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SOCIAL SECURITY

Capital Markets and Educational Issues Associated With Individual Accounts





G A O

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

General Government Division

B-281161

June 28, 1999

The Honorable Bill Archer
Chairman, Committee on Ways and Means
House of Representatives

Dear Mr. Chairman:

Proposals have been advanced by various groups calling for individual accounts as a component of Social Security reform. To better understand the potential implications of individual accounts, you asked us to provide you with information on how such accounts could affect private capital and annuities markets as well as national savings, and to determine the potential risk and returns to individuals under such a program. You also asked us to determine the disclosure and educational efforts needed to inform the public about individual accounts. This report responds to your request.

We will provide copies of this report to the Honorable Charles B. Rangel, Ranking Minority Member of the House Committee on Ways and Means; the Honorable Kenneth S. Apfel, Chairman of the Social Security Administration; the Honorable Arthur Levitt, Chairman of the Securities and Exchange Commission; the Honorable Alexis M. Herman, the Secretary of the Department of Labor; the Honorable Robert E. Rubin, the Secretary of the Treasury; and other interested committees and organizations. Copies will be made available to others upon request.

If you have any questions, please call me (202) 512-8678. Major contributors are acknowledged in appendix II.

Sincerely yours,

Thomas J. McCool
Director, Financial Institutions
and Markets Issues

Executive Summary

Purpose

The Social Security program faces a financing challenge primarily due to the aging of the U.S. population. In response, some reform advocates have suggested the use of individual investment accounts as a component of Social Security reform. To better understand the potential implications of individual accounts, the House Committee on Ways and Means asked GAO to determine how such accounts could affect (1) private capital and annuities¹ markets as well as national savings,² (2) potential returns and risks to individuals, and (3) the disclosure and educational efforts needed to inform the public about such a program.

This report addresses certain aspects of the broad issue of the relationship between individual accounts and Social Security's long-term financing needs. It does not seek to evaluate any specific Social Security reform proposal or seek to address the administrative costs or implementation issues associated with individual accounts.³ Rather, to identify the potential impact of individual accounts on the capital markets, GAO focused on the potential effect of proposals in which some percentage of taxable payroll or other potential base would be provided to individuals to invest in private markets.⁴ Some proposals allow individuals wide latitude in investment options; others provide a narrower choice, generally between debt and equity mutual funds, or particular types of mutual funds.⁵

Results in Brief

Individual investment accounts could affect the capital markets in several ways, depending on how the accounts are funded, how the funds are invested, and how people adjust their own savings behavior in response to individual accounts. As a source of funds for the accounts, most proposals use either the cash collected from Social Security taxes or federal general

¹ Annuities are contracts to provide periodic pay-outs for an agreed-upon span of time in return for a premium. These contracts basically convert savings into income.

² National savings includes the savings of individuals, households, and businesses, called private savings; and the net savings of all levels of government.

³ GAO has issued two other reports that provide additional information on individual accounts as a component of Social Security reform. One report provides information on the implementation issues of individual accounts Social Security Reform: Implementation Issues for Individual Accounts (GAO/HEHS-99-122, June 18, 1999). The other report provides additional detail on administrative costs, which can have a direct effect on how much savings are accumulated in individual accounts over time Social Security Reform: Administrative Costs for Individual Accounts Are Hard to Predict (GAO/HEHS-99-131, June 18, 1999).

⁴ We use 2 percent of taxable payroll as an example throughout the report although, depending on the proposal, the percentage or the base could be different.

⁵ Mutual funds pool the limited funds of small investors into large amounts, thereby gaining the advantages of large-scale trading. Investors are assigned a prorated share of the total funds according to the size of their investments.

revenues. As a result, the primary capital market effect is a purely financial one: borrowing in the Treasury debt market (or retiring less debt) to provide funding for investment in private debt and equity markets. Although the annual flows are likely to be sizeable (for instance, 2 percent of payroll would be about \$70 billion in 1998), both the private debt and equity markets should be able to absorb the inflow without significant long-term disruption. There could eventually be a significant increase in the amount of new funds flowing into the annuities market. However, the magnitude of annuity purchases is likely to build gradually over time as more retirees build larger balances, allowing the market sufficient time to adjust.

In addition to the financial effect of redirecting funds from the Treasury debt market to private capital markets, individual account proposals could also affect the level of financial resources available for private investment by increasing or decreasing national savings. The extent to which individual accounts affect national savings will depend on how they are financed, the structure of the program, and any behavioral responses of businesses and individuals. National savings is more likely to increase if (1) the government funds would have been spent but instead are not; (2) the program is mandatory and prohibits pre-retirement distributions;⁶ and (3) households do not fully adjust their other retirement saving—that is, reduce it because of savings involved in individual accounts.

To the extent that households use the opportunities offered by an individual account program to invest in private equities and debt rather than Treasury securities, they could increase both the returns they receive and the risks they face compared to the current Social Security program. Although asset diversification offers mitigation against certain risks, the returns that individuals receive would depend on and vary with their investment choices and the performance of the private debt and equity markets. On the basis of historical data, most advocates of individual accounts state that the expected future returns on private investments, especially equities, would be much higher for individuals than the implicit return available under the current Social Security program. Others are skeptical about these claims for higher expected returns on equities. Some argue that historical returns may not be a good predictor of future returns. Others suggest that because equity market returns are more volatile than returns on Treasury securities, a better comparison would be among risk

⁶ Pre-retirement distribution refers to distributions other than the those that would occur as a result of someone's death. Some proposals allow distributions at death to be paid as a survivor benefit while others do not.

adjusted returns of various assets. There are numerous ways to adjust returns for risk but no clearly best way. In the end, even informed choices among potential investments depend upon an individual's tolerance for risk.

To provide participants with a clear understanding of the purpose and structure of an individual account program, an enhanced educational program would be necessary. At a minimum, such a program would have to provide individuals with information adequate for their decisionmaking, as well as protect against misinformation. Existing disclosure and antifraud rules provide for the disclosure of information material to investors making investment decisions. However, disclosure alone would not enable participants in an individual account program to make thoughtful and informed investment decisions. An enhanced and broad-based educational effort would have to be undertaken in order to provide individuals with information they need and can readily understand as well as with tools that can help to improve both the decisionmaking process and awareness of the consequences of those decisions. Individuals would need education on the benefits of saving in general, the relative risk-return characteristics of particular investments and how different distribution mechanisms can affect their retirement income security. If only a few well-diversified investment choices are provided, most of the educational effort could be targeted to clarifying the purposes of investing and the potential long-term consequences of different investment alternatives. However, if a wide variety of choices is offered individuals so that they could potentially choose less diversified investments, such as individual equities, a more broad-based educational program will be necessary.

Background

In early 1997, the Advisory Council on Social Security reported on Social Security's long-term financing problem of keeping the program solvent. Three plans or proposals were advanced by different groups of Council members. Two plans called for the creation of mandatory individual accounts, and the remaining plan called for having the government invest the trust fund in marketable securities.⁷ A number of other proposals calling for individual accounts have been advanced by various research organizations, academics, and Members of Congress. For the most part, these other proposals contain provisions similar to those found in the Advisory Council's report.

⁷ See Social Security Financing: Implications of Government Stock Investing for the Trust Fund, the Federal Budget, and the Economy (GAO/AIMD/HEHS-98-74, April 1998).

An individual account program requires that some portion of workers' contributions to Social Security be put into individual accounts that they may invest in private equity or debt markets.⁸ The current Social Security program is a pay-as-you-go program whereby each year's revenue is collected to pay for that year's benefits. An individual account program would enable individuals to build up and maintain account balances that would provide financing for some part of their Social Security retirement income. As a result, it moves away from a strictly pay-as-you-go system in the direction of an advanced funded system.

Individual account proposals are usually framed by three characteristics. The first characteristic pertains to whether to "carve-out" a portion of Social Security's tax that is to be invested in financial assets, or to "add-on" a percentage to the current tax that is to be invested in financial assets. The second characteristic concerns whether to make investments in individual accounts mandatory or voluntary. Mandatory participation would require that each individual invest some percentage of his or her payroll tax contribution in financial assets. Voluntary individual accounts would allow individuals to opt in or out of investing any portion of their payroll tax contributions into financial assets. The third characteristic pertains to how the accumulated earnings in individual accounts would be paid out upon retirement, i.e., whether annuitization or a lump sum pay-out would be required.

Principal Findings

Market Effects

Funding of individual accounts will come directly or indirectly from increased government borrowing, unless funded by a tax increase or reduced government outlays. In the absence of a tax increase, the government will need to raise resources either by borrowing in the market or by not retiring as much maturing debt as it otherwise would. Some part of funds could be invested in the corporate equity and debt markets. The amounts that would flow into these markets would depend upon the options available to individuals as well as the choices they make. The annual flow resulting from 2 percent of payroll would have been about \$70 billion in 1998 dollars. Annual net purchases and sales of equities were about \$300 billion in 1996 and close to half a trillion dollars in 1997 and 1998. Thus, the additional annual flows could represent a 10- to 20-percent

⁸ Debt and equities are often the benchmarks used, even though eligible market investments could encompass a wider range of financial assets under certain proposals.

increase in the annual flow but would still be relatively small compared to the \$15 trillion U.S. equity markets as a whole. Funds flowing into individual accounts are more likely to have some short-term effects on the corporate bond market because this market is smaller than the equities market and less liquid—it is not as easy to buy and sell bonds without moving the market. However, it is unlikely that there will be any significant long-term disruptions of either market. Moreover, insurance industry officials said that the annuities markets are likely to be able to absorb the flows from mandatory or voluntary annuitization. They said that the annuities resulting from the liquidation of the individual accounts would generally be phased in over a long period of time and, therefore, could be absorbed by the market without difficulty.

The extent to which individual accounts would affect national savings depends on how they would be financed. For instance, funds could come from (1) within the current Social Security system, which would likely reduce government savings; (2) a change in the system resulting from increased payroll taxes or reduced benefits, which would not affect government savings; or (3) outside the system using general revenues, where the effect on government saving would depend on how those funds would otherwise have been used.⁹ National saving would also be affected by how households and businesses respond to individual accounts. The extent of these behavioral effects would depend in part on the structure of the individual account program and any limitations placed on the use of funds. For instance, proposals that are mandatory are more likely to increase private saving because such a program would require that all individuals, including those who do not currently save—such as many low-income individuals or families—place some amount in an individual account. Prohibitions or restrictions on borrowing or other forms of preretirement distributions could also limit the ability of some households to reduce their savings in response to individual accounts.

Expected Returns and Risks

Investing in assets through individual accounts involves a trade-off: greater returns are possible, but only if the individual accepts some additional risk, including, but not limited to, more variability in rates of return. Under the current Social Security program, there is little investment risk. Demographic and economic risk are borne collectively by taxpayers and beneficiaries. Moving to an individual account program would mean that

⁹ The primary determinant is what would have been done with the revenue if it had not been used to finance individual accounts; would the government have spent it, provided tax cuts, or saved it by buying back outstanding debt? If the government would have spent it or reduced taxes but does not because it funds individual accounts instead, government saving is not affected. If it would have used the funds to buy back debt, government saving is reduced.

individuals would be able to reap the rewards of their own investments, but they also would incur risk—not only the possibility of lower returns, but also the possibility of losing money. Diversification and other asset allocation approaches could help to improve an individual’s risk/return trade-off.¹⁰ Holding assets for long periods of time could also improve an individual’s risk/return trade-off because the risk averages out over time, evening out the variations in risk. However, individuals who retire at the same time may receive different pay-outs from individual account investments because of the investment choices they have made. Returns could also vary depending on when an individual retires because of the volatility of the stock market. Thus, market-driven results can produce “winners” and “losers,” depending on when and how individuals invest their accounts and when they liquidate their holdings. As long as individuals are aware of and accept this risk, there may not be calls to fix the “unfair benefits outcomes.” On the other hand, if there are enough “losers,” there could be calls to offset some or all of any losses.

Advocates and opponents of individual accounts have estimated what the market rate of return could be for an individual’s investments under an individual account program. Higher returns are possible for individuals investing through individual accounts than are possible under the current Social Security program, but only if individuals take on more risk. Individuals should therefore not only be interested in the returns from their investments, but also in the risks that must be incurred to achieve higher returns. The difficulty is how to measure risk and how to adjust rates of return to compensate for risk and allow for comparability. There are many ways to adjust returns for risk but no clearly best way.

Enhanced Education

Existing Securities and Exchange Commission (SEC) disclosure rules require that material information be provided about a particular investment instrument and its issuer. Separate disclosure rules promulgated by the Department of Labor (DOL) apply to pension plans. Such disclosure would be essential to an individual account program, with some rules having more significance than others, depending on the investment choices offered. For example, if participants were allowed to acquire individual corporate securities such as stocks and bonds, the disclosure and reporting requirements of the Securities Acts of 1933 and 1934, such as those applicable to the governance, activities, and financial status of the issuer, would be particularly important. If investment choices

¹⁰ Diversification refers to investing in more than one asset. Asset allocation is the choice of how much to invest in each of the broad asset classes—stocks, bonds, cash, real estate, and possibly others to achieve the best portfolio given the investor’s objectives and constraints.

were limited to mutual funds, disclosure about the funds would have primary importance, while information about the issuers of the securities owned by the funds would be relatively less significant for participants.

Introducing an individual account program would change the nature of the current Social Security program and would require increased education, not only to help people to understand the individual account program, but also what their responsibilities and risk trade-offs would be. The amount of education that would be necessary would depend on the range and type of investment choices and the fees and expenses associated with individual accounts. As a wider variety of choice is offered to individuals, especially under a mandatory program, more education beyond the basics would be necessary because individuals would need to consider broader issues. In addition to understanding the difference between a stock and a bond, investors would need to understand the importance of diversification. Furthermore, being able to understand the rates of return and various risks of different options and pick the appropriate investment vehicle becomes more difficult, as more choice is offered. When choices are limited to a few well-diversified alternatives—such as the case of a few indexed mutual funds¹¹—many decisions are made by those managing the funds or are made by rules governing the fund (such as what the funds can invest in). Thus, if a few well-diversified choices are offered, the individual would have fewer risk factors to consider, and investor education can be more targeted. Various officials have suggested that a default option be provided for those individuals who, regardless of educational effort, would not make investment choices. Such a default mechanism could provide a very low-risk option based on Treasuries and/or could gear the asset mix to the age of the worker.

