

GAO

Report to the Ranking Minority Member,
Subcommittee on Social Security,
Committee on Ways and Means, House
of Representatives

December 1997

SOCIAL SECURITY REFORM

Implications for Women's Retirement Income





**United States
General Accounting Office
Washington, D.C. 20548**

**Health, Education, and
Human Services Division**

B-276168

December 31, 1997

The Honorable Barbara Kennelly
Ranking Minority Member
Subcommittee on Social Security
Committee on Ways and Means
House of Representatives

Dear Ms. Kennelly:

Increasing longevity and falling birth rates over the past 50 years have led to a growth in the elderly's share of the U.S. population. The share that is 65 and older is expected to continue to increase from 13 percent of the total U.S. population today to 20 percent by 2050. This demographic change has led to a serious long-term financing problem for the Social Security system. Although Social Security currently has more revenue than expenditures, over the next 75 years revenues are projected to be about 14 percent less than total projected expenditures.

Several different reform plans have been proposed to address the financing problem, and all would affect the financial well-being of current and future beneficiaries. Some current beneficiaries, especially older unmarried women, are already experiencing higher poverty rates than other groups in the aged population and may be increasingly vulnerable if particular options are selected.

On April 10, 1997, we testified before the House Ways and Means Subcommittee on Social Security on the issue of Social Security reform and women's retirement income. Subsequently, you asked us to extend our analysis of the effect of the various reform proposals on women. Specifically, you asked us to evaluate (1) why women's benefits are lower than men's under the current Social Security system, (2) the possible differential effects on women of the new privatization reform proposals, and (3) what can be done to minimize the possibly negative effect on women of certain elements of the Social Security reform proposals.

To evaluate these issues, we reviewed the literature on women's labor force participation and earnings, spoke with Social Security and insurance industry analysts, analyzed data on individual annuity benefits for men and women, and conducted an econometric analysis to estimate the relative levels of risk aversion of men and women. We performed our work between April and October 1997 in accordance with generally accepted

government auditing standards. For more details about our methodology, see appendix I.

Results in Brief

Women's average Social Security benefits are currently lower than men's for a number of reasons, most of which relate to women's lower rates of labor force participation and lower earnings levels.¹ Both years of earnings and earnings levels enter into the calculation of Social Security benefits. Although the labor market differences between men and women have narrowed over time, the Bureau of Labor Statistics does not project that they will disappear entirely, even in the long term.

The reform proposals that would create individual private savings accounts and change the way benefits would be distributed from those accounts are the most likely to affect women and men differently. A retirement income system that is based in large part on mandatory contributions of a fixed percentage of earnings and on individuals' making their own investment decisions could lead to women's receiving relatively lower benefits than men. Working women earn less than men, on average, and therefore would have fewer funds to invest in their individual accounts. Researchers have found that women in general are more risk-averse investors than men. Our analysis of women in their prime earning and saving years suggests that they are less likely than men to invest in potentially higher yielding, though riskier, assets such as stocks, which would generally leave them at risk of having accumulated relatively less in their accounts at retirement. Moreover, even if men and women enter retirement with equal amounts in their individual accounts, women may receive a lower monthly benefit if they buy an individual annuity—a monthly benefit for the life of the worker or the worker and a spouse—because it is adjusted for their greater longevity.

Changes over time in women's labor force behavior and experience are projected to reduce, but not completely eliminate, the differences in men's and women's labor force participation rates and earnings. Thus, any reform of the system that bases benefits on earnings will continue to produce different benefit levels for men and women. If a reformed Social Security system were to rely largely on individual investments, better education about investment strategies and general financial principles might help women workers increase their retirement benefits. In addition, requiring that retirement savings be annuitized would better protect

¹The rate of labor force participation is defined as the percentage of all women aged 16 and older who are working or actively seeking employment.

dependent spouses. Finally, annuities purchased with individual account balances might give rise to differential benefit levels for men and women with the same level of lifetime earnings because women are charged higher annuity prices, based on their longer average lifespan. One possible option for addressing this concern is the use of the same unisex annuity tables that are currently required for employer-provided group annuities.

Background

Social Security is a retirement income program whose benefits are based, in part, on an individual's earnings. Social Security is also gender-neutral—that is, a man and a woman whose labor force participation and earnings are identical, in terms of both extent and timing, will receive the exact same Social Security benefit. When calculating actual benefits, Social Security employs a progressive benefit formula that replaces a relatively larger portion of lifetime earnings for people with low earnings than for people with high earnings. Because women tend to have lower lifetime taxable earnings than men, they generally benefit from this provision.² The program also provides benefits to retirees' dependents (such as spouses, ex-spouses, children, and survivors).³ Many more women than men receive dependent benefits as spouses or survivors. Unlike some pension benefits, these benefits are automatic for all eligible dependents and do not depend on the worker's electing to include them. In general, a retired worker's spouse who is not entitled to benefits under his or her own work record will receive a benefit up to as much as 50 percent of the retired worker's benefit, and a surviving spouse will receive up to as much as 100 percent of the deceased worker's benefit.⁴ A spouse's receiving dependent benefits does not reduce the size of the worker's own benefit.

Social Security has helped reduce poverty rates for the elderly, from 35 percent in 1959 to less than 11 percent in 1996. Nevertheless, some subgroups of the elderly population are at a greater risk of living in poverty than others. Unmarried women make up more than 70 percent of poor elderly households, although they constitute only 45 percent of all elderly households. Single, divorced, and widowed women aged 65 or older have a poverty rate of 22 percent, compared with 15 percent for

²Taxable earnings are earnings on which Social Security taxes are paid.

³The program also provides benefits for disabled workers and their dependents.

⁴A spouse or survivor who is entitled to benefits on his or her own work record and on the record of a spouse (dually entitled) receives his or her own retired-worker benefit or the spouse or survivor benefit, whichever is higher.

unmarried men and 5 percent for married couples older than 65.⁵ In addition, some researchers expect the current level of poverty among widows to persist over the next 20 years because there will still be a substantial number of women with a history of low earnings and intermittent labor force attachment whose own worker benefit will not be greater than their widow's benefit.

In part, because of the anticipated increase in the size of the elderly population and the growing proportion of the total population that the elderly will constitute over the next 33 years, Social Security's trust funds are projected to be depleted by 2029. A number of proposals have emerged to resolve this difficulty, with a great deal of variety in terms of both how the Social Security program would be structured and who would be eligible for benefits. Appendix II summarizes the key features of the major proposals.

