



# **Social Security in the 21st Century**

**September 2000**

**Joint Economic Committee Staff Report  
Office of the Chairman, U.S. Senator Connie Mack**



## Executive Summary

**The Original Vision.** When Social Security was established in 1935, President Franklin Roosevelt envisioned that the system would be based on sound insurance principles, whereby each generation of workers would contribute sufficient funds to support its own retirement. Changes to Social Security in 1939 abandoned that approach and embraced pay-as-you-go financing, whereby each generation of workers supports the current generation of retirees rather than supporting its own retirement.

**Updating Social Security for the 21<sup>st</sup> Century.** Society has changed dramatically since Social Security was designed in the 1930s. The ratio of workers to retirees has fallen greatly, and is continuing to fall, which will make the current pay-as-you-go system unsustainable without major reforms. Other changes since the 1930s that indicate a need to redesign Social Security include the rise in work outside the home by married women and the increasing level of financial investment by average Americans.

**The Coming Shortfall.** The combination of increased life expectancy and the retirement of the baby-boom generation in coming decades will reduce the number of workers available to support each Social Security beneficiary. Between 2000 and 2030, the number of workers per beneficiary will fall from 3.4 to 2.1. The current Social Security surplus will become a perpetual deficit. Social Security revenues will cover only about three-quarters of promised benefits by 2030. After 2030 the shortfall will grow still more.

**Social Security's Low Rate of Return.** Even though Social Security is a transfer program rather than a pension system based on income-generating assets, it is useful to compare the rate of return on taxes paid into the system with returns available on private savings. The real (inflation-adjusted) rate of return for new retirees averages about 2 percent a year. In comparison, long-term real rates of return on U.S. equities have averaged more than 7 percent a year.

**Is Social Security Fair?** Social Security shifts income from some groups in society to others in complex and opaque ways. For example, Social Security's benefit formula is designed to favor low-wage workers. But this feature is often more than offset by the fact that low-wage workers typically have shorter lives than high-wage workers. People with life-shortening diseases, such as diabetes or AIDS, may receive no benefits at all. In fact, recent studies have found that, on average, Social Security may transfer income *from* low-wage workers *to* high-wage workers.

**An Investment-Based Retirement System.** Dissatisfaction with Social Security's low rate of return has led many analysts to favor converting Social Security from a pay-as-you go system into an investment-based system more consistent with the program's original vision. An investment-based system would provide advance funding of future retirement benefits. Without such a change, taxes will have to be increased or promised benefits will have to be cut substantially to keep the system in balance in coming decades. Advance funding provides a prudent way for the nation to avoid imposing financial hardship on our children and grandchildren.

**Retirement Savings Accounts (RSAs).** Most Congressional plans to reform Social Security with investment-based, advance funding propose to establish personal retirement savings accounts (RSAs) for every worker. With RSAs, individuals and couples would save and invest during their working years to provide for their own future retirement. People would have a legal right to the contributions and earnings in their RSAs, and all Americans would benefit from economic growth and expansion in the nation's financial markets resulting from the additional saving and investment that RSAs would promote.

**Advantages of RSAs.** Social Security can be either partially or entirely converted from a pay-as-you-go system to an investment-based system with RSAs. Bringing RSAs into the Social Security system would have the following benefits:

- ! Ensure adequate income for future retirees without imposing large tax increases on future workers.
- ! Stimulate additional savings and investment to fuel economic growth.
- ! Increase the incentives to work and earn.
- ! Reduce the dependency of retirees on a government program always at risk of political manipulation.
- ! Reduce the hidden and often unfair income transfers in the current system.

**The Structure of RSAs.** The following features could be built into RSAs:

- ! RSAs should recognize the joint nature of earnings within marriage. In case of divorce, a couple's RSAs should be equally divided. That would provide security for the lower-earning spouse.
- ! The fraction of earnings allocated to RSAs could be larger for lower-income workers. Such a "progressive contribution" structure would raise retirement income for the elderly poor, and would treat the poor more favorably than the current system.
- ! Individuals could be permitted to diversify their portfolios with holdings of bonds, equities in broad-based funds such as index funds, and money market funds. Over periods of 20 years or more (the relevant spans for retirement investments), broad-based equity funds have little risk of underperforming bonds or returns on Social Security taxes. In fact, equities have historically provided rates of return approximately 3½ times the current rate of return on Social Security taxes.
- ! RSAs could be structured to keep administrative costs low. A simple structure for RSAs could hold administrative costs below 0.4 percent of assets per year—a level achieved by many mutual funds.

## Table of Contents

<b>Foreword by Senator Connie Mack</b> .....	1
<b>I. Introduction</b> .....	3
<b>II. Our Changing World: The 1930s Versus Today</b> .....	5
A. A Slower-Growing Population .....	5
B. Longer Life Expectancy .....	6
C. More Married Women Working Outside the Home .....	8
D. A Higher Divorce Rate .....	8
E. Earlier Retirement .....	9
F. More Equity Ownership .....	11
<b>III. Social Security's Coming Shortfall</b> .....	12
<b>IV. The Real Rate of Return on Social Security Taxes</b> .....	15
<b>V. Is Social Security Fair?</b> .....	17
A. Transferring Income from Low-Wage to High-Wage Workers .....	17
B. Bias Against Those With Shorter Life Spans .....	19
C. Treatment of Working Women and Stay-at-Home Mothers .....	21
D. The Effects of Divorce .....	21
<b>VI. Social Security and Family Incentives</b> .....	22
<b>VII. The Current System's Great Dilemma</b> .....	23
<b>VIII. Retirement Savings Accounts (RSAs)</b> — A 21 <sup>st</sup> Century Approach to Reforming Social Security .....	24
<b>IX. The Advantages of Retirement Savings Accounts</b> .....	26
A. More Savings and Investment .....	26
B. More Incentives to Work and Earn .....	26
C. Less Dependency .....	26
D. Fewer Hidden Transfers of Income .....	27
<b>X. Retirement Savings Accounts: Funding Options</b> .....	28
A. Add-On RSAs .....	28
B. Carve-Out RSAs .....	29
C. A Fully Investment-Based System Using RSAs .....	29
<b>XI. Retirement Savings Accounts: Design Issues</b> .....	31
A. Benefits for Married Couples .....	31
B. Would Equity Investments Make RSAs Risky? .....	31
C. Assuring Minimum Levels of Retirement Income .....	34
D. The Poor and the Design of RSAs .....	34
E. Administration of RSAs .....	36
<b>XII. Conclusion</b> .....	38
<b>Bibliography</b> .....	39



## **Foreword**

Social Security is a vitally important program that touches the lives of nearly all Americans. In the near future, the baby-boom generation will retire and the population of elderly people will expand greatly. We need to plan for those changes now by establishing a sound system that will enhance the retirement security of future generations of Americans.

As this report highlights, Social Security was designed during an era when Americans typically had larger families, shorter life spans, and fewer years of retirement. Today, the economy and demographics of the United States are much different. There are fewer workers supporting each Social Security beneficiary, a trend that will continue in the decades to come. Unless the “pay-as-you-go” structure of Social Security is modified, big tax increases or substantial cuts in promised benefits will eventually be necessary.

We need to find a way to fix the finances of the system while continuing to ensure good levels of retirement income for all Americans. Many people are coming to the conclusion that the best way to accomplish these goals is by establishing personal retirement savings accounts for all workers. Retirement savings accounts would provide a secure source of retirement income, while allowing everyone to benefit from the growth of the economy. Additionally, broad-based ownership of the financial assets in such accounts would provide many other benefits. For example, should a worker or retiree pass away, the funds in his or her retirement savings account would remain as an inheritance available to support family members.

Modernizing Social Security will be one of the most important issues confronting the new President and the new Congress. All Americans have a stake in this issue. I believe that policymakers and the general public alike will find this report helpful as we work together to improve the nation’s retirement system.

**Senator Connie Mack, Chairman  
Joint Economic Committee**



## I. Introduction

The Old Age, Survivors, and Disability Insurance (OASDI) program, popularly known as Social Security, was established in 1935. The system is financed by a flat-rate tax on wages up to a cut-off level. Currently, the tax rate is 12.4 percent (10.6 percent to finance benefits to retirees and surviving dependents, and 1.8 percent to finance benefits to disabled persons). The income cut-off, currently \$76,200 a year, is adjusted upward each year by the growth rate of nominal wages.<sup>1</sup> The formula used to determine retirement benefits is, on its face, highly progressive: persons with low lifetime earnings gain relatively larger benefits.

Social Security is currently running a surplus, but it faces a troublesome financial future. As members of the baby-boom generation start reaching age 65 beginning in 2011, the number of workers per Social Security beneficiary will steadily decline, transforming Social Security's surplus into a deficit. Sustaining the program in its current form will then require raising taxes or reducing promised benefits, neither of which is an attractive option. Thus, Americans are considering other ways to bridge the gap, particularly the use of retirement savings accounts (RSAs). This report focuses on the nature of Social Security's funding problem and analyzes the potential of RSAs to enhance the retirement security of Americans.

President Franklin Roosevelt signed the Social Security Act into law in August 1935. The new program promised a secure pension to all participating retirees age 65 and over. The first payments, averaging \$18 a month (equivalent to about \$220 in today's dollars), were made in 1940 to 220,000 beneficiaries. Benefits were financed by a 2 percent payroll tax (1 percent on the employer and 1 percent on the employee<sup>2</sup>) levied on the first \$3,000 of earnings (equivalent to about \$37,000 in today's dollars). Through the years, the number of beneficiaries and average benefits have increased dramatically, pushing the tax rate and the earnings cut-off higher and higher. Today, Social Security is by far the largest federal program, accounting for 23 percent of all federal spending—more than spending on defense or all non-defense discretionary programs combined.

When Social Security was established, it was thought that workers would contribute to a pool of national savings that would be available to pay their future retirement benefits. President Roosevelt, for example, perceived the new system to be founded on sound insurance or private pension principles, as illustrated by some of his statements on Social Security:

- ! “Get these facts straight. The Act provides for two kinds of insurance for the worker. For that insurance both the employer and worker pay premiums—just as you pay premiums on any other insurance policy.”<sup>3</sup>
- ! “We put those payroll contributions there so as to give the contributors a legal, moral, and political right to collect their pensions...”<sup>4</sup>
- ! “In effect, we have set up a savings account for the old-age of the worker.”<sup>5</sup>

Unfortunately, the Social Security system never lived up to Roosevelt's vision of an advance-funded pension plan providing workers with a secure right to their retirement benefits. Even though many people describe Social Security as a type of insurance program, the Supreme Court has twice ruled that, unlike the

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<sup>1</sup>Medicare is financed by a separate, additional payroll tax of 2.9 percent. Unlike the Social Security tax, it has no income cut-off.

<sup>2</sup>Ultimately, it is employees who pay for the tax on the employer, in the form of lower after-tax wages or lower demand for employees.

<sup>3</sup>Ferrara and Tanner (1998), p. 23.

<sup>4</sup>Ferrara and Tanner (1998), p. 23.

<sup>5</sup>Ferrara and Tanner (1998), p. 37.

case with private insurance, paying into the system gives individuals no legal right to benefits.<sup>6</sup> Moreover, the Social Security system never developed a true pool of savings that would be available for advance funding of future benefits. Under legislation adopted in 1939, Social Security was placed on a “pay-as-you-go” basis, and this structure has been maintained ever since.<sup>7</sup>

Debates from the 1930s regarding the merits of pay-as-you-go versus advance-funded retirement systems are being replayed in today’s discussions of Social Security reform. Under an advance-funded, investment-based system, funds paid in during working years are invested in stocks, bonds, and other assets. The funds increase with returns provided by economic growth and are available to finance retirement benefits in the future. In contrast, under the current pay-as-you-go system, payroll tax revenues flowing into Social Security are almost immediately paid out to current beneficiaries or used for other government programs. There is no saving or investment in real assets to pay future benefits. As explained in more detail later, the Social Security Trust Fund is just a bookkeeping entry. The federal government is not using the Social Security system’s current surpluses to accumulate assets and provide advance funding for future deficits.

It is essential, then, to examine cash flows into and out of the Social Security system rather than the account balance of the Trust Fund. The cash flows depend on economic and demographic factors that are continuing to evolve and change the financing of Social Security.

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<sup>6</sup>The rulings came in the 1937 *Helvering v. Davis* case and the 1960 *Flemming v. Nestor* case.

<sup>7</sup>Schieber and Shoven (1999), p. 82.

## II. Our Changing World: The 1930s Versus Today

When Social Security was established, the U.S. population was growing rapidly, families were large, relatively few Americans lived much past age 65, married women generally did not work outside the home, and the divorce rate was low. All of these factors influenced the design of the Social Security system. Today the world is much different. The differences must be considered as we think about adapting the nation's retirement system to the realities of the 21<sup>st</sup> century.

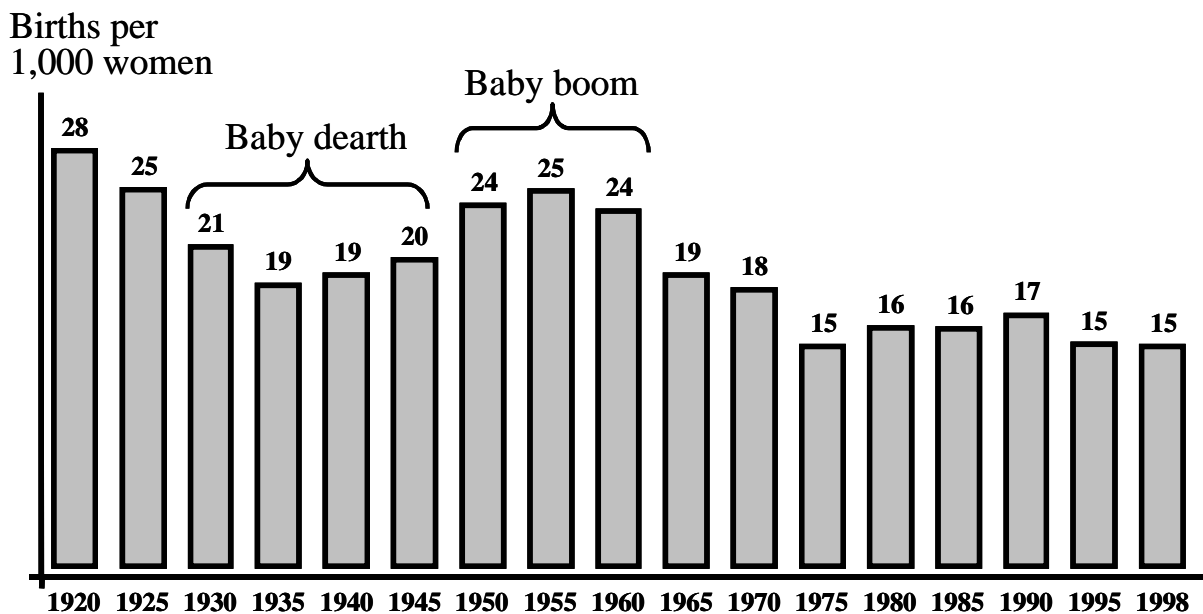
### A. A Slower-Growing Population

During the first three decades of the 20<sup>th</sup> century, the population of the United States increased at an average annual rate of 1.6 percent. In contrast, the population has grown at an average annual rate of only 1 percent during the last three decades. As Exhibit 1 shows, the birth rate fell during the "baby-dearth" years of the Great Depression and the Second World War (1930 to 1945). After rising during the baby-boom era (1946 to 1960), the birth rate has once again fallen sharply during the last four decades. Women of childbearing age now have only about half as many children as their counterparts of the early 1920s. Today, the birth rate is lower and the average family size is smaller than at any time since Social Security was established.

