expected to be in the labor force. If the labor force participation rates rise to the 1950s level because of smaller Social Security benefits the number jobs created would

¹ Social Security detractors argue the system is unfair because the FICA is regressive. High-income workers pay a smaller share of their earnings because the earnings subject to FICA tax are capped. However, the regressive structure is mitigated by the earned income tax credit, which pays a credit to workers who earn less than \$25,000 per year (Bluestone and Ghilarducci, 1997). In addition, half of Social Security benefits are subject to ordinary income tax for beneficiaries with incomes over \$25,000 and \$32,000 for couples — the clawback — paying a benefit and then taxing it — makes it somewhat proportional.

have to triple or unemployment will soar which in turn will suppress wages.

Political theory about social insurance offers two competing explanations for Social Security's existence. One possibility is that interest groups — like the Grey lobby — become more powerful in a pluralistic society and get their way at the expense of another group, for example, the young. Another explanation is that groups form coalitions around their similar class interests and support transfers between profits and wages. A variant of the class argument is that capitalists use social welfare programs, like Social Security, to quell labor unrest by paying off the working class or dividing identity groups — women, the old, the young..

Certain features of the system can be used to divide and weaken workers' support for it. The U.S. Social Security system indexes benefits to prices in order to maintain pension adequacy. However, this feature has poignant political consequences when real wage growth is negative and inflation is positive, as has occurred in the 1970s, by the 1980s and early 1990s, U.S. Social Security pensions grew faster than wages. Old people were seen as not sharing in economic decline — or rather in the decline in worker's living standards. It looked as if the old were eating the young.² Visions of hardworking, tax paying, getting-nowhere young workers serving cold drinks to greedy geezers playing golf makes the point. Ironically, the erosion of workers pay led to an attack on a workers' program. Despite this potential wedge — workers' pay was growing slower than retiree income — coalitions between labor and the elderly were formed, indicated by the voting patterns and polls around Social Security (the AFL-CIO and the American Association of Retired Persons oppose Social Security privatization) that showed that the intergenerational political base for working class programs, such as unemployment insurance, public education, and Social Security, still existed.

² In contrast real wage indexation means that the elderly share in the productivity gains of the current generation. (Austria and Mexico index pensions to wages and Japan and Germany index pensions to net-of-taxes wages, so pensioners bear the brunt of a rising tax burden.) A nation may want to spend productivity gains in ways other than keeping the elderly at the same relative position. Switzerland compromises and uses a fifty-fifty combination of wage and price growth to index pensions. Sweden is also indexing pensions by average longevity, so that the elderly will stay in the same relative position as the definition of who is old becomes stricter.

Social Security Helps Boost Savings and Stabilize Stock Markets

Another, and perhaps even stronger, "old-eat-the-young" argument, is made by the World Bank (World Bank, 1994). They make the point that PAYGO systems shift resources away from the young by inhibiting economic growth. Therefore, the World Bank argues, the effect of public pension systems on economic growth and savings is an intergenerational equity issue.

The macro-economic argument that Social Security inhibits growth is based on the assertion that the Social Security system lowers the savings rate. Since workers have a guaranteed source of retirement income, the argument goes, they are less likely to save for retirement. Since pensions are financed by taxes and not returns on accumulated savings, advocates for diminishing Social Security (Feldstein, 1996) argue that lower savings lowers investment and productivity.

However, some evidence on Social Security's effect on savings could lead to the opposite conclusions. When Social Security passed in 1935 the insurance industry argued that the new system would cause people to stop buying private annuities from the insurance industry. A year later when friendly Senators asked the industry representatives whether the insurance companies wanted legislation to make the Social Security voluntary, the industry said no. The insurance industry was thrilled with the new system. People began to plan for retirement and used the industry products when Social Security was established!

In addition, in the post WWII period, pensions emerged as a key union bargaining issue, in part, because a decent Social Security provided a floor of retirement income and planted the idea that retirement can extend to the working class. Social Security created a retirement savings motive. Further evidence to support the argument that Social Security "crowds in" savings are in one survey about people's savings attitudes. The Public Agenda Foundation and the Employee Benefit Research Institute (Farkas, 1995) found that 34% of people claim they do not save because of low earnings; 37% do not save because they underestimate what they need in retirement. The rest are split between those who plan their future and save and those who figure they will work until they die. People did not report they lowered their savings because they thought Social Security would

provide enough in retirement.

Further if people acted in accordance with the life cycle behavior model assumed by economist Martin Feldstein then savings would go up as reports of the Social Security deficit circulate. However, the opposite has happened, consumer debt is at all time high when fears over Social Security's solvency is high (Singletary and Crenshaw, 1996).

