

**PRESENT LAW AND BACKGROUND
RELATING TO TAX INCENTIVES FOR SAVINGS**

Scheduled for a Public Hearing

Before the

SENATE COMMITTEE ON FINANCE

on February 24, 1999

Prepared by the Staff

of the

JOINT COMMITTEE ON TAXATION



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INTRODUCTION

The Senate Committee on Finance has scheduled a public hearing on February 24, 1999, on issues relating to retirement savings and the current status, availability, and effectiveness of tax-favored savings vehicles.

This document,¹ prepared by the staff of the Joint Committee on Taxation, provides a description of present-law tax treatment of savings and background information on savings in the United States.

Part I of the document is a summary. Part II is a description of present law relating to the taxation of savings. Part III provides background information on savings in the United States.

¹ This document may be cited as follows: Joint Committee on Taxation, *Present Law and Background Relating to Tax Incentives for Savings* (JCX-7-99), February 23, 1999.

I. SUMMARY

Present law

Dividend and interest income is generally taxable under present law. However, present law also contains a number of provisions that permit individuals to save on a tax-favored basis. These include provisions relating to individual retirement arrangements ("IRAs"), tax-qualified retirement plans and similar employer-sponsored arrangements, annuity contracts, life insurance, medical savings accounts, and various education savings vehicles. These tax-favored vehicles generally increase the rate of return on investments compared with after-tax investment vehicles.

Role of saving in the national economy

National saving is important to the economy because of its relationship to investment. The sources for investment are national saving and foreign investment. Increased investment increases the capital stock, which leads to greater productivity, higher wages and salaries, and increases in a nation's standard of living. Because of the possibility of foreign investment in the United States, a low saving rate does not necessarily mean a low investment rate. However, when foreign saving finances domestic investment, the profits from such investment are transferred abroad.

Net national savings declined through most of the 1980's, and is lower than that of other countries. Investment has declined as well over this period; however, foreign investment has compensated for some of the decline in domestic saving.

Issues related to tax incentives for saving

Some argue that tax incentives for saving are appropriate because the income tax system penalizes saving by taxing the return to income that is saved. This can affect both the national saving rate, as well as the assets taxpayers accumulate for particular purposes. Tax incentives for saving could be designed to encourage saving for particular purposes, e.g., retirement, education or first-time home purchase, or to increase national saving generally.

Tax incentives for saving may have a number of attributes that may affect a taxpayer's saving decision. First, investments in tax-advantaged assets or accounts earn a higher after-tax rate of return than investments in other assets. Second, a targeted savings incentive may provide an incentive for a specific form of saving relative to other forms of saving. Third, a tax incentive for saving may provide a psychological incentive to save. Forth, advertising by financial institutions may influence people's saving decisions.

It is unclear whether tax benefits for saving which increase the rate of return on saving actually increase saving levels. Some studies have argued that one should expect substantial

increases in saving from increased rates of return, while others have argued that large behavioral responses may not occur. Empirical investigations of the responsiveness of personal saving to after-tax returns provide no conclusive results.

Adequacy of retirement savings

Many tax incentives for saving are intended to encourage people to save for retirement. Currently, Social Security is the largest source of retirement income (39 percent in 1996), followed by earnings (22 percent in 1996), private and government employee pensions and alimony (18 percent in 1996), and income from assets (17 percent in 1996).

The adequacy of retirement income is commonly measured by the replacement rate, that is, the ratio of retirement income to income during working years. Available data indicate that Social Security and pension benefits replace roughly 33 percent of career high earnings and 50 percent of earnings over the last 5 years of employment for current retirees. When spousal benefits are taken into account, replacement rates are higher. Some recent research has estimated that, for workers retiring over the next 10 years, replacement rates for the median 10 percent of households (45th to 55th percentiles ranked by income) may approach 97 percent in nominal dollars and 66 percent in real (inflation adjusted) dollars. These replacement rates are higher for individuals who had lower earnings.

It is not clear what an appropriate replacement rate is. A rate lower than 100 percent may be adequate. For example, people may desire to have more income during working years because some of that income is saved for retirement. People may also have lower expenses in retirement; for example, they may no longer be making payments on a home. On the other hand, a replacement rate of 100 may be too low. For example, a retiree may face much higher medical expenses than a younger person.

Although coverage by employer pension plans and Social Security is expected to be higher for current workers than for current retirees, the saving rate of current workers is lower than the rate at which current retirees saved during their working lives. Also, it is possible that the need for retirement income is increasing over time because of increases in life expectancies, trends toward early retirement, and rapid rises in medical costs.

II. PRESENT LAW

A. In General

Dividend and interest income generally is taxable under present law. However, present law also contains a number of provisions which permit individuals to save on a tax-favored basis. These include provisions relating to individual retirement arrangements, tax-qualified retirement plans and similar employer-sponsored arrangements, annuity contracts, life insurance, medical savings accounts, and various education savings vehicles.

B. Individual Retirement Arrangements ("IRAs")

In general

There are 3 types of IRAs under present law: deductible IRAs, Roth IRAs, and nondeductible IRAs. The economic benefits of deductible and Roth IRAs are similar,² although the rules applicable to each type of IRA vary.

Deductible IRAs

Under present law, an individual may make deductible contributions to an individual retirement arrangement ("IRA") up to the lesser of \$2,000 or the individual's compensation if the individual and the individual's spouse are not active participants in an employer-sponsored retirement plan. In the case of a married couple, deductible IRA contributions of up to \$2,000 can be made for each spouse (including, for example, a homemaker who does not work outside the home), if the combined compensation of both spouses is at least equal to the contributed amount. If the individual (or the individual's spouse) is an active participant in an employer-sponsored retirement plan, the \$2,000 deduction limit is phased out for taxpayers with adjusted gross income ("AGI") over certain levels for the taxable year.

The AGI phase-out limits for a single individual who is an active participant in an employer-sponsored retirement plan are as follows: for 1999, \$31,000 to \$41,000; for 2000, 2001 and 2002, the limits increase by \$1,000 each year, so that the limits by 2002 are \$34,000 to \$44,000; for 2003, \$40,000 to \$50,000; for 2004, \$45,000 to \$55,000; and for 2005 and thereafter, \$50,000 to \$60,000.