The fall in the birth rate has dramatically altered the relative size of successive generations during the last seven decades. In 1930, the elderly (those age 65 and over) comprised only 5.4 percent of the population. People under 25 represented 47.5 percent of the total, or nine times the number of the elderly.

#### **Exhibit 1: Fluctuations in the U.S. Birth Rate, 1920 to 1998**

*The birth rate was high in the 1920s, before Social Security began. It fell substantially in the baby-dearth era (1930 to 1945), before rising during the postwar baby-boom era (1946 to 1960). Since the early 1960s, the birth rate has fallen and is now much lower than in earlier periods. Social Security will be strained as the baby-boomers begin reaching age 65 in 2011.*

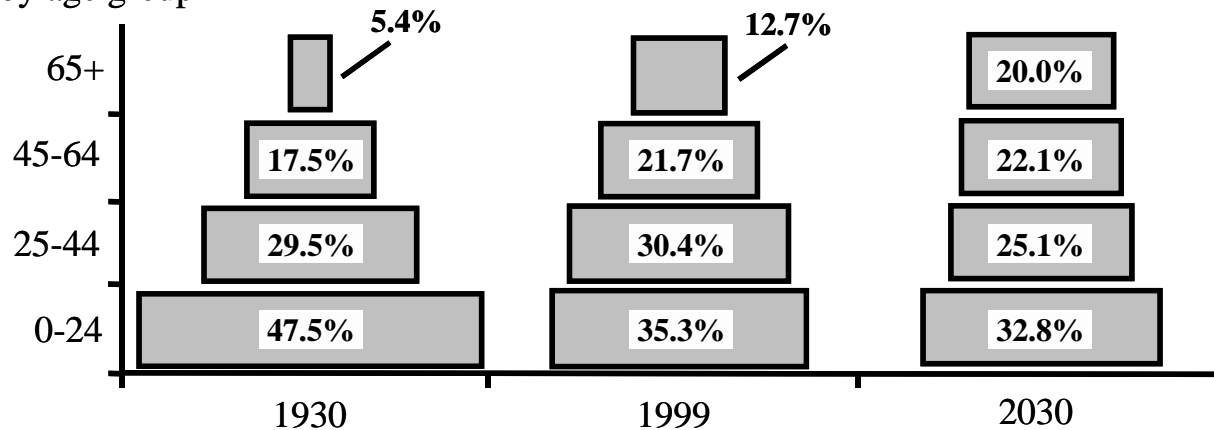


**Source:** Centers for Disease Control, National Center for Health Statistics, 2000.

## Exhibit 2: Changes in the Age Composition of the U.S. Population

*Falling birth rates and rising life expectancy have changed the age composition of the U.S. population. In contrast with 1930, younger age groups are now only slightly larger than their older counterparts. This makes pay-as-you-go Social Security less sustainable.*

Population share  
by age group



Sources: Bureau of the Census via Haver Analytics.

Exhibit 2 shows that the structure of the population in 1930 was like a pyramid. Today, the elderly comprise 12.7 percent of the population, more than twice the share of 1930. People under age 25 account for 35.3 percent of the total, or fewer than three times the number of the elderly. By 2030, people under 25 are projected to comprise 32.8 percent of the population, only a little more than one and a half times the number of the elderly, who will comprise 20 percent of the total. The structure of the population will be more like a rectangle than a pyramid.

The age structure of the population when Social Security was established was highly favorable for a pay-as-you-go retirement system. Each generation was substantially larger than its predecessor, making it relatively easy for workers to support the previous generation of retirees. These positive demographics will reverse in the coming decades, making the pay-as-you-go approach much less viable.<sup>8</sup>

### B. Longer Life Expectancy

Life expectancy at birth for Americans has risen from less than 64 years in 1935 to 77 years today. Since most people begin full-time work at about age 20, life expectancy at 20 provides insight on the average number of years people spend working relative to the average number of years in retirement. In 1930, the average 20 year-old man was not expected to live to the normal retirement age of 65, while the average 20 year-old woman could expect to live just 5.4 years beyond age 65. By 1997, the average 20 year-old man could expect to live 9.7 years beyond 65, while the average 20 year-old woman could expect to live 15.2 years beyond 65. Frame A of Exhibit 3 shows how life expectancy at age 20 has increased since 1930.

<sup>8</sup>In 1967, the future Nobel Prize-winning economist Paul Samuelson wrote, “The beauty of social insurance is that it is actuarially unsound. Everyone who reaches retirement age is given benefit privileges that far exceed anything he has paid in....How is it possible? It stems from the fact that the national product is growing at compound interest and can be expected to do so for as far as the eye cannot see. Always there are more youths than old folks in a growing population.” Samuelson and other observers did not foresee that birth rates would decline and life expectancy would increase so much as to undermine the actuarial basis of social insurance in the United States and elsewhere.

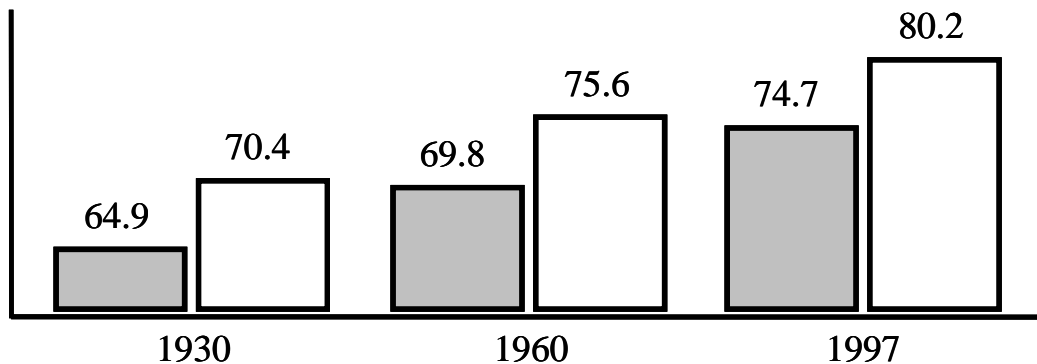
### Exhibit 3: Increases in Life Expectancy

*Life expectancy for men and women age 20 has increased dramatically since the inception of Social Security (Frame A). Men and women are now expected to live longer beyond the normal retirement age of 65, thus drawing Social Security for more years (Frame B).*

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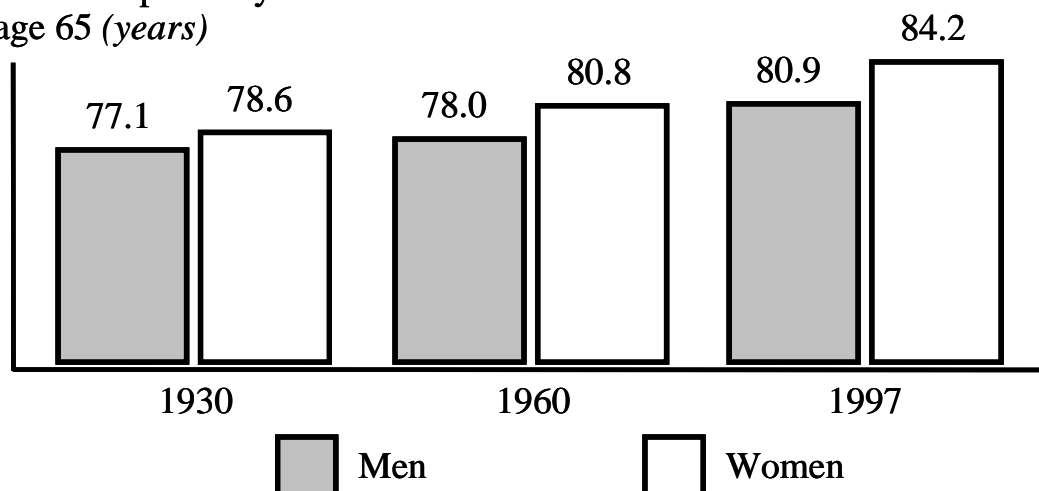
Total life expectancy  
at age 20 (years)

**Frame A**



Total life expectancy  
at age 65 (years)

**Frame B**



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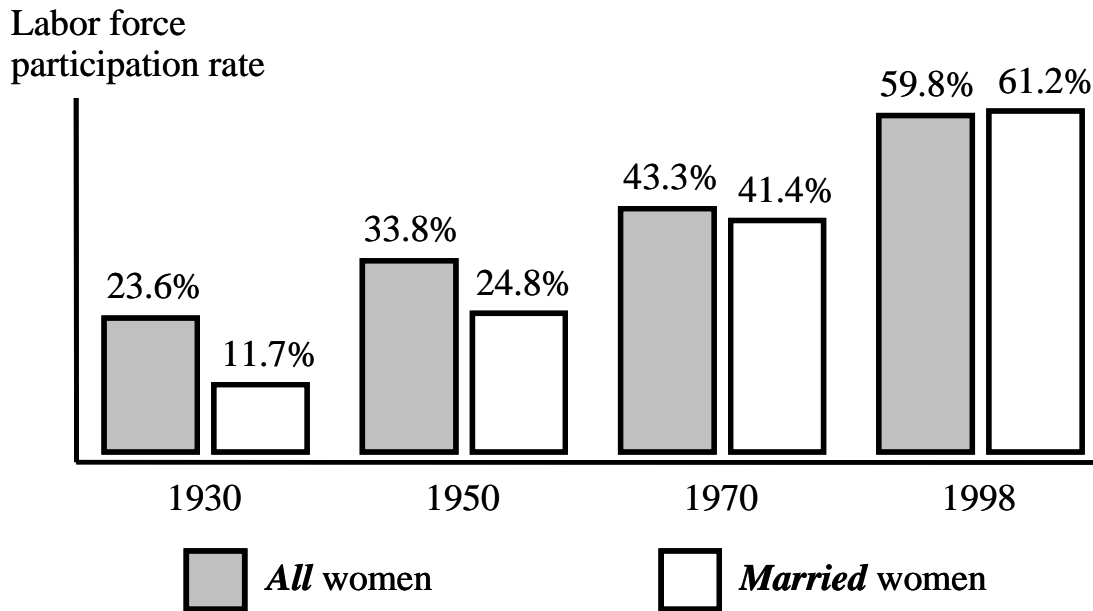
**Source:** Centers for Disease Control, National Center for Health Statistics, *Health, United States, 1999*.

With regard to Social Security, the additional years of life that can be expected at age 65 is also an important statistic. As Frame B of Exhibit 3 indicates, men age 65 were projected to live another 12.1 years in 1930 and another 15.9 years in 1997—an increase of 31 percent. For women, life expectancy at 65 rose from 13.6 years in 1930 to 19.2 years by 1997—an increase of 41 percent. Thus, the average Social Security recipient now receives retirement benefits longer than was the case when the system was instituted.

The Social Security Administration projects that life expectancy at age 65 will increase just two more years by 2040. The projection, though consistent with the experience of past decades, may be low. As we move into the 21<sup>st</sup> century, many scientists believe new drugs and medical breakthroughs from decoding the human genome will lead to a dramatic increase in the number of elderly Americans. Longer life spans reduce the sustainability of pay-as-you-go programs like Social Security in its current form.

## Exhibit 4: The Rising Labor Force Participation Rate of Married Women

When Social Security was established in the 1930s, few women, particularly married women, were in the labor force. This factor was the rationale for the system's spousal benefit. Today, the labor force participation rate of married women is at parity with that of other women and is more than five times the level of 1930.



**Sources:** *Statistical History of the United States from Colonial Times to the Present*, series A 160-171 and D 29-41; U.S. Census Bureau, *Statistical Abstract of the U.S. 1999*, tables 650, 657; Haver Analytics.

### C. More Married Women Working Outside the Home

In the 1930s, the typical American family had a husband earning wages and a wife working at home and caring for children. As Exhibit 4 shows, only 11.7 percent of married women participated in the labor force in 1930. Today, 61.2 percent of married women work outside the home.

The design of Social Security reflects the typical division of labor within families when the program began. The spousal benefits provision of Social Security permits a spouse to draw benefits based on his or her own earnings or 50 percent of the benefits earned by the other spouse, whichever is greater. Additionally, if the higher-earning spouse dies, the surviving spouse receives 100 percent of the higher-earning spouse's benefits, rather than the 50 percent spousal benefit. These provisions benefit women who do not work outside of the home, the typical situation in the 1930s. Today, however, most married women spend many years working for wages, but they often derive little or no additional benefit from the Social Security taxes they pay because they could receive benefits almost as great without earning wages.

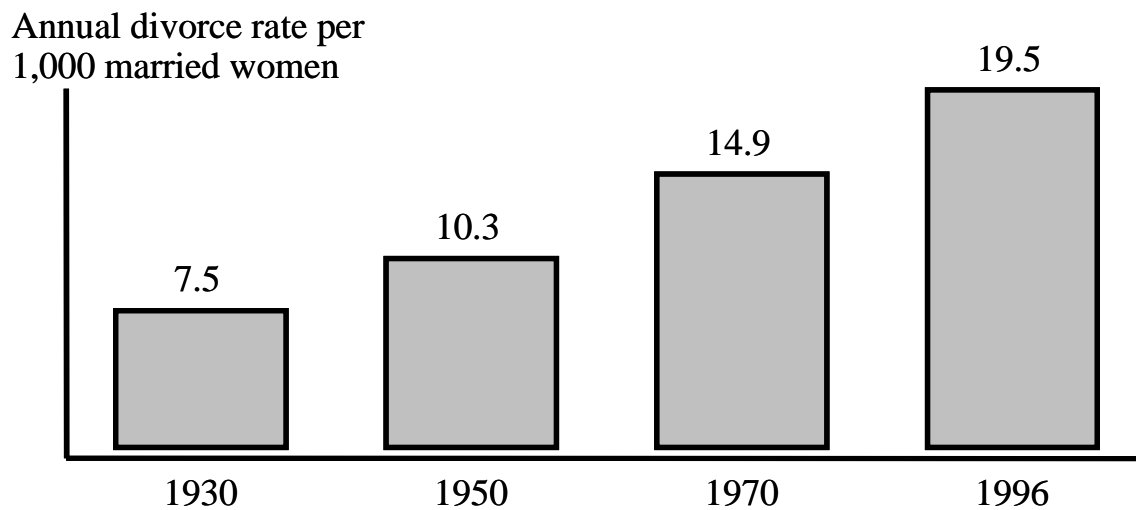
### D. A Higher Divorce Rate

In the 1930s divorce was less common, so Social Security's rules about benefits in the case of divorce affected fewer people. As Exhibit 5 illustrates, the divorce rate has almost tripled since 1930, hence rules about the impact of divorce and remarriage on benefits are now quite important. Under current law, a

## Exhibit 5: The Divorce Rate and Social Security

*Social Security benefits may be drawn on the basis of a spouse's earnings, but only when a marriage lasts 10 years or more. The divorce rate today is nearly three times the level of the 1930s, subjecting an increasing number of Americans to this arbitrary treatment.*

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**Sources:** *Statistical History of the United States from Colonial Times to the Present*, series B 216-220; U.S. Census Bureau, *Statistical Abstract of the United States*, 1998, p. 133, no. 156.

divorced person who has not remarried is eligible for spousal benefits from a marriage lasting at least ten years. However, eligibility ends if the person remarries, and no benefits are paid from marriages lasting less than ten years. These rules can interfere with decisions to remarry and are unfair to many Americans.