In sum, three pieces of evidence support the argument that Social Security does not inhibit savings and can even encourage more retirement savings. These are: one, historical evidence that individuals and labor unions supplement Social Security with insurance annuities and employer pensions; two, that surveys on retirement savings do not show excessive reliance on Social Security to fund planned retirement; and, three, econometric evidence on cross section and time series of individual savings behavior show no correlation between Social Security wealth and savings.

There is some evidence that workers use Social Security and mandatory pension as self-discipline devices against over-consumption and myopic financial planning. Since WWII, workers rely on collectively based, mandatory and near mandatory programs to get them to do the sensible, but not so fun, thing — defer gratification.

One way to see this is that workers, when negotiating in a group, reveal different preferences for future and current consumption than workers exhibit acting as individuals. Workers chose to save more when the whole group must save than they do when making individual and voluntary savings decisions. Union employers pay a much larger percentage of total compensation on pensions than nonunion employers. The rate of increase in unionized employers' pension expense outpaced union wage growth between 1980 and 1990.³ In the same time period, nonunion employers' pension costs fell as a share of pay while nonunion workers rate of pay outpaced union wage increases. (Employment Cost Index, various years). Social Security, can be seen as one way to boost savings by creating a retirement motive.

Pensions and Social Security could also be “arms agreement” whereby workers

³ Freeman (1981) argues that older workers have more political power in unions and therefore their preferences dominate the tradeoffs made in collective bargaining negotiations. Others argue that union employers want pensions to complete implicit contracts (Lazear, 1979) that encourage workers to invest in skill specific skills or settle contracts with least costs (Ghilarducci, 1992).

agree to hold back consumption and save by changing group norms (Frank and Cook, 1995). Therefore, Social Security and its complementary employer pension can be seen as a form of democratic, self-imposed paternalism to curb over consumption. In addition, a salubrious side-effect of PAYGO schemes, like Social Security, is a stable and calming effect on finance markets, especially compared to the long-term problems posed by advanced-funded systems with uneven demographic bulges.

Privatizers argue that the increase in the number of retirees to workers necessitate abandoning PAYGO; however, that may just the reason to have a PAYGO system. Baby boomers will start retiring in 12 years and by 2030, 100 workers will support 36 retirees, up from 21 in 1995. Privatizing advocates argue that people should save for their own retirement so that smaller generations do not have to support large retired ones. Instead, they want workers to invest their deferred consumption – rather than put it into current Social Security benefits – and sell assets when they retire. However, just as the baby boomers' demand for financial assets lifted stock and bond prices in the 1980s and 1990s, their sell-off, starting in the year 2020, will lower asset values. (Schieber and Shoven, 1994; Bensen, 1994). This de-accumulation will cause assets values to fall, potentially destabilizing markets and reducing pensions. The financial industry's response has been an expressed hope for a source of demand to buy the surplus assets in 2020-2035: perhaps, the young populations of Mexico, Brazil, and China and India (Bensen, 1994). This works if these nations have private pension systems that invest in foreign assets. This may explain why the World Bank's effort to privatize pension systems spans the globe.

Advance-funded plans work in an elaborate system where populations with different age distributions buy and sell each other's investments. The promise that growth will occur because of future buying at higher prices, ironically, is a feature of Ponzi systems. Therefore, there is a second reason, in addition to the "crowd in" reason Social Security helps boost private finance markets. Social Security, or any PAYGO system helps smooth out the demographic effects in finance markets.

Social Security also helps to diversify the retirement asset "portfolio" between assets that depend on financial markets, the financial health of one's employer or industry, and those that depend on the macro-economy. Individual accounts depend on

financial markets; employer pensions depend on the fortunes of one's particular work place and industry; Social Security is based on wages and employment.

So Social Security eliminates poverty, is the main source of middle class pensions, it is indexed to inflation, provides disability and survivors insurance, diversifies retirement wealth portfolios, and helps stabilize financial markets and increases savings. If it works well, why are there so many proposals to privatize?

The projected shortfall is not sufficiently immediate or large to explain the excitement for privatizing, in my view. The 1994 report was released at the same time the few risks of working — being too old, disabled, or unemployed— presented themselves. The 1990s have been blessed with an unusual and glittering prosperity. As I write this, inflation and unemployment rates are miniscule and the financial sector is riding an unprecedented 16-year bull market. The only risk to work was low rewards. Most workers' real wages were not increasing and the stock market was passing them by. Some have suggested workers interest in changing the system may be rooted in buyer's remorse — they wish someone would have forced them to buy stocks in the late 1980s.

The next section explores the arguments and interest groups in favor of privatization.

The Privatizers World View

Advocates Social Security privatization advance three bromides. They are the following. First, as noted, people are not getting their "money's worth" because the system is obviously outdated. Increases in longevity, the immense size of the baby boom generation, and the so-called "obvious" ability of people to work longer, make the system outdated. The implication is that the system can work if the beneficiary-to-worker ratio is 16-to-one (as it was at inception) but fails if it the ratio of workers to retirees falls to two-to-one as projected in twenty years.