The AGI phase-out limits for a married individual filing a joint return who is an active participant in an employer-sponsored plan are as follows: for 1999, \$51,000 to \$61,000; for 2000, 2001 and 2002, the limits increase by \$1,000 each year, so that the limits by 2002 are

² For a detailed comparison of Roth IRAs and deductible IRAs, see Joint Committee on Taxation *Description and Analysis of Tax Proposals Relating to Individual Savings and IRAs* (JCS-2-97), March 3, 1997.

\$54,000 to \$64,000; for 2003, \$60,000 to \$70,000; for 2004, \$65,000 to \$75,000; for 2005, \$70,000 to \$80,000; for 2006, \$75,000 to \$85,000; and for 2007 and thereafter, \$80,000 to \$90,000.

If the individual is not an active participant in an employer-sponsored retirement plan, but the individual's spouse is, the \$2,000 deduction limit is phased out for taxpayers with AGI between \$150,000 and \$160,000.

Amounts held in a deductible IRA are includible in income when withdrawn (except to the extent the withdrawal is a return of nondeductible contributions). Includible amounts withdrawn prior to attainment of age 59-1/2 are subject to an additional 10-percent early withdrawal tax, unless the withdrawal is due to death or disability, is made in the form of certain periodic payments, is used to pay medical expenses in excess of 7.5 percent of AGI, is used to purchase health insurance of an unemployed individual, is used for education expenses, or is used for first-time homebuyer expenses of up to \$10,000.

Roth IRAs

Beginning in 1998, individuals with AGI below certain levels may make nondeductible contributions to a Roth IRA. The maximum annual contribution that may be made to a Roth IRA is the lesser of \$2,000 or the individual's compensation for the year. The contribution limit is reduced to the extent an individual makes contributions to any other IRA for the same taxable year. As under the rules relating to IRAs generally, a contribution of up to \$2,000 for each spouse may be made to a Roth IRA provided the combined compensation of the spouses is at least equal to the contributed amount. The maximum annual contribution that can be made to a Roth IRA is phased out for single individuals with AGI between \$95,000 and \$110,000 and for joint filers with AGI between \$150,000 and \$160,000.

Taxpayers with modified AGI of \$100,000 or less generally may convert a deductible or nondeductible IRA into an Roth IRA. The amount converted is includible in income as if a withdrawal had been made, except that the 10-percent early withdrawal tax does not apply and, if the conversion occurred in 1998, the income inclusion may be spread ratably over 4 years.

Amounts held in a Roth IRA that are withdrawn as a qualified distribution are not includible in income, nor subject to the additional 10-percent tax on early withdrawals. A qualified distribution is a distribution that (1) is made after the 5-taxable year period beginning with the first taxable year for which the individual made a contribution to a Roth IRA, and (2) which is made after attainment of age 59-1/2, on account of death or disability, or is made for first-time homebuyer expenses of up to \$10,000.

Distributions from a Roth IRA that are not qualified distributions are includible in income to the extent attributable to earnings, and subject to the 10-percent early withdrawal tax (unless an exception applies).³ The same exceptions to the early withdrawal tax that apply to IRAs apply to Roth IRAs.

Nondeductible IRAs

To the extent an individual cannot or does not make deductible contributions to an IRA or contributions to a Roth IRA, the individual may make nondeductible contributions to an IRA. Distributions from a nondeductible IRA are includible in income and subject to the 10-percent early withdrawal tax to the extent attributable to earnings.

Legislative history

The IRA provisions were originally enacted in the Employee Retirement Income Security Act of 1974 ("ERISA"). Individuals who were active participants in an employer-sponsored retirement plan were not permitted to make contributions to an IRA. The limit on the deduction for IRA contributions was generally the lesser of (1) 15 percent of the individual's compensation for the year, or (2) \$1,500.

The Economic Recovery Tax Act of 1981 increased the deduction limit for contributions to IRAs and removed the restriction on IRA contributions by active participants in employer-sponsored retirement plans. Beginning in 1982, the deduction for IRA contributions was generally the lesser of (1) 100 percent of the individual's compensation, or (2) \$2,000. An individual was entitled to make a deductible contribution to an IRA even if the individual was an active participant in an employer-sponsored retirement plan.

The Tax Reform Act of 1986 ("1986 Act") added restrictions on deductible IRA contributions if the individual (or the individual's spouse) was an active participant in employer-sponsored retirement plan. For years 1987 through 1997, if a single taxpayer or either spouse (in the case of a married couple) was an active participant in an employer-sponsored retirement plan, the maximum IRA deduction was phased out between \$25,000 and \$35,000 of AGI. For married taxpayers, the maximum deduction was phased out between \$40,000 and \$50,000 of AGI. In addition, the 1986 Act added the present-law rules permitting individuals to make nondeductible contributions to an IRA.

The Small Business Job Protection Act of 1996 modified the rule relating to the maximum deductible IRA contribution by permitting deductible IRA contributions of up to \$2,000 to be made for each spouse (including a spouse who does not work outside the home) if the combined compensation of both spouses is at least equal to the contributed amount.

³ Early distribution of converted amounts may also accelerate income inclusion of converted amounts that are taxable under the 4-year rule applicable to 1998 conversions.

The Health Insurance Portability and Accountability Act of 1996 extended to IRAs the exception to the early withdrawal tax for medical expenses in excess of 7.5 percent of AGI and added the exception for health insurance expenses for unemployed individuals.

The Taxpayer Relief Act of 1997: (1) increased the AGI phase-out limits for deductible IRAs; (2) modified the AGI phase-out limits for an individual who is not an active participant in an employer-sponsored retirement plan but whose spouse is; (3) provided exceptions from the early withdrawal tax for withdrawals for education expenses and first-time home purchase (up to \$10,000), and (4) created the Roth IRA.