Recommendations

GAO is not making recommendations in this report.

Agency Comments

GAO provided drafts of this report to the Department of the Treasury, the Social Security Administration, the Securities and Exchange Commission, and the Pension and Welfare Benefits Administration of the Department of Labor (DOL) for review and comment. SSA provided written comments that are included in appendix I. SSA had two major points: (1) that GAO needed to clarify that comparisons between the rate of return implicit in the Social Security system and those of individual accounts were

¹¹ An indexed mutual fund is a mutual fund that holds shares in proportion to their representation in a market index, such as the Standard & Poors 500.

problematic for many reasons, including the fact that Social Security provides survivors and disability insurance; and (2) that GAO needed to discuss the savings implications of the President's proposal. In response to the first point, we have further clarified issues regarding the rate of return comparisons. With regard to the second point, this report was not intended to comment on specific reform proposals.

In commenting on our report, SSA and the other agencies also provided technical and clarifying comments. We have incorporated these comments where appropriate.

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Abbreviations

DOL	Department of Labor
FDIC	Federal Deposit Insurance Corporation
IRA	Individual Retirement Accounts
OASDI	Old Age Survivor Disabilities Insurance
OCC	Office of the Comptroller of the Currency
OTS	Office of Thrift Supervision
SEC	Securities and Exchange Commission
SSA	Social Security Administration
SPD	Summary Plan Description

Introduction

Social Security forms the foundation for our retirement income system. In 1998, it provided approximately \$264 billion in annual benefits to 31 million workers and their dependents. However, the Social Security program is facing significant future financial challenges as a result of profound demographic changes, including the aging of the baby boom generation and increased life expectancy. In response, different groups and individuals have advanced numerous proposals that have called for the creation of some sort of mandatory or voluntary individual accounts. To better understand the potential implications of individual accounts, the Chairman of the House Committee on Ways and Means asked GAO to determine how individual accounts could affect private capital and annuities markets as well as national savings, the potential risks and returns to individuals, and the disclosure and educational information needed for public understanding and use of an individual account investment program.

Social Security Has a Financing Problem

The Social Security program¹ is not in long-term actuarial balance. That is, Social Security revenues are not expected to be sufficient to pay all benefit obligations from 1999 to 2073. Without a change in the current program, excess cash revenues from payroll and income taxes are expected to begin to decline substantially around 2008. Based on the Social Security Trustees latest “best estimate” projections, in 2014 the combined OASDI program will experience a negative cash flow that will accelerate in subsequent years. In addition, the combined OASDI trust funds are expected to be exhausted in 2034, and the estimated annual tax income will be enough to pay approximately 70 percent of benefits.

Every year, Social Security’s Board of Trustees estimates the financial status of the program for the next 75 years using three sets of economic and demographic assumptions about the future. According to the Trustees’ intermediate set of these assumptions (or best estimate), the nation’s Social Security program will face both solvency and sustainability problems in the years ahead unless corrective actions are taken. Over the next 75 years, Social Security’s total shortfall is projected to be about \$3 trillion in 1998 dollars.

Social Security’s long-term financing problem is primarily caused by the aging of the U.S. population. As the baby boom generation retires, labor

¹ Social Security consists of two separate trust fund accounts: Old Age and Survivors Insurance (OASI), which funds retirement and survivor benefits, and Disability Insurance (DI), which provides disabled workers and their families. These two accounts are commonly combined in discussing the Social Security program. For the purposes of this report, any reference to the Social Security program refers to the combined Old Age Survivors Disability Insurance (OASDI) program.

force growth is expected to slow dramatically. Beyond 2030, the overall population is expected to continue aging due to relatively low birth rates and increasing longevity. These demographic trends will require substantial changes in the Social Security benefits structure and/or revenues (i.e., taxes and/or investment returns). Without such changes, current Social Security tax revenues are expected to be insufficient to cover benefit payments in about 2014, less than 15 years from now. These trends in Social Security's finances will place a significant burden on future workers and the economy. Without major policy changes, the relatively smaller workforce of tomorrow will bear the brunt of financing Social Security's cash deficit. In addition, the future workforce also would likely be affected by any reduction in Social Security benefits or increased payroll taxes needed to resolve the program's long-term financing shortfall. As a result, without timely actions, certain generations could face the twin blows of higher burdens and reduced benefits.

Individual Accounts Proposed to Help Solve Social Security's Financing Problem

Proposals have been advanced by different groups to reform Social Security through individual accounts. Such proposals basically also try to restore the Social Security program's solvency and conserve its sustainability. In its report to the Social Security Commissioner, the 1994-1996 Advisory Council on Social Security offered three alternative reform proposals, two of which would create individual accounts. The remaining proposal called for having the government invest the trust fund in financial assets, such as corporate equities. Numerous other proposals, also calling for individual accounts, have since been put forth by various organizations. Currently, therefore, there are a wide array of proposals that rely on some form of individual accounts. These proposals have in common the idea that to varying extents, individuals would manage their own individual accounts. The returns from these accounts would provide some or much of an individual's future retirement income.

Social Security is currently structured as a defined benefit program.² The current Social Security program's benefit structure is designed to address the twin goals of individual equity and income security—including retirement income adequacy.³ The basis of the benefit structure is that

² A defined benefit plan is one in which the employer determines employees' retirement benefit amount using specific formulas that consider such factors as age at retirement, years of service, and salary levels. The employer is responsible for ensuring that sufficient funds are available to pay promised benefits.

³ Individual equity means that there should be some relationship between contributions made and benefits received (i.e., rates of return on individual contributions). Retirement income adequacy is addressed by providing proportionately larger benefits (redistributive transfers) to lower earners and certain household types, such as those with dependents (i.e., benefits levels and certainty).

these twin goals, and the range of benefits Social Security provides, are currently combined within a single defined benefit formula. Under this defined benefit program, the worker's retirement benefits are based on the lifetime record of earnings, not directly on the payroll tax he or she contributed. Alternatively, a number of individual account proposals introduce a defined contribution structure as an element of the Social Security program. A defined contribution approach to Social Security focuses on more directly linking a portion of the worker's contributions to the retirement benefits that will be received. The worker's contributions are invested in financial assets and earn market returns, and the accumulations in these accounts can then be used to provide income in retirement and an additional pre-retirement death benefit. One advantage of this approach is that the individual worker has more control over the account and more choice in how the account is invested. In essence, the defined contribution structure is similar to the current 401(k) or IRA systems.⁴

Some proposals combine defined contribution and defined benefit approaches into a two-tiered structure for Social Security. The aim is to maintain in some form the current existing system as a base tier and add an individual account component as a supplemental tier. Some proposals modify the existing benefit structure; and others propose features that provide guarantees of current law benefits or some other level, such as the poverty line. Other proposals have a more complicated formula including forms of matching. Thus, the relationship between contributions and benefits may be less direct. Under most of these proposals, individuals would receive part of their future benefits from a modified Social Security program and part from the accumulations from their individual account.

Four Main Characteristics of Individual Account Proposals

Most of the individual account proposals seek to create investment accounts that to varying extents are managed by the participants themselves. However, the actual details of how to structure individual accounts vary by each proposal. Individual account proposals are usually framed by four characteristics: (1) carve-out versus add-on; (2) mandatory versus voluntary participation; (3) range of investment options offered; and (4) distribution options (e.g., required annuitization or lump-sum payout).

⁴ A 401(k) pension plan is an employer-sponsored defined contribution plan that allows participants to contribute, before taxes, a portion of their salaries to a qualified retirement account. An IRA is a personal, tax-deferred retirement account. IRA assets can be invested in almost any kind of financial instrument.

Carve-out Versus Add-on

The first characteristic pertains to whether to carve-out a portion of Social Security's tax that is to be invested in financial assets or to add-on a percentage to the current tax that is to be invested in financial assets. OASDI has a payroll tax of 12.4 percent. A carve-out involves creating and funding individual accounts with a portion of the existing payroll tax. Thus, some portion of the 12.4 percent payroll tax, such as 2 percent, would be carved out of the existing Social Security cash flow and allocated to individual account investments. The resulting impact would be that revenues are taken out of Social Security and less is left to finance current benefits. Other proposals take a different approach and add-on individual accounts as a type of supplementary defined contribution tier. For instance, 2 percent would be added on to the current tax of 12.4 percent. The resulting effect of an add-on leaves the entire 12.4 percent payroll tax contribution available to finance the program while dedicating additional revenues for program financing either from higher payroll taxes and/or from general revenue.

Mandatory Versus Voluntary

The second characteristic of individual account proposals concerns whether to make investments in individual accounts mandatory or voluntary. Mandatory participation in individual accounts would require that each individual invest some percentage of his or her payroll tax contribution in financial assets such as equities. Voluntary participation in individual accounts could allow individuals to opt in or opt out of investing any portion of their payroll tax contributions into financial assets. Individuals would rely on the existing Social Security if they chose to opt out of participating in individual accounts. Other voluntary approaches allow individuals to contribute with or without matching to a retirement account. Additionally, mandatory or voluntary can also refer to the pay-out an individual receives upon retirement, such as a pay-out in the form of a lump sum.

Investment Choices

The third characteristic has to do with the degree of choice and flexibility that individuals would have over investment options. Some proposals would allow unlimited investment choices, such as investments in corporate equities, bonds, or real estate. Other proposals would offer a more limited range of choices, such as equity or bond indexed funds. Thus, individual account investments offer individuals some range of choice over how to accumulate balances for their retirement.

Annuitization Versus Lump-Sum

The final characteristic centers around how the accumulated earnings in individual accounts will be paid out. Preserving individual's retirement income prior to pay-out by prohibiting pre-retirement distributions or loans is also a requirement of most proposals. However, upon pay-out,

some proposals would permit requiring annuities—contracts that convert savings into income and provide periodic pay-outs for an agreed-upon span of time in return for a premium. Other proposals suggest allowing the individual to withdraw the account balance in lumpsum or through gradual pay-outs.⁵

Individual Accounts are Different From the Current Social Security Program

Among the changes implementing individual accounts would make to the current Social Security program is to move away from a pay-as-you-go system in the direction of an advanced funded system.

Pay-As-You-Go

Social Security is currently financed largely on a pay-as-you-go basis. Under this type of financing structure, the payroll tax revenues collected from today's workers are used to pay the benefits of today's beneficiaries. Under a strict pay-as-you-go financing system, any excess of revenues over expenditures is credited to the program's trust funds, which function as a contingency reserve.

Advanced Funding Through Individual Accounts

Advanced funding refers to building and maintaining total balances for Social Security, whether that is done through individual accounts or some other mechanism.⁶ Thus, although individual accounts are a form of advanced funding, the two terms are distinct. For instance, building up the balance in the Trust Funds is a form of advanced funding. The creation of individual accounts refers to a defined contribution system of accounts connected to Social Security and held in individuals' names. Essentially, individual accounts would be advanced funded income arrangements similar to defined contribution plans or 401 (k) plans. Although privately held individual accounts are a widely discussed means to achieve advanced funding, there are other ways to achieve advanced funding. Another approach to advanced funding using private markets would have the government invest directly in private capital markets. Building up the Trust Fund using Treasury securities (marketable or nonmarketable) is another form of advanced funding, although it does not involve diversification gains.

Proponents of individual accounts often state that advanced funding and asset diversification are benefits of their proposals. Yet, although

⁵ Some other proposals would combine payments from individual accounts with Social Security benefits into a single benefit.

⁶ Advanced funding could also occur through a buildup of nonmarketable or marketable Treasury securities or through having the government invest in the private sector.

advanced funding, individual accounts, and asset diversification are often linked, they are conceptually different. Diversification refers to investing in more than one asset and can be performed by individuals investing in individual accounts or by the government investing the trust fund in corporate equities stocks as well as corporate bonds. Any one of the three categories could change without changing the other. For instance, Social Security's Trust Funds are currently invested in nonmarketable Treasuries.⁷ Allowing the Trust Funds to invest in assets other than Treasuries would be diversifying without introducing individual accounts. Alternatively, individual accounts could be introduced whereby individuals are allowed to invest in only one asset—thereby introducing individual accounts without diversifying.

Savings Implications of Advanced Funding

Whether advanced funding through individual accounts increases national saving is uncertain. The nation's saving are composed of the private saving of individuals and businesses and the saving or dissaving of all levels of government.⁸ Supporters of advanced funding point out that individual accounts offer a way to increase national savings as well as investment and economic growth. Others suggest that the national saving claims of those favoring advanced funding through individual accounts may not be realized. Whether advanced funding through individual accounts increases national saving depends on a number of factors, including how individual accounts are financed (existing payroll tax, general revenues); how private saving⁹ responds to an individual account system; the structure of the individual account system (mandatory or voluntary), and the limitation or prohibition of pre-retirement distributions and loans to make sure retirement income is preserved.

Furthermore, even if national saving increases as a result of individual accounts, individuals may or may not be better off. Saving involves giving up consumption today in exchange for increased consumption in the

⁷ The Trust Funds are invested in special issue Treasuries (either bonds or certificates of indebtedness). These special issue Treasuries are redeemable at face value at any time.

⁸ In general, government budget deficits reduce from national savings by absorbing funds that otherwise could be used for private investment. Conversely, government budget surpluses add to saving. Surpluses allow the government to pay off some of its maturing debt, thereby reducing the outstanding level of debt held by the public and freeing up additional funds for private investments.

⁹ Private saving is the saving of households and businesses.

future. Some economists have stated that it is not necessarily the case that all increases in saving are worth the cost of foregone consumption.¹⁰

Objectives, Scope, and Methodology

The Chairman of the House Committee on Ways and Means asked us to determine how individual accounts could affect (1) private capital and annuities markets as well as national savings, (2) potential returns and risks to individuals, and (3) the disclosure and educational information needed for public understanding and use of an individual account investment program.

To determine the effect of individual accounts on the private capital and annuities markets, as well as risk and return issues, we interviewed economists and other officials who were both proponents and opponents of individual accounts. These officials included officials from think tanks as well as academicians who have studied Social Security reform. We also reviewed and analyzed several studies relating to the impact of individual accounts on the market as well as studies that had tried to assess the risks and return issues that would arise because of individual accounts. We also analyzed data from the Federal Reserve Flow of Funds as well as data provided by the insurance industry. Additionally, we talked to industry officials from both the insurance and securities industries to obtain their views, and we interviewed government agency officials as well.