In fact, the irrelevance of these ratios is the main lesson from intergenerational models. The models point out that quality, not quantity, matter. A healthy Social Security system depends on good pay and full employment which raises contributions. Diminishing either will diminish workers' standard of living. These economics points to the subtle class aspects of the debate. We saw that it is the gap between death and

retirement age that has grown immensely for men — not their increase in longevity. Reducing the gap increases the supply of labor and may soften wage growth.

The second argument for privatization is based on two faulty assumptions about economic behavior. One is that private investing is more productive than public investing, so that privatizing Social Security is good for us all. Transferring Social Security taxes from public hands to private ones will increase returns. Furthermore, it is presumed that advance-funding pensions through private accounts will increase savings and that Social Security reduces savings. Actually, as we discussed, Social Security may give Americans a motive to save for retirement because retirement is expected and within reach. Moreover, privatizing Social Security could flood financial markets with new demand for equities and subject financial markets to a new source of volatility unrelated to economics and due only to swings in the nation's age structure.

Third and last, is the idea that the trust funds do not have real assets and that the government is using Social Security money for purposes other than its intent. The argument here is that a worker would be better off directly owning and managing their own account. The next section shows that only higher income individuals will be better off with privatization because of the increased risk and costs of privatization. Individual control covers up the shrinking choices workers will actually have if they have to manage and direct private accounts.

How Privatizing Would Work.

As discussed above, the idea of making Social Security optional and voluntary, an idea first proposed in 1935, has evolved into making a portion of the system become individual private accounts (IPAs). Various proposals exist — the modern ones appeared in 1995 (Bipartisan Commission, 1995) and the latest (as of this writing), in May 1999, has been proposed by three Republican Senators and one Democrat — the Democratic privatization stalwart, Senator Robert Kerrey (D. Neb.) It would divert 2% of payroll now going into the Social Security system (2% of the 6.2%) into private individual accounts to be managed by individuals. Of course, this will put more financial pressure on Social Security system. They propose to reduce Social Security benefits principally by raising the retirement age. Individuals are assured that the increased rate of return in the

individual accounts would more than make up for the loss in benefits.

The projections depend on assumptions about the following: what the returns will be on privately traded financial assets; the typical investing patterns of certain groups; administrative fees; and the assumption that the increased flow of funds into the stock and bond markets do not cause their prices to increase and rate of return to fall.

One simulation showed that the privatizing plan advanced by the business faction of the Advisory Council raises payroll taxes 12.5% between 1998 and 2069. Spouse's benefits are cut by one third and the age at which full benefits can be collected is raised from 65 to age 69 by 2059. Furthermore, Social Security retirement benefits for those between ages 62 and 65 would be eliminated by 2012. In addition to raising the payroll tax and cutting benefits, estimates of new taxes required to pay for the transition range from 3% of payroll for the next 35 years or 1.5% for the next 72 years (Century Foundation, 1997).

Privatizing Exacerbates Inequality

Transitioning from the current system to one based on individual private individual accounts would increase the gap between higher income workers and others. The majority of workers are better off under the defined-benefit insurance structure of the current system – even if payroll taxes are raised – for several reasons. Lower and middle class workers would earn lower returns on IPAs than would higher income workers because they invest more conservatively. Despite the rhetoric that more financial education will encourage people to take more risk it also teaches that those with less to lose should take fewer risks. In addition, most workers reasonably fear they will outlive their savings and buy an annuity like current Social Security benefits (a guaranteed stream in income for life.) The problem is that in open markets annuity sellers presume that people who expect to live for a long time are more likely to buy annuities. This causes annuities to cost quite a bit. In other words, the private and voluntary annuity will be smaller than an annuity paid in a mandatory and universal system. Moreover, unlike Social Security, affordable annuities are not indexed to inflation, and small inflation rates can lead to dramatic decreases in living standards. A mild 3% annual inflation can cut real income in half in twenty years. Since women, on balance, are long lived, losing the

inflation protection hurts women more.

Raising the retirement age also increases inequality. Millions of Americans, particularly those with physically demanding jobs, are more likely to suffer health problems that will require them to retire earlier than white-collar employees (Bovbjerg, 1998). Raising the age one can collect full benefits by one year is an effective 7% decrease in benefits (Burtless, 1998). Lower income workers in blue-collar jobs will likely experience a disproportionate share of these lower benefits (General Accounting Office, 1998).

In sum, in the switch to private accounts from a PAYGO system workers lose the security of an indexed annuity and bear all the risks of financial downturns, inflation, living too long, and being disabled. Since the transition probably requires cutting benefits and raising the retirement age, blue-collar workers bear the brunt. The transition costs actually equal more than what it would take to put the current system in balance.