### E. Earlier Retirement

Americans, especially men, are now retiring earlier than they did during the initial years of Social Security. As Exhibit 6 (*on the following page*) indicates, the share of men 65 and over who were working fell from 45.8 percent in 1950 to just 16.5 percent by 1998. Men 60 to 64 are also working less: 63.7 percent were working in 1976, but only 54.8 percent in 1999. The decline in the proportion of elderly men working reduces the ratio of workers per Social Security beneficiary.

The downward trend in labor participation of those over age 60 reflects both improvement in the financial status of the elderly and the structure of the Social Security system. Many people over age 60 retire because they are financially secure and do not want to continue working. However, others retire because the rules of the Social Security system discourage them from continuing to work. Until earlier this year, Social Security recipients over the normal retirement age (currently 65, but rising to 67 by 2022) faced an “earnings test” that reduced their benefits by \$1 for every \$3 earned above a modest income level. In essence, the earnings test imposed an extremely high marginal tax rate on the elderly. Social Security recipients over the normal retirement age got to keep only about \$40 of every \$100 they earned above the cutoff; \$60 went to the tax collector. The high tax rate discouraged work. Now that Congress has repealed the earnings test for people over the normal retirement age, it will be easier for them to improve their quality of life by working a little more as they phase into full retirement.<sup>9</sup>

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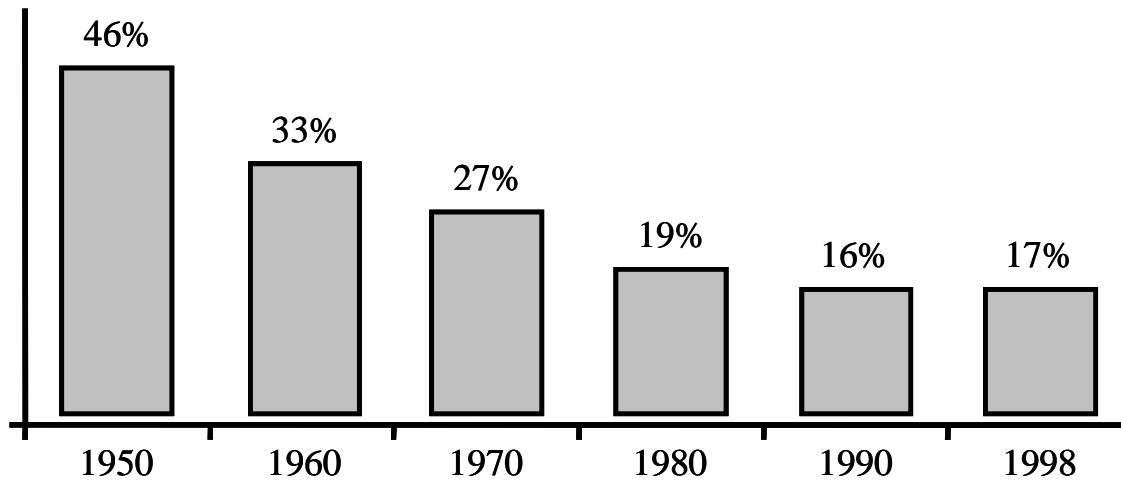
<sup>9</sup>The earning test remains for those age 62 to 64. Their Social Security benefits are reduced by \$1 for every \$2 they earn above the earnings cut-off. When the income and payroll taxes are considered along with the benefit reduction, these workers face an implicit marginal tax rate of approximately 75 percent for earnings above the cut-off.

## Exhibit 6: The Labor Force Participation Rate of Elderly Men, 1950 to 1998

*Labor force participation by men over 65 fell almost two-thirds from 1950 to 1998. Higher incomes and the high marginal tax rates accompanying the Social Security earnings test both contributed to the decline. Congress recently repealed the earnings test for those 65 and older.*

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Labor force participation  
rate of men over age 65



Source: Bureau of Labor Statistics, *Monthly Labor Review*, December 1999.

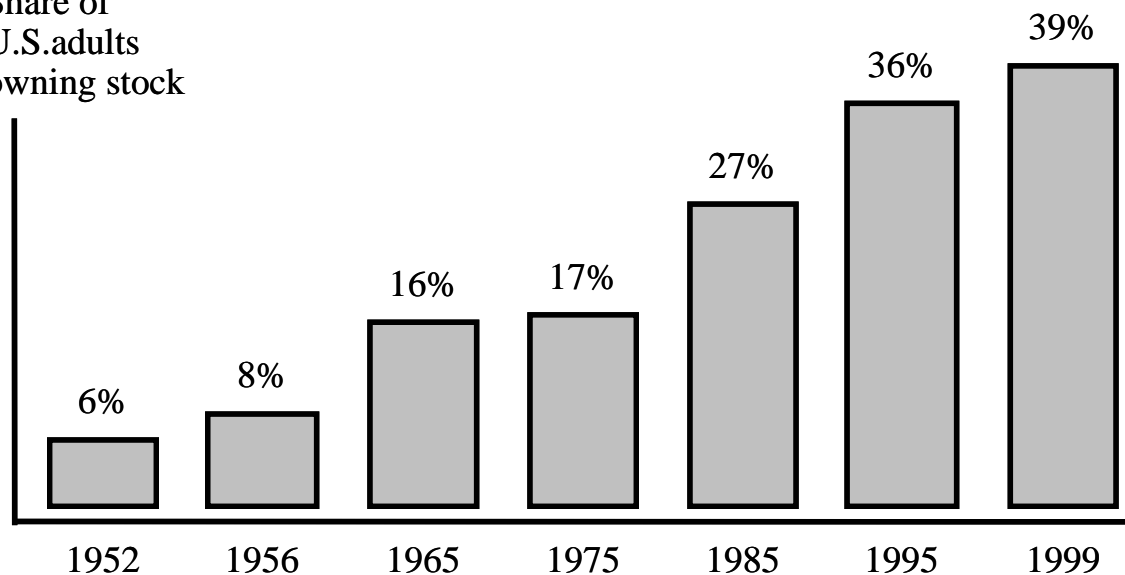
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## Exhibit 7: Share of U.S. Adults Owning Equities, 1952 to 1999

*There has been a dramatic increase in the share of the adult population owning equities since the early 1950s. Today, 39 percent of all adults (and 48 percent of all households) own equities, either directly or through pensions or mutual funds.*

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Share of  
U.S. adults  
owning stock



Source: New York Stock Exchange (2000).

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## F. More Equity Ownership

When President Roosevelt signed Social Security into law, most of the elderly derived economic security from continued work or family support, rather than from substantial holdings of financial assets. Estimates indicate that only about 5 percent of adults at the time held equities (stocks). Social Security was revolutionary in that it created a reasonably secure stream of retirement income for millions of Americans.

Since then, however, Americans have vastly expanded their holdings of financial securities. Individual Retirement Accounts (IRAs), 401(k) plans, mutual funds, and reductions in brokerage fees have greatly enhanced the ability of ordinary Americans to plan for their own retirement. Through individual stock ownership and broad participation in retirement plans, 79 million Americans now own equities.

Exhibit 7 plots the rise in individual ownership of equities. In 1952, the first year of accurate statistics tabulated by the New York Stock Exchange, only 6 percent of adult Americans owned stocks. By 1975 the figure had risen to 17 percent; in 1985 it reached 27 percent; and by 1999 it was 39 percent. Stock ownership by *households* is even greater: in 1983, just 19 percent of U.S. households owned stock, but by 1999, the number had risen to 48 percent. While some view increased reliance on stock ownership as “risky,” the vast majority of investors are planning for the long term. One survey found that 87 percent of investors follow a buy-and-hold strategy, and 66 percent view their investments primarily as retirement security.<sup>10</sup>

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<sup>10</sup>*Equity Ownership in America*, Fall 1999.

### III. Social Security's Coming Shortfall

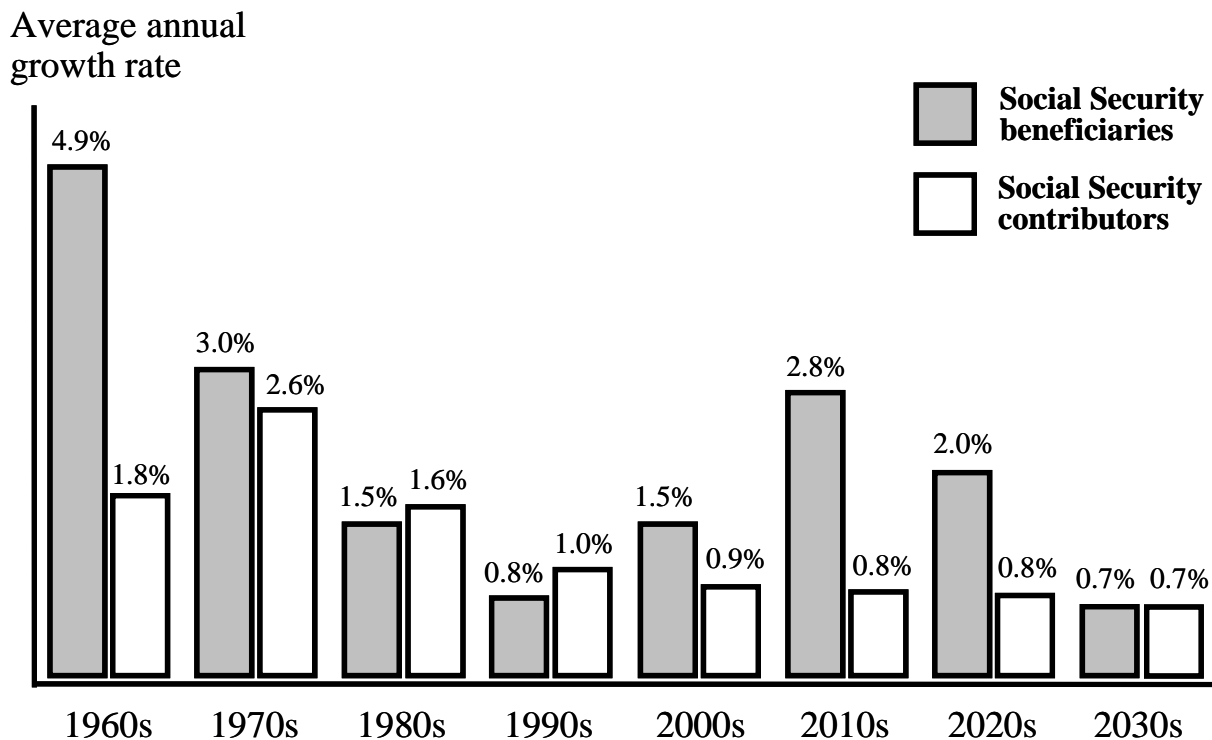
The flow of funds into and out of a pay-as-you-go retirement system is sensitive to demographic conditions. The Social Security system is currently enjoying a period of favorable demographics. Although the U.S. birth rate was low during the first decade of Social Security, a baby-boom era followed from 1946 to 1960. The baby-boomers are now in their prime earning years, which has boosted payroll tax revenues. The Great Depression/Second World War group is now retiring and because it is a relatively small generation, payments to it are also relatively small.

The demographics will change dramatically in the coming decades. The baby-boomers will begin reaching the normal retirement age of 65 starting in 2011. Their retirement, combined with rising life expectancies, will substantially increase the number of retirees relative to the number of workers, as shown in Exhibit 8 and Frame A of Exhibit 9. There are currently 3.4 workers per Social Security beneficiary, a figure that has remained relatively constant over the last three decades. In a few years the ratio will start falling, and by 2030 there will be only 2.1 workers per beneficiary. After that the ratio will continue falling, though at a slower rate.