Among the various proposals for restoring long-term financial balance to the Social Security system are several that call for some degree of privatization.⁶ Some of these privatization proposals would redesign the Social Security system, patterning it, in part, after some private sector pension plans, such as 401(k) plans. Under such a system, a portion of workers' Social Security taxes would be deposited in an investment account that they would then control. By investing in stocks or other assets, workers could increase their retirement savings and potentially increase their retirement benefits. However, they could also lose some portion of their savings for retirement if, for example, stock prices fell. While the data indicate that the U.S. stock market has historically outperformed the implicit return expected from Social Security for today's and future retirees, there is always a risk of loss. The uncertainty of market gains or losses would be borne by the individual, and the individual's retirement income would not be guaranteed by the government as it currently is under Social Security.⁷

Retirees could use the payout from individual accounts to buy an annuity, or they could receive a lump-sum distribution of the accumulated savings to manage or spend as they saw fit. In most cases, an annuity lasts for the

⁵Data are from the U.S. Bureau of the Census and Susan Grad, *Income of the Population 55 or Older, 1994* (Washington, D.C.: Social Security Administration, Office of Research and Statistics, 1996).

⁶Elements of other proposals that would affect women particularly are discussed later in this report.

⁷In addition to worker's benefits, people receive benefits as spouses or survivors. Issues related to the provision of dependent benefits under the privatization proposals are discussed below under "Costs of and Rules on Annuitization and the Effect on Women's Benefits" and "Other Proposed Changes Could Differentially Affect Women."

life of the recipient, removing the risk that retirees will outlive their savings. With a lump sum, retirees may make other choices about the distribution of their assets, including, at their death, bequeathing any remaining funds to their heirs.

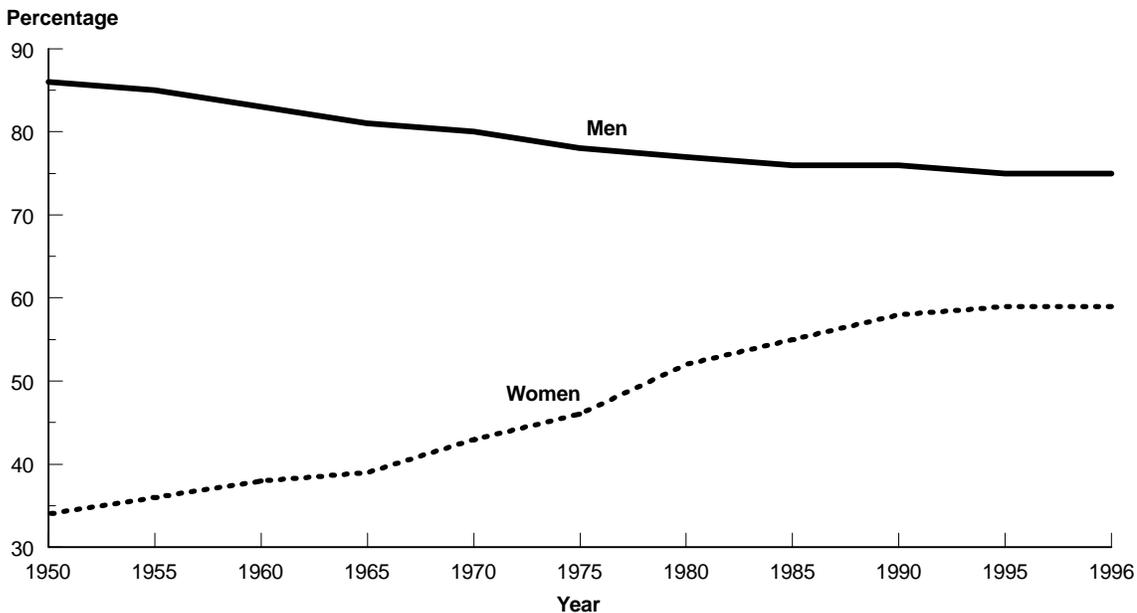
Women's Benefits Differ From Men's Because of Labor Market Differences

Women's Social Security benefits are currently lower, on average, than men's because their labor force participation rates and earnings are lower. These gaps are narrower than in past years yet still large enough to affect retirement income benefits. The gaps are not expected to disappear entirely, even in the long term.

Labor Force Attachment and Earnings Differ for Men and Women

Women's labor force participation rates continue to be lower than men's at every age, despite substantial increases in women's rates in the past 35 years. On average, the labor force participation rate for women aged 16 and older in 1996 was 59 percent, compared with 75 percent for men. As seen in figure 1, this represents a significant increase for women from 35 years ago, when their labor force participation rate was only 38 percent, compared with 83 percent for men.

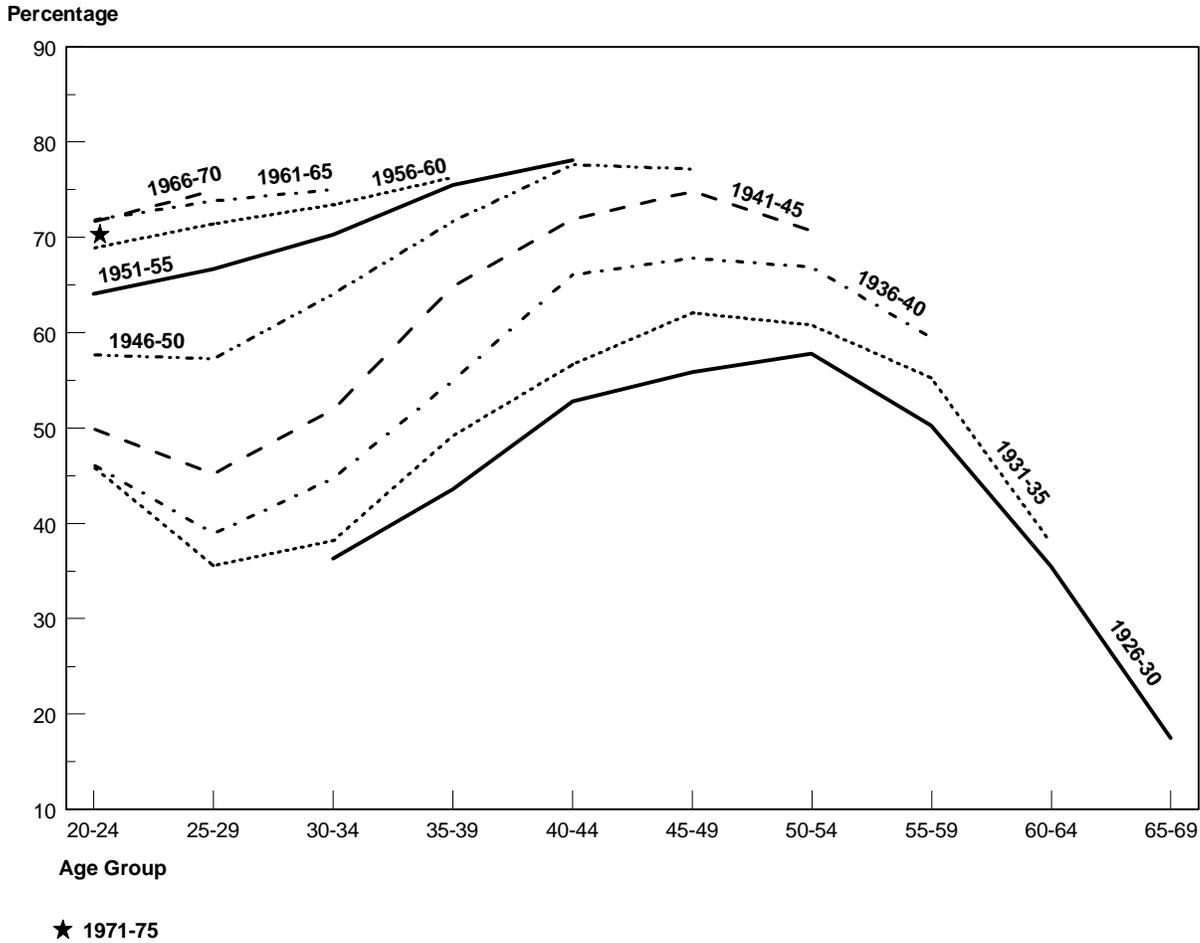
Figure 1: Labor Force Participation Rates, 1950-96