In addition to the high cost of the transition and the attendant increase in inequality the privatizing arguments are disturbingly inconsistent. The same assumptions that predict Social Security's financial problems doom the privatizing plan. A low GDP growth rate would negate the privatizers' claim that investing in private financial markets will yield an average return of 7%. If the economy makes privatizing attractive because of high GDP growth rates then the current system's future is rosy and not in deficit (Baker, 1997).

Martin Feldstein's, former Chair of the Council of Economic Advisors under Ronald Reagan and chief economic advisor to George W. Bush's Y2K presidential campaign, privatizing scheme is different. It does not cut benefits but it does divert the FICA tax to individual private accounts. The Feldstein plan thus costs quite a bit; yet is paid for by the presumption that economic growth will be close to 5% for many years because of the infusion of new private capital. This is trickle-down and supply-side economics redux. It is based on the neoclassical assumption that private financial capital induces private productive investment, which leads to economic growth. This belief ignores the evidence that business confidence about future profits induces investment — not the mere supply of capital — and that public and private investment is needed for economic growth.

In sum, neoclassical macroeconomics supports the immediate interests of the financial industry to bolster finance markets. Yet, the neoclassical economic argument sidesteps the political economy reality that Social Security privatization may create more focus on short-term profits than long term growth. Under a private personal account a retiree's pension depends on the stock market and not the growth in wage income. An important political split could develop that would jeopardize long term growth. Privatized, individual-based pensions could divide the interests of the working class since, in equilibrium, the returns to capital and the returns to labor can not exceed the growth rate of the economy without the other losing. Retired workers may want to slash wages and employment to boost profits, and indirectly, their pensions. If the capital market consistently outperforms the rest of the economy it represents a transfer from workers to capital.

Though the economy is not a clear winner under privatization the financial services industry clearly is. The industry has financed a multimillion campaign to lobby for the change. In 1994, the Cato Institute, a conservative think tank formed in 1972 to promote Social Security privatization, received over \$2 million from State Street Bank, Merrill Lynch (see complete list in the Appendix) to found the "Social Security Project." The industry stands to gain 130 million new accounts and manage over \$40 billion of new money each year (Kostelritz, 1995; Calmes, 1996; Cutler, 1996; Wayne, 1996).

There is No Social Security Crises

Let's return to the beginning. Calls for radical reform starts with a projected crisis. The actuaries and staff of the Social Security Administration have always projected how different scenarios — dismal, intermediate, and rosy — would affect the system. The scenarios are created by simulating what would happened to the system under different combinations of future levels of fertility, immigration, pay increases, employment, disability and retirement trends. The U.S. Social Security actuaries are unusually conservative, because they project out into 75 years, whereas most nations project out to 50 years.

The 1994 edition of the annual Social Security Trustees Report projected an unexpected future-funding shortfall, which is expressed as the difference between the

current tax rate and what the tax rate would have to be to keep the system solvent for 75 years. The predicted shortfall in 1998 has fallen to 2.17% under the intermediate assumptions. That means that an additional 1.08% of payroll would have to be paid for by employers and employees to keep the system solvent for 75 years. Workers and employers would experience a 17% increase in taxes. If nothing is done the Social Security Trust fund would be exhausted by 2034, according to the 1998 projections. But remember this is a projected problem — it is based on conservative growth assumptions — the actuaries want to be sure they are close to 100% right..

A far more serious unexpected shortfall was reported in a very different economic environment in 1982. The stock market barely beat inflation and school children learned a new economic term - stagflation. As described above, President Reagan responded by pulling back on privatizing ideas and appointed the National Commission on Social Security to maintain the system in the face of soaring inflation and unemployment. In 1983, the President and Congress approved the Greenspan Commission's recommendations to fix half of the financial balance by raising revenues and the other half by cutting benefits. Most of the benefit cuts consisted of raising the age at which workers can collect full benefits from 65 to 67 in 2027, starting gradually in 2004. The payroll tax was raised by a 42%. There was nary a peep of protest because the tax increase solved the deficit and create a substantial Trust fund for the first time. The tax increase was seen as helping a trusted and favorite program.

The 1983 reforms marked the first time benefits were cut. It also marked the first time the surplus of contributions over liabilities became significant. The 1983 reforms raised taxes far beyond what was needed to pay for current benefits. It made baby boomers partially fund their own retirement by paying more Social Security tax than required to pay current benefits. Social Security is mandatory savings. The Social Security Trust fund is now over \$600 billion with annual flows of approximately \$110 B a year. (By comparison, personal savings, in 1998, were \$260 B per year.) How does a system with a \$600 billion reserve get described as having a financial problem? One reason is that people do not think the trust fund is real. The same poll that showed most workers want Congress to fix Social Security also reveals that 61% of Americans think the trust fund is being used for purposes other than for Social Security. However, the

trust funds holds Treasury bonds — paying a rate equivalent to 7% in the open market because they are indexed to inflation and can be redeemed at any time at par. They are, however, not traded on the open market. The Social Security framers thought doing so would leave the government open to criticism for trying to alter private bond markets.