The surpluses that Social Security is currently experiencing flow into the Social Security Trust Fund. The Trust Fund uses the revenue to buy special nonmarketable bonds from the U.S. Treasury. These bonds

#### Exhibit 8: The Decade-by-Decade Growth Rates of Social Security Contributors and Beneficiaries

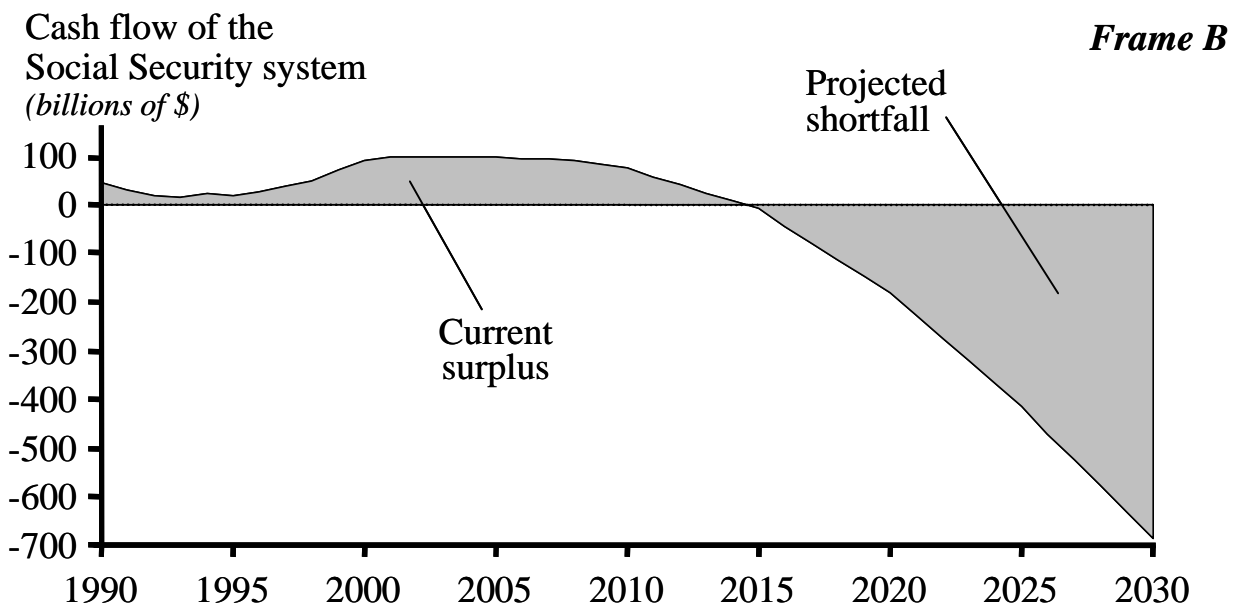
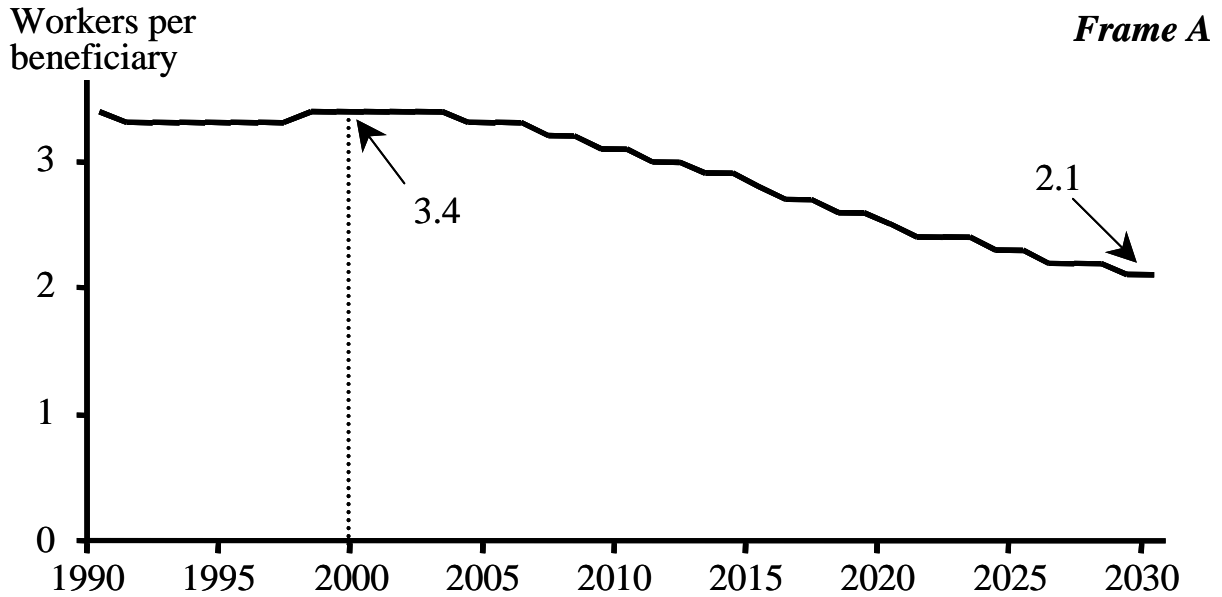
*In the 1980s and 1990s, the number of Social Security contributors grew slightly faster than the number of beneficiaries. As the baby-boomers retire during the next three decades, the number of beneficiaries will grow substantially faster than the number of contributors.*



Source: Social Security Administration (1999).

**Exhibit 9: The Falling Worker-to-Beneficiary Ratio and Coming Shortfall**

As Frame A illustrates, the worker-to-beneficiary ratio will decline from 3.4 today to 3.1 in 2010 and then plummet to 2.1 by 2030. As a result, the Social Security surplus will be transformed into a deficit around 2015. As Frame B shows, this shortfall is projected to explode in the years that follow.



**Sources:** *Social Security Bulletin, Annual Statistical Supplement, 1999, table 4.A3; 2000 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, table III.B.3; data on workers per beneficiary come from the Social Security Administration Web site, <http://www.ssa.gov/OACT/STATS>.*

**Note:** OASDI receipts exclude interest income, miscellaneous payments from the general fund of the Treasury, and income from taxation of Social Security benefits.

are not an accumulation of assets that the government could later sell, like a trust fund in the usual sense. Rather, they are merely an IOU from one part of the U.S. government (the Treasury) to another (the Social Security Administration). Their net value to the federal government is zero! To redeem the bonds in the Social Security Trust Fund, the federal government will have to raise taxes or increase borrowing, which is precisely what it would have to do if no Trust Fund existed.<sup>11</sup>

According to estimates by Social Security's actuaries, the fall in the number of workers per Social Security beneficiary will cause the current Social Security surplus to disappear and become a large cash-flow deficit beginning in 2015. As the baby-boomers retire, the deficit will grow. Frame B of Exhibit 9 shows how quickly the deficit will grow. Under current law, revenues will be sufficient to pay only about three-quarters of promised benefits by 2030, and less in later years.

Nor will robust economic growth by itself cure Social Security's financial problems. Retirement benefits are indexed to average growth in nominal wages. If higher productivity enables *real* (inflation-adjusted) wages to rise quickly, so will Social Security benefits. For example, if inflation is zero and real wages grow 2 percent a year instead of their previous level of 1 percent, the formula used for calculating the Social Security benefits of people retiring that year will also grow 2 percent instead of 1 percent. Higher economic growth may temporarily improve Social Security's finances, but under current law the improvement will not last.<sup>12</sup>

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<sup>11</sup>As Dan Crippen (2000), director of the Congressional Budget Office, has explained, "These [Social Security trust fund] balances are available to finance future benefit payments and other trust fund expenditures, but only in a bookkeeping sense. These funds are not set up to be pension funds, like the funds of private pension plans. They do not consist of real economic assets that can be drawn down in the future to fund benefits. Instead, they are claims on the Treasury that, when redeemed, will have to be financed by raising taxes, borrowing from the public, or reducing benefits or other expenditures. The existence of large trust fund balances, therefore, does not, by itself, have any impact on the Government's ability to pay benefits."

<sup>12</sup>Davis (2000).

## IV. The Real Rate of Return on Social Security Taxes

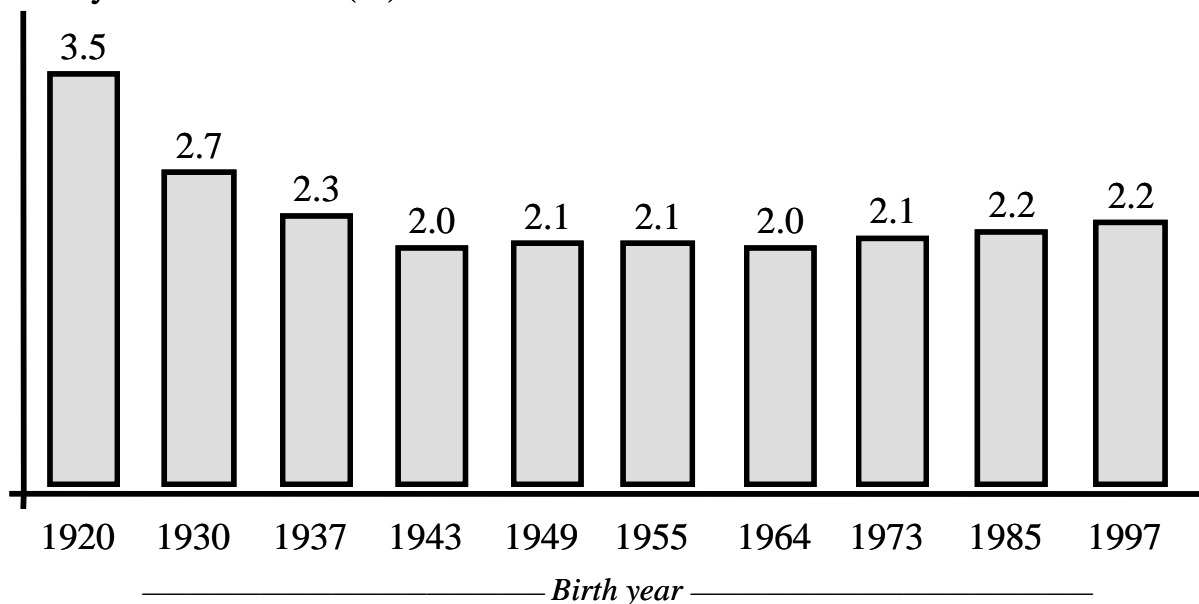
It is common to calculate a rate of return on financial investments by comparing initial investments with the stream of projected future income (or benefits). A rate of return calculation can be performed for Social Security by comparing the payroll taxes a worker pays with the future benefits he or she is promised. Social Security is unlike a regular financial investment since there is no accumulation of assets and no legal right to benefits. Nonetheless, it is useful to make rate of return calculations for Social Security because they show what workers would be able to do with their payroll taxes if they could redirect them to retirement savings accounts. Exhibit 10 shows real rates of return by birth year.

With a pay-as-you-go system, there is no accumulation of assets that will generate a future stream of earnings that can be utilized to pay benefits. This highlights two important points. First, pay-as-you-go Social Security is like a chain letter scheme. Its rate of return depends on the number of workers paying into the system and the real growth of their earnings.<sup>13</sup> If the growth of the earnings tax base slows, so will the

### **Exhibit 10: Declining Real Returns on Taxes Paid into Social Security**

*Real rates of return on taxes paid into Social Security have stabilized around 2 percent. This assumes no changes in payroll taxes or promised benefits. The current payroll tax is sufficient to finance **only** 72 percent of promised benefits, so the figures below are overstated.*

Real annual projected  
rate of return on Social  
Security contributions\* (%)



**Source:** Social Security Advisory Council (1997).

**Note:** \*Rates of return are for two-earner married couples, each partner with a moderate income. Data for single males, single females, and married one-earner families follow the same general downward trending pattern. Due to the spousal benefit, returns for single-earner families are modestly higher.

<sup>13</sup>In the long run, the average rate of return of a pay-as-you-go Social Security system will be equal to the real growth rate of the underlying earnings tax base, which depends on the growth in the number of workers and the growth in average real wage rate. See Samuelson (1958).

rate of return. Second, there is no stock of capital generating a return. Thus, the rate of return of a pay-as-you-go system will almost invariably be less than that of a system based on capital formation. Furthermore, compared to an investment-based system, the taxes and transfers of the pay-as-you-go structure reduce investment and thereby retard economic growth.

During the early years of Social Security, rates of return were very high. The system was able to pay generous benefits because there were many workers per beneficiary. The era of high returns is now over. The program has matured and the number of workers per beneficiary has declined. Payroll taxes have risen greatly over the decades and without reform to the system, more tax increases will be necessary merely to fund currently promised benefits.

The rates of return in Exhibit 10 assume that the current tax rate and promised benefits are maintained. The estimated average real rate of return for persons born in 1937, a group now approaching normal retirement age, is 2.3 percent. For persons born in 1943 and later, the estimated real rate of return hovers slightly above 2 percent a year. However, as we noted, the revenues derived from the current tax level are projected to cover only about three-quarters of promised benefits by 2030. Without reform to the system, taxes will have to be increased or benefits will have to be cut soon after the baby-boomers retire. Returns will fall as a result, so the rates of return for persons retiring after 2010 (most of whom have been born since 1960) will probably be lower than the estimates of Exhibit 10. Of course, the returns of particular individuals and groups may differ substantially from the average, as we will describe next.

## V. Is Social Security Fair?

Dramatic changes in life expectancy, labor force participation, and family status have occurred since the Social Security system was established in 1935. Some of the changes were not envisioned by the designers of the system and have created hidden redistributions in Social Security that seem quite unfair. The system favors some income, ethnic, and demographic groups at the expense of others in ways that are subtle and often unintended.

### A. Transferring Income from Low-Wage to High-Wage Workers

Social Security has gained many supporters because of the belief that it redistributes wealth from rich to poor. The system is financed with a flat tax rate up to the cut-off limit, but the formula used to calculate benefits disproportionately favors workers with low lifetime earnings. Retirement benefits are based on the best 35 years of earnings from a worker's career. Benefits are calculated by taking 90 percent of the first \$6,372 a year of earnings, 32 percent of earnings between \$6,372 and \$38,424, and just 15 percent of earnings above \$38,424 up to the earnings cutoff of \$76,200. Workers earning up to \$38,424 a year receive a relatively high return on their Social Security taxes, whereas those earning more than \$38,424 a year gain little from the additional taxes they pay into the system.<sup>14</sup>

The benefit formula itself favors low-wage workers, but other factors need to be considered. First, high-wage workers tend to live longer than low-wage workers. Data on life expectancy and mortality rates are not directly available for wage groups, but data are available for groups according to years of education. Education and wages are correlated: people with more education tend to earn higher wages. Accordingly, the figures on life expectancy and years of education indirectly shed considerable light on the relationship between longevity and wages.

As Exhibit 11 (*on the following page*) shows, the age-adjusted mortality rate of persons with less than a high school education are 8 to 10 percent higher than the average for all Americans. As years of schooling increase, mortality rates fall. The age-adjusted mortality rate of college graduates is 21 percent below the average for all Americans, while the rate for persons with advanced degrees is 32 percent below the average. Lower age-adjusted mortality rates mean longer life expectancy. Given the strong correlation between education and earnings, the age-adjusted mortality figures indicate that, on average, Americans with higher earnings live longer than their counterparts with less education and lower earnings.<sup>15</sup> As a result, high-wage workers will, on average, draw Social Security benefits longer than low-wage workers. Low-wage workers are more likely to pay thousands of dollars in Social Security taxes and then die before, or soon after, becoming eligible for retirement benefits.

Second, low-wage workers generally begin full-time work at a younger age. Many work full time and pay Social Security taxes for years while future high-wage workers are still in college and graduate school. Low-wage workers generally pay more into the system earlier, and therefore forego more interest, than high-wage workers. This situation further reduces rates of return for low-wage workers.