Source: Department of Labor, Bureau of Labor Statistics.

Figure 2 shows the change in labor force participation rates for women born in different 5-year intervals as they move through their prime-age years (25 to 54). Women born more recently have higher labor force participation rates than older women had at the same age. The labor force participation rates of the younger women do not drop off during their child-bearing years as the older women’s did, but the rate of increase in labor force participation for the younger women has slowed. Women today are much more likely to participate in the labor force than in previous generations, but their rate of participation is still below the rate for men.

Figure 2: Labor Force Participation Rates of Women for 5-Year Age Groups



Note: Interior years are birth years.

Source: Theresa J. Devine, "Demographics, Social Security Reform and Labor Supply," forthcoming in *Social Security Reform: Links to Savings, Investment and Growth*, Conference Series No. 41 (Boston, Mass.: Federal Reserve Bank of Boston, 1997).

The difference in labor force participation has implications for women's level of Social Security benefits relative to men's, since under the current rules Social Security calculates monthly benefits on the basis of lifetime taxable earnings averaged over a worker's 35 years of highest earnings.

Women generally spend more time out of the labor force than men and have fewer years of taxable earnings, so the calculation of their benefit includes more years with zero earnings. The median number of years with zero earnings for workers turning 62 in 1993 was 4 for men and 15 for women. This results in lower monthly benefits for women relative to men.

Women also earn lower wages than men, although some of this difference can be explained by the fact that women more often work part-time. However, even in a comparison of year-round, full-time workers, median earnings for women are still only about 70 percent of men's. This difference further narrows when differences in education, work effort, age, and other relevant characteristics are accounted for, but even then the gap does not close completely, with women earning wages that are 15- to 20-percent lower than men's. These differences in earnings lead to lower Social Security benefits for women relative to men. In 1995, the average monthly benefit for retired workers was \$621.30 for women and \$810.00 for men; women's average benefit was 77 percent that of men's. Even if earnings for men and women and their labor force participation behavior were equalized starting today, women would continue to have lower benefits than men until the 2030s because earnings are averaged over 35 years; it would take that long for benefits to be equalized.

Neither the difference between men's and women's labor force participation rates nor the gap in their earnings is expected to disappear in the foreseeable future. As figure 2 shows, the long-term upward trend in women's labor force participation rates has flattened out in recent years. The decline in men's labor force participation is also leveling off, making it less likely that women will have the same rate as men. Because a 15-to-20-percent gap in earnings between men and women remains even after accounting for demographic and labor force characteristics, it is likely that the gap will not close completely. Since retirement income benefits are based on both amount of earnings and number of years in the labor force, the gap will continue to produce lower benefits, on average, for women than for men. Over the course of their retirement, women might receive benefits for a longer period of time than men because they live longer, but they will not necessarily receive more in total lifetime benefits, and in any case, it is the monthly benefit that is most important to the retiree's standard of living.

Some Elements of Privatization Proposals Could Have a Differential Effect on Women

Establishing individual savings accounts for every worker and providing benefits in a lump-sum are two of the most important proposed reforms that could affect women and men differently. Other elements of the reform proposals might also affect men and women differently, although the effects may be relatively small or may pertain only to certain subgroups, such as divorced women.

With Individual Accounts, Women May Fare Worse Than Men Because They Are More Risk Averse

Many of the reform proposals call for the creation of mandatory savings accounts that allow workers to make their own investment decisions. One consequence of this move might be that individuals would decide to take on more risk in order to earn potentially higher rates of return. Economists have found evidence suggesting that women are generally more risk averse than men in financial decisionmaking. Compared with men, they might choose an investment strategy for their retirement income accounts that earns them lower rates of return. Although proponents argue that privatization could allow for higher retirement benefits for both men and women, a too-conservative investment strategy could leave women with lower final account balances than men, even if both make the same contributions to their accounts. In reality, women's lower average earnings will result in their making smaller average contributions to their accounts than men will make. Thus, even though women could be better off under a privatized system, compared to the current Social Security system, the gap between men's and women's benefits could increase.

We attempted to calculate the difference in risk aversion between men and women by looking specifically at the differences in how men and women invest their assets.⁸ We found that women aged 51 to 61 in 1992 had a lower percentage of their total assets in stocks, mutual funds, and investment trusts than men did. These assets are riskier, but potentially higher yielding, than others, such as certificates of deposit, savings accounts, or government bonds.⁹ On average, we found that the ratio of riskier assets to total assets held by men was 8 percentage points higher than the same ratio for women. Other researchers, looking at participants in the federal Thrift Savings Plan, have also found that women invest less

⁸We used data from the Health and Retirement Study and controlled for demographic characteristics, wealth, and income. See appendix I for a discussion of our methodology.