Thus, Social Security financial problem is a projected financial problem — the actual shortfall will be larger or smaller. As of 1998 the projection show the system will start spending the interest on the Trust fund assets in 2013 — this will require an outlay from taxpayers, if there is no general budget surplus. In about 2021, the system redeems the Fund's Treasury notes. This means that the system will no longer show a surplus, but will start selling the notes back to taxpayers, causing a demand on government revenues and an obligation on future politicians. The mechanisms work as they were intended, the Social Security Trust fund will act like any pension fund -- eventually selling assets to pay benefits. The Trust Fund will be worth approximately \$2.87 trillion in Treasury notes in 2018 and is projected to sell all the notes by 2032. If tax rates are not increased, or the economy and wages do not grow further, only 73% of the benefits can be paid. The Greenspan solution aimed to keep the system solvent for the next 75 years. Yet, 11 years later, in 1994, the system showed more short-fall than expected according to the intermediate scenario.

Where did the surprise deficit come from? Much of it comes from the intermediate scenario's assumption that GDP will grow about two percent over the next 30 years. The Congressional Budget Office, the Council of Economic Advisors, and many private financial firms traffic in projections — and the Social Security Trustees come in with the lowest assumed rate. They predict real wage growth to be just 1.2% a years — slower than predicted rate of productivity growth. These assumptions, of course, produce a low revenue projection. . The Congressional Budget's Office long term GDP growth forecast is 2.2% and Wall Street firms have routinely predicted over 3 – 4% growth. The so-called shortfall in Social Security is very sensitive to this assumption. For example, if the economy grew at its average rate of 2.5% during the last 20 years the Social Security shortfall is less than .7% of payroll. If long term GPP growth averages out to a high unbelievable 3.5%, there would be no projected shortfall (Baker, 1998).

One myth should be clarified, the shortfall did not come from baby-boomers. The

expert Social Security actuaries easily foresaw demographic changes. Paying for them is already figured in the tax rate and trust fund accumulation. In fact, workers have supported more dependents in the past than they ever will in the foreseeable future. In 1965 moms and the little baby boomers stayed home and went to school while one Dad supported them — then 100 workers supported 85 dependents. As discussed earlier, the peak of the baby boomers retirement in 2030, the rate will be 100 workers for just 79 dependents. That is an increase from the 1995 rate of 100 to 72.

The unexpected projected shortfall comes from wages in the 1980s simply not growing as expected — wages were expected to grow at the same rate as productivity. In other words, half of the problem would not exist if wages grew as fast as the Greenspan Commission predicted.

In sum, the Reagan Administration responded to a much worse financial problem by shoring up the basic social insurance structure. At the end of the millenium the basic structure is under attack. The systems' internal economics do not explain the wavering political support for Social Security. Rather shifts in the relative power of groups whose interests lie in the current system and those whose are advanced by mandated individual accounts are the explanation.

Advocates for maintaining the current system believe democratic governments are best able to facilitate workers obtaining insurance from the risks of work in a market society which include — superannuation, disability, leaving behind dependents after death. Advocates for privatization hold that governments can not be trusted to fund promised benefits and claim that individuals can insure themselves and do better on their own. Although privatizing an already existing social insurance system incurs new transition costs, new administrative fees to private money managers, practical accounting problems, and brand new risks. To the privatizer, the costs of private accounts are worth gaining individual control over accounts and providing new capital for private investment.

Options to Shore-Up the Current Social Security System

This section describes the price tag for maintaining the current system and many ways to close the projected deficit due to appear in 34 years. The actuaries, Congress, and

administrators have gone through similar exercises of adding and deleting benefits to cut or predict expenses. For instance, the 1998 White House Conference on Social Security asked over 200 organizations to each submit their own menu for reform. Other notable solution recipes are included in Aaron and Reischauer, 1998; Ball, 1998; The 1994-96 Advisory Committee on Social Security, 1997; and The Bipartisan Commission on Entitlements and Tax Reform, 1995). The solutions usually contain ways to trim benefits and raise revenues within the current rules and traditions of the system. There are many options and they can be linked together to make the projected Social Security balance sheet solvent for 75 years. One will see that the solutions are rather mundane, which is part of the problem. Fixing the system this way offers less obvious opportunities for ideological reflection. No wonder the privatizers have gotten some attention and the idea that everyone should have access to the stock market — even if they are forced to through private account.