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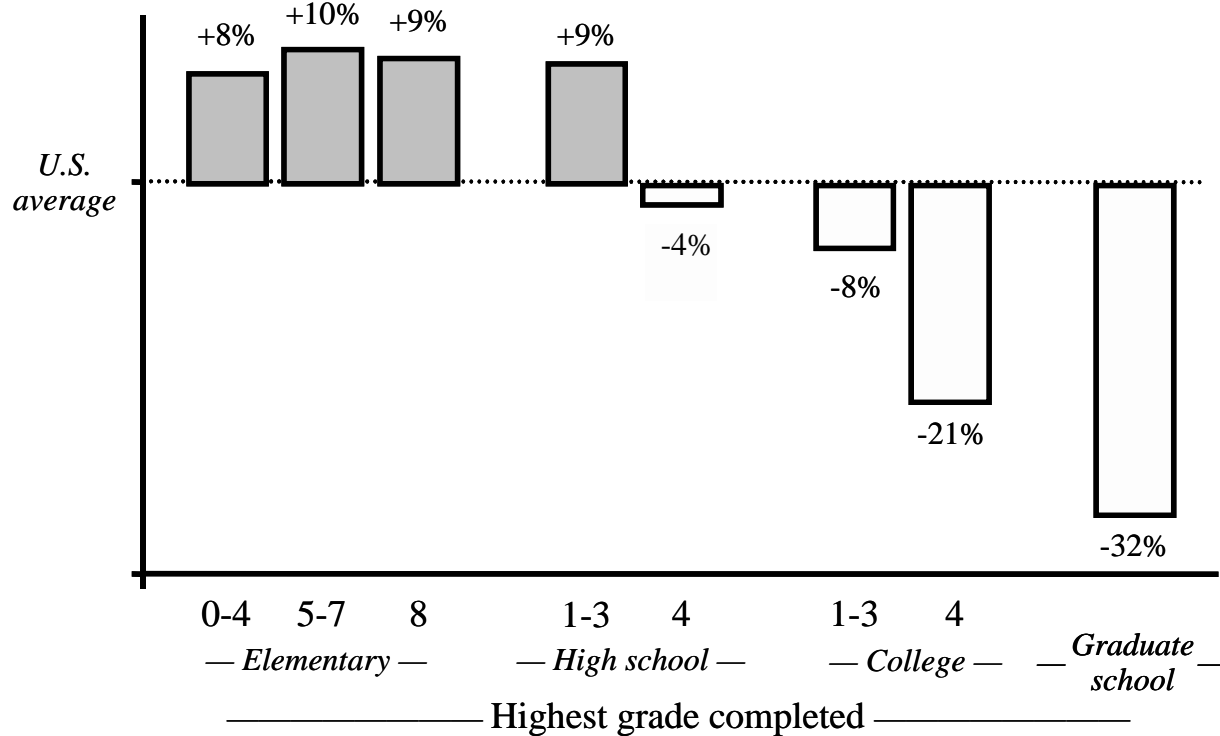
<sup>14</sup>The earnings brackets presented here are for 2000. The figures are adjusted each year for the growth of nominal wages. As earnings rise, retirement benefits as a share of prior base earnings fall. A worker with average annual earnings of \$6,372 receives an annual benefit of \$5,735 — 90 percent of the earnings on which he or she paid payroll taxes. In contrast, a worker with average annual earnings of \$60,000 receives an annual benefit of \$19,228, or only 32 percent of prior earnings.

<sup>15</sup>Numerous factors such as nutrition, quality of health care, smoking, and abuse of alcohol and other drugs may contribute to the positive relationship between education (and income) and longevity of life. A full explanation of these underlying factors is beyond the scope of this study.

## Exhibit 11: Mortality Rates by Level of Education

*Persons with more years of schooling have lower age-adjusted mortality rates. Because education and income are closely linked, mortality rates are also higher among persons with lower incomes. Compared to their counterparts with more education and income, persons with less education and lower incomes are likely to draw Social Security benefits for fewer years.*

Age-adjusted mortality rate



**Source:** Data provided to JEC by Center for Data Analysis, Heritage Foundation.

Third, labor participation tends to fall as spousal earnings increase. As a result, couples with a high-wage worker are more likely to gain from Social Security's spousal benefit provision, which provides the nonworking spouse with benefits equal to 50 percent of those the working spouse receives. A married couple with a nonworking spouse receives a benefit package 50 percent greater than the package of a single person with the same earnings and payroll tax liability. The rate of return from Social Security is higher for single-earner couples than for any other category. The most recent report of the Social Security Advisory Council places the real rate of return for a one-earner, low-wage couple retiring in 2002 at 4.0 percent a year, versus 3.4 percent for a low-wage two-earner couple and 2.7 percent for a low-wage single male.<sup>16</sup>

Fourth, not everyone with low lifetime earnings from wages is poor. Some low earners have substantial income from investments, entrepreneurial activities, inheritance, and other sources that are not subject to the payroll tax. Others are married to a spouse with substantial income. Even though they may not be poor, these people gain disproportionately from Social Security's benefit formula.

<sup>16</sup>Social Security Advisory Council (1997), p. 219.

## Exhibit 12: Life Expectancy by Gender and Ethnicity

*For persons of the same birth year and gender, the life expectancy of whites and Hispanics persistently exceeds that of blacks.*

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***Life expectancy at birth (years)***

		<u>Blacks</u>	<u>Whites</u>	<u>Hispanics</u>
<b>Birth year 1950</b> —	Male	58.9	66.3	**
	Female	62.7	72.0	**
<b>Birth year 1970</b> —	Male	60.0	67.9	68.3*
	Female	68.3	75.5	74.0*
<b>Birth year 1999</b> —	Male	68.4	74.7	77.2
	Female	75.1	80.1	83.7
<b>Birth year 2025</b> —	Male	73.6	77.8	80.0
	Female	80.5	83.6	86.1

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**Sources:** U.S. Census Bureau, *Methodology and Assumptions for the Population Projections of the United States: 1999-2000*; Texas Department of Health, *Texas Vital Statistics 1998 Annual Report*; National Center for Health Statistics, *National Vital Statistics Report*, v. 47.

**Notes:** \*Texas data are used as a proxy for the 1970 cohort; no Hispanic data exist for the U.S. as a whole.

\*\*Data are incomplete or inconsistent for these observations.

Two recent studies taking these factors into consideration suggest that Social Security may actually transfer wealth from low-wage to high-wage workers. A study using data from the Social Security Administration and the Health and Retirement Study found that when Social Security benefits are assessed for family units, rather than for individuals, the progressivity of the system disappears. Another study adjusted for differences in mortality rates, patterns of lifetime income, and other factors. It found that if a 2 percent real interest rate (discount rate) is used to evaluate the pattern of taxes paid and benefits received, the redistributive effects of Social Security are essentially neutral. However, at a more realistic 4 percent real interest rate, Social Security actually favors higher-income households.<sup>17</sup>

### **B. Bias Against Those With Shorter Life Spans**

In 2000, the average retiree reaching age 65 can expect to spend 18 years receiving Social Security benefits, after more than 40 years of paying into the system. But what about those not lucky enough to make it into their 80s, or even to reach the normal retirement age of 65? There are groups in society who have shorter life expectancies than average. In particular, people with less education, lower incomes, and certain ethnic backgrounds tend to have lower life expectancies and may receive unfair treatment. As Exhibit 12 illustrates, life expectancy for blacks is substantially lower than for whites and Hispanics.

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<sup>17</sup>The studies are Gustman and Steinmeier (2000) and Coronado and others (2000). When comparing taxes and benefits across time periods, figures must be adjusted to take into account that \$1 in the future is not worth as much as \$1 today because today's dollar could be invested and earn interest. The interest rate that could have been earned on Treasury bills or a similar low-risk asset is generally considered the most appropriate rate for such calculations.

### Exhibit 13: Rates of Return by Gender, Marital Status, and Ethnicity

*As the result of their lower life expectancy, real rates of return from Social Security for blacks are, on average, less than for whites and substantially less than for Hispanics. This is true within gender, marital status, and birth-year categories.*

		<i>Real annual projected rate of return on Social Security contributions (%)</i>		
		<u>Blacks</u>	<u>Whites</u>	<u>Hispanics</u>
<b>Birth year 1940</b> —	Male ( <i>single</i> )	1.2	1.5	2.8
	Female ( <i>single</i> )	2.8	3.0	3.6
	Married two-earner family*	2.1	2.2	3.3
<b>Birth year 1960</b> —	Male ( <i>single</i> )	-0.5	0.7	2.1
	Female ( <i>single</i> )	2.1	2.5	3.2
	Married two-earner family*	0.9	2.2	2.7
<b>Birth year 1975</b> —	Male ( <i>single</i> )	-1.3	0.2	1.6
	Female ( <i>single</i> )	1.8	2.3	3.0
	Married two-earner family*	0.5	1.2	2.3

**Source:** Data provided to JEC by Center for Data Analysis, Heritage Foundation.

**Note:** \*Statistics for married two-earner family assume two children.

When a worker and his or her spouse, if any, die before age 65, their heirs may receive nothing from Social Security. Social Security does have spousal and survivor benefits, but they are of little value to singles or families without children. Unlike private financial assets, Social Security benefits cannot be passed on to heirs, so years of payroll tax payments may come to naught with early death. Blacks are more likely than whites or Hispanics to pay a lifetime of payroll taxes, then die having received little in benefits.

The Social Security system has a benefit structure intended to redistribute income from higher-wage to lower-wage workers. The benefit formula by itself tends to favor blacks and Hispanics, who have lower incomes than the U.S. average. For blacks, however, lower than average life expectancy more than offsets the progressive nature of the benefit formula. Exhibit 13 shows that the overall real rate of return for blacks on Social Security taxes is less than for whites. Therefore, on average, the Social Security system transfers income from blacks to whites. In contrast, Social Security is particularly advantageous to Hispanics, given their relatively long life expectancies and the progressivity of benefits. The rate of return for Hispanics is higher than for whites and substantially higher than for blacks.<sup>18</sup> Social Security was not set up to transfer income from some ethnic groups to others, but under its current structure, it does.

<sup>18</sup>For additional details on the redistributive effects of Social Security across ethnic groups, see Beach and Davis (2000). An additional factor making the rate of return high for Hispanics is that the group includes many immigrants. Immigrants often spend only part of their working years living in the United States and paying Social Security taxes, but as long as they have paid into Social Security for at least ten years (whether consecutive or not), they are eligible for old age benefits. The formula for Social Security benefits gives them a higher rate of return relative to workers who earn similar wages but spend all their working years in the United States. See Feldstein and Liebman (2000).

Another group that receives unfavorable treatment from Social Security is people with life-shortening diseases. People with diabetes, heart disease, AIDS, and other diseases may spend decades paying into the system, only to die with loved ones unable to receive benefits from the Social Security taxes they have paid. (People with life-shortening diseases may receive disability insurance, but if they die before retirement they collect nothing from old age and survivors insurance, towards which they pay 10.6 percent of their wages.) By moving Social Security towards a system based on personal retirement savings accounts, every dollar paid into the accounts would be available to the heirs chosen by those who have worked hard but died before reaping the full benefit of their retirement savings.

### **C. Treatment of Working Women and Stay-at-Home Mothers**

When Social Security was established, relatively few married women worked outside the home. As has been mentioned, a beneficiary of Social Security can receive benefits based on his or her own earnings or 50 percent of the benefits his or her spouse receives, whichever is greater. When a spouse dies, a lower-earning spouse can receive 100 percent of the benefits to which the higher-earning partner was entitled, rather than the 50 percent spousal benefit.

These rules work to the advantage of married couples where one partner spends substantial time outside the labor force. However, the rules also impose a significant penalty for the spouse who re-enters the work force, works part time, or works full time but earns much less than the other partner. The payroll tax takes 12.4 percent of earnings but provides few or no additional benefits because the spousal benefit may nearly equal or exceed the benefits the lower-earning spouse could attain from his or her own earnings.

### **D. The Effects of Divorce**

All retirees, regardless of marital status, can receive benefits based on their own earnings history. Divorced retirees are eligible for spousal benefits if their marriage lasted ten years or more and they have not remarried. However, if the marriage lasted even a day less than ten years, they lose spousal benefits completely. Moreover, divorced retirees who have remarried lose all claim to the benefits of an ex-spouse, no matter how long the marriage lasted. In effect, a divorced retiree whose ex-spouse had high wages is deterred from remarrying unless he or she can find a partner who earns or earned equally high wages. Another anomaly is that a worker who is married more than once for ten years or more can generate extra liabilities for the Social Security system, since each ex-spouse can collect spousal benefits based on the marriage.

In the early years of Social Security, these factors were of little consequence because divorce was relatively rare. It is now far more common: today, 48 percent of all marriages end in divorce. Almost two-thirds of divorces occur during the first ten years of marriage.<sup>19</sup> As a result, the lives of many more people are now affected by Social Security's arbitrary allocation of benefits when a divorce occurs.

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<sup>19</sup>Clarke (1995).

## VI. Social Security and Family Incentives

Children are the future work force of a nation. When parents provide their children with nurturing, training, and education, they are promoting future productivity and growth. Having children and investing in their development also enhance the sustainability of pay-as-you-go Social Security. Unfortunately, the Social Security system itself weakens the incentive to raise children.

To be sustainable, Social Security requires every generation of working-age adults to perform two tasks: pay enough taxes to support current retirees and raise children who are able to fund their benefits in retirement. Yet Social Security benefits are based only on earnings, not on the time and effort we put into raising children. When parents put more effort into raising children, they are deprived of a large part of the rewards of their investment, which they must share with everyone else in the Social Security system.<sup>20</sup>

To illustrate the nature of the problem, imagine a pay-as-you-go retirement system with only two families, the Smiths and the Powells. Mr. and Mrs. Smith and Mr. and Mrs. Powell all earn equal wages. The couples agree to pay equal retirement benefits to their parents, and their children will eventually pay for their retirement. The couples also decide that upon retirement they should get the same benefits because their earnings have been equal and they both contributed equally to supporting their parents in retirement.

But suppose the Smiths have three children and spend extensive time and effort raising them to be productive members of society, while the Powells have no children. When both couples retire, the Smiths' children will support both the Smiths and Powells. The earnings of the Smiths' children would not be available without the efforts of the Smiths. In effect, the Powells free-ride on the Smiths. If the Smiths realize this, they may be more likely to spend their money on consumption or invest it in things not subject to the Social Security tax, rather than invest more in the education of their children, whose earnings will be subject to the tax.<sup>21</sup>

The Social Security system is in a similar position, only on a much larger scale. Current workers are financing the retirement of the previous generation of workers, while their own future benefits largely depend on their generation's *overall* investment in child raising rather than on their own particular investment. Within each generation, Social Security transfers income from those who invest heavily in children to families without children. Thus, the system itself reduces incentives to have children and invest in their education and training. This is not the intent of Social Security, but it is nonetheless a consequence of its current structure.

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<sup>20</sup>Some have suggested that Social Security's spousal benefit offsets the bias against families with children. However, the spousal benefit is also available to families without children. A homemaker who raises no children receives the same benefit as one who raises five children. A family in which the husband and wife have similar lifetime earnings gets no spousal benefit, regardless of how many children they raise. Furthermore, spousal benefits are not nearly as generous as commonly understood. By separating husbands and wives for purposes of determining how much each pays in payroll taxes (rather than acknowledging that they *share* their combined payroll tax burden equally) the formula artificially reduces the benefits of married couples. Most of the spousal benefit merely offsets this bias against married couples. For example, say a worker earns an average of \$48,000 per year during his career and his wife is a homemaker. Based on his lifetime earnings, the worker receives Social Security benefits of \$17,428 a year and his wife receives spousal benefits of \$8,714 (50 percent of \$17,428), for a total benefit package of \$26,142. If, instead of treating the husband's earnings separately, the system attributed half of the couple's combined earnings to the husband and half to the wife, each would be treated as earning \$24,000. Under the current benefit formula, each would receive \$11,376 a year, for a total of \$22,752. The spousal benefit is only 15 percent more than the couple would receive were its income split 50-50 between husband and wife. That amount is far less than the supposed 50 percent spousal benefit.