⁹Total assets included nonhousing equity from checking and savings accounts, money market funds, certificates of deposit, government bonds, Treasury bills, individual retirement accounts (IRA), KEOGHs, stocks, mutual funds, investment trusts, business equity, bonds, bond funds and other assets, and housing equity.

in stocks than men do.¹⁰ Our analysis, using different data and focusing on individuals in their prime working and saving years, increases the robustness of this conclusion. By investing less in these riskier assets, women benefit less from the potentially greater rates of return that, in the long run, stocks could generate. At the same time, they are not as exposed to large losses from riskier assets. While it is true that in the past U.S. stocks have almost always posted higher returns than less-risky assets, there is no guarantee that they will always do so.

Costs of and Rules on Annuitization and the Effect on Women's Benefits

Some proposals for reforming Social Security would not require retirees to purchase an annuity with the funds in their retirement income accounts. At retirement, workers could choose to receive their account balance as a lump-sum payment, as some pension plans now allow, to spend as they see fit. If retirees and their spouses do not accurately predict their remaining lifespans or make poor investment choices, they may end up with very small incomes from assets late in life.

Most married women with little work history of their own currently receive a Social Security benefit as a dependent, based on their husband's earnings. Under Social Security, the distribution of benefits to dependents does not reduce a worker's benefit and they are mandatory, so that no worker can opt out of providing them. In contrast, some of the privatization proposals do not automatically provide dependent benefits from the investment portion of the retirement income accounts. Workers may choose not to purchase an annuity at all, or they may choose a single life annuity that ends at the worker's death. Either of these options would put dependent wives at greater risk of having little to live on should their husbands die first.

While some retirees might prefer to avoid the cost of an annuity, receiving their account balance as a lump-sum payment to manage as they see fit, others might prefer the security of a guaranteed monthly income for life that an annuity provides and therefore choose to purchase one. However, a man and a woman could retire with similar amounts in their personal accounts under a privatized social security system and still end up with

¹⁰Richard P. Hinz, David D. McCarthy, and John A. Turner, "Are Women Conservative Investors? Gender Differences in Participant Directed Pension Investments," in *Positioning Pensions for the Twenty First Century*, ed. by Michael S. Gordon, Olivia S. Mitchell, and Marc M. Twinney (Philadelphia: University of Pennsylvania Press, 1997); Vickie L. Bajtelsmit, Alexandra Bernasek, and Nancy A. Jianakoplos, "Gender Differences in Pension Investment Allocation Decisions," Working Papers in Economics and Political Economy, Department of Economics, Colorado State University, October 1996; James M. Poterba and David A. Wise, "Individual Financial Decisions in Retirement Saving Plans and the Provision of Resources for Retirement," National Bureau of Economic Research Working Paper No. 5762, September 1996.

very different monthly benefits if they were to purchase an annuity.¹¹ Annuities sold to individuals are usually based on gender-specific life tables. That is, insurance companies take into account women’s longer life expectancy and either provide a lower monthly benefit to women or charge women more for the same level of benefits given to men.¹² Insurance companies also pay lower benefits for a joint and survivor annuity that covers both husband and wife than for a single life annuity that covers only the worker during his or her lifetime, again because the total time in which the benefits are expected to be paid is longer. Women are more likely to receive the survivor portion of this type of annuity, since they are more likely to outlive their husbands. Thus, while men’s and women’s total lifetime benefits may be similar, the monthly benefit women receive, either as retirees or as survivors, will likely be lower.¹³

Table 1 shows the average monthly benefit paid to men and women at different ages, based on a \$100,000 premium, for both single life and joint and full survivor options.¹⁴ At every age, a man’s monthly benefit under a single life option is between 8 and 13 percent higher than a woman’s.

Table 1: Individual Single Life and Joint and Full Survivor Monthly Benefits on a \$100,000 Premium Annuity

Age	Single life		Joint and full survivor
	Man	Woman	Man and woman at same age
60	\$697	\$643	\$590
65	772	700	631
70	880	781	690

Source: Data are the average of benefits from 111 insurance companies listed in A.M. Best Company, *Best’s Policy Reports, Single Premium Immediate Annuities, Special Edition: 1997* (Oldwick, N.J.: 1997).

This comparison of average benefits masks significant differences between insurance companies. Table 2 shows for men and women separately, at each age, the highest and lowest monthly benefit paid for a \$100,000 premium in a single life plan. While men and women differ little in terms of the variation in monthly benefits, the lowest possible benefit

¹¹An annuity can be single life, for the lifetime of the worker only, or joint and survivor, for the lifetime of the annuitant and his or her designated survivor.

¹²In the case of employer-provided group annuities, unisex life tables must be used in the calculation of monthly benefits, which ensures equal benefits for men and women with the same lifetime earnings.

¹³Some demographers believe that life expectancy will continue to increase in the future, affecting annuity values. However, it is unclear whether the gap between the life expectancy of men and women will narrow in the future as well.

¹⁴Under a full survivor option, the survivor receives 100 percent of the annuitant’s monthly benefit for life.

paid to a woman is still lower than the lowest benefit paid to a man of the same age, and the highest possible benefit paid to a woman is also lower than the highest paid to a man.

Table 2: Range in Monthly Benefits From an Individual Single Life \$100,000 Premium Annuity

Age	Men		Women	
	Highest	Lowest	Highest	Lowest
60	\$771	\$577	\$722	\$522
65	856	653	796	579
70	988	734	871	646

Source: Data taken from 111 insurance companies listed in A.M. Best Company, *Best's Policy Reports, Single Premium Immediate Annuities, Special Edition: 1997* (Oldwick, N.J.: 1997).

The difference in annuity benefits for men and women exists only for individual annuities. A 1983 Supreme Court ruling requires that employer-provided pension plans use a unisex life table in calculating annuities, so that women and men receive the same monthly benefit.¹⁵ Federal, state, and local pension plans also use unisex life tables in calculating monthly annuity benefits. The market for individual annuities, however, is not covered by the Supreme Court ruling, and it is unclear whether or not annuities purchased from retirement savings accounts in a reformed Social Security system would be covered by the Court ruling.¹⁶

Other Proposed Changes Could Differentially Affect Women

Other proposed changes in various Social Security reform proposals would differentially affect women, although the effects might not be as far-reaching and in some cases could even be beneficial. Some reform proposals require Social Security to extend the computation period for benefits from 35 years to 38 or 40 years. For women, with their lower rates of labor force participation giving them fewer years of taxable earnings than men, increasing the computation period would increase the number of zero years used in the calculation of benefits, lowering their average benefit. The Social Security Administration (SSA) forecasts that fewer than 30 percent of women retiring in 2020 will have 38 years of taxable earnings, compared with almost 60 percent of men. However, SSA has also calculated that the difference in additional benefit reductions for men and women would be relatively small: a 3.1-percent reduction for men compared with a 3.9-percent reduction for women if the computation

¹⁵Arizona Comm. for Deferred Compensation Plans v. Norris, 463 U.S. 1073 (1983).