Some Social Security advocates have ventured out of the bounds of the traditional Social Security system with an adventuresome reform idea that starts from the observation (that the nation's better-off households obtain a substantial amount of income from non-labor sources — capital gains and interest income. Non-wage and salary income accounts for most of the new wealth in the last ten years. For instance, a broad index of the value of equities — the S&P 500 — increased over 75% in the last three years, whereas people who sold labor got wage increases just over 6%). Stock options are not included in the Social Security base because they are unrealized and go to people making other the earnings cap. If workers earning \$25,000 in 1994 got the same increases as the top management they would be earning \$138,350 in 1999. The median pay for CEOs was over \$2 million (including stock options the average pay is \$10 million) (Business Week, 1999). The Social Security system views Disney's chairman, Michael Eisner as a \$72,600 a-year-man (the earnings cap in 1999) though he makes \$5.8 million in salary and over one-half billion (in 1999) in total pay. (He pays 1.45% of all \$5.8 million for Medicare).

The progressive era's anti-trust legislation and social reform was based on such observations that the Rockefellers paid tax on an assessed value of \$10,000 even though their property was worth over \$5 million. If we lifted the cap completely for OASDI

purposes (as we do for HI) and taxed all earnings and non labor all Social Security projected deficits would disappear problems with money left over to improve benefits. Easy money, no? The oft-cited drawback is that Eisner (and others), would get a tiny amount of Social Security from the enormous premiums and their "money's worth" would fall to zip. This, it is argued, would reduce the top-paid workers support for the system. However, 75% of National Association of Manufactures (one of the few polls of corporate thinking on Social Security privatization) executives polled want privatized accounts anyway. We lose their support but save the system. Upper-middle-income workers would experience a reduced "return" on premiums — 12% or so of male workers make over the cap and below \$110,000. Would they not support the system? Does their support matter? We haven't voted on it; it hasn't been proposed, and it's barely discussed.

As discussed above, the projected deficit is expressed as a percentage of payroll that needs to be collected to keep the system sound for 75 years (in other words, if our time horizon was, say 33 years, there would be no deficit.) These numbers will change dramatically if work effort, immigration, and economic growth change. Two-thirds of the Social Security deficit is caused by a GDP growth assumption of 2%, and not 2.5% in the next 75 years.

The Advisory Council's labor representatives proposed to a.) raise payroll taxes by 1.6% points from 12.4% to 14%, far off in the future, in 2045; b.) put up to 40% of the Trust Fund in the stock market by year 2014 (this solves half of the deficit); c.) compute benefits on the basis of 38 years of earnings rather than 35 years (this lowers benefits); and d.) bring in the approximately 20% of state and local government workers not covered by the system. However, women's groups oppose the lengthening of the computation period because it disproportionately affects women by lowering benefits for people with shorter work histories and who live longer. The stock market investments pose other risks, and including state and local workers would disrupt their own plans. In the appendix I have assembled some of the most popular options to amend Social Security and have ranked them by desirability. I chose the proposals that achieve solvency with the least cost, disruption, and inefficiency.

Another source of options are included in Aaron and Reischauer. Their options adhere to the standard list of social insurance criteria: providing adequate income and

insurance from financial, longevity, and other economic risks, ensuring horizontal and vertical equity, minimizing administrative costs, and promoting economic growth. Personal Savings Accounts get the low grade of a "C ." USA-type plans proposed by President Clinton in the 1999 State of the Union Address mandates individual accounts on top of Social Security get a grade of "B. " The acceptable "B" grade is given to a variant of the labor plan outlined above, the Ball plan named after Former Commissioner and Council member Robert Ball, gets a "B." Aaron and Reischauer call for raising spouse's benefits to help reduce poverty among older women, a speed-up in the raising the age at which full benefits can be collected to 67 in 2011, instead of 2031. They propose further benefit cuts by making the initial age of eligibility 64 rather than 62, cover state and local employees, increase the computation period from 35 to 38, tax more benefits and invest some of the trust fund in stocks and bonds to boost the return. You'll see in the appendix I oppose raising the retirement age without at least some accommodation to blue collar workers and trying other revenue sources.

The proposals are practically infinite and the exposition of the details should not cause the larger picture to blur. The Social Security system as we know it is affordable and fixable. The drive for privatizing is strengthened by a commonplace perception that graying demographics and government chicanery will bust the system and that financial markets can deliver personal control and fortune.

Conclusion: Privatizations Winners and Losers

Well-meaning people advocate privatizing the Social Security system — the promise and ideology of personal control and protection against government motivate many reformers. But most voters are practical and a practical sorting of winners and losers in the various reforms helps us understand the debate. The financial industry clearly wins from privatizing Social Security — both directly by providing new accounts and indirectly by pumping in more money in their markets and more trades. Most workers lose — they lose directly by taking on more risk and on average, getting lower benefits. Workers lose indirectly when support for high employment and healthy wages diminish. Jose Pinera, Cato Institute member and architect of the Chilean privatization under General Pinochet, identified the valuable — from the junta's point of view —

merging of working class interests with capitalists' interests when he announced the privatization. Pinera said

Finally, in making every worker an owner, the reform compromises him actively in the responsible management of the economy and in the search of political stability and social peace. Just as with the Labor Plan, we have the certainty of giving another mortal blast to the politicization of social life and to Marxism, and particularly to poverty and injustice. (Pinera, 1988)

Employers can be said to represent the productive or “real” sector. They have remained on the sidelines of the debate (a poll of top CEO's, though, supported privatization by a factor of three 3 to one.) Some employers have expressed worries that privatization would cause their pension costs to rise (England, 1999).