<sup>21</sup>For evidence that these effects do seem to occur, see Ehrlich and Zhong (1998) and Ehrlich and Lui (1998).

## VII. The Current System's Great Dilemma

As we have mentioned, between now and 2030, the number of workers per Social Security beneficiary will fall from 3.4 to 2.1. Taxes will have to rise sharply or benefits will have to be cut substantially to maintain the current system. After 2030, things are projected to get even worse for Social Security.

Why not increase the payroll tax? If promised benefits are maintained, the Social Security payroll tax will have to rise to more than 18 percent. Since Medicare payroll taxes are also likely to rise as more Americans live longer, payroll taxes would take more than 20 percent of the earnings of future workers. As Exhibit 14 indicates, both the Social Security payroll tax rate and the income cut-off have been increased often. In real dollars, the top amount of Social Security taxes is already nearly twice the level of 1980 and more than three times the level of 1970. Consequently, 76 percent of working Americans now pay more in payroll taxes than in federal income taxes. The original plan was for the payroll tax to level off at 6 percent when the system reached maturity. The rate is now more than twice that level. The record is clear: higher taxes have failed to place the system on a sound financial footing. Furthermore, if the payroll tax rose to 20 percent or more, we could expect incomes to be lower than if the current tax rate were maintained. Lower incomes would reduce the level of payroll tax revenue, starting a vicious circle.

What about cutting benefits? To maintain the current 12.4 percent payroll tax, benefits will have to be cut approximately 17 percent by 2020 and 33 percent by 2040. In real terms, benefits would still be at or above current levels. However, benefits would not rise as fast as wages, so people who relied mainly on Social Security benefits for income would fall lower and lower down the income ladder relative to the average worker. Increasing taxes and cutting benefits would both lower rates of return from Social Security.

### Exhibit 14: The Increasing Burden of Social Security Taxes

*Over time, both the Social Security tax rate and tax base (adjusted for inflation) have persistently increased.*

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Year	Tax rate	Top tax base (real 2000 dollars)	Maximum Social Security taxes (real 2000 dollars)
1937	2.00%	\$ 35,896	\$ 718
1940	2.00%	\$ 36,921	\$ 738
1950	3.00%	\$ 21,447	\$ 643
1960	6.00%	\$ 27,936	\$ 1,676
1970	8.40%	\$ 34,632	\$ 2,909
1980	10.16%	\$ 54,157	\$ 5,502
1990	12.40%	\$ 67,613	\$ 8,384
2000	12.40%	\$ 76,200	\$ 9,449

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**Sources:** Social Security Administration (2000); Haver Analytics.

**Note:** The tax rate and base are for Old Age, Survivors, and Disability Insurance (OASDI) and include both the employer and employee shares. The original plan for Social Security envisioned a top tax rate of 6 percent. The real 2000 dollar rates are based on June 2000 CPI estimates.

## VIII. Retirement Savings Accounts (RSAs) — A 21<sup>st</sup> Century Approach to Reforming Social Security

Some ask, “How can we preserve Social Security in its existing form?” A better question is, “What is the best way to provide retirement security for working Americans?” Social Security was designed for the economic and demographic conditions of the 1930s. Today’s world is vastly different, and, as a result, the structure of the current system may not be well suited for it.

As we consider how to adapt retirement security to the realities of the 21<sup>st</sup> century, several things are clear. It makes sense for a retirement security system to place more emphasis on saving and ownership of income-generating assets than has been the case in the past. The system should provide workers with a rate of return comparable to what they could obtain elsewhere. It should keep the elderly out of poverty without reducing economic prospects for future generations. It should not work to the disadvantage of minorities or people with low earnings. It should not discourage work by imposing high taxes. Finally, it should free elderly Americans from dependency on politicians and manipulation by the political process.

Social Security’s problems extend beyond the coming shortfall. The system is ill-suited for today’s demographics. It redistributes income in arbitrary ways. It is a poor investment: the average real rate of return that young and middle-aged workers today can expect is 2 percent, which is less than one-third of the return equity markets have generated historically. Most policymakers have come to the conclusion that Social Security needs major reforms, the sooner the better, so as not to pass the problem on to future generations.

Retirement savings accounts (RSAs) provide a method for eliminating Social Security’s coming shortfall and, at the same time, correcting other problems arising from the program’s current structure. The unpleasant choice between tax hikes and benefit cuts can be avoided because the real rates of return for funds in RSAs would be substantially greater than the rate for Social Security. With RSAs, individuals would save and invest during their working years to provide advance funding for their own retirement benefits. Each worker would have a property right to the contributions and earnings in his or her RSA.<sup>22</sup> By allowing workers to save for their own retirement, RSAs could fill the system’s coming funding gap so that future retirees could enjoy promised benefits without imposing higher payroll taxes on their children.

Although the RSA approach is relatively new, several countries now have experience with it. Chile was the leader. Beginning in the early 1980s, Chile allowed individuals to contribute funds to RSAs rather than the traditional pay-as-you-go system. They did so in overwhelming numbers. Chile’s domestic savings rate increased dramatically and the country has experienced strong economic growth since the mid 1980s. While other factors, particularly trade liberalization and a more stable monetary policy, contributed to Chile’s strong performance, the adoption of RSAs also played a role. Mexico, Peru, Argentina and several other Latin American countries adopted RSA-based plans during the 1990s.

Among high-income countries that have adopted RSAs, Australia is noteworthy because of its cultural and demographic similarities to the United States. Australia had a decades-old government retirement system that provided a modest flat-rate benefit for those over 65, which was financed from general government funds. In the 1990s, Australia realized that its retirement system would face a large shortfall in the future because of substantial growth in the proportion of retirees. The Labor government of the time enacted reforms that moved the country away from a pay-as-you-go system towards an investment-based

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<sup>22</sup>Many Americans already make contributions to retirement investment funds. Contributions to pensions, 401(k) plans, and IRAs were about 2 percent of GDP in 1998. Social Security payments were about 4 percent of GDP.

system. In 1997, Australia began phasing in its new system, which includes RSAs called “superannuation accounts.” Workers must pay 8 percent of wages into these accounts at present, increasing to 9 percent starting in 2002; they can also make additional voluntary contributions. Some of the accounts are managed individually, while others are managed through companies, businesses, industry groups, or unions. The accounts may be invested in a variety of assets, including equity mutual funds, bond funds, property, and cash.

Benefits under the old system have been frozen and a means test has been imposed to tilt traditional benefits towards those with lower incomes. In the future, most workers will rely primarily on savings in their private accounts for retirement income, with those who had lower working incomes also receiving benefits from the traditional pay-as-you-go benefit structure.<sup>23</sup>

Another high-income country with RSAs is the United Kingdom, which has a two-tier system, one tier being a pay-as-you-go system and the other an RSA system. Recently, Sweden adopted a plan that would allow its citizens to direct a portion of their payroll taxes into RSAs. Thus, as the U.S. considers the RSA approach, it is in a position to benefit from the experience of other countries.

Today’s financial system provides a favorable environment for RSAs. U.S. financial markets are far more robust and sophisticated than they were in the 1930s. There is no reason why today’s financial markets could not handle RSAs for every adult in the country. About half of all American families now own equities, and the vast majority are familiar with basic financial instruments such as bank savings accounts and personal credit. The dream of a secure individual retirement savings account for all Americans is an achievable goal.

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<sup>23</sup>Discussion of Australia is based on material in Ferrara and Tanner (1998), Mitchell (2000b), and Schieber and Shoven (1999, pp. 316-17).

## **IX. The Advantages of Retirement Savings Accounts**

RSAs offer many advantages over the current pay-as-you-go Social Security system. Let us consider some of them.

### **A. More Savings and Investment**

RSAs would stimulate economic growth by increasing savings and investment.<sup>24</sup> The funds paid into RSAs would flow into corporate bonds and stocks, providing additional funds that businesses need for investment in capital equipment and growth. As the economy's rate of investment increased, worker productivity and incomes would rise. In contrast, the current Social Security system does not save or invest the tax revenues that flow into government coffers from the payroll tax. These inflows are immediately paid out to beneficiaries or lent to the Treasury to finance other government activities.

### **B. More Incentives to Work and Earn**

Social Security is financed by a payroll tax that drives a wedge between the employer's cost of paying wages and the employee's net earnings. Because the link between payroll taxes and retirement benefits is weak, the current system exerts a negative impact on employment and the incentive of individuals to earn. In contrast, funds contributed to RSAs would be retained by individuals as their own property, encouraging workers to earn more and build up greater nest eggs for retirement. The funds in RSAs would be channeled into investments earning market rates of return, thus providing positive feedback for saving. The incentive to work would be strengthened because the funds in a RSA would be passed on to heirs as part of a worker's personal property if he or she died before withdrawing all the money in the RSA. Social Security benefits cannot be passed on to heirs, so they may be completely lost should a worker die prematurely.

### **C. Less Dependency**

A key advantage of RSAs is that they would reduce dependency on government and decrease the manipulation of the elderly for political gain. Economic dependency undermines political freedom. When citizens are dependent on the government, they are vulnerable to political manipulation. With RSAs, individuals would have an enforceable property right to their accumulated contributions. They would save to provide for their own retirement. As a result, they would be less dependent in their old age on the decisions of politicians and freer to exercise independent political judgment.

Economic dependency on government creates divisions between the interests of different groups in society, as the history of Social Security illustrates. Beginning with the revisions of 1939, politicians have used Social Security in efforts to "buy" the votes of the elderly. As a result, most working Americans now pay more in payroll taxes than in income taxes. Since RSAs would give all Americans a stake in the country's economic prosperity, people would be less likely to be enticed by short-sighted economic fixes, and be more concerned with policies that promote long-term prosperity.

President Franklin Roosevelt was well aware of the potential problems accompanying political dependency. When Social Security was established, he insisted that each person should have a clearly defined account, so that Americans would know "no damn politician can ever scrap my Social Security program."<sup>25</sup>

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<sup>24</sup>In the extreme case that the transition to RSAs were financed entirely by government borrowing, savings would not increase.

<sup>25</sup>Moynihan (2000).

#### **D. Fewer Hidden Transfers of Income**

One of Social Security's hidden problems is the large and often perverse transfers of income that it generates. As we have shown, the current system imposes a high tax relative to benefits received on those with shorter life spans, various minority groups, and married working women. Under a system of RSAs, all funds could earn decent rates of return and the linkage between contributions and benefits would be stronger. RSAs would improve the fairness of the system.

## X. Retirement Savings Accounts: Funding Options

The widespread appeal of RSAs for Social Security reform has led to numerous proposed structures for the new accounts. RSAs have been proposed as “add-ons,” “carve-outs,” or complete replacements for traditional Social Security retirement benefits. Add-on plans would allow, or mandate, that individuals contribute to a RSA an *additional* portion of their wages above the current 12.4 percent payroll tax. Carve-out plans would redirect a portion of the *current* payroll tax into workers’ RSAs. Proposals for an investment-based system that would provide full advance funding would eventually replace traditional Social Security benefits with equal or higher benefits from RSAs, often with a phase-in period during which persons currently in mid-career would receive a combination of traditional and RSA benefits when they retire.

Most proposals for RSAs have important features in common. Generally, they would not affect the level of benefits for current retirees; would require that RSA account balances at retirement be taken as regular monthly payments or converted into annuities; would prescribe a range of relatively safe financial assets to be held in RSAs; and would provide for a minimum benefit guarantee from RSAs.<sup>26</sup> Almost all proposals would combine gradual reductions in traditional Social Security benefits with proceeds from RSAs to provide *total* retirement benefits at least as high as those promised under current law.

### A. Add-On RSAs

Under add-on approaches, the current 12.4 percent Social Security payroll tax would continue to fund traditional retirement and disability benefits. Retirees and those close to retirement would remain fully in the current system, but persons younger than a given age, perhaps 55 years, would contribute funds to a RSA. The funds would be invested and used to cover the shortfall between promised traditional benefits and available payroll tax revenue. An add-on of about 2 percentage points would be required to bring the benefits of workers up to the promised level.<sup>27</sup> Individuals would decide how their RSA investments would be divided among equities, bonds, and money market funds or bank deposits.

Over time, traditional benefits would be scaled back and replaced with benefits funded by RSAs. Younger generations would derive more of their retirement benefits from RSAs and less from the pay-as-you-go system. As the system matured, half to two-thirds of benefits would come from the pay-as-you-go system and the rest from RSAs. The system would be sustainable and currently promised benefits could be delivered with the current tax plus the 2 percentage points of the add-on.<sup>28</sup>

The most recent report of the Social Security Advisory Council proposed that a 1.6 percent add-on be combined with cuts in the Social Security benefit formula, a gradual rise in the normal retirement age, and other reforms.<sup>29</sup> Under their plan, future retirees would receive about the same overall level of benefits as under current law, with about one-third of future benefits coming from the new RSAs. The Advisory Council estimated that reductions in traditional Social Security benefits and other changes under their plan would create long-term (75-year) actuarial balance in the financial structure of Social Security.

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<sup>26</sup>For a summary and description of Congressional RSA proposals, see Joint Economic Committee (2000).

<sup>27</sup>Recent calculations by the Congressional Research Service illustrate the potential of RSAs to fund future benefits. For an average income worker who will retire in 2030, a 2-percent RSA earning a rate of return equivalent to the past performance of the Standard and Poor’s 500 index would receive monthly RSA benefits equal to about 28 percent of current law Social Security benefits.

<sup>28</sup>For more on how a mixed system of RSA add-ons and a gradual reduction in traditional benefits could be financed over time with the current 12.4 percent Social Security tax, see Feldstein and Samwick (2000).

<sup>29</sup>Social Security Advisory Council (1997).

Add-on RSAs based on contributions of about 2 percent, combined with a gradual reduction in traditional benefits as the RSAs of younger workers have time to grow, would provide a fairly straightforward approach to fixing Social Security. Such an approach could be designed to maintain currently promised benefit levels, create long-term actuarial balance in the Social Security system, and eliminate the need to raise payroll taxes in the future. However, add-on approaches would push the combination of taxes and contributions higher. Doing so might discourage economic growth, and would still leave the Social Security system vulnerable to demographic changes if current projections of the system's finances turn out not to be correct.