C. Employer-Sponsored Qualified Retirement Plans and Similar Arrangements

1. Employer-sponsored qualified retirement plans

In general

A plan of deferred compensation that meets the qualification standards of the Internal Revenue Code ("a qualified plan") is accorded special tax treatment under present law. Employees do not include qualified plan benefits in gross income until the benefits are distributed, even though the plan is funded and the benefits are nonforfeitable. The employer is entitled to a current deduction (within limits) for contributions to a qualified plan even though the contributions are not currently included in an employee's income. Contributions to a qualified plan are held in a tax-exempt trust.

Employees, as well as employers, may make contributions to a qualified plan. Employees may, subject to certain restrictions, make both pre-tax and after-tax contributions to a qualified plan. Pre-tax employee contributions (e.g., contributions to a qualified cash or deferred arrangement (section "401(k) plan")) are generally treated the same as employer contributions for tax purposes.

The tax treatment of contributions under qualified plans is essentially the same as that of deductible IRAs. However, the limits on contributions to qualified plans are much higher than the IRA contribution limits, so that qualified plans provide for a greater accumulation of funds on a tax-favored basis. The policy rationale for permitting greater accumulation under qualified plans than IRAs is that the tax benefits for qualified plans encourage employers to provide benefits for a broad group of their employees. This reduces the need for public assistance and reduces pressure on the social security system.

Present law imposes a number of requirements on qualified plans that must be satisfied in order for the plan to obtain tax-favored status. For example, minimum participation and coverage rules and nondiscrimination rules are designed to ensure that qualified plans benefit an

employer's rank-and-file employees as well as highly compensated employees.⁴ Under the minimum coverage rules, a plan must satisfy one of the following requirements: (1) the plan benefits at least 70 percent of employees who are nonhighly compensated employees⁵; (2) the plan benefits a percentage of nonhighly compensated employees that is at least 70 percent of the percentage of highly compensated employees benefitting under the plan; or (3) the plan satisfies an average benefits test which compares the benefits received by highly compensated employees and nonhighly compensated employees. Present law also contains a general nondiscrimination requirement which provides that plans may not discriminate in favor of highly compensated employees. This requirement generally applies to all benefits, rights and features, not just to contributions and benefits. Special rules apply to plans that primarily benefit key employees (called "top-heavy plans").

The plan qualification standards also define the rights of plan participants and beneficiaries and provide some limits on the tax benefits for qualified plans.⁶ Certain of the rules relating to qualified plans are designed to ensure that the amounts contributed to qualified plans are used for retirement purposes. Thus, for example, an early withdrawal tax applies to premature distributions from such plans, and the ability to obtain distributions prior to termination of employment from certain types of qualified plans is restricted.

Types of qualified plans

Qualified plans are broadly classified into two categories, defined benefit pension plans and defined contribution plans, based on the nature of the benefits provided.

Under a defined benefit pension plan, benefit levels are specified under a plan formula. For example, a defined benefit pension plan might provide an annual retirement benefit of 2 percent of final average compensation multiplied by total years of service completed by an employee. Benefits under a defined benefit pension plan are funded by the general assets of the

⁴ Pursuant to the Taxpayer Relief Act of 1997, qualified plans maintained by State and local governments are not subject to the nondiscrimination rules applicable to other qualified plans.

⁵ Under present law, an employee is treated as highly compensated if the employee (1) was a 5-percent owner of the employer at any time during the year or the preceding year or (2) either (a) had compensation for the preceding year in excess of \$80,000 (for 1999) or (b) at the election of the employer had compensation for the preceding year in excess of \$80,000 (for 1999) and was in the top 20 percent of employees by compensation for such year. A nonhighly compensated employee is an employee other than a highly compensated employee.

⁶ Qualified plans are subject to regulation under Federal labor laws (Title I of ERISA) as well as under the Internal Revenue Code. The ERISA rules generally relate to the rights of plan participants, reporting and disclosure, and the obligations of plan fiduciaries.

trust established under the plan; individual accounts are not maintained for employees participating in the plan. Benefits under a defined benefit pension plan are guaranteed (within limits) by the Pension Benefit Guaranty Corporation ("PBGC"), a Federal corporation within the Department of Labor.

Benefits under defined contribution plans are based solely on the contributions (and earnings thereon) allocated to separate accounts maintained for each plan participant. Profit-sharing plans and qualified cash or deferred arrangements (called 401(k) plans after the section of the Code regulating such plans) are examples of defined contribution plans.

Limits on contributions and benefits

Under present law, limits apply to contributions and benefits under qualified plans. In the case of a defined benefit pension plan, present law limits the annual benefits payable under the plan to the lesser of (1) 100 percent of the participant's average compensation for his or her high 3 years, or (2) \$130,000 (for 1999).⁷ In general, the \$130,000 dollar limit is increased for retirement after the social security retirement age, and decreased for retirement before the social security retirement age. Under a defined contribution plan, the qualification rules limit the annual additions to the plan with respect to each plan participant to the lesser of (1) 25 percent of compensation or (2) \$30,000 (for 1999). Annual additions are the sum of employer contributions, employee contributions, and forfeitures with respect to an individual under all defined contribution plans of the same employer. The dollar limits are increased for cost-of-living adjustments in \$5,000 increments. In some cases special, increased limits apply in the case of State and local government plans.

An overall limit applies if an individual is a participant in both a defined contribution plan and a defined benefit plan of the same employer. The Small Business Job Protection Act of 1996 repealed this overall limit for years beginning after December 31, 1999.

Taxation of distributions

Under present law, a distribution of benefits from a qualified plan generally is includible in gross income in the year it is paid or distributed, except to the extent the amount distributed represents the employee's investment in the contract (i.e., basis). Special rules apply to lump-sum distributions, distributions rolled over to an IRA or another qualified plan, and distributions of employer securities.

Early distributions from qualified plans generally are subject to the same additional 10-percent early withdrawal tax that applies to early distributions from IRAs. The early

⁷ Annual benefits may in some cases exceed this dollar limitation under grandfather and transition rules contained in the Tax Equity and Fiscal Responsibility Act of 1982 and other legislation.

withdrawal tax does not apply to distributions from a qualified plan made to an employee after separation from service after attainment of age 55. The exceptions to the early withdrawal tax for medical insurance expenses of unemployed individuals, education expenses, and first-time homebuyer expenses do not apply to qualified plan distributions.