To determine the disclosure and educational requirements needed, we spoke to officials from the Securities and Exchange Commission (SEC), the Department of Labor's (DOL) Pension and Welfare Benefits Administration (PWBA), the Pension Benefit Guaranty Corporation, and the Social Security Administration (SSA). We also spoke to private sector officials about the educational requirements that would be needed for an individual account program. Additionally, we reviewed various studies that have looked at the best ways to educate people about investment and retirement education.

Because of the wide-ranging nature of the numerous proposals being advanced, our report focuses on the common, or generic, elements that underlie various proposals to reform Social Security financing rather than on a complete evaluation of specific proposals.

¹⁰ See Eric M. Engen and William G. Gale, "Effects of Social Security Reform on Private and National Saving," *Social Security Reform Conference Proceedings Federal Reserve Bank of Boston*, Conference Series No. 41, June 1997.

Chapter 1
Introduction

We did our work in accordance with generally accepted government auditing standards between October 1998 and June 1999 in Washington, D.C., and New York, NY.

We requested comments on a draft of this report from SSA, SEC, DOL, the Department of Treasury, and the Federal Reserve Board. SSA provided written comments that are included in appendix I. A discussion of these comments appears at the end of chapters 2 and 3. SSA and the other agencies also provided technical and clarifying comments, which we incorporated in this report where appropriate.

Capital and Annuities Markets Able to Absorb Individual Account Investments

Individual accounts can affect the capital markets in several ways depending on how the accounts are funded, how the funds are invested, how people adjust their own savings behavior in response to having individual accounts, and the restrictions placed on using funds in individual accounts for anything other than retirement income. Most of the proposals use either the Social Security cash flow or federal general revenues as a source of funds. As a result, the primary capital market effect is a purely financial one: borrowing in the Treasury debt market (or retiring less debt) to provide funding for investment in private debt and equity markets. Although the amounts involved are likely to be sizeable, the effect would primarily be one of redirecting funds and readjusting the composition of financial portfolios. There may also be some effect on the difference between the return on Treasury debt and that paid on riskier assets, although the effect is not likely to be large. Although substantial inflows into the private debt market could, in certain circumstances, result in some increased volatility, both the private equity and debt markets should be able to absorb the inflows without significant long-term disruption. There could eventually be a significant increase in the amount of new funds flowing into the annuities market. However, the magnitude of annuity purchases is likely to build gradually over time as more retirees build larger balances, allowing the market sufficient time to adjust.

Another potential effect of individual accounts would be an increase or decrease in national savings—the overall level of domestic financial resources available in the economy for the purpose of investing in plant and equipment. Whether individual accounts would increase or decrease national savings depends on how they are financed, how private savings changes as a result of individual accounts, and whether there are restrictions on households' ability to borrow.

Redirection of Funds Could Affect Composition of Portfolios

Most proposals use either the Social Security cash flow or federal general revenues as a source of funds for individual accounts. The funds raised are then to be invested in private equity or debt markets. As a result, there would be an increase in the relative supply of Treasury debt available to the public and an increase in the relative demand for private debt and equities to be held in individual accounts. This redirection of funds—selling Treasury debt for the cash to invest in private debt and equity—is a purely financial effect. It is likely to result in a change in the composition of private sector holdings as businesses and households absorb the extra government debt and provide new or existing private debt and equity, thereby adjusting their portfolios.

Whether the resources for individual accounts come from Social Security contributions or general revenues, the level of government debt held by the public would increase, or not fall as much as it otherwise would. The only cases in which an increase in debt held by the public would not occur would be those in which the resources come from an additional source of funding—either a tax increase, an expenditure reduction, or the result of some voluntary private saving—that would not otherwise have occurred. Increased government borrowing from the public could put some upward pressure on the interest rate at which the government borrows, if private sector borrowers are to be persuaded to hold the increased supply of government debt. Funds diverted to private equity and debt markets could have the effect of raising the prices and therefore lowering the yields (rates of return) on these higher risk assets. The combined effect could narrow somewhat the difference between the more risky and least risky assets.

Debt Held by the Public Will Likely Rise to Provide Funding

Whether resources used to finance individual accounts come from new revenues, additional borrowing, or surpluses, the amounts flowing into private capital markets are likely to be substantial. Funding of individual accounts will come directly or indirectly from increased government borrowing from private markets, unless funded by a tax increase or spending reduction. To fund most individual account proposals, the government would need to raise resources either by borrowing in the market or—under a surplus scenario—by not retiring as much maturing debt as it otherwise would. For certain proposals, changes in borrowing may not arise because these proposals rely on a tax increase or benefit reduction so that current cash flow is not affected. If the source of funding for individual accounts is a carve-out from the current Social Security cash flow, this loss in cash flow would have to be made up from increased borrowing, a reduction in benefits, or some other program change. Alternatively, if the source of funding is general revenues, either additional borrowing from the public or less debt retired will be necessary depending on whether the overall budget is in deficit or surplus.¹ Only if the government raises taxes or reduces spending, and uses those revenues to finance individual accounts, is there not likely to be any effect on borrowing because the remaining cash flow would not be affected.

¹ The federal deficit (also called the “unified “ deficit) is the difference between total federal spending and revenue in a given year. To cover this gap, the government borrows from the public by issuing securities, mostly through the Treasury Department. A surplus reduces the need for the federal government to borrow from the public.

Funds Would Be Redirected Into Private Capital Markets

The uses of the funding for individual accounts will depend on the options available to investors and the choices they make within those options. To the extent that investors choose to invest in Treasury debt, there is that much less flowing into private capital markets, and any effects on those markets would be reduced. However, investors or their agents are likely to put at least some, if not most, of the funds into the private equity or debt market, and some proposals call for all of the funds to be invested in private markets. The size of this potential flow of funds into the private sector depends on whether individual account investments are mandatory or voluntary as well as the percentage of payroll that forms the basis for the program. The actual amounts allocated to private equity and debt will depend upon individual choice to the extent such choice is allowed, or on selected percentages if those are set by law.

The initial annual dollar amount flowing into the capital markets as a result of individual account investments could be about \$70 billion (2 percent of payroll) in 1998 dollars. According to our analysis of Social Security Administration (SSA) data, the effective taxable payroll for all working individuals will steadily increase well into the future. As a result, the annual dollar amount from individual account investments is likely to increase. For instance, our analysis of SSA data indicates that in the year 2020, the effective taxable payroll will be almost \$11 trillion. On the basis of that dollar amount, if 2 percent is the designated percentage, the amount flowing into the private equity and debt markets from individual accounts would be about \$220 billion in the year 2020.

Current Size of the Private Capital Markets

U.S. capital markets are the largest and most liquid in the world. The total market value of U.S. equities outstanding at the end of 1998 was about \$15 trillion.² The total value of corporate bonds³ outstanding in the United States was about \$4 trillion at the end of 1998. The amount of Treasury debt outstanding was also about \$4 trillion. As shown in table 2.1, the amounts outstanding for corporate equities and corporate bonds have been increasing. For instance, in 1997 there was about \$13 trillion in equities outstanding, up from \$10 trillion in 1996. The amounts outstanding for corporate bonds has increased from about \$3 billion in 1996 to about \$4 billion in 1998.

² This amount also includes foreign issues traded in the United States.

³ The Flow of Funds data from the Federal Reserve only reports corporate and foreign bonds together. It is difficult, therefore, to separate the corporate bonds from the foreign bonds, and we did not attempt to do so. For the purposes of our discussion, we will refer only to corporate bonds.

Table 2.1: Amounts of Corporate Equities, Corporate Bonds, and U.S. Treasuries Outstanding (Dollars in Billions)

Market	1996	1997	1998
Corporate equities	\$10,062	\$12,776	\$15,438
Corporate bonds ^a	3,128	3,440	3,894
U.S. Treasuries	3,755	3,778	3,724

Source: *Flow of Funds Accounts of the United States*, Federal Reserve statistical release for the fourth quarter 1998, tables L. 209, p. 87, L. 212, p. 89, and L. 213, p. 90.

On the basis of the current size of the corporate equity and bond markets, the amount representing individual accounts is likely to be a small percentage of private capital markets, at least for a number of years. For instance, using a payroll percentage of 2 percent, if \$70 billion were to come from individual accounts, it would represent less than 0.5 percent of the \$15 trillion in equity outstanding in 1998 and less than 2 percent of the \$4 trillion in corporate bonds outstanding in 1998.

Various officials have expressed concern that over time, individual account investments would represent significant portions of the corporate equities and bond markets. It is likely that investments from individual accounts could eventually rival current holdings of other major sectors of the market and represent a sizeable portion of equity and corporate bond holdings. For instance, if 2 percent of payroll is placed in individual accounts annually, SSA estimates that stock holdings in individual accounts could grow to between \$1 trillion and \$2 trillion in 1996 dollars over the next 15 years. The overall market will grow at about the market rate of return, although individual components may grow faster or slower depending on strategies and relative demands by mutual funds, pension plans, and other investors.

Table 2.2: Annual Holdings of Corporate Equities and Bonds by Various Sectors of the Economy (Dollars in Billions)

Sectors	Corporate Equities			Corporate Bonds		
	1996	1997	1998	1996	1997	1998
Mutual funds	\$1,470	\$2,019	\$2,523	\$230	\$274	\$339
Private pension plans	1,491	1,864	2,232	228	256	301
State & local governments ^a	956	1,306	1,593	180	200	245
Life insurance companies	410	561	746	949	1,026	1,086

^aState and Local Governments refers to their retirement plans.

Source: *Flow of Funds Accounts of the United States*, Federal Reserve statistical release for the fourth quarter 1998, tables L. 212, p. 89, and L. 213, p. 90.

For instance, as shown in table 2.2, the total value of equity holdings of mutual funds was \$2.5 trillion in 1998, and the total value of corporate and foreign bond holdings was about \$339 billion.⁴ The holdings of various

⁴ *Flow of Fund Accounts of the United States*, Federal Reserve statistical release for the fourth quarter of 1998, tables L. 213, p. .90, and L. 212, p. 89.

sectors, such as private pension plans, were about \$2.2 trillion of equities and about \$301 billion of corporate bonds in 1998.⁵ Thus, although individual account holdings are likely to increase over time, the holdings of many other sectors of the economy are also likely to rise, although certain individual sectors may not. In general, it is difficult to predict how rapidly the sum of these sectors holdings will grow, especially in the presence of individual accounts.⁶

Current Flows Into Private Capital Markets

Even if the annual flows from individual accounts into private capital markets were a small percentage of the total market value of outstanding debt and equities, these amounts could still represent a substantial increase in the annual flows into those markets. The actual amounts will depend on the options available to individuals as well as the choices they make. If a large percentage of funds from individual accounts flowed into the equity markets, it could represent an increase of approximately 15 to 20 percent in the flow of funds into and out of the equity market, according to data from the Federal Reserve Flow of Funds.⁷ It is not clear that such an increase would have much effect on the pricing, or volatility, of the equity markets. However, the corporate bond market, which is smaller, could be affected, at least in the short term, depending on how much of the funds flow into the market and, to some extent, on the timing of those flows.

Current Stock Market Flows

Most U.S. equities markets are very liquid—it is easy for investors to buy and sell equities without moving the price.⁸ Various sectors of the economy, such as the household sector, mutual funds, private pension plans, and life insurance companies, purchase and sell equities every day. The equities market is a secondary market in which much of the transaction volume and value reflects movement of equities between purchasers and sellers. The annual net purchases can be positive or negative, reflecting the difference between the value of new equities issued and the value of equities repurchased; however, the amounts purchased

⁵ Flow of Fund Accounts of the United States, Federal Reserve statistical release for the fourth quarter of 1998, table L. 213, p. 90.

⁶ See later section of this chapter for a discussion of possible changes in household savings behavior in response to individual accounts.

⁷ This percentage relates approximately \$70 billion in individual account funds to the approximately \$400 to \$500 billion in net purchases and sales of equities over 1997 and 1998.

⁸ The equities markets are said to be “liquid” because the markets attract many buyers or sellers. In a liquid market selling or buying can be done with minimal effect on the prevailing competitive established price. The advantage of a liquid market for customers is immediacy or the ability to sell quickly when the customer needs to or buy quickly when there is a chance to make a profit.

and sold by specific sectors can be quite large. For instance, the annual net purchases of equities were minus \$3 billion in 1996, minus \$79 billion in 1997, and minus \$178 billion in 1998.⁹ As can be seen in table 2.3, the three largest purchasers bought in the range of \$300 billion in securities each year from 1996 to 1998. In terms of sellers, the household sector sold almost \$300 billion in 1996 and about a half of a trillion dollars in both 1997 and 1998.

Table 2.3: Annual Net Purchases and Sales of Corporate Equities by Different Sectors (Dollars in Billions)

Sector	Corporate equities		
	1996	1997	1998
Largest net buyers			
Mutual funds	\$193	\$167	\$144
Retirement plans of state and local govts.	52	54	66
Life insurance companies	42	93	92
Largest net sellers			
Household sector	-282	-514	-500
Private pension plans	-10	-16	-53

Source: *Flow of Funds Accounts of the United States*, Federal Reserve statistical release for the fourth quarter 1998, table L. 213, p. 45.

Annual flows within the equities market were in the hundreds of billions of dollars between 1996 and 1998. Over that period, mutual funds, life insurance companies, and state and local government retirement plans were the primary purchasers, and private pension plans and households were the major sellers of equities. Compared to these annual amounts, an additional tens of billions of dollars generated by individual accounts is not likely to cause major disruptions and could potentially be absorbed without significant price or volatility effects.

There is a greater chance of some possible disruption, however, if all of the individual account funds were to flow in at once rather than regularly, but not too predictably, over the course of the year. For instance, \$70 billion distributed evenly over the year would be unlikely to cause much disruption. However, concentrating that same flow into one quarter of the year could have some short-term effect on the market because it would represent a substantial increase in quarterly flows. As a result, to minimize the likelihood of disruption, it would make sense, to the extent practicable, to smooth out the inflows so that they do not all come into the market within a short time period. If the inflows are lumpy and predictable, the market may be able to anticipate the inflows and adjust prices somewhat, which could mean that individual account purchases would pay slightly higher prices than they otherwise would.

⁹ *Flow of Funds Accounts of the United States*, Federal Reserve statistical release for the fourth quarter of 1998, table F. 213, p. 45.