¹⁶There is some concern about whether insurance companies would offer individual annuities for women if they were required to use unisex tables.

period were 38 years, and a 5.2-percent reduction for men compared with a 6.4-percent reduction for women if the computation period were extended to 40 years.¹⁷

Another of the reform proposals includes a provision designed to improve the status of survivors, who are predominantly widows. This provision decreases the spousal benefit while a retired worker is alive (from 50 percent to 33 percent of the worker's benefit) and increases the survivor's benefit to 75 percent of the couple's combined benefit or 100 percent of the worker's benefit, whichever is greater.¹⁸ Another feature of this particular proposal, however, would change the benefit formula for retired workers in a way that would reduce the monthly benefit for most retired workers, disabled workers, spouses, survivors, and children. Thus, the net effect of these changes in spouse and survivor benefits will vary by individual circumstances. While mandatory savings accounts are intended to replace these lost benefits, it is not clear whose total benefits would be maintained and whose would increase or decrease.

The effect of individual changes in the reform proposals could be relatively minor. However, several taken together could interact substantially. For example, cuts in spouse benefits and in the benefit formula, combined with increases in years of taxable earnings included in the computation period and increases in the normal retirement age, could potentially add up to a large effect on women relative to men.

Some groups of women may be at risk of receiving lower retirement income benefits under some of the Social Security reform proposals, and other groups may lose their eligibility for benefits entirely. Under current Social Security law, divorced spouses are entitled to a benefit based on the work record of their former spouse, if they are aged 62 or older, had been married at least 10 years, and have not remarried. Divorced survivors are entitled to a benefit based on the work record of their former spouse if they are aged 60 or older and had been married at least 10 years.¹⁹ Under several of the reform proposals that create mandatory savings accounts, divorced spouses and divorced survivors are not acknowledged as having any claim at all on the mandatory savings accumulated by their former

¹⁷These percentages are based on a current sample of new awards in 1993.

¹⁸Whether or not individuals benefit from this provision depends on whether women receive benefits based on their own work record or their spouse's.

¹⁹Women are much more likely than men to receive benefits as a divorced spouse or divorced survivor. As of December 1996, approximately 425,000 women received benefits as a divorced spouse or surviving divorced spouse.

spouse during the period of their marriage. Under these proposals, the current automatic provision of benefits would be eliminated. While this money may become part of the settlement upon divorce, it is not guaranteed under these proposals.

Differential Effects Could Be Mitigated

The differential effects, both large and small, that many of the Social Security reform proposals would create could be mitigated. In some cases, participants in the program would simply need help in understanding the new system and how to make it work for them. In other cases, different policy options with regard to annuitization would to varying degrees protect women as a whole or some subgroups, such as dependent spouses.

Investor Education Might Narrow the Differences in Investment Behavior

To the degree that women are more risk averse than men, they might be less likely to take full advantage of the potential benefits from Social Security privatization. Some pension specialists believe that education is a critical factor in helping individuals make the most of their retirement investments. Preliminary evidence from a study of 401(k) participants suggests that people who are given information about their investment choices and potential returns are more likely to participate in a 401(k) and to contribute a higher proportion of their salaries than those who do not receive such information.²⁰ However, few, if any, studies have examined how education affects the allocation decisions of 401(k) participants. Nevertheless, investor education that covers general investment principles and financial planning advice might help both men and women to better manage their investments. While employers have provided this type of education in the case of 401(k) accounts, it is not clear who the provider would be in the case of individual retirement savings accounts under a privatized Social Security system.

Government Role in Annuities Provision Could Mitigate Differences

A variety of policy options may help preserve the protective aspects of annuities, especially for women who are receiving dependent benefits. These range from mandatory annuitization of all individual accounts at retirement to partial annuitization, where some minimum level of annuity purchase is mandatory but the balance of an individual's account can be paid in a lump sum, to voluntary annuitization with some government regulation of the market, such as requiring the use of unisex life tables in calculating annuities.

²⁰Robert L. Clark and Sylvester J. Schieber, Factors Affecting Participation Rates and Contribution Levels in 401(k) Plans (Washington, D.C.: Watson Wyatt Worldwide, May 1996).

Mandatory annuitization simply means that the balance in each individual's account must be used to purchase an annuity at retirement. Because everyone is in the same risk pool for insurance purposes, the cost of annuities should be lower than if they were purchased individually, and monthly benefit levels should be higher for all annuitants. If annuities were also purchased under the auspices of the federal government, gender-neutral life tables could be used, so that men and women with the same account balance at retirement would receive the same monthly benefit from their annuity. In addition, by requiring married workers to purchase a joint and survivor annuity, unless a spouse signs a waiver, a mandatory annuity could protect women whose minimal work histories might make them ineligible for a retired-worker benefit of their own.

Partial annuitization means that some portion of each individual's account balance would be used to purchase an annuity, but the rest of the money in the account could be paid out in a lump sum and spent as the individual wished. Partial annuitization might also lead to the use of gender-neutral life tables in the calculation of monthly benefits, leading to equal benefits for women and men with comparable lifetime earnings. And again, since all retirees would be in the same risk pool, the cost of an annuity would probably be lower than when purchased by an individual. The monthly benefits from these annuities would be lower than under a full annuitization plan, since they would not be using the entire account balance, but dependent spouses would still benefit from the protection of having some portion of their retirement income in the form of a joint and survivor annuity.

Voluntary annuitization would leave the decision of whether to purchase an annuity, and what type of annuity to purchase, up to each individual. Under this plan, dependent spouses could lose the protection that a mandatory joint and survivor annuity would provide.

Finally, under Social Security, the government ensures that men and women retiring at the same age with the same earnings history receive the same monthly benefits, despite the fact that women are expected to live longer and will therefore receive benefits over a longer period of time. The current approach provides equal living standards for equal contributions. If individual annuities were provided under gender-specific life tables, men and women with the same earnings history would receive different monthly benefits but equivalent expected lifetime benefits. The result would be that women's living standards would be lower than men's despite the same contributions. One option for mitigating this outcome is

to use the same unisex life tables that are currently required for employer-provided group annuities for all annuitants.