Qualified cash or deferred arrangements

As mentioned above, a qualified cash or deferred arrangement is a type of qualified plan. Thus, such arrangements are subject to the rules generally applicable to qualified plans. In addition, special rules apply to such arrangements.⁸

A profit-sharing or stock bonus plan, a pre-ERISA money purchase pension plan, or a rural cooperative plan may include a qualified cash or deferred arrangement (section 401(k) plan). Under such an arrangement, an employee may elect to have the employer make payments as contributions to a qualified plan on behalf of the employee, or to the employee directly in cash. Contributions made at the election of the employee are called elective deferrals. The maximum annual amount of elective deferrals that can be made by an individual is \$10,000 for 1999. This dollar limit is indexed for inflation in \$500 increments. An employee's elective deferrals must be fully vested. A special nondiscrimination test applies to elective deferrals under cash or deferred arrangements. Employer matching contributions and after-tax employee contributions under qualified defined contribution plans are also subject to a special nondiscrimination test.

Under a safe harbor, a cash or deferred arrangement is deemed to satisfy the special nondiscrimination test if the plan satisfies one of two contribution requirements and satisfies a notice requirement. A plan satisfies the contribution requirement under the safe harbor rule for qualified cash or deferred arrangements if the employer either (1) satisfies a matching contribution requirement or (2) makes a nonelective contribution to a defined contribution plan of at least 3 percent of an employee's compensation on behalf of each nonhighly compensated employee who is eligible to participate in the arrangement without regard to the permitted disparity rules (sec. 401(1)). A plan satisfies the matching contribution requirement if, under the arrangement: (1) the employer makes a matching contribution on behalf of each nonhighly compensated employee that is equal to (a) 100 percent of the employee's elective deferrals up to 3 percent of compensation and (b) 50 percent of the employee's elective deferrals from 3 to 5 percent of compensation; and (2), the rate of match with respect to any elective contribution for highly compensated employees is not greater than the rate of match for nonhighly compensated employees. Certain alternative matching arrangements also can be used to satisfy the safe harbor.

⁸ State and local governments may not maintain section 401(k) plans, but can maintain similar arrangements. As described below, educational institutions may maintain tax-sheltered annuities, which operate in a manner similar to section 401(k) plans, i.e., they allow employees to make elective contributions. Similarly, many State and local governments maintain section 457 plans (described below) which in practice operate like section 401(k) plans. These plans are not subject to the nondiscrimination rules applicable to section 401(k) plans.

2. SIMPLE retirement plans

Under present law, certain small businesses can establish a simplified retirement plan called the savings incentive match plan for employees ("SIMPLE") retirement plan. SIMPLE plans can be adopted by employers who employ 100 or fewer employees who received at least \$5,000 in compensation during the preceding year and who do not maintain another employer-sponsored retirement plan. A SIMPLE plan can be either an IRA for each employee or part of a section 401(k) plan. If established in IRA form, a SIMPLE plan is not subject to the nondiscrimination rules generally applicable to qualified plans (including the top-heavy rules) and simplified reporting requirements apply. If established as part of a 401(k) plan, the SIMPLE does not have to satisfy the special nondiscrimination tests applicable to 401(k) plans and is not subject to the top-heavy rules. The other qualified plan rules continue to apply. Within limits, contributions to a SIMPLE plan are not taxable until withdrawn.

A SIMPLE retirement plan allows employees to make elective contributions which cannot exceed \$6,000 (for 1999). The \$6,000 dollar limit is indexed for inflation in \$500 increments. The employer is required to satisfy one of two contribution formulas. Under the matching contribution formula, the employer generally is required to match employee elective contributions on a dollar-for-dollar basis up to 3 percent of the employee's compensation. Under a special rule applicable to SIMPLE IRAs, the employer can elect a lower percentage matching contribution for all employees (but not less than 1 percent of each employee's compensation). In addition, a lower percentage cannot be elected for more than 2 out of any 5 years.

Alternatively, for any year, an employer is permitted to elect, in lieu of making matching contributions, to make a 2 percent of compensation nonelective contribution on behalf of each eligible employee with at least \$5,000 in compensation for such year, whether or not the employee makes an elective contribution.

No contributions other than employee elective contributions, required employer matching contributions or employer nonelective contributions can be made to a SIMPLE plan. All contributions to an employee's SIMPLE account must be fully vested.

Contributions to a SIMPLE plan generally are deductible by the employer and excludable from the employee's income. Early withdrawals from a SIMPLE plan generally are subject to the 10-percent early withdrawal tax. However, in the case of a SIMPLE IRA, withdrawals of contributions during the 2-year period beginning on the date the employee first participated in the SIMPLE IRA are subject to a 25-percent early withdrawal tax.

3. Simplified employee pensions ("SEPs")

A simplified employee pension ("SEP") is an IRA to which employers may make contributions up to the limits applicable to defined contribution plans. The employee is always 100-percent vested in employer contributions. All employees who satisfy certain participation

requirements must be eligible to participate in the SEP. An employee satisfies the participation requirements if the employee (1) has attained age 21, (2) has performed services for the employer during at least 3 of the immediately preceding 5 years, and (3) received at least \$400 (for 1999) in compensation from the employer for the year. Contributions to a SEP generally must bear a uniform relationship to compensation. An employee can participate even though he or she is also a participant in one or more other qualified retirement plans sponsored by the employer. However, SEP contributions are added to the employer's contribution to the other plans on the participant's behalf in applying the limits on contributions and benefits.

Effective for taxable years beginning before January 1, 1997, certain small employers could maintain a salary reduction SEP ("SARSEP") under which employees could elect to have contributions made to the plan or to receive the contributions in cash. The SARSEP rules were generally repealed with the adoption of SIMPLE plans. However, employers may continue to make contributions to SARSEPs that were established before 1997 (in accordance with the rules in effect before 1997). In addition, employees hired after December 31, 1996, may participate in SARSEPs established by their employers prior to January 1, 1997.