Corporate Debt Flows

The corporate debt markets are not as transparent as the corporate equities markets; for example, there are no central listings for the prices of the bonds or the volume of corporate bonds sold. They also do not have as much depth as the equities markets—there are fewer buyers and sellers in the corporate bond markets. Many corporate bond transactions are done through private placements; i.e., they are not offered to the corporate debt market as a whole. The result is a market with less liquidity reflected in a greater spread between the bid price (what you will pay for the bond) and the ask price (the price at which you would sell the bond).

As stated previously, the value of outstanding corporate debt is substantially less than the market value of corporate equities. On an annual flow basis, corporate debt issues have been running in the hundreds of billions of dollars over the last decade. However, some proportion of that is short term (less than 1 year in maturity) so that the total is not easily comparable to the annual amounts of equities purchased and sold. As shown in table 2.4, the annual net purchases of corporate bonds by various sectors ranged from as low as \$17 billion for state and local government retirement plans of in 1996 to as high as \$79 billion for life insurance companies in 1996. On the basis of annual flows, it is difficult to say what the effect on the bond market is likely to be.

Table 2.4: Annual Purchases and Sales of Corporate Bonds Equities by Different Sectors (Dollars in Billions)

Sector	Corporate bonds		
	1996	1997	1998
Large Buyers			
Mutual funds	\$34	\$44	\$65
Retirement plans of state and local govts.	17	19	45
Private pension plans	21	28	45
Life insurance companies	79	77	60

Source: Flow of Funds Accounts of the United States, Federal Reserve statistical release for the fourth quarter 1998, table F. 212, p. 44.

However, if we compare the corporate bond and equity markets, we can draw some tentative conclusions about the likelihood of individual accounts having a disruptive effect on either market. The corporate bond market is relatively smaller and less liquid than the equity market. As a result, an inflow into the bond market is more likely to affect the market price and the volatility of the market, compared to an equivalent inflow into the equity market, especially if it is concentrated in a short period of time. Any disruption is still likely to be short term in nature and can be mitigated if the inflow is spread over time, so that other market participants are less able to predict the inflows and raise prices in anticipation of the inflow.

Treasury Debt

Although there are various types of Treasury debt, the overall market for U.S. Treasuries is far more liquid and transparent than the corporate bond market. A large secondary market—in which Treasury securities are bought and sold subsequent to original issuance—exists for Treasuries and helps to make it one of the most liquid markets in the world. Annual net purchases of Treasuries were \$23 billion in 1997 and minus \$55 billion in 1998.¹⁰

The effect on the Treasury debt market from a movement to individual accounts will depend not only on the choices available to individuals but also on the extent to which the government borrows from the private capital markets to fund individual accounts. As stated previously, to fund any individual account proposal that does not increase Social Security contributions, the government would need to raise resources either by borrowing in the market or by not retiring as much maturing debt as it otherwise would. The Treasuries market, therefore, could be affected in two ways: (1) by how much the government borrows to fund individual accounts, and (2) by how much individuals choose to invest in Treasuries. However, the depth and liquidity of the Treasury debt market is such that the market is unlikely to be significantly disrupted even by a large flow of funds resulting from individual accounts.

Affect of Individual
Accounts on the Annuities
Markets

Annuities protect against the possibility of outliving one's financial resources by guaranteeing a stream of income for the remainder of one's life, regardless of how long that may be. Annuities basically convert savings into income and may be sold individually or as a group product. In a group annuity a pension plan provides annuities at retirement to a group of people under a master contract. It usually is issued by an insurance company to an employer plan for the benefit of employees. The individual members of the group hold certificates as evidence of their annuities. Depending on the structure of individual accounts, individuals may be required to purchase individual annuities or, similar to pension and other retirement plans, fall under a group annuity.¹¹

One measure of the size of the annuities market is the level of the insurance industry's policy reserves—the sum of all insurers' obligations to their customers arising from annuity contracts outstanding. Each company is required by state insurance regulators to maintain its policy reserves at a

¹⁰ Flow of Funds of the United States, Federal Reserve statistical release for the fourth quarter of 1998, table F.209, p. 42.

¹¹ Some approaches call for having the government be responsible for small annuities. Other approaches call for individual account accumulations to feed into Social Security benefits.

level that will ensure payment of all policy obligations as they fall due. As shown in table 2.5, policy reserves for individual annuities were about \$693 billion and for group annuities about \$762 billion.

Table 2.5: Policy Reserves Held for Individual and Group Annuities (Dollars in Billions)

	1995	1996	1997
Annuities			
Individual	\$594	\$622	\$693
Group	619	690	762

Source: Life Insurance Fact Book, American Council of Life Insurance, 1998, table 7.5, p.119.

Insurance industry officials told us that the annuities industry is likely to be able to absorb the flows from either mandatory or voluntary annuitization. Once again, we are talking about a movement of financial resources from one form to another rather than a new source of funds. The funds will be moved out of whatever investment instruments (assets) workers were using for accumulation purposes into a potentially different combination of assets held by companies supplying annuities.¹² Insurance industry officials believe that, generally, annuities resulting from the liquidation of the individual accounts would be phased in gradually and over a number of decades. In the early years, few if any retirees would have built up substantial individual account balances. As time passes, both the number of retirees with individual account balances and the average size of those balances would gradually increase, allowing the industry and the market time to adjust without difficulty.

One issue raised by insurance industry officials was that an individual account proposal that made annuity purchases mandatory at retirement could result in the demand for a significant number of very small annuities. For instance, at least initially, there would be many small accounts below \$2,000. Currently, annuity purchases average about \$100,000. Although the industry could absorb a significant number of small accounts, industry officials said that providing annuities that small could be uneconomical for the industry because the cost of issuing a monthly check, and other administrative costs, would be prohibitive.¹³

¹² Annuities have traditionally been supplied by life insurance companies and financed primarily by investments in corporate debt and real estate, although there is also likely to be some investment in corporate equities and Treasury debt.

¹³ In a forthcoming report, we will provide a more detailed discussion of the factors that affect the costs associated with purchasing an annuity and how this cost may factor into a system of individual accounts.

Effect of Individual Accounts on National Savings Depends on Financing, Structure, and Behavioral Effects

Although the financial effects of individual accounts are an important consideration, a related but somewhat separate issue is the potential for individual accounts to increase or decrease national saving.¹⁴ Along with borrowing from abroad, national savings provides the resources for private investment in plant and equipment. The primary way in which a movement to individual accounts could change the overall capacity of the economy to produce goods and services would be if individual accounts were to lead to a change in the overall level of national saving. The extent to which individual accounts affect national saving depends on how they are financed (existing payroll tax, general revenues)—the effect on government saving; how private savings—the savings of households and businesses—respond to an individual account system; the structure of the individual account system (mandatory or voluntary); and the limitation or prohibition of the pre-retirement distribution or loans to make sure retirement income is preserved.

Savings Affected by Funding Source

One important determinant of the effect of individual accounts on national savings is the funding source. There are several possible funding sources, although most involve a movement of funds from or through the federal government and each has its own effects on the federal government's portion of national saving. For some funding sources these savings effects are clearer than others. As previously stated, the funds can come from (1) within the current Social Security system, i.e., the surplus or current cash flows; (2) a change in the system resulting from increased payroll taxes or reduced benefits;¹⁵ or (3) outside the system using a general fund surplus or general revenues.

Using either the Social Security surplus or more generally the current Social Security cash flow is likely to reduce government saving. If part of the cash flow is diverted to individual accounts but there is no change in the benefits paid or the taxes collected, the lost cash flow will either result in a smaller addition to the surplus or be replaced by borrowing. In either case the result is a reduction in the measured government surplus—the sum of the Social Security surplus and the general fund surplus—or an increase in the deficit. From the government's perspective, its saving has gone down to provide the resources for increased personal savings

¹⁴ National saving includes the saving of individuals, households, and businesses, called private saving; and the net saving of all levels of government.

¹⁵ There are also proposals which allow individuals to voluntarily contribute to individual accounts from their own resources.

through individual accounts.¹⁶ This is a case of a carve-out from Social Security.

If the resources for individual accounts are financed by additional Social Security taxes or reduced benefits instead, there will be no direct effect on government savings. The increased outlays for individual accounts will be offset by higher government revenues or lower government benefit payments. In the absence of other changes in Social Security cash flows, government savings remain constant, and any increase in private saving would be an increase in national saving. This is a case of an add-on to both Social Security and to the overall government budget.

The most complicated case involves the use of funds that are outside of the Social Security system but part of the overall government budget. There are proposals to use the overall budget surplus or general government revenues as a source of funds for individual accounts. Although on its face this appears to reduce government savings by the amount diverted, the actual effect on government savings depends on what would have been done with the surplus or revenue if it had not been used to finance individual accounts.

For example, if the resources would have been used to finance additional government spending, and the diversion of the funds to individual accounts means that such spending is not undertaken, government saving would not be reduced by individual accounts. In this case, any increase in private saving would be an increase in national saving. Similarly, if the resources would have been used to finance a tax cut, then diverting funds to individual accounts does not directly reduce government savings if the tax cut is not undertaken. In the case of a tax cut, national saving will go up if individual accounts generate more private saving than the tax cut.

If the funds would have been used to pay down debt, the direct effect of diverting those resources to individual accounts would be to reduce government saving. The full effect on national saving depends on the extent to which individuals adjust their own savings behavior. If they do not adjust, national saving is on balance unaffected. To the extent individuals or businesses reduce their saving, national saving will fall.

¹⁶ Because national savings is the sum of government and private saving, the effect of a carve-out depends on whether private savings goes up by more or less than government savings goes down.

Behavioral Effects Are
Difficult to Predict

The effects of various individual account proposals on national saving depend not only on how the proposals affect government savings but also on how private savings behavior will respond to such an approach. Regardless of the financing source, the effect of individual accounts will be to raise, at least to some extent, the level of personal or household saving unless households fully anticipate and offset through a reduction in their own saving. For example, a carve-out from the existing Social Security cash flow would provide funding for individual accounts for everyone (under a mandatory approach) or for those who wished to participate (under a voluntary approach). Such a carve-out is likely to reduce government saving and raise private saving by an equivalent amount in the absence of any behavioral effects. If households are forgoing current consumption by saving for their retirement, then, in response to this potential increase in future retirement benefits, they may reduce, to a greater or lesser extent and in various ways, their own savings, including retirement saving. To the extent that household responses lead to reduced personal saving, national savings as a whole would fall under a carve-out.

In general, the result would be similar under any proposal that reduced government saving to fund private saving through individual accounts. This includes proposals that use general revenues that would have been saved by the government; i.e., used to reduce the deficit or retire debt outstanding. The overall level of consumption in the economy is not likely to change as a result of the movement of funds. Any significant change in the level of consumption resulting from such proposals would result from some households reducing their retirement savings to fund consumption because they now had individual accounts.

Behavioral Change Depends
on Preferences and
Opportunities

The extent of these behavioral effects will depend on the structure of the program and any limitations that are placed on the use of funds in individual accounts, such as restrictions on preretirement withdrawals. If such a program is mandatory rather than voluntary, it is more likely to affect those households who currently either do not save or do not save as much as the amounts in their individual accounts. A mandatory program would increase savings for those who do not usually save, who are usually low-income people.

Household behavior in response to individual accounts will depend on the extent that the household is currently saving for retirement and how the set of options available to households is changed by the presence of individual accounts. One group of households, those that are currently saving as much as they choose for retirement, given their income and wealth, would probably reduce their own saving in the presence of

individual accounts. For those households for whom individual accounts closely resemble 401(k)s and IRAs, a shift to individual accounts might lead them to decrease their use of these accounts.¹⁷ They would have additional retirement income possibilities available and might choose to reduce their retirement or other saving to use for consumption in the present rather than in the future. However, unless they were target savers, i.e., savers who were trying to reach a specific retirement income goal, they might not reduce their other savings dollar for dollar with individual accounts.¹⁸ Therefore, we might expect some reduced saving by a significant number of households; for certain households, we might expect a substantial reduction.

Under a voluntary approach, the households that are most likely to participate are those households that are currently saving but that face some constraint in terms of the type of retirement saving they can do or the amount of tax-preferred saving they are allowed. For example, someone whose employer offered only a defined benefit retirement plan or a defined contribution plan with very limited options might find that voluntary individual accounts offered a new opportunity. In addition, someone who was already contributing as much as he or she was legally allowed to tax-deferred savings would find a voluntary program attractive if it allowed an additional amount of tax-deferred saving. These and others who take advantage of a voluntary program may be more likely to reduce other forms of saving in response.

Households that are currently not saving, either because they are resource constrained or because they are not forward-looking, would be forced to save some amount by a mandatory individual account system. Households in such situations may welcome the additional resources, especially if they do not come from a direct reduction in their own consumption. However, such households may also try to transform some of the additional resources into consumption if they are able to borrow from the accounts or otherwise tap into the accounts before retirement. To maintain retirement income adequacy and to keep savings from being dissipated, it

¹⁷ See National Academy of Social Insurance, Report of the Panel on Privatization of Social Security, 1998 pp. 2-4.

¹⁸ See Eric M. Engen and William G. Gale, "Effects of Social Security Reform on Private and National Savings" Social Security Reform, Links to Saving, Investment, and Growth, Conference Series No. 41, June 1997, pp. 103-142.

may be necessary to prohibit or restrict borrowing or other methods of drawing down individual accounts prior to retirement.¹⁹

Even with such restrictions, it may not be possible to completely eliminate all options that households could use to indirectly increase consumption from individual accounts. For example, households with little or no retirement saving or other financial wealth could have wealth in some other form, such as home equity. It is conceivable that such households could borrow against that home equity as a way of turning their increased future consumption into present consumption.

In addition to the effects of individual accounts on household savings there are also other potential indirect effects on private saving. For example, the incentives for employers to provide retirement benefits, either through defined benefit or defined contribution plans, could be affected by individual accounts. In addition, if less compensated workers in a defined contribution plan reduce their contributions to the plan, higher compensated workers may be required to reduce their own contributions under the antidiscrimination rules.

Offsetting these tendencies to reduce saving, however, there are some economists who believe that individual accounts might encourage certain individuals to save more for retirement and thus not reduce their current savings.²⁰ Such an effect is more likely to be present if there is some form of matching by the government as part of the individual account proposal. Others believe that to the extent that a lack of saving is based on people not taking a long enough view, the presence of individual accounts and watching them accumulate could give people a better sense of how saving small amounts can add up over time. This, plus observing how compounding²¹ works, could induce some to save who otherwise would not.