Besides assessing winners and losers, political economy analyses have bottom lines. If the system goes on the way it has, with no reduction in benefits, how much will it cost?" The answer is 6.6% of GDP in 2040, up from 4.78% of GDP in 1993 (Steuerle and Bakija, 1994, p. 50). Is that too much?

The current system efficiently pays for what most workers want —leisure at the end of their lives and insurance from not being able to work. The system also most likely induces savings and economic growth. Is 6.6% of GDP too much to pay for all of that? Economists can't answer that, thank goodness. In a democracy, voters do.

APPENDIX

Below are the 1.) Best, 2.) Acceptable, 3.) Unacceptable, and 4.) Diversionary options to solve the 2.19% of payroll deficit in Social Security's 75-year forecast.

Menu of Proposals to Maintain the System	
	Percent of Deficit Solved
A. The Best Options	
Eliminate cap on employer contributions to cover 90% of all income (cap goes to \$97,000 from \$68,400)	25%
Raise payroll tax by .04% per year while indexing the earned income tax credit	64%
Use the CBO projections on growth (SSA uses a 2.0% growth assumption the CBO uses 2.3%)	33%
B. Acceptable Options	
Correct CPI by BLS criteria (impacts long livers)	14%
Give Social Security revenue to Social Security – now it goes to the Hospital Insurance (hurts Medicare)	10%
Raise normal retirement age to 67 in 2011 only if disability criteria is loosened to include sector unemployment (this costs .004%)	22%
C. Unacceptable Options — They violate fairness, portfolio diversity and efficiency criteria	
Privatization is too costly, disruptive, and violates diversity	N/A
Shifting 40% of trust funds out of government bonds to stocks by 2014 (this puts too much of retirement income assets in the financial markets.)	12%
D. Diversionary Options, not worth the fight or too vague	
Extend Coverage to state and local employees	10%
Divert the federal budget surplus to Social Security (too vague – the surpluses might not materialize)	64%
Tax all unearned income (capital gains and interest). (This will invite class warfare and moves away from the pension- for-work model.)	145%

I depended to a great extent on my own papers and Congressional testimonies and on Dean Baker's calculation of the revenue contribution of surpluses and tax increases in his latest Economic Policy Institute paper "Saving Social Security in Three Steps" (Nov. 1998); The Report of the 1994-95 Advisory Council on Social Security; the Bipartisan Commission Final Report on Entitlement and Tax Reform, 1995, Robert Ball's many communications, and estimates about the revenue impact on taxing unearned income comes from the AFL-CIO in Washington DC.

Resources:

- Aaron, Henry and Robert Reischauer. Countdown to Reform The Century Foundation: New York. 1998.
- Ball, Robert. Social Security Plus. & Straight Talk on Social Security The Century Foundation: New York. 1998.
- Baker, Dean. 1997) "Saving Social Security in Three Steps," Economic Policy Institute Briefing Paper, Washington, DC. December 1998.
- Baker, Dean. "Saving Social Security with the Stock Market," Twentieth Century Fund/Economic Policy Institute report, Economic Policy Institute, 1660 L St. NW, Washington DC. 20036. 1997
- Bensman, Miriam. "The Baby Boomer Boomerang." Institutional Investor, September 1994, 53-56.
- Bluestone, Barry, and Teresa Ghilarducci. Making Work Pay Jerome Levy Institute at Bard College, Annadale on the Hudson, NY. 1998
- Bipartisan Commission on Entitlement and Tax Reform, Final Report to the President J. Robert Kerrey and John C. Danforth, Washington DC, January 1995
- Boeker, P. H. "Developing Strong Capital Markets: Contrasting Latin American and East Asian Experiences," Inter-American Development Bank. 1995
- Bovbjerg, Barbara; Associate Director Income Security Issues, Health, Education, And Human Services Division, Statement Prepared, Before the Senate Committee On Aging, July 16, 1998.
- Burtless, Gary. 1998) Testimony at the U.S. Senate, Special Committee on Aging, July 16, 1998.
- Calmes, Jackie. "Wall Street Quietly Promotes Social Security Overhaul" The Wall Street Journal. December 3, 1996. p. a22,
- Cato Institute Web Page. Washington Dc URL site [http//www. socialsecurity.org](http://www.socialsecurity.org)
- Century Foundation (formerly Twentieth Century Fund), New York.. URL site [http//www. socser.org](http://www.socser.org)
- Chen, Yung-Ping and Stephen Goss, "Are Returns On Payroll Taxes Fair?" in Kingson and Schultz editors. 76 - 90. 1996
- Derthick, Martha. 1979. "Policy Making for Social Security, Washington D.C., Brookings

Institution.