## **B. Carve-Out RSAs**

Carve-out proposals would fund RSAs by redirecting part of the 12.4 percent Social Security payroll tax into new personal accounts instead of imposing an additional required contribution or using general tax revenues for the contribution. Because the carve-out approach would keep the combined payroll tax plus RSA contribution lower than it would be under the add-on approach, the carve-out would have to be larger than the add-on to maintain currently promised benefits. Historical data indicate that it is reasonable to expect the long-term real rate of return from an appropriate portfolio of stocks and bonds to be at least twice the 2 percent return of traditional Social Security (see Section XI). Therefore, benefits from a 4 percent carve-out plus traditional benefits can be expected to generate total benefits at least equal to those promised by the current system. With a 4 percent carve-out, more of the total benefits would come from RSAs and fewer from the traditional system than would be the case with add-ons.

A key difference between add-on and carve-out RSA plans is their implications for the federal budget. Carve-out plans would reduce the flow of payroll taxes into the current Social Security system. Part of the rationale for such a redirection is that until 2015 Social Security payroll taxes are higher than needed to pay current beneficiaries. Under current law, the temporary Social Security surplus is lent to the Treasury, which uses it for other purposes. Many fear that Congress and the President will use these funds to initiate new programs and expand the size of government in the years immediately ahead. The carve-out approach would eliminate those funds as a source for financing more government spending.<sup>30</sup> The overall level of taxes plus contributions would be less under carve-out plans than under add-on plans. By increasing the proportion of wages that workers keep, carve-out plans would increase incentives for work, employment, and economic growth.

## **C. A Fully Investment-Based System Using RSAs**

Add-on and carve-out proposals alike are designed to bring about long-term financial balance to Social Security by *partially* substituting higher-earning RSAs for pay-as-you-go Social Security. Another option would be to move towards a completely investment-based system. There are several proposals for moving to a fully investment-based system. All would maintain currently promised benefits to retirees and those nearing retirement. All would involve a phase-in period during which benefits from RSAs would gradually be substituted for traditional benefits. Some would replace only the old age and survivors insurance (OASI) portion of Social Security and retain the disability insurance (DI) program, which is funded with 1.8 percentage points of the 12.4 percent Social Security (OASDI) tax. Some would make the shift from the current pay-as-you-go system to RSAs voluntary at all age levels; others would require all younger workers to make the shift.

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<sup>30</sup>The potential impact on size of government is of considerable importance because the empirical evidence indicates that there is a negative relationship between government expenditures as a share of GDP and the rate of economic growth. Thus, a higher level of government expenditures will tend to reduce the economy's long-run growth rate. See Gwartney and others (1998).

The major advantage of an investment-based system is that, when completely phased in, it could deliver any level of benefits at a lower cost than a pay-as-you-go system. This is because the historical long-term rate of return on private investment has been more than three times higher than the return that can be expected from the growth of the payroll tax base. An RSA contribution of approximately 5 percent would deliver the retirement and survivor benefits promised by the current system.<sup>31</sup> In contrast, according to the estimates of the Social Security actuaries, it will take an old age and survivors payroll tax of approximately 15 percent to deliver these benefits in the future, versus the current 10.4 percent.

It has been claimed that moving towards an investment-based system is unfair because younger workers would have to “pay twice” for retirement, once to fund beneficiaries of the current pay-as-you-go system and again to provide advance funding for their own retirement. This burden is sometimes described as a transition cost that would be imposed by reform, but that is not an accurate description. Rather, the problem is that Social Security faces a shortfall in funding that any approach must somehow resolve. A properly designed investment-based system would reduce the costs of funding the shortfall compared to continuing with the current system.

There are a number of Congressional proposals to establish a fully investment-based retirement system. A bill by Rep. Mark Sanford (H.R. 249) would have workers divert 8 percentage points of the payroll tax into privately managed RSAs. As under a number of proposals, the new system would be mandatory for younger workers, voluntary for workers who are in mid-career, and would not affect current retirees. Other proposals that move the system towards full investment funding include those introduced by Rep. John Edward Porter (H.R. 874) and Senator Rod Grams (S. 1103), which are both based on a 10 percent payroll tax carve-out.

Investment-based proposals would use various methods of reducing traditional Social Security benefits as workers are transferred over to the new system in coming decades. (Again, benefits from RSAs would be increasing, so that *total* benefits would not fall.) The method adopted by the Grams and Porter plans is to issue “recognition bonds” to mid-career workers for payroll taxes already paid, should they opt for the new voluntary RSA system. When these workers retire, they would receive benefit payments from their RSA accounts, but not traditional Social Security benefits. Instead, they would receive benefits from their recognition bonds, which would repay them for the value of past payroll taxes paid into the Social Security system, with an adjustment for inflation or interest earnings.

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<sup>31</sup>For example, a couple with wages of \$40,000 a year over a 40-year career would accumulate a nest egg of \$399,270 if annual RSA contributions of 5 percent of wages were invested at a 7 percent real annual rate of return. Even at a lower 5 percent rate of return, the value of their assets at the end of the period would be \$241,600. Assuming a life expectancy of 20 additional years, the assets from the 7 percent return (\$399,270) could be converted to an annuity that would provide the couple with \$35,804 a year for the rest of their lives. At a 5 percent rate of return, the assets could provide an annuity of \$18,417 a year. (We assume that a one-time fee equal to 5 percent of the principal is required to convert the assets into a lifetime annual income annuity. According to the U.S. General Accounting Office [1999, p. 25], the 5 percent figure is the current market rate for such conversions.)

## **XI. Retirement Savings Accounts: Design Issues**

If Social Security legislation incorporating RSAs moves forward, a number of important structural issues will have to be addressed. Let us consider various options for making a RSA-based system efficient and fair.

### **A. Benefits for Married Couples**

The Social Security system was designed for a time when most families had only one earner, married women seldom worked outside of the home, and divorce was uncommon. The system's spousal benefit and arbitrary treatment of divorce reflect this era. Today, two-earner families are the norm and women are almost as career-oriented as men. Furthermore, almost half of marriages today end in divorce. A retirement security system for the 21<sup>st</sup> century must reflect the current status of family earnings and provide for fairer, more uniform treatment when divorce occurs.<sup>32</sup>

The problems of the current system would be overcome by recognizing the joint nature of earnings generated by married couples. When RSAs are established, this principle should be incorporated. It could be done by mandating that upon divorce, the RSAs of both spouses would be treated as a single pool and divided equally, regardless of the length of the marriage. With this arrangement, each spouse could have a secure property right to the funds channeled into his or her RSA during the marriage and that right would not be undermined by a subsequent divorce. If a spouse died prior to retirement, the funds in his or her RSA could be passed to the surviving spouse. If both spouses died prior to retirement, their RSA funds could be inherited by their children or other heirs. Providing for an equal split of RSA funds generated during a marriage could eliminate features of current Social Security rules that discourage some divorced people from remarrying. An equal split would also provide many divorced women with higher benefits than they receive under current rules.

### **B. Would Equity Investments Make RSAs Risky?**

With retirement RSAs, individuals would decide the allocation of their funds among bonds, stocks, and other securities. Many RSA proposals would require that individuals invest in diversified stock and bond funds, rather than individual company securities. With diversification, risk would be reduced and the returns to individual RSA accounts would approximate those of the broader market.

Some critics argue that investing RSA funds in equities would be risky because the stock market fluctuates substantially from year to year. But year-to-year fluctuations are of little relevance to long-term retirement investing. The risks and expected returns over periods of 20, 30 or 40 years are the relevant criteria. Over the long term, broad-based portfolios of equity investments have consistently outperformed other investment options.

From 1925 to 1997, the Standard and Poor's 500, a broad-based index of large-company stocks, earned an average annual real rate of return of 7.7 percent, compared to just 2.1 percent for long-term government bonds. Thus, the real return to the S&P 500 was more than three times the return to government bonds. Equally important is that the longer the term of investment, the lower the risks associated with investing in

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<sup>32</sup>For a more detailed explanation of how Social Security benefits affect the changing family structure in the United States, see Stanfield and Nicolaou (2000).

stocks. Exhibit 15 illustrates this point. The top frame shows the 20-year moving average annual return for stocks and bonds from 1925 to 1997. Stocks outperformed bonds in 52 of the 53 overlapping 20-year periods.<sup>33</sup> Stocks provided positive real returns during all 53 overlapping 20-year periods, a feat achieved by bonds only 19 times. Furthermore, the 20-year average annual real return from stocks exceeded Social Security's 2 percent return in 49 of the 53 overlapping 20-year periods.

The bottom frame of Exhibit 15 shows average annual real returns for 30-year intervals, a time horizon comparable to that of retirement investing. These figures present an even more compelling case for stocks. Even during their worst 30-year period (1965-94), stocks provided a better rate of return than bonds did in *any* 30-year period. The consistency of the figures presented in Exhibit 15 are even more remarkable given the turbulence of the times. This 72-year period included the Great Depression, the Second World War, the Korean War, the Vietnam War, various oil crises, and numerous recessions.<sup>34</sup>

Professor Jeremy Siegel of the Wharton School has exhaustively researched returns from various asset classes dating back to the early 1800s. Siegel found that stocks have provided the best long-term investment option for nearly two centuries. He has remarked, “[Y]ou have to go back more than one and a half centuries, to the period from 1831 through 1861, to find any 30-year period where the return on either long- or short-term bonds exceeded that on equities. The dominance of stocks over fixed-income securities is overwhelming for investors with long horizons.”<sup>35</sup>

Another aspect of RSAs that reduces investment risk is the extended period during which contributions would be made. Individuals would allocate funds into their RSAs over 30 to 50 years, essentially practicing “dollar cost averaging.” Over time, the purchase price of shares would approximate the average price during the period, so individuals would not be caught buying most of their shares at high prices. This would be true regardless of whether the market was relatively stable or highly volatile. The month-to-month or year-to-year volatility of the stock market is of little importance for RSA investing.

RSA investors would also be able to tailor their accounts to individual preferences for risk. Young workers would probably invest largely in growth stocks to take advantage of the high long-term returns such stocks earn. During mid-career, many investors would likely split their portfolios between stocks and bonds. As workers approached retirement and became more concerned about preserving asset value over the short term, they might well want to shift more of their investments toward bonds or cash.

Another way RSA investors could reduce the risk of low returns would be to use option contracts to guarantee a minimum rate of return, in exchange for giving up part or all of their chance to receive unusually high returns. The minimum could be set equal to the minimum currently provided by Social Security or to some other level chosen by individual investors.<sup>36</sup>

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<sup>33</sup>The one exception was 1929-48, when the real return from large-company stocks was 1.4 percent and the real return from long-term government bonds was 2.2 percent. Historically, small-company stocks have earned an even higher rate of return than large-company stocks. From 1925 to 1997, the index of small-capitalization stocks earned an average real annual return of more than 9 percent.

<sup>34</sup>Social Security benefits are based on a worker's best 35 years of earnings. Texas A&M University researchers Thomas Saving and Andrew Rettenmaier have calculated that the returns for a fixed contribution (for example, \$50 a month) into an index fund invested 100 percent in stocks. They calculate the returns for each overlapping 35-year period since 1940. During the worst 35-year period, the average real rate of return was 4.2 percent a year. See Herrick and Cordell (forthcoming).

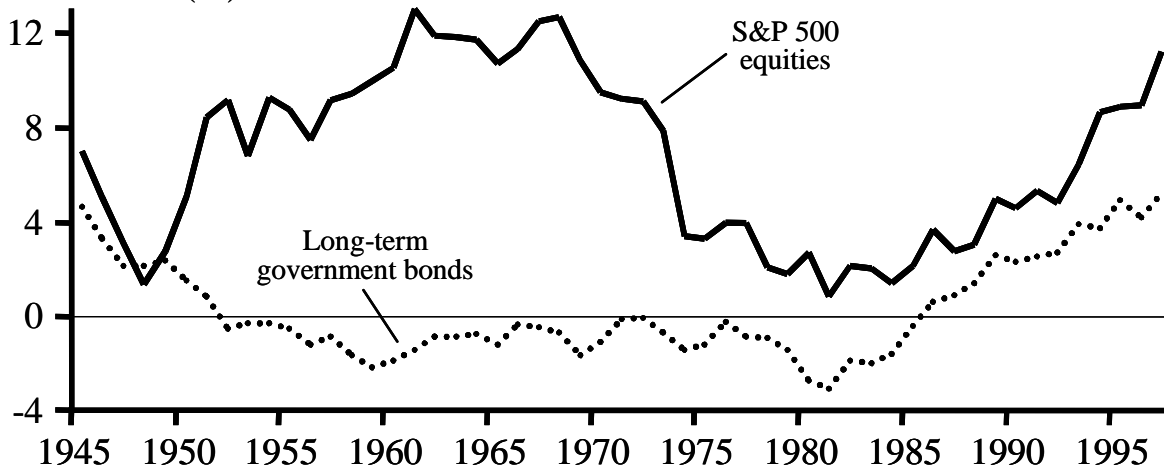
<sup>35</sup>Siegel (1998), p. 15.

<sup>36</sup>Feldstein and Ranguelova (2000).

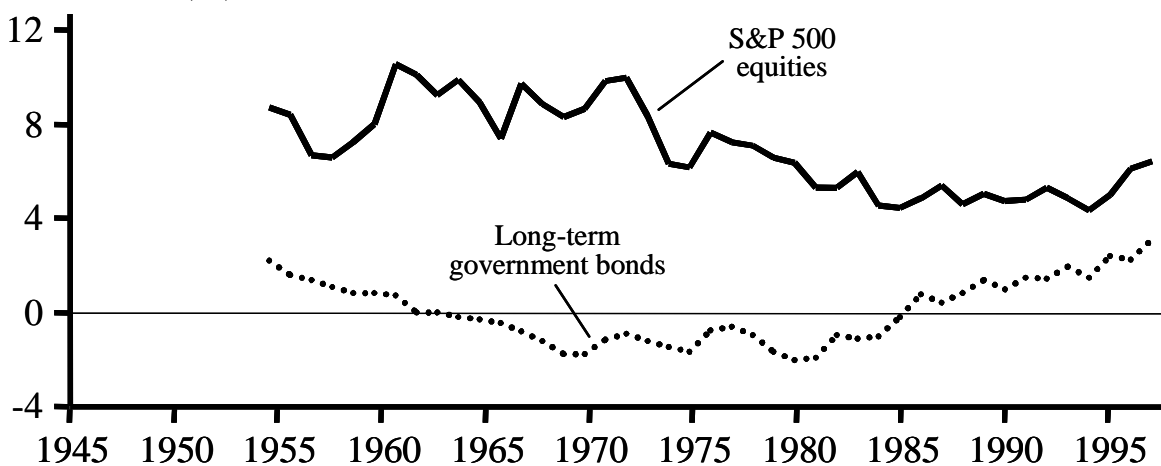
## Exhibit 15: The 20-Year and 30-Year Real Rates of Return of Equities and Long-Term Government Bonds

*From 1925 to 1997, the real annual rate of return of the S&P 500 stocks averaged 7.7 percent. The comparable return for long-term government bonds was just 2.1 percent. Both the 20-year and the 30-year returns to equities consistently exceeded those of long-term government bonds. The 30-year average real annual rate of return to equities never fell below 4.3 percent.*

20-year real  
compound annual  
rate of return (%)



30-year real  
compound annual  
rate of return (%)



**Sources:** Ibbotson Associates; JEC calculations.

**Note:** 20-year data start with 1945 and 30-year data start with 1955 because of data limitations.

### **C. Assuring Minimum Levels of Retirement Income**

The current Social Security system provides beneficiaries with a flow of income throughout their retirement years, regardless of how long they live. Through annuitization, RSAs could do the same. An annuity is a contract, sold typically by life insurance companies, that converts a lump-sum payment into a stream of income, either for a specified number of years or for the remainder of one's life. According to the General Accounting Office, the current cost of converting a lump sum to an annuity is a one-time charge equal to approximately 5 percent of the assets annuitized.<sup>37</sup> (The amount paid per year depends on a number of factors, notably the age and sex of the buyer of the annuity and the rates of return prevailing on various types of investments the insurance company can make.) If conversions were more commonplace, as they would be under a RSA system, conversion costs could be expected to decline.