National saving is more likely to be increased by some approaches to individual accounts than by others. Using sources of government funding that would more likely have resulted in spending rather than saving

¹⁹ While borrowing could potentially allow individuals to reduce retirement income, the option to borrow can also be an attractive feature under a voluntary program. For discussion of the trade-off see 401(k) Pension Plans: Loan Provisions Enhance Participation But May Affect Income Security (GAO/HEHS-98-5, October 1, 1998).

²⁰ Based on James M. Poterba, Steven F. Venti, and David A. Wise, "How Retirement Saving Programs Increase Savings," Journal of Economic Perspectives, Volume 10, Number 4, Fall 1996, pp. 91-112.

²¹ Interest accrued on a daily, quarterly, semiannual, or annual basis.

decreases the likelihood that government saving would be reduced. Proposals that are mandatory are more likely to increase private saving because a mandatory program would require that all individuals, including those who do not currently save, place some amount in an individual account. Certain prohibitions or restrictions on borrowing or other forms of preretirement distributions would also limit the ability of some households to reduce their savings in response to individual accounts.

Agency Comments

SSA commented that we needed to discuss the savings implications of the President's proposal. This report was not intended to comment on specific reform proposals.

Return and Risks Are Likely to be Higher With Individual Accounts

There is a risk/return trade-off for individuals under an individual account program; instituting such a program would likely raise both the risks and the returns available to participants compared to the current system. In order to receive higher returns, individuals would have to invest in higher risk investments. The return that individuals receive would depend on both their investment choices and the performance of the market. Individuals who earn the same wages and salaries and make the same contributions to Social Security could have different retirement incomes because of the composition of their portfolios and market fluctuations. As with any investment program, diversification and asset allocation could reduce the risks while still allowing an individual to earn potentially higher returns.

Most advocates of individual accounts state that the expected return on investments under an individual account program would be much higher for individuals than the return under the current Social Security program. Proponents of individual accounts usually point out that equities have historically substantially yielded higher returns than U.S. Treasuries, and they expect this trend to continue. Others are skeptical about the claims for a continuation of such a high expected return on equities. They state that history may not be a good predictor of the future and that the expected premium generated by investing in equities has steadily been declining. Furthermore, they state that even if expected equity returns are higher than other investments, equity returns are risky. Thus, in order to determine what returns individuals might expect to receive on their individual account investments, the riskiness of the investment should be taken into account. Adjusting returns to include risks is important, but there are many ways to do this, and no clearly best way.

Lastly, comparing the implicit rate of return that individuals receive on their Social Security contributions to expected rates of return on market investments may not be an appropriate comparison for measuring whether individuals will fare better under an individual account system. Such comparisons do not include all the costs implied by a program of individual accounts. In particular, the returns individuals would effectively enjoy under individual accounts would depend on how the costs of the current system are paid off. Rates of return would also depend on how administrative and annuity costs affect actual retirement incomes.¹

¹ In a forthcoming report, we will provide a more detailed discussion on issues comparing Social Security rates of return with those of market investments.

Instituting an Individual Account Program Means Greater Risk to Individuals for Potentially Greater Return

An individual account program would offer individuals the opportunity to earn market returns that are higher than the implicit returns to payroll under the current Social Security program. However, investing in private sector assets through individual accounts involves a clear trade-off—greater return but more risk or more variability in future rates of return. Under the current Social Security program, risks are borne collectively by the government. Moving to an individual account program would mean that individuals reap the rewards of their own investments, but they also incur risk—not only about future returns, but also the possibility of losing money and even having inadequate income for retirement. However, holding assets for the long term, diversification, and the proper asset allocation can mitigate certain risks and improve an individual's risk/return trade-off.

Risk/Return Trade-Off

A trade-off exists between risk and return in investments. If an individual is willing to consider the possibility of taking on some risk, there is the potential reward of higher expected returns. The capital markets offer a wide variety of investment opportunities with widely varying rates of return, which reflect variations in the riskiness of those investments. For instance, Treasury Bills are considered to be relatively risk free because they have almost no default risk and very little price risk.² Alternatively, equities are considered to be relatively risky because the rate of return is uncertain.

Because debt holders are paid out of company income before stockholders, equity returns are more variable than bonds. Overall, annual returns on equities are more volatile than returns on corporate bonds or Treasuries. On a long-term average basis, the market compensates for this greater risk by offering higher average returns on equities than on less risky investments. Thus, among the three types of investments, corporate equities are the riskiest investments but pay the highest returns, followed by corporate debt and then Treasuries. However, holding riskier investments such as equities over long periods of time can substantially diminish the risk of such investments.

The degree of risk and the size of potentially higher returns with individual accounts depend on the equities chosen as well as the performance of the market. A stock's value is tied to the expected performance of the issuing company. If the company does well, investing in individual equities could be very lucrative for investors. However, if the company does poorly,

² Treasury securities are subject to interest rate risk. Treasury bonds and notes are subject to more interest rate risk than Treasury bills, which are basically considered to be risk-free assets.

investing in individual equities could result in low returns or losses to the investor. Many financial analysts go through intensive research to try and pick the best stocks. Choosing the right stock, however, can be mostly a matter of a “random walk.”³

Diversification Improves Risk/Return Trade-Off

Individuals may mitigate the risk of holding equities and bonds by diversifying their portfolios and allocating their investments to adjust their risk exposure and to reflect their own risk tolerance and circumstances. Ultimately, the composition of an individual portfolio, along with the performance of the market, determines the return individuals receive and the risk they bear.

In constructing a portfolio investors combine equities and bonds and other “securities” in such a way as to meet their preferences and needs, especially their tolerance for risk. Individuals manage their portfolios by monitoring the performance of the portfolios and evaluating them compared to their preferences and needs. Many people have been managing portfolios for years. There are, however, many others who either do not have portfolios or do not consider what they have as a portfolio. With individual accounts, all individuals would eventually have to manage their portfolios as they start to own various investments, especially if they have options over individual securities or types of securities.

A well-diversified portfolio could help to diminish risk without lowering the return, thereby improving the risk/return trade-off. For instance, a properly selected combination of risky assets can have a lower risk than any of its individual assets because the risk is spread out among different assets allowing for gains in some assets to offset losses in others. Such portfolios could provide higher average returns over the long term than a single asset with equal risk. Furthermore, diversifying an equity portfolio across companies and industries reduces both default and concentration risk⁴ and reduces the likelihood that a portfolio’s return will vary widely from the expected market return.

In order to quantify the diversification of a portfolio, concepts like correlation and covariance are used to measure how much the returns on

³ That is, choosing the right stock is a random and unpredictable process.

⁴ Depending on the composition of an individual’s stock portfolio, an individual could be exposed to “concentration risk,” or the potential loss resulting from a heavy investment in a group of related companies or an industry susceptible to the same economic dynamics. Individuals could also face “default risk,” or the exposure to loss due to an individual company failing.

assets move in tandem with one another. For instance, if annual returns on different investments are not very correlated, their risks can offset each other even though they still individually earn higher average returns. Such techniques, however, are very sophisticated, require substantial data analysis, and would require the help of professional advisors for the average investor. However, there are ways for individuals to take advantage of many of the benefits of diversification without needing to calculate correlation and covariance measures. Indexing is one way to broadly diversify an equity portfolio and to match the approximate market return.⁵ Typically, investing in broad-based stock indexes such as the Standard & Poor's 500 index—which represents about two-thirds of the value of the U.S. stock market—diversifies an individual's portfolio by reducing the likelihood of concentrating investments in specific companies. Such investments also tend to reduce turnover and lower administrative costs because they do not involve as much research or expensive investment advice.

A diversified stock portfolio, however, does not protect against the risk of a general stock market downturn. One way to mitigate U.S. stock market risk is to diversify into international markets. An investor can also shield against general stock market risk by diversifying into other types of assets, such as corporate bonds. To minimize exposure to short-term stock market fluctuations, an investor can hold less risky, albeit lower yielding, assets to cover liquidity needs in the short run.

Asset allocation can provide an approach to portfolio diversification. For example, percentages can be allocated to equities (including indexes), bonds, and Treasuries. These allocations will generally reflect preferences for risk as well as an individual's life-cycle phase. Those with a higher tolerance for risk and those who are younger would generally invest more in equities. Those in later life-cycle phases might invest more in bonds or Treasuries.

Individuals Bear Most of the Risk

The primary risk that individuals would face with diversified or indexed individual account investments is “market risk,” the possibility of financial loss caused by adverse market movements. When the stock market drops, prices of some equities fall and can stay depressed for a prolonged period of time. Although a long investment time horizon provides the individual

⁵ Indexing reduces risk or exposure to loss associated with an individual company failing and industry-specific downturns. The securities held in a broadly based indexed portfolio would represent many different sectors of the economy and many individual companies. This diversification reduces the risk that any loss related to the performance of an individual security or group of securities would greatly affect the overall performance of the portfolio.

more time to recover from short-term fluctuations, an individual also would have more time to encounter a prolonged stock market downturn. Thus, although long periods of time can help mitigate the effects of market risk, it does not disappear over time.

Under most individual account programs, individuals would bear much if not all of the market risk.⁶ Although market risk would not increase with the introduction of an individual account program, more people would be exposed to it under an individual account program than are under the current Social Security system. Some individuals would do very well under such an individual account program, but others may not do as well and could experience a significant drop in their expected retirement income compared to others in the same age group or to the current Social Security program. Furthermore, those who are reluctant to invest in the stock market may not benefit from the potentially higher returns of equity investing. Thus, the investment choices individuals make, as well as the performance of the market, would determine the return they would receive under an individual account program.

Individual Returns May Vary Under an Individual Account Program

Individuals who retire at the same time may receive different pay-outs from individual account investments because of the choices they have made. Although some individuals could make the same choices, individuals are more likely to make different choices. In part, differences may come about due to luck; other differences may be more systematic. For instance, higher income people may be willing to take on more risk—and possibly earn higher returns—than lower income people. For this reason, higher income individuals could earn higher rates of return than lower income individuals under an individual account program, which is not the case under the current Social Security program.

Many programs also provide for a default option for those who do not wish to take an active part in investing in individual accounts. One type of default option would provide investments in Treasuries with very low risk and a low return. Others could provide an asset allocation, possibly age related, with more equities included for younger workers and more Treasuries for older workers.

Returns could vary across cohorts⁷ as well under an individual account program. Even if some cohorts made the same choices, given the volatility

⁶ There are some proposals that protect the individual against some or all of the downside risk.

⁷ Cohorts pertain to a large group of people with similar characteristics. For example, people of the same age would be in the same age cohort.

of the stock market, the returns could vary substantially across different time periods and affect cohorts differently. For instance, even if the market experienced no dramatic or long-lasting downturns, the market will create “winners” and “losers” depending on when and how individuals invest their individual account investments and when they liquidate their holdings.

As long as workers are aware of and accept the idea that returns may vary across individuals as well as cohorts, there will probably not be calls to fix the “unfair benefits outcomes.” However, if large differences in outcomes become commonplace, many participants could become dissatisfied with the program and demand some payment from the government to make up for any losses they incur or even if substantial differences result. For instance, those that have incurred losses may expect the government to mitigate their losses when they do not receive the return they believe they were led to expect.

Furthermore, individual accounts are at least in part an attempt to finance the unfunded liability with the excess returns of equities over nonmarketable Treasuries. To the extent that individuals receive low or even negative returns over time, individual account investments could actually lead to an increase in the unfunded liability of the current Social Security program.

The Expected Market Return for Individual Account Investments

The expected return from investments of individual accounts is likely to be higher than the average implicit rate of return of the current system, but it is unlikely to be as high as many advocates presume. Advocates and opponents of individual accounts have estimated what the likely market return would be for an individual’s investments under an individual account program. When discussing equity returns, advocates often point to the fact that equities have historically yielded higher returns than Treasuries. They expect returns on equities to continue to be higher than Treasuries and to boost individual returns on individual account investments.

Other economists are skeptical that the higher returns presumed under an individual account program will be realized. They state that history may not be a good predictor of the future. Others state that even if expected equity returns are higher than other investments, equity returns are risky. For instance, the average historical return reveals nothing about how variable that return has been from year to year. Thus, in an estimation of an expected return to investments of individual accounts, the riskiness of the investment should be taken into account. Estimating expected returns

without mention of the risk and costs of the investments will overstate the benefits of investing in marketable securities because the return on marketable securities varies substantially with the riskiness of those investments.⁸

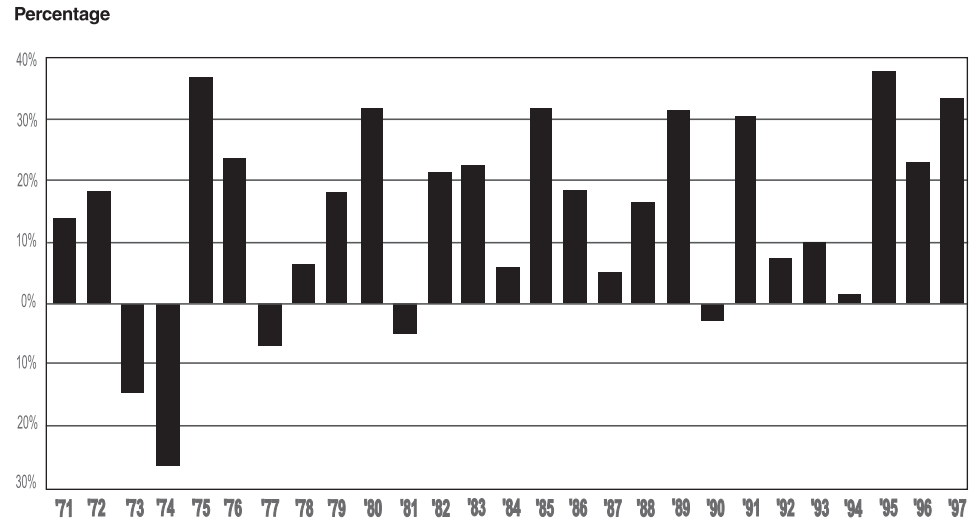
Future Returns to Equities Uncertain

Advocates of individual accounts have stated that individuals would receive higher returns by investing in the stock market than they receive under the current Social Security program. Although, comparing investment returns with the rate of return paid by Social Security is always problematic, advocates of individual accounts point out that the rate of return on equities has been significantly higher than other rates of returns. For instance, compounded annual average rates of return on equities have averaged about 7 percent per year since 1900 and 6 percent per year since 1957. Alternatively, the compounded annual average return on Treasuries has been between 1 and 2 percent per year on an inflation-adjusted basis, and long-term corporate bonds have averaged 2 percent.