4. Tax-sheltered annuities ("section 403(b) annuities")

Tax-sheltered annuities ("section 403(b) annuities") are another form of employer-based retirement plan that provide the same tax benefits as qualified plans and IRAs. Employers may contribute to such annuities on behalf of their employees, and employees may contribute on a pre-tax basis through salary reduction. Tax-sheltered annuities are subject to rules similar to some of the rules applicable to qualified plans. Tax-sheltered annuity plans may be maintained only by certain types of organizations, in particular, tax-exempt charitable organizations and educational institutions.

The annual contribution to a tax-sheltered annuity generally cannot exceed the lesser of the exclusion allowance or the limit applicable to defined contribution qualified plans. The exclusion allowance for a year is equal to 20 percent of the employee's includible compensation, multiplied by the employee's years of service, minus excludable contributions for prior years under qualified plans, tax-sheltered annuities or section 457 plans of the employer. In addition to this general rule, employees of nonprofit educational institutions, hospitals, home health service agencies, health and welfare service agencies, and churches may elect to have one of several special rules apply that increase the amount of the otherwise permitted contributions. The election of a special rule is irrevocable; an employee may not elect to have more than one special rule apply.

Employer contributions to a section 403(b) annuity are generally subject to the same nondiscrimination rules as contributions to qualified plans. Contributions made by the employee under a salary reduction agreement (i.e., contributions that are comparable to employee elective deferrals under a section 401(k) plan) are not subject to nondiscrimination rules similar to those applicable to section 401(k) plans. Instead, all employees generally must be eligible to make

salary reduction contributions. Certain employees may be disregarded for purposes of this rule.⁹

5. Eligible deferred compensation plans of State and local governments and tax-exempt entities ("section 457 plans")

Compensation deferred under an eligible deferred compensation plan (a "section 457 plan") of a tax-exempt or State or local governmental employer is includible in income when paid or made available. The maximum annual deferral under such a plan generally is the lesser of (1) \$8,000 (for 1999) or (2) 33-1/3 percent of compensation (net of the deferral).

In general, amounts deferred under a section 457 plan may not be made available to a plan participant before the earlier of (1) the calendar year in which the participant attains age 70-1/2, (2) when the participant is separated from service with the employer, or (3) when the participant is faced with an unforeseeable emergency. Amounts that are made available upon separation from service are includible in gross income in the taxable year in which they are made available.

Amounts deferred under a governmental section 457 plan must be held in trust. Amounts deferred under a section 457 plan of a tax-exempt entity must remain the property of the employer, subject only to the claims of the employer's general creditors.

With certain exceptions, section 457 generally applies to all deferred compensation of employees of tax-exempt and State and local governmental employers other than compensation deferred under a qualified plan (or a tax-sheltered annuity). Section 457 does not apply to any bona fide vacation, sick leave, compensatory time, severance pay, disability pay, or death benefit plan. In addition, section 457 does not apply to qualified governmental excess benefit plans that provide benefits in excess of those that are provided under a qualified plan maintained by the governmental employer.

Section 457 plans are not qualified retirement plans; rather, such plans have traditionally been more like unfunded, nonqualified deferred compensation arrangements of private, taxable employers. Present law does not limit the amount of deferred compensation payable under nonqualified deferred compensation plans of taxable employers because there is tension between the employer and the employee—employers generally want a current deduction for compensation, whereas deferred compensation is not deductible until includible in employees' income. This tension is not present in the case of deferred compensation plans of tax-exempt and governmental employers. Thus, section 457 limits the amount that can be deferred under such plans and provides other rules regarding such plans.

⁹ As with qualified plans, State and local governmental tax-sheltered annuities are not subject to nondiscrimination rules.

Section 457 plans do not benefit from all the favorable tax rules applicable to qualified plans because section 457 plans generally have not been subject to all of the same restrictions and rules as qualified plans (e.g., the maximum permitted annual deferral is lower). However, recent changes in the rules relating to section 457 plans of governmental employers have blurred the distinction between governmental section 457 plans and governmental qualified plans. In particular, assets of governmental section 457 plans must now be held in trust, and governmental qualified plans are not subject to nondiscrimination rules.

D. Other Tax Incentives for Saving

1. Annuity contracts

Present law provides that income credited to a deferred annuity contract generally is not currently includible in the gross income of the owner of the contract. No deduction is provided for, and no dollar limits are imposed on, amounts used to purchase annuity contracts. No income cap limit applies to individuals purchasing annuity contracts. In general, amounts received by the owner of an annuity contract before the annuity starting date (including loans under or secured by the contract), as well as lump sum distributions after the annuity starting date, are includible in gross income as ordinary income to the extent that the cash value of the contract exceeds the owner's investment in the contract. A portion of each annuity payment received after the annuity starting date is treated as ordinary income based on the ratio of the investment in the contract to the total distributions expected to be received.

A 10-percent additional income tax is imposed on certain early withdrawals under an annuity contract. This additional tax does not apply to any distribution made after the owner of the contract attains age 59-1/2, dies or becomes disabled, made in the form of certain periodic payments, or that satisfies certain other requirements.

2. Life insurance

No Federal income tax generally is imposed on a policyholder with respect to the earnings under a life insurance contract ("inside buildup"). Further, death benefits paid under a life insurance contract are excluded from income, so that neither the policyholder nor the policyholder's beneficiary is ever taxed on the inside buildup if the proceeds of the policy are paid to the policyholder's beneficiary by reason of the death of the insured. In addition, certain amounts received under a life insurance contract on the life of a terminally ill or chronically ill individual are treated as being received by reason of the death of the insured and therefore are excludable from income. This same favorable tax treatment applies to amounts received from the sale or assignment to a viatical settlement provider of a life insurance contract on the life of a terminally ill or chronically ill individual. The favorable tax treatment for life insurance contracts is available only if the policyholder has an insurable interest in the insured when the contract is issued and if the life insurance contract meets certain requirements designed to limit the investment character of the contract.