Conclusions

While the Social Security system is gender neutral in the way it calculates benefits, women generally receive lower Social Security benefits than men because they work fewer years and earn lower wages. Some of the proposals to reform the Social Security system could exacerbate the differences between men's and women's average benefits. In particular, the creation of individual mandatory savings accounts, and the change from an annuity to a lump-sum payout of account balances at retirement, might decrease women's benefits relative to men's. An awareness of these implications is important in assessing these proposals.

However, there may be ways to mitigate some of these effects. Information about investment principles and financial planning might help minimize the differences in investment behavior between men and women and improve retirees' ability to manage their assets. Mandatory or partial annuitization might reduce the risk that some wives will have little to live on when they outlive their husbands. The use of unisex life tables could ensure equal monthly benefits for men and women with comparable lifetime earnings.

Agency Comments and Our Evaluation

We received written comments from SSA on a draft of this report. SSA staff also submitted technical comments, which we incorporated in the report as appropriate. In its overall comments, SSA commended GAO for outlining some of the concerns about the differential effects on women of the new privatization reform proposals. SSA expressed concern, however, that by focusing primarily on women as retired workers, we had missed the effect of privatization on women as dependents. We agree that the Social Security reform proposals have important implications for dependent benefits, and we discuss their impact in several places in the report. We paid special attention to the effect of reform proposals on women receiving worker benefits of their own, however, because under some privatization proposals, dependent benefits may be a less important part of their retirement income package. Women's lower rates of labor force participation and earnings, the proposed changes in the calculation of the basic worker's benefit, and risks related to the creation of individual retirement accounts all have major implications for women's standard of living in retirement relative to men's.

Three reviewers who are experts in the fields of social security and pensions also made comments on a draft of this report, and we incorporated them as appropriate.

As we arranged with your office, unless you announce its contents earlier we plan no further distribution of this report until 30 days after the date of this letter. We will then send copies to the Commissioner of Social Security and make copies available to others on request.

This report was prepared under my direction. Please contact Francis P. Mulvey, Assistant Director, at (202) 512-3592 or Alicia Puente Cackley, Senior Economist, at (202) 512-7022 if you or your staff have any questions.

Sincerely yours,

A handwritten signature in black ink that reads "Jane L. Ross". The signature is written in a cursive style with a large, stylized "R".

Jane L. Ross
Director, Income Security Issues

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Abbreviations

ERA	early retirement age
HRS	Health and Retirement Study
IRA	individual retirement account
OASI	Old Age and Survivors Insurance
NRA	normal retirement age
PIA	primary insurance amount
PIP	Personal Investment Plan
PRA	personal retirement account
PTA	Personal Thrift Account
SSA	Social Security Administration

Scope and Methodology

This appendix provides more detail about our analysis of gender differences in the percentage of total assets invested in risky assets and in individual annuity benefits. To conduct our work on asset investment, we analyzed the first round of interviews from the Health and Retirement Study (HRS), a longitudinal survey prepared by the University of Michigan Survey Research Center. To conduct our work on individual annuity benefits, we analyzed data from Best's Policy Reports, an insurance information publication. We also reviewed the relevant technical literature. We did not independently verify the accuracy of HRS because it is commonly used by researchers. We also did not independently verify the annuity data, which are from a common source of information for the insurance industry.

Health and Retirement Study

The first wave of HRS was conducted in 1992. The sample was composed of families in which at least one family member was between the ages of 51 and 61. The survey asked the primary respondent and his or her spouse questions regarding their current and past employment, family asset holdings and debt, and demographic characteristics. From the total sample of 12,652 respondents interviewed, we selected a subsample of 2,371 single respondents (that is, never-married, separated, divorced, or widowed). We excluded married couples from our sample because we were particularly interested in differences across gender, and within married couples we could not distinguish which member of a couple was the decisionmaker on financial issues.²¹ We used sample weights throughout our analysis. The final sample size was 1,414 individuals, after we deleted cases with missing data. The advantage of using HRS is the detail of the data on assets held by the individual, as well as the demographic and household information. The major caveat to our analysis is that it cannot be generalized to the population as a whole; it applies only to the single population between the ages of 51 and 61 in 1992. However, people of this age are particularly relevant for a study of investment behavior since they are passing through their prime earning and saving years and closing in on retirement age. We also recognize that our results for this population may not accurately predict the investment behavior of future cohorts.

The estimated model examines the effects of individual characteristics, including gender, on the ratio of risky assets to total assets held by the individuals. The multivariate regression estimation technique used is a tobit model. The tobit model takes into account the fact that the

²¹In the case of persons who are separated, divorced, or widowed, we do not know which spouse made the initial investment decision. However, since this group's investment pattern is different from that of married couples, we are attributing the decisionmaking to the individuals.

dependent variable is a ratio that is bounded by 0 and 1. The model will not predict a ratio of risky assets that is outside this range. Formally, the model can be expressed as

$$Y^* = \beta' X + \epsilon$$

where the X vector contains independent variables; the β vector contains the parameters to be estimated; and ϵ is the error term, assumed to be random, that captures the unobserved factors influencing the dependent variable. The dependent variable, the ratio of risky assets to total assets, is

$$Y = Y^* \text{ if } 0 \geq Y^* \geq 1$$

$$Y = 0 \text{ if } Y^* < 0$$

$$Y = 1 \text{ if } Y^* > 1$$

Construction of Variables

The dependent variable is the ratio of risky assets to total assets held by the respondent. Total assets included housing equity and nonhousing equity such as checking and savings accounts, money market funds, certificates of deposit, government bonds, Treasury bills, IRAs, KEOGHs, stocks, mutual funds, investment trusts, business equity, bonds, bond funds, and other assets. Our definition of risky assets includes stocks, mutual funds, and investments trusts only. The independent variables used in the analysis are a constant term, age, age squared, education, race, gender, number of children living at home or away at school, the natural log of annual income, and the natural log of total net worth.

Regression Results

The coefficient estimates from the model of the investment in risky assets are shown in table I.1. The coefficient estimates indicate the effect of a change in an independent variable on an individual's percentage of total assets that are classified as risky, holding constant the values of all other independent variables. For example, the coefficient estimate of 0.08 for the gender variable indicates that men's ratio of risky assets to total assets is 8 percentage points higher than women's.

**Appendix I
Scope and Methodology**

Table I.1: Regression Results for the Determinants of Investment Behavior

Independent variable	Coefficient estimate	Standard error
Constant	.89	4.59
Age (in years)	-.10	.16
Age squared (in years)	.00092	.0015
Education (in years)	.03 ^a	.006
Race (nonwhite = 1)	-.09 ^b	.04
Gender (male = 1)	.08 ^a	.03
Number of children	-.006	.02
Natural log of annual income (dollars)	.007	.02
Natural log of net worth (dollars)	.10 ^a	.01
σ^c	.36 ^a	.02
Log likelihood function	-487.95	

^a Significant at the 1-percent level.