The capital markets generally offer higher potential rates of return on riskier investments such as equities. Figure 3.1 shows the annual returns of Standard & Poor's (S&P) 500 Index, which is a measure of the performance of the stocks of 500 large companies traded on the U.S. stock exchange. Actual nominal (non-inflation-adjusted) returns for large company stocks varied widely from the annualized average return over long periods and have ranged from a low of minus 26.5 percent in 1974 to a high of 52.6 percent in 1954.

⁸ For detailed information on how administrative costs can have a direct effect on how much savings are accumulated in individual accounts over time see Social Security Reform: Administrative Costs for Individual Accounts Are Hard to Predict (GAO/HEHS-99-131, June 18, 1999).

Figure 3.1: Returns of the Standard and Poors 500 Index



Source: Haver Analytics.

As can be seen in figure 3.1, returns are variable. An average return over a long period of time can obscure the reality that equity returns fluctuate substantially from year to year. There have also been years in which equities have yielded negative returns. For instance, over the past 70 years or so, equity returns were negative in nearly 1 out of every 4 years.

Even taking into account the variability of returns, some analysts have suggested that historic U.S. returns may overstate future returns. They state that the equity markets in the United States have tended to outperform the equity markets in other countries. Thus, when relying on historical data as the basis for estimates of long-term market growth, if one looks not just at U.S. data, but also at the historical returns of other countries, then the high historical returns to equities in the United States could be an exception rather than the rule.⁹ Historical returns are the only empirical basis with which to judge equity returns, but there is no guarantee that the future will mirror the averages of the past in the United States as opposed to some subperiod of the U.S. market or, alternatively, returns to foreign stock markets.¹⁰

⁹ See Philippe Jorion and William N. Goetzmann, *A Century of Global Stock Markets*, National Bureau of Economic Research Working Paper 5901, July 1997.

¹⁰ See John E. Golob and David G. Bishop, "What Long-Run Returns Can Investors Expect from the Stock Market?" *Federal Reserve Bank of Kansas City Economic Review*, vol. 82, No. 3 (Third Quarter 1997), pp. 5-20; and John H. Cochrane, "Where is the Market Going? Uncertain Facts and Novel Theories," *Economic Perspectives*, Vol. XXI, Issue 6 (November/December 1997), pp.3-37.

Equity Premium Diminishing

In general, investors, tend to be averse to risk and demand a reward for engaging in risky investments. The reward is usually in the form of a risk premium—an expected rate of return higher than that available on alternative risk-free investments. For instance, the historical advantage enjoyed by equity returns over the returns of other assets is what is known as the equity premium. The premium is said to exist because equities have historically earned higher rates of return than those of Treasuries to compensate for the additional risk associated with investing in equities. However, the equity premium has slowly been declining. Studies have shown that the equity premium has declined since the 1950s.

A number of studies have attempted to measure the equity premium as well as explain its size. One study¹¹ found that the premium appeared to be quite high in the 1930s and 1940s and was caused by the perception of the high volatility in the stock market in the late 1920s and the early 1930s. This led investors to favor less risky securities as opposed to equities, generating a high equity premium. However, as the volatility of stock market declined after the 1929 stock market crash, the appeal of investing in equities began to increase; and although an equity premium continues to exist, it has steadily declined. However, in the 1970s the equity premium increased somewhat from its general downward trend; this was attributed to inflation.¹² The study concluded that decreases in the equity premium were the result of increases in expected bond rates and decreases in the expected rates of returns to equities.

It has also been suggested that the shrinking premium reflects a structural change in that the economy appears less susceptible to recessions.¹³ To the extent that corporate profits fluctuate with general economic conditions, fewer downturns translate into less volatility in corporate earnings. If investors perceive that the outlook for corporate earnings is more certain and that equities may be less risky than they have been

¹¹ See Oliver J. Blanchard, "Movements in the Equity Premium," Brookings Papers On Economic Activity, 2:1993, pp. 75-118.

¹² The study noted that inflation causes higher dividend yields, which in turn increases the return to stocks. Alternatively, inflation leads to a decrease in real bond rates, for a few years only. This means that the relationship between inflation and the equity premium is strong in the short run because inflation affects real bond rates, but it is not so strong in the long run because the effect of inflation on bond rates is not as lasting.

¹³ Goldman Sachs, "The Equity Risk Premium and the Brave New Business Cycle," U.S. Economics Analyst, No. 97/8, February 21, 1997.

historically, equity investing might carry a lower premium and, therefore, relatively lower returns. As a result, the equity premium diminishes.

It is unclear whether the equity premium will continue to decline. However, if individual accounts affect equity prices in the short run, the equity premium could decrease. For instance, if the demand for equities increases as a result of individual accounts, the prices of equities are likely to increase. This in turn lowers the expected return on equities. As the expected return on equities decreases, the equity premium decreases because the difference between the return on equities and the risk-free asset such as Treasury bills would diminish.

The decreasing equity premium could imply that people do not view the stock market to be as risky as they once did. One possible implication is that if people view the stock market as not very risky, and they prove to be right, they will continue to invest in it, and the equity premium is likely to continue decreasing. Alternatively, if the stock market is in fact riskier than investors believe, then investors will be surprised by underperformance and volatility over time and will begin to reduce their equity holdings, which could eventually cause the equity premium to go back to values consistent with past decades.

The size of the equity premium has implications for analyzing the benefits of an individual account program.¹⁴ The potential gain from equity investing under an individual account program depends on what future equity returns are and in particular how much return might be expected for taking on additional risk. A significant part of the gain that might be generated from diversifying into equities comes from the equity premium. To the extent that the equity premium continues to decline, individuals are unlikely to receive as high a return from stock investing as they have in the past.

The Returns of Investments

The return that individuals are likely to receive from individual account investments would depend on what they are allowed to invest in, e.g. stocks, bonds, indexed mutual funds,¹⁵ as well as the risk of the asset being invested in. When estimating expected returns under an individual account program, most proposals have tended to focus on equities.

¹⁴ See Implications of Government Stock Investing for the Trust Fund, the Federal Budget, and the Economy (GAO/AIMD/HEHS-98-74, April 22, 1998).

¹⁵ Mutual funds pool the limited funds of small investors into large amounts, thereby gaining the advantages of large-scale trading. Investors are assigned a prorated share of the total funds according to the size of their investments.

However, other assets may offer different returns. Corporate equities have tended to have higher market returns than other investments because they are riskier. Other investments, such as corporate bonds, have also tended to offer high yields. For instance, corporate bonds offer higher yields than Treasuries to entice investors to buy these securities, which have some risk of default.¹⁶ As in the case of corporate equities, investors are offered a higher reward for taking on the additional risk that the company may default. If an individual account system were to provide for mutual funds, depending on the type of mutual fund allowed, individuals would receive various returns. For instance, a government bond mutual fund may yield a lower return to investors than an equity indexed mutual fund.¹⁷

Overall, the capital markets offer higher market returns only by having investors take on additional risk. Thus, in estimating expected returns for individual account investments, it is important to not only consider the type of asset invested in but also the riskiness of the investment.

Adjusting the Rate of Return for Risk

Higher returns are possible for individuals investing through individual accounts than under the current Social Security program, but only if individuals take on more risk. Individuals should therefore not only be interested in the returns of various assets but also in the risks that have to be incurred to achieve higher returns under an individual account program. The difficulty is how to measure risk and how to adjust rates of return for risk so that investors would be able to compare various returns to investments.

Risk is often considered to be the uncertainty of future rates of return, which in turn are equated with variability. In fact, one of the underlying concepts of risk is inherent volatility or variability. For instance, the variability of equity prices is among the key factors that cause investors to consider the stock market risky. The price at which an individual purchases shares of a company early in the morning is not guaranteed even later in the day. Bond prices also vary due to changing interest rates and inflation.

¹⁶ When a bond is purchased, the coupon rate is fixed and known for the life of the bond—this is the rate the purchaser will receive every 6 months for the life of the bond.

¹⁷ An indexed mutual fund is a mutual fund that holds shares in proportion to their representation in a market index such as the S&P 500.

There are Many Ways to
Measure Risk

There are a number of different ways to try to measure variability or risk. All such measures give some estimate of the riskiness of investments. Classic risk measures such as variance¹⁸ or the standard deviation¹⁹ are often used to measure the risk of an asset. However these measures are often considered to be difficult for investors to understand and may not reflect how people perceive risk. For instance, investors do not generally take a symmetrical view of the variability of returns—downward deviations are perceived as economic risks, but upward deviations are regarded positively or as unexpected gains. Furthermore, quantifying uncertainty or risk is usually done using probability distributions. As long as the probability distribution falls symmetrically about the mean or average—what is known as a normal distribution—the variance and standard deviation are adequate measures of risk. However, to the extent that the probability distributions are asymmetrical, as is the case with the returns from a combination of securities, those measures are not as meaningful in terms of measuring risk.

Other ways to measure risk include (1) the value at risk (VAR) –how much the value of a portfolio can decline with a given probability in a given time period, or (2) the beta of a security—the tendency of a security’s returns to respond to swings in the broad market. VAR is an approach used by money risk managers to measure the riskiness of their portfolios. It is an estimate of the maximum amount a firm could lose on a particular portfolio a certain percent of the time over a particular period of time. For example, if an investor wanted to put money into a mutual fund and wanted to know the value at risk for the investment of a given time period, the investor could determine the percentage or dollar amount that their investment could lose, e.g., a 2-percent probability that the investor could lose at least \$50 of a \$1,000 investment over a certain period of time. VAR models construct measures of risk using the volatility of risk factors, such as interest rates or stock indexes, which is helpful for mutual funds that have a wide variety of investments.

Measuring the beta is another way to measure risk. In essence, if an investor wanted to know how sensitive a particular asset’s return is to market movements, calculating the beta would do so. Beta measures the amount that investors expect the equity price to change for each additional 1-percent change in the market. The lower the beta, the less susceptible the stock’s return is to market movements. The higher the beta, the more

¹⁸ The variance of an asset’s return is the expected value of the squared deviations from the expected return. The variance tries to measure the dispersion of the returns.

¹⁹ The standard deviation is the square root of the variance.

susceptible the stock's return is to market movements. Thus, the beta would measure the risk that a particular stock contributes to an individual's portfolio.

Adjusting for Risk

As previously stated, estimating a return on investments without taking in to account the riskiness of the investment is likely to overstate the benefit of investing in that asset. Adjusting returns to account for risk is important because risk-adjusted returns are likely to be lower than unadjusted returns but more comparable across asset classes.

There are different ways to adjust returns for risk, but there is no clear best way to do so. The appropriate risk-adjusted measurements depend on what is being evaluated. For instance, in terms of evaluating the returns of mutual funds, various risk-adjusted performance measures could be used.²⁰ One measure used is the Sharpe Ratio,²¹ which basically measures the reward to volatility ratio and is the most commonly used measure for determining the risk-adjusted performance of mutual funds. A high Sharpe ratio means that a mutual fund delivers a high return for the level of volatility of the fund's investments. Thus, if individuals were trying to determine the mutual fund that had the best combination of return for risk, they would choose the fund that had the highest Sharpe Ratio. An alternative to the Sharpe Ratio is the Modigliani Measure, which measures a fund's performance relative to the market. The measure uses a broad-based market index, such as the S&P 500, as a benchmark for risk comparison. In essence, the measure is equivalent to the return a mutual fund would achieve if it had the same risk as a market index. Another measure is one calculated by Morningstar, Incorporated. Unlike the Sharpe Ratio, which compares the risk-adjusted performance of any two mutual funds, Morningstar measures the risk-adjusted performance of mutual funds within the same asset class. It usually assigns ratings to mutual funds on the basis of the risk-adjusted return and risk of a mutual fund.²² Thus, if individuals wanted to know how various mutual funds did within their asset groups, they would look at the Morningstar rating.

²⁰ See Katrina Simons, "Risk-Adjusted Performance of Mutual Funds," *New England Economic Review*, September/October 1998., pp.34-48.

²¹ The Sharpe Ratio measures a mutual fund's excess return per unit of risk (fund's average excess return divided by the standard deviation of the fund's excess return).

²² Morningstar calculates its risk-adjusted return measure by calculating an excess return measure for each fund by adjusting for sales loads and subtracting the 90-day Treasury bill rate and then dividing the excess return by the average excess return for the fund's asset class. Morningstar calculates a measure of downside risk by counting the number of months in which the fund's excess return was negative, summing up all the negative excess returns, and dividing the sum by the total number of months in the measurement period.

There are other risk-adjusted measures that are used. However, there is no clear best way to adjust a return for risk, and there is no one risk-adjusted measure that everyone agrees is the correct measure. Many of the measures are complicated and may require more sophistication to understand than could be expected of individual account investors. It should be noted, however, that although risk-adjusted rates of return are the appropriate measure for individual account investments, an investor's entire portfolio has a different risk than that of its individual components. Thus, risk-adjusted returns depend fundamentally on how portfolios are managed.

Comparing Rate of Return From Social Security to Expected Return With Individual Accounts Requires Careful Consideration

Comparing rates of return on Social Security and private market investments has frequently been discussed in evaluating options for reforming Social Security, but comparing the two does not capture all the relevant costs and benefits that reform proposals imply.²³ Such comparisons often do not factor in the costs of disability and survivors insurance when determining a rate of return on Social Security contributions for retirement.

Individual accounts would generally increase the degree to which retirement benefits are funded in advance. Today's pay-as-you-go Social Security program largely funds current benefits from current contributions, but those contributions also entitle workers to future benefits. The amount necessary to pay the benefits already accrued by current workers and current beneficiaries is roughly \$9 trillion. Any changes that would create individual accounts would require revenues both to deposit in the new accounts for future benefits and to pay for existing benefit promises. Rate of return estimates for such a program should reflect all the contributions and benefits implied by the whole reform package, including the costs of making the transition. Administrative and annuity costs could also affect actual retirement incomes.