Except as described above, distributions from a life insurance contract (other than a modified endowment contract) that are made prior to the death of the insured generally are includible in income only to the extent that the amounts distributed exceed the taxpayer's investment in the contract; such distributions generally are treated first as a tax-free recovery of the taxpayer's investment in the contract, and then as income. In the case of a modified endowment contract, distributions are treated as income first, loans are treated as distributions (i.e., income rather than basis recovery first), and an additional 10-percent tax is imposed on the income portion of distributions made before age 59-1/2 and in certain other circumstances. A modified endowment contract is a life insurance contract that does not meet a statutory "7-pay" test, i.e., generally is funded more rapidly than 7 annual level premiums.

No deduction is provided for, and no dollar limits are imposed on, amounts used by an individual to purchase life insurance contracts.

3. Medical savings accounts

Under present law, eligible individuals covered under a high deductible health plan may have a medical savings account ("MSA"). In general, eligible individuals are individuals employed by a small employer and self-employed individuals. Within limits, contributions made by an individual to an MSA are deductible, and contributions made by the individual's employer are excludable from gross income. Earnings on amounts held in an MSA are not currently includible in income. Amounts withdrawn for medical expenses are not taxable. Amounts withdrawn for nonmedical purposes are includible in income and subject to an additional 15-percent tax unless the distribution is made after death, disability, or age 65.

While MSAs are not available to all individuals, when used for nonmedical purposes, MSAs provide the same tax benefits as IRAs and qualified plans. When used for medical purposes, they provide greater tax benefits, because both contributions and withdrawals are tax free.

4. Education tax incentives

Present law contains a number of provisions intended to assist individuals to save for education.

Exclusion for interest earned on savings bonds

Interest earned on a qualified U.S. Series EE savings bond issued after 1989 is excludable from gross income if the proceeds of the bond upon redemption do not exceed qualified higher education expenses paid by the taxpayer during the taxable year (sec. 135). "Qualified higher education expenses" include tuition and fees (but not room and board expenses) required for the enrollment or attendance of the taxpayer, the taxpayer's spouse, or a dependent of the taxpayer at certain colleges, universities, or vocational schools. The exclusion is phased out for certain

higher-income taxpayers, determined by the taxpayer's modified AGI during the year the bond is redeemed. For 1999, the exclusion is phased out for taxpayers with modified AGI between \$53,100 and \$68,100 (\$76,650 and \$109,650 for joint returns). To prevent taxpayers from effectively avoiding the income phase-out limitation through issuance of bonds directly in the child's name, present law provides that the interest exclusion is available only with respect to U.S. Series EE savings bonds issued to taxpayers who are least 24 years old.

Qualified State tuition programs

Present law provides tax-exempt status to "qualified State tuition programs," meaning certain programs established and maintained by a State (or agency or instrumentality thereof) under which persons may (1) purchase tuition credits or certificates on behalf of a designated beneficiary that entitle the beneficiary to a waiver or payment of qualified higher education expenses of the beneficiary, or (2) make contributions to an account that is established for the purpose of meeting qualified higher education expenses of the designated beneficiary of the account (sec. 529). "Qualified higher education expenses" are defined as tuition, fees, books, supplies, equipment and certain room and board expenses required for the enrollment or attendance at a college or university (or certain vocational schools). Present law also provides that no amount is included in the gross income of a contributor to, or beneficiary of, a qualified State tuition program with respect to any distribution from, or earnings under, such program, except that (1) amounts distributed or educational benefits provided to a beneficiary (e.g., when the beneficiary attends college) will be included in the beneficiary's gross income (unless excludable under another Code section) to the extent such amounts or the value of the educational benefits exceed contributions made on behalf of the beneficiary, and (2) amounts distributed to a contributor (e.g., when a parent receives a refund) will be included in the contributor's gross income to the extent such amounts exceed contributions made by that person.

Education IRAs

Present law provides tax-exempt status to "education IRAs," meaning certain trusts (or custodial accounts) which are created or organized in the United States exclusively for the purpose of paying the qualified higher education expenses of a named beneficiary. Annual contributions to education IRAs may not exceed \$500 per designated beneficiary (except in cases involving certain tax-free rollovers, as described below), and may not be made after the designated beneficiary reaches age 18.¹⁰ The \$500 annual contribution limit is phased out ratably for single contributors with modified AGI between \$95,000 and \$110,000 (\$150,000 and \$160,000 for joint returns).

¹⁰ In addition, an excise tax applies if a contribution is made by any person to an education IRA established on behalf of a beneficiary during any taxable year in which any contributions are made by anyone to a qualified State tuition program on behalf of the same beneficiary.

Amounts distributed from education IRAs are excludable from gross income to the extent that the amounts distributed do not exceed qualified higher education expenses of an eligible student incurred during the year the distribution is made (provided that a HOPE credit or Lifetime Learning credit is not claimed with respect to the beneficiary for the same taxable year). If a HOPE credit or Lifetime Learning credit is claimed with respect to a student for a taxable year, then a distribution from an education IRA may (at the option of the taxpayer) be made on behalf of that student during that taxable year, but an exclusion is not available for the earnings portion of such distribution.

Distributions from an education IRA that exceed qualified higher education expenses are includible in the distributee's gross income, and subject to an additional 10-percent tax (unless the distribution is made on account of the death, disability, or scholarship receipt of the designated beneficiary).

III. BACKGROUND INFORMATION RELATING TO TAX INCENTIVES FOR SAVING

A. Role of Saving in the National Economy

Investment and economic growth

When an economy's rate of investment increases, the economy's stock of capital increases. A larger capital stock permits greater production of goods and services. Because a larger capital stock leads to more productive workers, investment also leads to higher real wages and salaries. Thus, increases in investment lead to future increases in a nation's standard of living.

It is important to distinguish gross investment from net investment. Gross investment includes investment in new capital as well as investment that is undertaken to replace depreciated or worn out capital. Net investment measures increases to the capital stock. (Net investment is equal to gross investment less depreciation).

In the short run, increases in gross investment will increase the capital stock. As the capital stock increases and worker productivity increases, the economy will experience a higher rate of growth. In the long run, any given rate of investment will just be sufficient to replace the existing, though larger, capital stock as it depreciates. Thus, in the long run, an increase in the level of investment increases a nation's standard of living, but may not increase a country's long-run rate of growth.