^b Significant at the 5-percent level

^c σ is the standard deviation of the error term.

The coefficient on the gender variable was positive and significant, indicating that male respondents held a significantly higher percentage of risky assets than female respondents. The coefficients on the education and natural log of net worth variables were also positive and significant. These results indicate that as respondents' levels of education and net worth increase, the ratio of risky assets to total assets that they hold increases as well. The coefficient on the race variable was negative and significant, indicating that nonwhite respondents held significantly lower percentages of risky assets than white respondents. The other independent variables were insignificant, indicating that there was no significant correlation between these variables and the ratio of risky assets to total assets held by the individuals.

Other Specifications

We constructed two other versions of the dependent variable, each of which included other types of assets in the definition of risky assets. Our second model included business equity, bonds and bond funds in the risky category of assets, along with stocks, mutual funds, and investment trusts. Our third model included IRAs, KEOGHs, and other assets as well. Using the same set of independent variables as in model one, we got very similar results from a tobit estimation of each of these new specifications. In both cases, the coefficient on the gender variable was positive, significant, and actually of greater magnitude than our initial specification. The other independent variables that were significantly correlated with the dependent variable in model one were still significant in models two and three. We report only the results of model one, however, because we recognize that these broader definitions of risky assets include some saving vehicles that cannot be easily classified as either risky or safe. Assets such as IRAs and KEOGHs could fall into either category, and without more information we cannot be sure that we are labeling them accurately. By reporting only the results from the estimation that uses our narrowest definition of risky assets—that is, stocks, mutual funds, and investment trusts—we have greater assurance that we are adequately measuring a true difference in the level of risk that individuals are choosing as they allocate their portfolios of assets.

Annuities Information

We took the data on monthly annuity benefits for men and women from a recent edition of Best's Policy Reports that provided data from 111 insurance companies that offer single premium immediate annuities. The report lists the monthly benefit generated by a \$100,000 single premium, for men and women, under both qualified (or tax-deferred) and nonqualified plans. The benefits are also differentiated by the age of the annuitant, ranging in 5-year increments from 55 to 80 for nonqualified plans and from 55 to 70 for qualified plans. Both a lifetime-only option and a joint and full survivor option are reported.

Appendix I
Scope and Methodology

We report the annuity information for nonqualified plans only, since they constitute two-thirds of all immediate annuities purchased. We calculated the average monthly benefit across all 111 firms, separately for men and women, and for each age. We also calculated the range, within each age and gender category, between the largest and smallest monthly benefit provided.

Elements of Social Security Reform Proposals That Affect Women

Several different reform plans have been proposed to address Social Security's long-term financing problem. Three plans put forth by members of the 1994-96 Advisory Council on Social Security have received the most attention, but other plans by members of the Congress, research organizations, and advocacy groups have also been proposed.

The three Advisory Council proposals are the Maintain Benefits plan, the Individual Accounts plan, and the Personal Security Accounts plan. At least two other plans have been proposed in legislation in the Congress, including S. 321 (105th Congress) and S. 2176 (104th Congress), and two more plans that have received serious attention were proposed by the Committee for Economic Development, a research organization, and the National Taxpayers Union Foundation, an advocacy group. All seven plans are compared to current Social Security law in table II.1.

**Appendix II
Elements of Social Security Reform
Proposals That Affect Women**

Table II.1: Features of Social Security Under Current Law and Reform Proposals

Type of beneficiary ^a	Reform proposals of 1994-96 Advisory Council on Social Security			
	Social Security	Maintain Benefits	Individual Accounts	Personal Security Accounts
Retired worker	<ul style="list-style-type: none"> — Benefit computation is based on 35 years of highest taxable earnings — Progressive formula leads to redistribution — Benefits reduced actuarially if taken between 62 and normal retirement age (NRA); increased if taken after NRA — NRA to increase to 67 years for persons born after 1959 	Extends computation period from 35 years to 38 years of taxable earnings	<ul style="list-style-type: none"> — Extends computation period from 35 years to 38 years of taxable earnings — Changes benefit formula by lowering conversion factors — Accelerates increase of NRA and indexes to longevity — Creates individual account based on defined contribution pension 	<ul style="list-style-type: none"> — Creates two-tier system with a tier I flat benefit based on years of taxable earnings and a tier II personal security account based on defined contribution pension — Accelerates increase of NRA and indexes to longevity — Increases early retirement age to 65 years
Spouse	<ul style="list-style-type: none"> — Benefit is 50% of the retired worker's benefit — Benefit is actuarially reduced if taken between 62 and NRA 	Same as current law	Benefits are lowered from 50% to 33% of retired worker's benefit	50% of full tier I benefit
Survivor	<ul style="list-style-type: none"> — Benefit is equal to amount deceased spouse would be receiving but not less than 82-1/2% of deceased spouse's benefit — Benefit is actuarially reduced if taken between 62 and NRA 	Same as current law	<ul style="list-style-type: none"> — Higher of own basic benefit or deceased spouse's basic benefit or 75% of couple's combined benefit — Joint and survivor annuity with individual account balance 	75% of benefit payable to couple plus eligibility to inherit balance of deceased spouse's personal security account
Dually entitled beneficiary ^c	Receives own retired worker benefit plus difference (if positive) between spouse or survivor benefit and his or her retired worker benefit	Same as current law	<ul style="list-style-type: none"> — Own individual account benefit — Higher of own basic benefit or 33% of spouse's benefit 	Tier II own accumulations plus higher of own tier I benefit or 50% of full tier I benefit