Agency Comments

SSA commented that we needed to clarify that comparisons between the rate of return implicit in the Social Security system and those of individual accounts were problematic for many reasons including the fact that Social Security provides survivors and disability insurance. We have further clarified issues regarding the rate of return comparisons and have referred to our forthcoming report that provides a more detailed discussion on

²³ In a forthcoming report, we will provide a more detailed discussion on issues comparing Social Security rates of return with those of market investments.

Chapter 3
Return and Risks Are Likely to Be Higher With Individual Accounts

comparing the rate of return implicit in the Social Security system with those of market investments.

Enhanced Education is Necessary for an Individual Account Program

Under many of the individual account programs that have been proposed, individual accounts to varying extents would be managed by participants themselves. To operate fairly and efficiently, such a system would have to provide participants with information adequate for their decisionmaking as well as to protect against misinformation that could impair that process. Existing SEC disclosure and antifraud rules and related doctrines provide for the disclosure of information that is material¹ to an investment decision. However, such disclosure alone would not enable participants in an individual account program to understand how best to use such information for purposes of their retirement investment decisions.

To provide participants with a clear understanding of the purpose and structure of an individual account program, an enhanced educational program would be necessary.² Such an enhanced and broad-based educational effort would have to be undertaken in order to provide individuals with information they need and can readily understand, as well as with tools that can help both improve the decisionmaking process and awareness of the consequences of those decisions. Individuals would need education on the benefits of saving in general, the relative risk-return characteristics of particular investments, and how different distribution options can affect their retirement income stream. If a wide variety of choice is offered individuals so that they could potentially choose less diversified investments, such as individual equities, a more broad-based educational program would be necessary. The wider the variety of choices, and thus more potential risks, offered individuals under an individual account program, especially a mandatory program, the more broad-based the education will need to be. If fewer, well-diversified choices are provided under an individual account program, the educational effort could be targeted more to the purpose for investing and the potential long-term consequences. It is also likely that some sort of provision, such as a default option—either a default to the defined benefit part of Social Security (staying in the current Social Security program) or to a mandatory allocation—may be needed for those individuals who, regardless of the education provided, will choose not to make investment choices.

¹ Under the Securities laws, the term “material information” generally is understood to mean the information that a reasonable investor would consider significant in making an investment decision, taking into account the circumstances of the particular transaction and the total mix of publicly available information.

² Such a program would have to acknowledge that not all participants will speak and read English and, thus, educational materials may need to be in a variety of languages.

The Significance of Disclosure Rules Would Depend Upon Available Investment Choices

Existing disclosure rules require that material information be provided about a particular instrument and its issuer. Such disclosure would be essential to an individual account program, with some rules having more significance than others, depending on the investment choices offered. For example, if participants were allowed to acquire corporate securities such as stocks and bonds, the disclosure and reporting requirements of the Securities Acts of 1933 and 1934, such as those applicable to the governance, activities, and financial status of the issuer, would be particularly important to participants choosing such instruments. If investment choices were limited to mutual funds, disclosure about the funds would have primary importance, and information about the issuers of the securities owned by the funds would be relatively less significant for participants. In addition, the Employee Retirement Income Security Act of 1974 (ERISA) requires disclosures in connection with pension funds (covered by Title I of ERISA). If products offered by banks and insurance companies were permitted, special disclosure rules would apply.

Disclosures in Connection with Securities and Pension Plans

The Securities Acts of 1933 and 1934 generally require disclosure and reporting of detailed information about an issuer of securities, such as its management, activities, and financial status. The Securities Act of 1933 (1933 Act) primarily focuses upon the disclosure of information in connection with a distribution of securities; the Securities and Exchange Act of 1934 (1934 Act) concentrates upon the disclosure of information trading, transactions, and sales involving securities.

The 1933 Act requires the disclosure of information intended to afford potential investors an adequate basis upon which to decide whether or not to purchase a new security and to prevent fraudulent conduct in connection with the offering. This disclosure generally takes place through a registration statement filed with SEC (and made available to the public, except for confidential information) and a related prospectus. Both documents contain detailed factual information about the issuer and the offering, including statements about the specifics of the offering as well as detailed information about the management, activities, and financial status of the issuer.

The 1934 Act, among other things, contains extensive reporting and disclosure requirements for issuers of securities registered under the act. Issuers must file current, annual, and quarterly reports with SEC, and the annual report must be distributed to security holders. The 1934 Act also governs brokers, dealers, and others involved in selling or purchasing securities. The act contains a broad prohibition against fraud in connection with securities transactions that frequently has served as a

basis for disclosing to customers an abundance of details about a particular instrument or transaction.

ERISA and DOL regulations require the administrator of a plan covered by Title I of ERISA to file certain information about the plan with DOL and distribute it to plan participants and beneficiaries receiving benefits.³ One of the principal disclosure documents, the summary plan description (SPD), must include information specified in the regulations, which includes details about the structure, administration, and operation of the plan as well as the participant's or beneficiary's benefits and rights under the plan. The SPD must be written in a manner "calculated to be understood by the average plan participant" and must be "sufficiently comprehensive to apprise the plan's participants and beneficiaries of their rights and obligations under the plan." Moreover, in fulfilling these requirements the plan administrator is to take into account "such factors as the level of comprehension and education of typical participants in the plan and the complexity of the plan."⁴

In addition to general reporting and disclosure requirements, DOL regulations contain special disclosure rules for participant-directed accounts. A participant-directed account plan is one that permits participants and beneficiaries to direct the investment of assets in their individual accounts.⁵ The special rules arise in the connection with the obligations of a fiduciary to a plan that permits such accounts.

³ ERISA's regulatory provisions are contained in four parts. Part I covers reporting and disclosure requirements, which are designed to improve pensions and protect employees by mandating disclosure of certain plan information to the government, participants, and beneficiaries. Part II establishes minimum vesting requirements and minimum participation standards, which are intended to lessen discrimination against lower level employees and broaden the coverage of pension plans. Part III sets minimum funding standards to improve the stability of certain defined-benefit pension plans. Part IV defines standards of conduct for pension plan fiduciaries and prohibits certain transactions.

⁴ In addition to the SPD, a plan administrator is required to provide each participant with a summary annual report which, among other things, is to include detailed information regarding the amount of administrative expenses incurred by the plan, the amount of benefits paid to participants and beneficiaries, the value of plan assets, income or loss for the year, and the amount of net unrealized appreciation in plan assets during the plan year.

⁵ Regulations for participant-directed accounts specifically require that such accounts provide the participant or beneficiary the opportunity to choose from a broad range of investment alternatives. These alternatives must provide a reasonable opportunity for a participant or beneficiary to: (1) materially affect the potential return on amounts in his or her individual account with respect to which he or she is permitted to exercise control and the degree of risk to which such amounts are subject; (2) choose from at least three investment alternatives; and (3) diversify the investment of that portion of his or her individual account with respect to which he or she is permitted to exercise control so as to minimize the risk of large losses.

Under DOL regulations, a fiduciary can avoid liability for any loss arising from the participant's exercise of control over account assets, provided that the participant has the opportunity to exercise control over the account assets and may choose, from a broad range of investment alternatives, the manner in which assets are invested. The regulations further provide that a participant has the opportunity to exercise control only if, among other things, the participant is provided or can obtain information sufficient for him or her to make informed investment decisions. This information includes (a) a description of investment alternatives and associated descriptions of the investment objective, risk and return characteristics of each such alternative; (b) information about designated investment managers; (c) an explanation of when and how to make investment instructions and any restrictions on when a participant can change investments; and (d) a statement of fees that may be charged to an account when a participant changes investment options or buys and sells investments.

Disclosure in Connection With Mutual Fund Shares

The information that the 1933 and 1934 Acts require issuers to disclose pertains to details about the issuers of securities and the securities themselves. Such information is significant to a person investing in a specific issuer. For the purchaser of shares in an investment company, such as a mutual fund, which is the vastly prevalent form of investment company, information about the company itself, rather than individual issuers, is most significant. Mutual funds are subject to the Investment Company Act of 1940, which deals with the registration, formation, and operation of investment companies, as well as provisions of the 1933 and 1934 Acts governing disclosure and prohibiting fraud. Disclosure about the fund, such as information concerning its investment strategies and its management, is provided in the registration statement filed with SEC; the prospectus or an alternative, less detailed document known as a "profile"; and periodic reports filed with the Commission and distributed to shareholders.⁶

⁶ As discussed later in the report, SEC recently modified Form N-1 and promulgated the "profile" rule to provide for the disclosure of mutual fund information in a less detailed, more understandable fashion. SEC instituted these changes because the proliferation of mutual funds and products increased the volume and complexity of disclosures, thus leading to the confusion of mutual fund customers.

Disclosure Concerning
Certain Products Offered by
Depository Institutions and
Insurance Companies

The expansion of products offered by depository institutions (primarily federally insured banks and thrifts and their subsidiaries or affiliates) and insurance companies carries with it the potential for confusion about the nature and risk of investment products offered by such institutions. For example, bank sales of nondeposit instruments, such as mutual fund shares and variable annuities, could lead an investor to conclude that such instruments are federally insured bank products. Investment products sold by insurance companies, such as certain variable annuities and equity-indexed agreements, might be viewed as traditional insurance products, under which the insurer assumes the payment risk. If such products are securities, they are subject to the requirements of federal and state securities laws. The activities of institutions in connection with the products would be subject to regulation under the securities laws as well as regulation by their supervising agencies.

NonDeposit Bank Products

The federal bank regulators⁷ have promulgated rules, guidelines, and policies containing standards for disclosure in connection with a banking institutions' involvement in sales of nondeposit instruments such as securities. These regulators issued an Interagency Statement on Retail Sales of Non-Deposit Investment Products ("Interagency Statement") together with subsequent statements that focuses on issues specifically pertaining to the retail sale of investment products to customers on depository institution premises. Among other things, the standards seek to prevent customer confusion over whether such products are FDIC-insured, primarily through disclosure and separation of sales of investment products from other banking activities.

New products being offered by insurance companies can also confuse investors about whether such a product is insurance (the insurer accepts the repayment risk) or a security (the purchaser of the product faces some or all repayment risk). States typically regulate disclosure about insurance products by prohibiting unfair, deceptive, or misleading statements about a product. However, to the extent such instruments are securities, their purchase and sale are subject to federal and state securities laws.

Initiatives to Facilitate
Understanding of
Information

To address concerns about the effectiveness of disclosures regarding investing, particularly with respect to mutual funds, SEC and some states have established programs to provide for disclosing information to investors in a more understandable way. SEC's "plain English" program is

⁷ The office of the Comptroller of the Currency (OCC), the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation (FDIC), and the Office of the Thrift Supervision (OTS).

an example. The Commission instituted the program because much of the disclosure provided in prospectuses and other documents often is complex, legalistic, and too specialized for investors to understand. Under this program, the Commission revised its rule for the presentation of information in a prospectus to require that the prospectus comply with plain English writing principles listed in the regulation. SEC also amended its Form N-1A, the registration form used by mutual funds for registration, to provide for the use of plain English principles and simplified descriptions of information essential to an investor's evaluation of the fund.

In March 1998, SEC adopted a rule permitting mutual funds to offer investors a new disclosure called a profile. The document summarizes key information about the fund, including its investment strategies, risks, performances, and fees, in a concise, standardized format. A fund offering a profile can give investors a choice about the amount of information they wish to consider before making a decision about investing in the fund. Investors have the option of purchasing the fund's shares on the basis of the profile, in which case they are to receive the fund's prospectus along with the purchase confirmation.

Among other things, the new SEC rules are designed to reduce the complexity of information provided to mutual fund customers and the potential for confusion that sometimes accompanies such information. They are an attempt to make the disclosure of material information more useful to those who invest in mutual fund securities.

Enhanced Education Is Necessary for an Individual Account Program

Whether an individual account program is mandatory or voluntary, giving millions of working Americans the responsibility for investing part of their Social Security payroll taxes on their own requires enhanced education. Social Security has provided a safety net for millions of people for a long time in that it has been the foundation of the nation's retirement income system, providing income for millions of Americans. Introducing an individual account program would change the nature of the current Social Security program and would require increased education if people are to understand the individual account program and what may be required of them. Although education would be necessary regardless of whether the program was voluntary or mandatory, the government would have a special responsibility under a mandatory program to provide individuals with the basic investment knowledge that they would need in order to make informed investment decisions affecting their retirement.

The extent to which enhanced education would be necessary would depend upon the available investment choices and the fees and expenses associated with an individual account program. An individual account program that offers many investment choices—especially one that is mandatory—would likely require a substantial amount of education because the wider the options provided an individual, the greater the chances are that the individual could lose money. If fewer well-diversified options are offered under an individual account program the fewer risk factors the individual has to consider and the more targeted the education could be. It would also be important to educate individuals about how to interpret the fees associated with individual account investments and how fees would affect their account balances.

Enhanced Education Is Important for All Individuals

The Social Security program includes workers from all levels of income, those who currently invest in equity and bond markets and those who do not. It is unlikely that a “one size fits all” educational effort would be appropriate for an individual account program. Because a mandatory individual account program would require everyone to participate, including those who do not currently make investment decisions, educational efforts would be especially crucial and would need to reach all individuals.

Enhanced Education Is Important for Those Who Do Not Currently Make Investment Decisions

Large segments of the working population do not currently make investment decisions for various reasons. For instance, some people do not believe that they have enough money to save or at least to save in any vehicle other than a bank account. Others do not know the benefits of investing. Lastly, there are those who do not appear to understand the benefits of saving and investing or the necessity of doing so for retirement. Whatever the reason, millions of people have never made investment decisions.

Investor education is especially important for individuals who are unfamiliar with making investment choices, including low-income and less well-educated individuals who may have limited investing experience.⁸ Thus, one of the primary areas of enhanced education under an individual account program would be to educate those who do not know the basics about savings or diversification, especially if the individual account program is mandatory. Those individuals and households who do not currently make investment decisions, but rely on Social Security as their

⁸ This is especially true for the 21 percent of the adult population with only rudimentary reading and writing skills (at or below the fifth-grade level) according to the National Center on Education Statistics).

Current Initiatives Focus on
Saving, Fraud, and Retirement
Income

primary source of retirement income, are likely to be the ones who are most affected by a mandatory individual account program and thus most in need of education.