Cutler, Joyce. "Unions Urged to Withhold Pension Funds From Wall Street, Fight for Social Security." Labor Relations Week. Bureau of National Affairs. Vol. 10, November 27, 1996, 1176 - 1177.

Dionne, E.J. "Why Social Insurance?" National Academy of Social Insurance, Social Security Brief, no. 6, March 1999, p.1.

Eisner, Robert.. "Social Security: More, Not Less." The Century Foundation: New York. 1998.

England, Robert Stowe. 1999. "Joined at the Hip" Pension Sponsor May. P 36-44.

Farkas, Stephen. Promises to Keep: How Leaders and the Public Respond to Saving and Retirement. A report from the Public Agenda in collaboration with Employee Benefit Research Institute, Public Agenda. Washington D.C. 1994.

Feldstein, Michael. The Missing Piece in Policy Analysis: Social Security Reform. Cambridge, Mass., NBER. 1996.

Frank, Robert and Phil Cook. Winner Take All Society New York, New York , Free Press, 1995.

Freeman, Richard. "Unions and Fringe Benefits" Industrial and Labor Relations Review. 1981

Ghilarducci , Teresa. "Do the Old Eat the Young?: Intergenerational Equity and Public Pensions" presented at the Second International Research Conference on Social Security. "Summing up the evidence: The Impact of Incentives and Targeting in Social Security sponsored by the International Social Security Association: ILO AISS-ISSA-IVSS Jerusalem, 25-28 January 1998

Ghilarducci , Teresa. Labor's Capital: the Economics and Politics of Private Pensions. Cambridge, Ma., MIT Press. 1992.

Hart (Peter D.) Research Associates, inc. 1998 "American View the Social Security Debate" Washington DC. .

Joint Committee on Taxation, Analysis of Issues Pertaining to Social Security Individual Accounts (JCX-14-99), March 15, 1999

Kostelritz, Julie. "Touching the Rail" National Journal . December 23, 1995.

Lazear, Edward. "Agency, Earnings Profiles, Productivity and Hours Restrictions." American Economics Review 71 1980. 606-619

National Commission, Report of 1983. Statement (7) p. 5. U.S. Government Printing Office, Washington DC, 20402, 0396-938, January.

New York Times, " Social Security" a Business Week ad quoting from its November 21 editorial, Nov. 21 1998,

O'Rourke, PJ. "The Great Ponzi Scheme Rescue Act of 1999" Rolling Stone Magazine April 15, 1999 (also See Cato web site

Piñera, J. (1988) "Discurso del Ministro de Trabajo y Previsión Social, con Motivo de la Aprobación de la Reforma Previsional", (Radio and TV speech. November 6, 1980). In *Sistema Privado de Pensiones en Chile*, ed. S. Baeza and R. Manubens, pp. 319-338, Centro de Estudios Públicos, Santiago.

Pampel, Fred and John Williamson, Old Age Security in Comparative Perspective, New York, Oxford University Press. 1993

Quinn, Joseph. "Microeconomics Determinants of Early Retirement: A cross-sectional View of White Married Males." Journal of Human Resources 12(3) 1977. 329-346.

Reno, Virginia P. "The Role of Pensions in Retirement Income," Pensions in a Changing Economy. Employee Benefits Research Institute. Washington D.C. 1993.

Samuelson, Paul. "An Exact Consumption-Loan Model of Interest with or without the Social Contrivance of Money." *Journal of Political Economy*, Vol. 66, No. 6 (1958), pp. 467-482 1958.

Schieber, Sylvester J, and John B. Shoven. "The Consequences of Population Aging on Private Pension Fund, Saving and Asset Markets" Prepared for the NBER-JCER joint conference, The Economics of Aging, September 14-16, at Hakone, Japan, NBER Working paper series no. 4665. Cambridge, Ma, National Bureau of Economic Research. 1994

Singletary, Michelle and Albert B. Crenshaw. "When Credit is Due" Washington Post Weekly Edition, December 2-8, 1996.

Steurele, Eugene and Jon, Bakija Retooling Social Security for the 20th Century. Washington D.C., The Urban Institute, 1995.

Tritch, Teresa. "The Privatization of Social Security: Who Wins and Who Loses?" Money, April 1996, 119 - 122.

U.S. Department of Labor, Pension and Welfare Benefits Administration, Trends in Pensions, 1992.

Wayne, Leslie. "Interest Groups Prepare for Huge Fight for Social Security" New York Times Dec. 30, 1996. A9.

Wolfson, , Michael and Brian Murphy. "Aging and Canada's Public Sector" in Banting and Boadway, editors. 69 - 98. (1996)

World Bank, Averting the Old Age Crises. Oxford, Oxford University Press, 1994.