It is possible that a higher investment level can lead to a higher growth rate even in the long run. Even if there is no growth in net investment, investment to replace depreciated capital may still enhance economic growth to the extent that the replacement capital embodies improved (and more efficient) equipment and technologies. The higher the gross investment rate, the more new capital is purchased each year, and thus the rate at which new technologies get adopted may be higher.

Sources of investment funds

Investment involves a trade-off between consumption today and consumption tomorrow. Investment can either be financed by national saving, or by foreign borrowing (saving by foreigners). A basic accounting identity of the national income and product accounts states that:¹¹

¹¹ The national income and product accounts measure the flow of goods and services (product) and income in the economy. Two common measures of the size of the economy are the gross domestic product ("GDP") and the gross national product ("GNP"). GDP measures the total value of the output of the U.S. economy. GNP measures the total annual value of goods and

$$\text{Investment} = \text{Private Saving} + \text{Government Saving} + \text{Net Foreign Borrowing}$$

Many analysts in the past ignored the foreign sector, primarily because at the time it was small relative to the U.S. economy. These analysts interpreted this basic relationship as saying that national investment must equal national saving, where national saving is the sum of private saving and public saving.

However, national investment need not equal national saving if foreigners can invest in the United States. The experience of the 1980s, when investment in the United States greatly exceeded national savings, demonstrates how important this source of funds can be. When

payment of factor income to the rest of the world (such as profits to foreign owners of U.S. based businesses), but is less than GNP by the amount of factor income received from the rest of world by U.S. residents (such as wages paid to U.S. workers who work abroad). Examining the income measure, GNP, is useful in understanding the trade-off between consumption tomorrow and consumption today. GNP may be measured in several ways. One way is to measure GNP by expenditure on final product in the economy. By this measure,

$$(1) \text{ GNP} = C + I + G + (X-M).$$

Equation (1) is an accounting identity which states that gross national product equals the sum of consumption expenditures (C), investment expenditures on plant, equipment, inventory, and residential construction (I), governmental purchases of goods and services (G), and net exports (exports less imports of goods and services or X-M).

An alternative is to measure GNP by the manner in which income created in the economy is disposed of. By this measure,

$$(2) \text{ GNP} = C + S + T.$$

Equation (2) is another accounting identity which states that gross national product equals the sum of consumption expenditures, saving by consumers and businesses (S), and net tax payments to the government (T) (net tax payments are total tax receipts less domestic transfer, interest, and subsidy payments made by all levels of government).

Because both measures of GNP are simple accounting identities, the right hand side of equation (1) must equal the right hand side of equation (2). From this observation can be derived an additional national income accounting identity,

$$(3) I = S + (T-G) + (M-X)$$

This is the basis for the statement that national investment equals private saving (S), plus public saving (T-G), and net imports (M-X).

demand for investment funds in the United States outstrips the supply of national savings, interest rates rise in response. Increases in interest rates attract foreign capital to the United States, and the excess of investment over national saving is financed by foreigners' saving.

Foreign investment in the United States also is related to the value of the dollar and the trade deficit. To take advantage of higher interest rates in the United States, foreign investors first must convert their currencies to dollars. This increases demand for the dollar, thereby increasing the dollar's exchange rate relative to the foreign currency. A stronger dollar makes imported goods relatively cheaper and our exports relatively more expensive. As a consequence, net exports fall and the trade deficit increases. A further accounting identity states that:¹²

$$\text{Net Foreign Borrowing} = (\text{Imports} - \text{Exports})$$

When net foreign borrowing increases, the trade deficit (the difference between imports and exports of goods and services) also increases. Thus, many people have blamed the U.S. trade deficits of the 1980s on the low national savings rate during that period.¹³

Is the United States' saving rate too low?

Consequences of a low saving rate

The consequences of a low saving rate depend on the mobility of international capital. If capital is not mobile, then, as discussed above, investment is equal to national savings. When the saving rate is low, so is the investment rate. Historically, there has been a strong relationship between a country's rate of investment and its rate of saving.¹⁴ Although this relationship has become weaker over time,¹⁵ it is still true that countries with high saving rates also generally have high investment rates.

¹² This ignores the relatively small amount of unilateral transfers to foreigners. For a more detailed discussion of foreign trade and domestic saving and investment, see Joint Committee on Taxation, *Background and Issues Relating to the Taxation of Foreign Investment in the United States* (JCS-1-90), January 23, 1990.

¹³ For instance, see Hatsopoulos, Krugman, and Summers, "U.S. Competitiveness: Beyond the Trade Deficit," *Science*, 15 July 1988, vol. 241, pp. 299-307.

¹⁴ See, for instance, Martin Feldstein and Charles Horioka, "Domestic Saving and International Capital Flows," *Economic Journal*, vol. 90 (June 1980), pp. 314-29.

¹⁵ See Phillippe Bacchetta and Martin Feldstein, "National Saving and International Investment," in Douglas Bernheim and John Shoven (eds.), *National Saving and Economic Performance*, (Chicago: The University of Chicago Press), 1991.

If capital is mobile (that is, if foreigners can invest in the United States at low cost and without a lot of added risk), then investment will not decline as much when the saving rate falls. Instead, investment will be financed by foreigners, either by direct foreign investment in the United States or by foreign lending to U.S. investors. When domestic saving rates are low, foreign financing of domestic investment results in a higher rate of investment than would be possible if investment were financed by domestic saving. Foreign investment in the United States does increase the productivity of U.S. workers. However, the profits generated by foreign investment flow abroad, since the United States has to pay interest on the funds it borrows. Furthermore, eventually the debt will have to be repaid, so the net wealth that is left to future generations of U.S. residents is smaller than it would be if the investment were financed by domestic saving.