**Appendix II
Elements of Social Security Reform
Proposals That Affect Women**

Committee for Economic Development	Gregg bill^b	Kerry-Simpson bill^b	National Taxpayers Union Foundation
<ul style="list-style-type: none"> — Creates two-tier system with basic benefit based on years of taxable earnings and a personal retirement account (PRA) based on defined contribution pension, financed by an additional mandatory 3% contribution — Gradually lowers replacement rate for two higher-income brackets — Favors annuitization of PRA at retirement — NRA increases to 70, beginning in 2000, by 2 months per year and indexed to life expectancy thereafter — Early retirement age (ERA) remains at 62 but with additional actuarial reduction — Taxes all benefits in excess of contributions — Increases years of taxable earnings in primary insurance amount (PIA) calculation from 39 to 40 years 	<ul style="list-style-type: none"> — Adds to the current system by establishing a mandatory 1% payroll deduction Personal Investment Plan (PIP) to be used in a similar fashion to the Thrift Savings Plan — Reduces factors used for calculation of PIA, based on age of the worker — NRA gradually increases to 70 (and beyond) in 2029 for both workers and widows older than 62 beginning in 2000 — ERA gradually increases to 65 (and beyond) in 2017 for both workers and widows older than 62 beginning in 2000 	<ul style="list-style-type: none"> — Adds to the current system by establishing a mandatory 2% payroll deduction. PIP to be used in a similar fashion to the Thrift Savings Plan — Reduces factors used for calculation of PIA, based on age of worker 	<ul style="list-style-type: none"> — Converts current system to a system of Personal Thrift Accounts (PTA), based on payroll contribution of 5% (designed to replace other benefits of Old Age and Survivors Insurance (OASI)) — PTAs can be passed down after death of worker or owner of PTA — Mandatory (minimum) annuitization at retirement (joint and survivor annuity if applicable) — Fund balances in excess of minimum annuity purchase are unrestricted
Reduces benefits from 50% to 33% of retired worker's benefit for nonworking spouses	Unless otherwise decided, transfers PIP balance to spouse at death	Unless otherwise decided, transfers PIP balance to spouse at death	PTA is transferred to spouse at death of owner
100% of deceased worker benefit or own benefit, whichever is larger	Balance of PIP is transferrable at death of retired worker (if agreed to in writing; otherwise spouse receives it)	Balance of PIP is transferrable at death of retired worker (if agreed to in writing; otherwise, spouse receives it)	Retains all OASI child benefits
No mention	Spouse receives PIP balance at death of retired worker	Spouse receives PIP balance at death of retired worker	PTA is transferred at death of owner

(continued)

**Appendix II
Elements of Social Security Reform
Proposals That Affect Women**

Reform proposals of 1994-96 Advisory Council on Social Security

Type of beneficiary^a	Social Security	Maintain Benefits	Individual Accounts	Personal Security Accounts
Divorced and surviving divorced spouse	<ul style="list-style-type: none"> — Must have been married for at least 10 years and currently be unmarried (for divorced spouse only) — Must be at least 62 years old for divorced spouse, 60 years old for divorced survivor — Benefit actuarially reduced if younger than NRA — Divorced spouse benefit is 50% of retired worker's benefit — Surviving divorced spouse benefit is 100% of retired worker's benefit 	Same as current law	No mention	No mention
Mother or father and widowed mother or father plus child	<ul style="list-style-type: none"> — Have eligible child in care — Younger than 65 — 50% of retired worker's benefit plus 50% of child's benefit — 75% of deceased worker's benefit plus 75% of child's benefit 	Same as current law	Same as for spouse or survivor plus child's benefit (same as current law)	Same as for spouse or survivor plus child's benefit (same as current law)

**Appendix II
Elements of Social Security Reform
Proposals That Affect Women**

Committee for Economic Development	Gregg bill ^b	Kerry-Simpson bill ^b	National Taxpayers Union Foundation
No mention	If there is no current spouse, then benefits devolve to the individual's last surviving divorced spouse but not if that former spouse is currently married	If there is no spouse, then benefits devolve to the individual's last surviving divorced spouse but not if that former spouse is currently married	In the event of a divorce, divides evenly all PTA assets attributable to wages earned during the marriage
No mention	No mention	No mention	Retains all OASI nonaged survivor benefits

^aBeneficiary categories are based on Social Security definitions.

^bBoth Gregg (S. 321, 105th Congress) and Kerrey-Simpson (S. 2176, 104th Congress) contain provisions that allow them to operate in a two-tier system. The first tier pays traditional Social Security benefits that are lowered because of the reduction in the payroll tax. The second tier consists of the PIP account balances that are a percentage deducted from payroll.

^cEntitled to benefits as both retired worker and spouse or survivor of retired worker.

Comments From SSA



SOCIAL SECURITY

Office of the Commissioner

December 15, 1997

Ms. Jane L. Ross
Director, Income Security Issues
U.S. General Accounting Office
Washington, D.C. 20548

Dear Ms. Ross:

Thank you for the opportunity to comment on the draft report, "Social Security Reform: Implications for Women's Retirement Income" (GAO/HEHS-98-42).

We believe that GAO has done a commendable job in outlining some of the concerns of the differential effects on women of the new "privatization" reform proposals. We do, however, have some general comments.

Because the report focuses on women as retired workers, it misses one major point. The report explains the lower benefits of women as a function of the lower lifetime labor force participation and the lower earnings of women. Although the conclusion is correct, a more complete analysis would have focused on lifetime earnings of both husbands and wives. While some women receive benefits based on their own lifetime earnings, many others get higher benefits based on their husband's earnings. Because of this, it is impossible to evaluate the impact of privatization on women without looking at the impact of those privatization plans on families.

As a corollary, it is important to remember that many, if not most, women retire as part of a married couple and later become widows. While retired as spouses (regardless of whether receiving Social Security spouse's benefits or worker's benefits based on their own work), poverty is rarely an issue. It is with advancing old age and widowhood that poverty becomes a problem for women. Social Security, as a social insurance program, attempts to address this by providing benefits for the widow (and surviving divorced spouse) in amounts similar to what the worker would have received.

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**Appendix III
Comments From SSA**

2

Under most privatization plans, social insurance features are replaced by individual choice. By reducing basic benefits for all workers, protection of dependents and survivors is automatically diminished. The result could be harmful for many women.

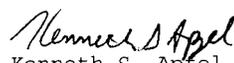
What individuals choose to do with their investments may have a profound impact on what retirement income will be available to their spouses in old age. For instance, under privatization, people cannot be compelled to take a joint and survivor annuity when the time comes to convert individual accounts. Some couples may wish to forego the cuts in the worker's protection that arise from such a choice. And, with privatization, people cannot be compelled to provide for their dependents, such as former spouses from a divorce and disabled adult children, who can qualify for Social Security survivor benefits under current law.

The reductions in Social Security contemplated in some privatization plans will have a direct impact on protection for some very vulnerable groups, many of whom are women. Whether these reductions are actually made up by proceeds from individual investment accounts will depend on the choices and decisions each individual worker makes.

We also had some technical comments on the report which we have already shared with your staff.

Thank you for the opportunity to comment on the draft report. If you have any questions, your staff can contact Judy Chesser at (202)358-6030.

Sincerely,


Kenneth S. Apfel
Commissioner
of Social Security

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