The purpose of annuities would be to provide individuals with secure guaranteed payments for life and avoid depleting their RSAs before death. To assure that they have sufficient funds in retirement, some proposals for RSAs would require individuals to convert enough RSA funds into annuities to assure a minimum level of real income—for example, an amount equal to at least the poverty income threshold. Because the expected additional years of life decline with age, the price of the annuity that would provide the minimum income for the remainder of one's life would be cheaper for persons retiring at an older age.

As long as individuals purchased annuities that would keep them out of poverty during their retirement years, or had sufficient funds in their RSAs to assure at least the minimum level of income under conservative assumptions, it would make sense to give them considerable discretion over how they used the funds in their accounts. Most Congressional plans would allow such freedom of choice. (Note that with many annuities, the annuity ends when the beneficiary dies. Funds available to be left to heirs will be those left after purchasing such annuities.)

Individuals could be allowed to annuitize any time after, perhaps, age 60. This flexibility would make it possible for individuals to make adjustments depending on their job opportunities, financial status, health, investments, and personal preferences. Some workers might want to retire at 60, while others might prefer to continue working to provide themselves with more income during retirement. People could also have the option of not purchasing annuities until after retirement, or even not purchasing annuities at all, if they maintained sufficient funds in their RSAs.

As workers approached retirement, most would switch substantial portions of the funds in their RSAs into bonds and money market investments to guard against volatility in the stock market. Flexibility in the timing of retirement would reduce the risk accompanying the movement of funds from equities to bonds, and eventually the conversion of funds into annuities. Flexibility is also important for another reason: the health and life expectancy of Americans in their sixties and seventies may change dramatically in the decades immediately ahead. Health conditions of persons approaching retirement already vary considerably. With future medical breakthroughs, the variability is likely to increase. Given these uncertainties, the flexibility provided by RSAs is particularly attractive.

### **D. The Poor and the Design of RSAs**

Although the benefit formula for Social Security appears progressive, the current system tends to transfer income toward those with higher wages. This occurs mainly because high-wage workers tend to live longer and therefore receive Social Security benefits for more years than their low-wage counterparts.

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<sup>37</sup>U.S. General Accounting Office (1999), p. 25. It should be noted that the existence of inflation-indexed bonds allows insurers to offer annuities indexed to keep pace with inflation.

How would a shift toward retirement RSAs influence the economic welfare of the poor? An RSA program that required each person to pay a constant percentage of his or her income into a RSA account would have no redistributive effects. Thus, it would eliminate the possible tendency of the current system to transfer income away from low-wage to high-wage workers.

The current system is particularly disadvantageous to people who die before retirement, who tend to be poorer than average. Low-wage workers are more likely to begin full-time work at a young age and have earnings well below the cutoff of the Social Security tax. Thus, payroll taxes account for a substantial portion of their income throughout their working lives. If they die before retirement, their Social Security taxes provide them with little in the way of benefits, nor do they provide anything for their heirs.<sup>38</sup> The combination of a high payroll tax and low life expectancy makes it particularly difficult for low-wage workers to achieve better lives for their children.

Clearly, the RSA approach would be advantageous to those with low incomes who die prior to retirement. With RSAs, both their contributions and accumulated earnings would be passed along to their heirs. However, when low-income recipients live long, the progressive nature of the current benefit formula works to their advantage. Because of the progressivity of the formula, income levels during retirement are often not much different than during the working years. Steady incomes are one reason why the poverty rate among the elderly is relatively low.

Critics have argued that retirement RSAs would lead to an increase in poverty among the elderly. It is true that with a uniform low rate for RSA contributions, those with very low wages during most of their working years would accumulate only modest amounts in their RSAs. Some might even be worse off than under the current system. However, there are various ways to assure that the poor could take advantage of RSAs. One method would be to incorporate a “progressive carve-out” into the RSA approach. Under this arrangement, a higher percentage would be channeled into RSAs up to a certain income cut-off. For example, the carve-out rate could be 6 percent of the first \$10,000 for a single earner (or \$20,000 for a married couple) and 2 percent for amounts above that level.<sup>39</sup> This approach would channel a larger proportion of the earnings of low-income recipients into RSAs. In turn, the higher level of contributions would provide low-income earners with more money during retirement.

Another way of helping low-wage workers within the framework of RSAs would be to combine a flat percentage RSA carve-out with a greater reduction in the benefits from the current system for middle- and high-wage workers. Lower-income workers would not see their traditional Social Security benefit reduced

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<sup>38</sup>See Gokhale and others (1999) for evidence that the structure of the current Social Security program adversely affects the wealth of low-income families. Social Security does provide a small death benefit, currently \$255, to a worker’s survivors, and if the worker’s children are under 18 they receive survivors insurance payments.

<sup>39</sup>With this carve-out, the annual contribution of a married couple with joint annual earnings of \$30,000 would be \$1,400. Invested at a 7 percent real annual rate of return (less than the average rate of return on equities during the last 75 years), annual contributions of \$1,400 over a 40-year career would have an asset value of \$279,489 at retirement. Assuming 20 additional years of life at retirement, the assets could be converted to an annuity that would provide an annual income of \$25,063 for the remainder of life. This annuity income is more than twice the poverty income threshold. Even at a 5 percent rate of return (a return well below that of equities), the \$1,400 annual investment would grow to assets valued at \$169,120 after 40 years. This amount would convert to an annuity providing an annual income of \$12,892 for the remainder of life. This annuity would provide the couple with an income level 15 percent above the poverty income threshold. (Again, we assume that a one-time fee equal to 5 percent of the principal—the current market rate—is required to convert the assets into a lifetime annual income annuity.) These figures represent income only from the annuity. If the couple had any other savings or earnings during retirement, these sources would enhance their income. It is also important to note that the couple would have a property right to all funds in their RSA. Therefore, should one or both die before retirement, the funds in their RSAs would go to the remaining spouse or other heirs.

much, thus giving them the same or higher income under the new system when income from their RSAs is included. The new system would then have two parts: a traditional benefit with a fairly flat benefit structure for persons at all income levels, and RSAs based on investments from a flat-percentage carve-out from the payroll tax. Such a system would be simple in structure, and would ensure that the low-income elderly continued to receive adequate benefits. The United Kingdom has instituted a two-tier system along these lines.

Still other steps could be taken to assure that an RSA system did not disadvantage the poor. Tax deductions could be provided for contributions bringing the RSAs of those approaching retirement age up to the level required for the purchase of the minimum-income retirement annuity. The contributions might either be made directly or through charitable organizations focusing on assistance of this type. Such a reform would strengthen families and communities. It would encourage children, family members, civic organizations, churches, philanthropists, and charitable organizations to take steps to assure that virtually all of the elderly were able to retire with income levels above the poverty line.

The current system does not work well for the poor. It would be relatively easy to design RSAs in a manner that would be more beneficial to them. Rather than being an argument against reform, the treatment of the poor is an argument in favor of reforming the current system.

### **E. Administration of RSAs**

Before a system of RSAs could be implemented, many administrative details would need to be ironed out. The details are important because they would affect the administrative costs of RSAs, the quality of customer service, and the status of RSAs as true private property rather than simply a new accounting device for the existing Social Security system.

A number of Congressional proposals, including those of Sen. Judd Gregg (S.1383), Sen. William Roth (S. 263), and Rep. Jim Kolbe (H.R. 1793), would require that RSAs be *government-administered*. Government administration seems to offer simplicity and low administrative costs. The successful Thrift Saving Plan for federal employees is a model of how government administration might work. The Thrift Saving Plan has low administrative expenses and has successfully insulated itself from political pressure in its operations.

Under a government-administered RSA plan, payroll contributions would flow directly into the federal agency set up to administer accounts, and individuals would interact with this agency regarding their account balance, investment choices, and other issues. Note that under such a plan, the government administration agency would likely make contracts with financial firms to actually invest the billions of dollars of RSA contributions into equity and debt securities. The contracts should be awarded on the basis of competitive bidding to hold costs down.

The National Academy of Social Insurance has estimated that such a government-administered system might cost \$25 to \$50 per participant in administrative fees each year.<sup>40</sup> Such costs are usually compared to total account assets to derive an annual “expense ratio.” The Academy figures that this level of costs would translate into an average expense ratio of 0.1 to 0.2 percent of assets for accounts based on a contribution rate of 5 percent. An account earning a real return of 7 percent a year before expenses would therefore earn 6.8 to 6.9 percent after expenses. In a 1999 report, the General Accounting Office found that centrally administered RSAs with limited account options would probably have administrative costs of less than 0.5

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<sup>40</sup>National Academy of Social Insurance (1998), p. 8.

percent of assets a year.<sup>41</sup>

Other Congressional plans for overhauling Social Security instead propose a system of *privately administered* accounts. Employer-based plans, such as 401(k)s, or individually-based plans such as IRAs, could be used as models, although some analysts suggest that a unique and simplified system should be developed for RSAs. Most proposals would create a regulatory body to oversee the new private account industry to ensure that RSAs were properly administered and maintained.

There have been concerns raised that privately administered accounts could result in substantially higher administrative costs than government-administered accounts. However, a thorough study of the issue, by William Shipman of State Street Global Advisors, suggests that costs would be less than 0.4 percent a year in the case of a carve-out of 2 percent, and even smaller in the case of a larger carve-out.<sup>42</sup> The typical stock index fund has an annual expense ratio of only 0.25 percent.<sup>43</sup>

There are advantages to private management, as compared to government management, that might merit potentially higher administrative costs. Private account management would foster competition between providers to lower costs, improve customer service, and provide options that satisfy diverse customer needs. A monopoly government account administrator might have difficulty satisfying the service demands of the perhaps 200 million or so account holders under a national RSA system. Some members of the last Social Security Advisory Council backed a privately managed RSA structure because of fear that government management would succumb to the pitfalls of monopoly. They pointed out that even the federal Thrift Saving Plan is ultimately a voluntary program that competes for employees' money with other financial institutions.<sup>44</sup> In contrast, a new RSA program with mandated contributions into government accounts might become ineffective and bureaucratic because it would face no competition for the billions of dollars being paid in on a compulsory basis. Even worse, under the wrong circumstances, a government-administered RSA program might become the basis for government control of business because the government would own large amounts of stock in the nation's largest companies. Government control of business has generally been enormously inefficient and costly where it has been tried both in the United States and elsewhere.

There are other important advantages of private management for RSAs. Increased understanding of investment principles and interactions with financial firms would give many Americans who do not currently invest a greater sense of financial security and independence. In addition, the widespread advertising that could be expected under a private management system would encourage individuals to increase their retirement savings above the minimum mandated level. In fact, a number of Congressional proposals would allow additional contributions to RSAs to encourage workers to build up even more secure nest eggs for their retirement years. The widespread promotion of new Roth IRA accounts in recent years is the type of positive pro-savings message that financial companies would likely pursue under a competitive private RSA management structure.

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<sup>41</sup>U.S. General Accounting Office (1999), pp. 14-15. The Thrift Savings Plan for federal employees has an annual expense ratio of 0.09 percent, but a similar program for RSAs would probably have somewhat higher costs. Expense ratios are sometimes expressed in basis points. One basis point is one-hundredth of a percent (0.01 percent).

<sup>42</sup>Shipman (1999).

<sup>43</sup>National Academy of Social Insurance (1998), p. 68.

<sup>44</sup>Social Security Advisory Council (1997), p. 130.

## **XII. Conclusion**

Modernizing Social Security for the 21<sup>st</sup> century is tremendously important for both economic and social reasons. The program was designed for the world of the 1930s characterized by a small elderly population, single-earner couples, and younger generations that were large relative to their older counterparts. These conditions are no longer present, and the system is ill-suited for the 21st century.

The current Social Security system redistributes income in complex, opaque ways. Its lottery-like transfers weaken the rights of workers to their own earnings, creating unfairness and reducing incentives to earn. Furthermore, the system unnecessarily intrudes into areas such as labor force participation, parenting, marriage, divorce, and other family choices that have little to do with retirement. Many of its incentive effects have results opposite from what the system's designers intended.

As the baby-boomers retire, the current Social Security surplus will be transformed into a large deficit. Without reform, taxes will have to be raised or benefits will have to be cut to cover the inevitable shortfall. RSAs can provide an escape from this unpleasant dilemma. Personal ownership of retirement accounts is a tried and true idea; in fact, it was Franklin Roosevelt's initial vision for Social Security. Because private investments (including those in equities) can provide a much higher rate of return than pay-as-you-go Social Security, they can cover the shortfall and deliver higher benefits without an increase in taxes.

RSAs would provide a property right to retirement savings and thereby prevent potential political manipulations of the Social Security system. They would also provide a means for ordinary Americans to benefit from equity investments. When held over the lengthy periods relevant for retirement funds, diversified equity portfolios have consistently yielded returns averaging more than three times the returns today's workers can expect from Social Security. Furthermore, these high returns have been consistent. Finally, RSAs would increase incentives to save and invest, reduce dependency, and eliminate the current inequitable treatment of certain ethnic groups and other people with relatively short life spans.

Social Security and Medicare currently consume a third of the federal budget. Without reform, they will consume more than half of the budget when the baby-boomers retire. Continuation of pay-as-you-go Social Security will lead to bigger government, higher taxes, and sluggish future growth. Either the payroll tax will have to be raised to more than 20 percent or income taxes will have to be raised by about 30 percent for the current system to deliver the promised benefits for Social Security alone. The result will be lower incomes than Americans would otherwise enjoy.

The United States has experienced remarkable prosperity since the early 1980s. The high future taxes and expansion in government implied by the current system will place that prosperity at risk. Thus, now is the time for the U.S. to begin shifting toward an investment-based retirement security system that is far more suitable for the 21<sup>st</sup> century.

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