Congress and various agencies and organizations have instituted programs to educate people about the benefits of saving and investing. In the Savings Are Vital to Everyone's Retirement Act of 1977, Congress mandated an education and outreach program to promote retirement income savings by the public. The act also required the Secretary of Labor, in consultation with other federal agencies selected by the President, to plan and conduct a National Summit on Retirement Savings. As part of this mandate, the act required the Secretary to bring together retirement and investment professionals, Members of Congress, state and local officials, and others to discuss how to educate the public—employers and individuals—about the importance of saving and about the tools available to enable individuals to retire and remain financially independent. Pursuant to this mandate, DOL sponsored the National Summit in 1998.

Other efforts have been made to reach out to investors to educate them about both how to protect themselves against fraud. SEC has realized that an important part of its role in combating fraud is to educate the public about what to be aware of and how to avoid being taken advantage of. If investors are adequately informed about the risks associated with potential securities frauds, then they will be less likely to fall victim to scams.

SEC has implemented several programs to advise the investing public about potential frauds. For instance, SEC has issued numerous pamphlets about what types of questions investors should ask about investing and the people who sell those products.⁹ Additionally, SEC has held local "town meetings" across the United States to discuss investment risks. It also coordinates the "Facts on Savings and Investing Campaign" with federal, state, and international securities regulators. SEC officials said that in order to have a successful education program, it is necessary to determine what people do and do not know. This has entailed determining people's level of literacy and math knowledge in order to design a program that could provide education for individuals with various levels of investment knowledge.

⁹ See pamphlets such as "Ask Questions," "Cold Calling Alert," "Invest Wisely: An Introduction to Mutual Funds," and "Invest Wisely: Advice from Your Securities Industry Regulator," published by and available from the U.S. Securities and Exchange Commission.

DOL's Pension Welfare and Benefits Administration has several educational outreach efforts for encouraging employers to establish retirement programs and employees to save for retirement. The basic program is a joint effort with a wide range of private sector partners, including the American Savings Education Council, the Employee Benefit Research Institute, banks, insurance companies, consumer groups, retiree groups, participant rights' groups, mutual funds, and other large companies. This joint effort was designed to provide very basic information to individuals and employers about the different types of savings vehicles available under the law and to encourage the private sector to provide employees with models of pension programs.¹⁰ The educational program tries to target special groups whose pension coverage is low, including such groups as women and minorities as well as small businesses; only about one-fifth of small businesses offer pension plans to their employees. DOL has issued numerous pamphlets on what individuals should know about their pension rights and what businesses can do to start pension plans for their employees.¹¹ For instance, they regularly use the Small Business Administration's newsletters to encourage members to establish pension plans and have developed a Web site for small businesses to give them information on various pension plan options, depending on how much each business can afford to contribute to a pension fund.

These current programs have a limited ability to reach the overall population. One clear constraint is the low level of resources, including funding directed to investor education. Another limitation is that they are targeted to circumscribed audiences, such as companies that do not have retirement programs as opposed to individuals who do not invest. Furthermore, most efforts are reaching those individuals who choose to take it upon themselves to find out what they need to do to save more or to learn how to make better investment decisions. Thus, even as a result of

¹⁰ This joint effort resulted from a concern a few years ago that as baby boomers began to retire and move away from defined benefit plans into 401(k) plans, there would be a great need for educational efforts to encourage individuals to save for their retirement. At first, Congress did not support DOL's voluntary efforts. However, several years later as 401(k) plans became increasingly popular, Congress passed the Savers Act, which requires DOL to establish and maintain a retirement education program for employers and employees.

¹¹ See pamphlets, "What You Should Know About Your Pension Rights," "Simple Retirement Solutions for Small Business," "Simplified Employee Pensions: What Small Businesses Need to Know," "Top 10 Ways to Beat the Clock and Prepare for Retirement," "Reporting and Disclosure Guide for Employee Plans," "Protect Your Pension: A Quick Reference Guide," "A Look at 401(k) Plan Fees" and "Saving Incentive Match Plan for Employees of Small Employers," published by and available from the U.S. Department of Labor, Pension Welfare and Benefits Association.

the various targeted efforts undertaken, large segments of the population are still not being reached.

Education Is Also Important for Those Individuals Who Currently Make Investment Decisions

Numerous studies¹² have been done that have looked at how well individuals who are currently investing understand investments and the markets. On the basis of those studies, it is clear that among those who save through their company's retirement programs or on their own, there are large percentages of the investing population who do not fully understand what they are doing. For instance, one study found that a little more than a third of American workers have tried to calculate how much money they would need to retire comfortably. Another study found that 47 percent of 401 (k) plan participants believe that stocks are components of a money market fund, and 55 percent of those surveyed thought that they could not lose money in government bond funds. Another study on the financial literacy of mutual fund investors found that less than half of all investors correctly understood the purpose of diversification. Further, SEC reported that over half of all Americans do not know the difference between a stock and a bond, and only 16 percent say they have a clear understanding of what an IRA is.

Although individuals who currently make investment decisions are likely to have some familiarity with investing, education would also be important for them because of their increased responsibility under an individual account program. Furthermore, according to the studies cited above, there would be a real need for enhanced education about such topics as investing, risk and return, and diversification. As the Chairman of SEC has said, there is a wide gap between financial knowledge and financial responsibilities. Closing that knowledge gap is imperative under an individual account program.

Enhanced Education Is Important for Individual Accounts Program

Moving to an individual account program is going to require a thorough education effort for everyone to understand the program and how it is different from the current Social Security program. The government has much more responsibility for educating individuals under a mandatory program because people would effectively be forced by the government to save and to make decisions about what to do with that saving as well as bear the consequences of a decision. Even with a default option for those who do not choose to participate, the government needs to explain why the option was provided and what are its implications.

¹² See studies such as the Securities Industry Association, "1997 Annual SIA Investor Survey: Investors' Attitudes Towards the Securities Industry, November 1997, and Vanguard Group, "Vanguard/Money Mutual Fund Literacy Test," January 1998, and Office of Investor Education and Assistance Securities and Exchange Commission, "The Facts on Saving and Investing," February 24, 1998.

Many people do not understand the current Social Security program, how their contributions are measured, and how their benefits are computed, even though the program is over 60 years old. Yet, millions of individuals rely on the program as their sole source of retirement income. In order to increase people's understanding of Social Security, SSA has implemented various efforts to educate people. Such efforts have included providing a 1-800 number for recipients to ask questions, having a public education service campaign, and providing educational packages to individuals. Despite these efforts, SSA officials said that people still have a hard time understanding the program. Implementing an individual account program is likely to require enhanced education not only about individual accounts but also about how an individual account program would change the nature of Social Security and what that means for the individual.

At a minimum, under an individual account program, educational efforts would be needed to help people understand how individual accounts would work and how the accounts would affect their retirement income security. Many proposals do not specify what entity would be responsible for the public education program that would be needed for an individual account program. On the basis of the type of information experts¹³ in employee education say is needed, education about an individual account program could include the following information:

- Goals of the program — individuals need to know what the goals of the program are and why they are participating.
- Responsibilities — individuals need to know what their responsibilities are under the program.
- Retirement Income — individuals need to know what their retirement income needs are and how their retirement needs will be affected under an individual account program.
- Materials — individuals need materials that convey the message of the program and what will be required of them.

Amount of Education Necessary is Directly Linked to the Choices Offered

The amount of education that would be necessary under an individual account program depends on the range and type of investment choices offered to individuals. There are basic issues that individuals will need to be educated about regardless of how the program is structured. Such issues include (1) the choices they have to make; (2) the consequences of those choices; (3) what the investment options are, such as stocks, bonds,

¹³ See Richard D. Glass, "Investment Education: Who's Fooling Whom?" *Employee Benefits Journal*, March 1999, pp. 3-8; and George Loewenstein, "Costs and Benefits of Health and Retirement Related Choice," Paper for the Eleventh Annual Conference of the National Academy of Social Insurance, January 8, 1999.

and indexed mutual funds; (4) rates of return of different investment vehicles; and (5) the risks of investment vehicles. However, as a wider variety of choice is offered to individuals, more education beyond the basics would be necessary because broader issues would need to be considered. With more variety of choice, investors would need to choose among various assets, which requires the investor to have certain skills to evaluate the risks and his or her own preference for risks. If the structure allows for an even broader variety of choices such as real estate, the educational requirements would mount. When choices are limited to a few well-diversified choices (such as a few indexed mutual funds), many decisions are made by those managing the funds or by rules governing the fund (such as what an indexed mutual fund can invest in). If the investor has the option of frequently moving funds from one investment to another, the educational effort needs to include analytical tools to aid such decisions and advice about the importance of a long-term horizon. Thus, the fewer well-diversified choices offered, the less risk to the individual and the more targeted the education could be.

Table 4.1: Investment Choices Under an Individual Account Program and the Education Required

Investment options	Education needed
More investment choices offered	More broad-based education that is needed
Fewer investment choices offered	Less education, but more targeted

Source: GAO

More Investment Choices, More Education

A variety of choices may benefit people in that it offers them a wider selection from which to choose, allowing them to choose the option that is in line with their preferences. However, it also increases their risk in that they could potentially choose less diversified investments, such as individual equities, that could result in financial loss. Furthermore, the wider the variety of choice offered, the greater the need for people to consider other issues. For instance, because offering a wide variety of investment options is likely to promote competition among financial institutions to provide a range of investment vehicles, investors would need to be educated about fraud and how to avoid it. When Great Britain went to an individual account program, individuals purchased unsuitable investments because of high-pressured sales tactics that resulted in individuals losing billions of dollars. The Chairman of the SEC has stated that allowing a broad range of investment options under individual accounts provides opportunities for fraud and sales practice abuses. Thus, education about fraud becomes important. For example, an investor would need to know what to look for, what type of questions to ask, what type of advice is biased, what the investor's rights are, or what the law requires. When investment options are limited, the chances of fraud are reduced.

Moreover, the wider the variety of choice that is offered individuals, the more they will need education about understanding the value of diversification and the possible consequences of not having a diversified portfolio. If choices are limited to indexed mutual funds, less education about diversification would be needed because indexed funds are by nature diversified.

Education is also necessary for understanding risks and the various returns that are likely with different investment options. With a wider variety of investment options, understanding risk and being able to manage the risk become important. It is important to explain to people that historical returns may not always be good predictors of future returns, especially when risks are ignored. As stated in chapter 3, measuring risk and comparing risk-adjusted returns can be a difficult process. Furthermore, being able to understand the rates of returns of various options and pick the appropriate investment vehicles become more difficult, as more variety is offered. Individuals would need more expertise to understand differences in the rates of return of equities, bonds, equity mutual funds, indexed funds, and so on.

Fewer Investment Choices, Less Education Needed

If the program has fewer well-diversified choices, limits would be placed on the ways that people could lose money. The educational effort could, therefore, focus more on getting individuals to be informed participants in the program. Educational issues that become relevant when individuals are offered numerous options are of less concern when they are offered fewer, well-diversified options.

With fewer, well-diversified investment choices, the educational effort could be more targeted to the purpose of retirement savings, e.g., educating people about how much they would need to save and invest for retirement or determining their goals for retirement. Other issues, such as compounding—the calculation of interest earned on a daily, quarterly, semiannual, or annual basis—or the impact of inflation on returns are issues that individuals need to fundamentally understand. For example, with compounding interest individuals could earn interest on the money they save and on the interest that the money earns, e.g., if they invested \$1,000 at 3-percent interest they could double their money in 24 years, but at 4 percent interest they could double it in 18 years. With inflation, or rising prices, the money that individuals earn on their investments would potentially be worth less and less as prices rose. In addition, seemingly small annual fees can eat away at the accumulated value. Offering fewer, more well-diversified options enables the education effort to be targeted

on basic issues that would be helpful for individuals to understand in order to save for retirement.

Default Option

Despite current efforts to increase people's awareness to save more, many people are still not saving and making the retirement choices they need to make, effectively relying on Social Security to be their primary source of retirement income. It is unlikely that moving to individual accounts will result in active participation by all individuals. Thus, various officials have suggested that a default option be provided for those individuals who, regardless of educational effort, will not make investment choices.

Default options could include a default to the defined benefit portion of Social Security (staying in the current Social Security program) or to some type of mandatory allocation. One example would be an investment vehicle in which, depending on the age of the individual, certain portions of the investment could be in equities and certain portions in bonds. The portion in bonds would increase with the age of the individual. Alternatively, the default option could be invested totally in Treasuries. As with any option, a default option with less risk is also likely to provide lower returns.

Comments From the Social Security Administration



SOCIAL SECURITY

Office of the Commissioner

June 18, 1999

Thomas J. McCool
Director, Financial Institutions and Market Issues
United States General Accounting Office
Washington, DC 20548

Dear Mr. McCool:

Enclosed are our comments on the Government Accounting Office's (GAO) draft report Social Security Reform: Capital Markets and Educational Issues Associated with Individual Accounts (GAO/GGD-99-115). We appreciate the opportunity to review the report and hope these comments will prove useful.

We are pleased that this GAO report addresses some of the economic effects of individual accounts and challenges the government would face in educating the public about investment strategies. Improved understanding of these issues is important in evaluating options for addressing the program's solvency. The information in this report will no doubt increase the level of understanding of the complex issues surrounding individual accounts, and we commend you in this effort.

We would like to see the report provide greater clarity when comparing rates of return under individual accounts to the current Social Security program. As the report briefly mentions, a comparison between the rate of return on investments and Social Security benefits may not be appropriate. Such comparisons typically fail to consider the costs of disability and survivors insurance, all administrative costs (including public education) associated with individual accounts, and costs of transitioning from a pay-as-you-go system to a partially pre-funded system. These costs should be highlighted when comparisons are made.

SOCIAL SECURITY ADMINISTRATION BALTIMORE MD 21235-0001


Appendix I
Comments From the Social Security Administration

2

Additionally, the report mentions national saving might increase through implementation of individual accounts, but does not mention that national saving could also be increased by building the Social Security trust funds and using the additional funds to buy down debt, as recommended in the President's framework.

Our specific comments are detailed in the attached document. They are slightly abbreviated given that we had only three days to respond. If you should have any questions concerning our comments, you may contact Jane L. Ross, the Social Security Administration's Deputy Commissioner for Policy, at (202) 358-6082 in Washington, or (410) 966-6756 in Baltimore. Again, we appreciate the opportunity to review the draft report and request an opportunity to review the revised report. We look forward to the GAO's continued involvement in this vital debate.

Sincerely,



Kenneth S. Apfel
Commissioner
of Social Security

Enclosure

GAO Contacts and Staff Acknowledgments

GAO Contact Tamara E. Cross, (202) 512-4890

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