Trends in national saving and investment

National saving is generally divided into private saving and public saving. Private saving is comprised of household or personal saving and business saving. Households save by not spending all of their disposable income (i.e., after-tax income). In the tables that follow, personal saving is measured as the difference between household income and household consumption. In addition, the National Income and Product Accounts attribute all corporate pension contributions and earnings on accumulated pension balances as saving by the household sector and, hence, part of personal saving. Personal saving does not include changes in values of household assets, such as have occurred over the past few years as stock market values have increased. Businesses save by retaining some of their earnings. Tables 1 and 2 present net saving, which equals gross saving less capital consumption (depreciation). Public saving reflects the extent to which the Federal, State, and local governments run budget surpluses or deficits. The National Income and Product Accounts also adjust government surpluses for depreciation of government assets. Hence, public saving, like business saving, is measured as net saving. Table 1 presents data on the components of net national saving in the United States.

Table 2 presents net saving by component as a percentage of gross domestic product ("GDP"). As the table demonstrates, net business saving, net private saving, and public saving were all lower during the 1980s than in any of the three previous decades. Net national saving declined through most of the 1980s, and has fallen to lower levels in the 1990s.

Some analysts suggest that because households save out of their disposable income (i.e., after-tax income), it is more appropriate to examine personal saving relative to disposable income than to examine personal saving relative to GDP. Table 3 presents personal saving as a percentage of disposable income. Generally, the same trends observed in Table 2 are evident in Table 3.

Table 1.--Components of Net National Saving, 1959-1998

<u>Year</u>	<u>Gross Domestic Product</u> <u>(\$ billions)</u>	<u>Net Private Saving</u>			<u>Net Public Saving</u>			<u>Net National Saving</u> <u>(\$ billions)</u>
		<u>Personal Saving</u> <u>(\$ billions)</u>	<u>Net Business Saving</u> <u>(\$ billions)</u>	<u>Total Net Private Saving</u> <u>(\$ billions)</u>	<u>Federal Government Saving</u> <u>(\$ billions)</u>	<u>State & Local Net Saving</u> <u>(\$ billions)</u>	<u>Total Net Public Saving</u> <u>(\$ billions)</u>	
1959	507.2	25.2	16.5	41.7	2.6	9.6	12.2	53.9
1960	526.6	24.2	15.3	39.5	7.4	9.9	17.3	56.8
1961	544.8	29.2	15.7	44.9	2.9	10.4	13.3	58.2
1962	585.2	30.4	21.5	51.9	2.8	11.7	14.5	66.4
1963	617.4	29.5	24.0	53.5	5.4	13.0	18.4	71.9
1964	663.0	36.4	27.3	63.7	0.9	14.7	15.6	79.3
1965	719.1	38.7	33.1	71.8	3.4	15.1	18.5	90.3
1966	787.8	40.1	35.2	75.3	2.6	17.3	19.9	95.2
1967	833.6	49.9	32.7	82.6	-8.3	17.3	9.0	91.6
1968	910.6	47.8	30.2	78.0	-2.8	20.0	17.2	95.2
1969	982.2	47.9	26.0	73.9	8.7	21.1	29.8	103.7
1970	1,035.6	62.0	20.7	82.7	-14.1	20.8	6.7	89.4
1971	1,125.4	69.9	30.5	100.4	-25.3	21.7	-3.6	96.8
1972	1,237.3	65.2	39.0	104.2	-20.5	32.2	11.7	115.9
1973	1,382.6	91.5	42.7	134.2	-11.1	33.4	22.3	156.5
1974	1,496.9	100.2	27.0	127.2	-16.9	30.5	13.6	140.8
1975	1,630.6	107.8	47.2	155.0	-73.9	27.6	-46.3	108.7
1976	1,819.0	100.4	54.8	155.2	-57.2	35.9	-21.3	133.9
1977	2,026.9	97.2	70.5	167.7	-46.3	44.7	-1.6	166.1
1978	2,291.4	118.2	79.5	197.7	-31.7	52.6	20.9	218.6
1979	2,557.5	136.2	72.6	208.8	-18.4	52.3	33.9	242.7
1980	2,784.2	169.1	44.1	213.2	-61.0	54.4	-6.6	206.6
1981	3,115.9	207.2	56.4	263.6	-57.8	55.4	-2.4	261.2
1982	3,242.1	210.9	52.5	263.4	-134.7	51.3	-83.4	180.0
1983	3,514.5	169.7	83.6	253.3	-174.4	64.9	-109.5	143.8
1984	3,902.4	241.5	116.8	358.3	-156.0	86.9	-69.1	289.2
1985	4,180.7	207.4	123.6	331.0	-162.9	91.0	-71.9	259.1

Year	Gross Domestic Product (\$ billions)	Net Private Saving			Net Public Saving			Net National Saving (\$ billions)
		Personal Saving (\$ billions)	Net Business Saving (\$ billions)	Total Net Private Saving (\$ billions)	Federal Government Saving (\$ billions)	State & Local Net Saving (\$ billions)	Total Net Public Saving (\$ billions)	
1986	4,422.2	188.6	95.9	284.5	-177.5	94.9	-82.6	201.9
1987	4,692.3	168.9	110.0	278.9	-128.9	83.8	-45.1	233.8
1988	5,049.6	195.2	134.0	329.2	-121.3	85.9	-35.4	293.8
1989	5,438.7	194.8	104.3	299.1	-113.4	95.1	-18.3	280.8
1990	5,743.8	213.3	112.7	326.0	-154.7	80.1	-74.6	251.4
1991	5,916.7	243.5	130.8	374.3	-196.0	75.8	-120.2	254.1
1992	6,244.4	264.1	137.1	401.2	-280.9	86.3	-194.6	206.6
1993	6,558.1	210.3	170.1	380.4	-250.7	87.4	-163.3	217.1
1994	6,947.0	176.8	201.4	378.2	-186.7	96.8	-89.9	288.3
1995	7,269.6	179.8	256.1	435.9	-174.4	111.7	-62.7	373.2
1996	7,661.6	158.5	262.4	420.9	-110.3	122.6	12.3	433.2
1997	8,110.9	121.0	296.7	417.7	-21.1	134.1	113	530.7
1998	8,573.9	12.6	304.8	317.4	92.0	148.7	240.7	558.1

Note: 1998 figure is annualized figure for the third quarter of 1998.

Source: Department of Commerce, Bureau of Economic Analysis.

**Table 2.--Components of Net National Saving in the United States
as a Percentage of GDP, 1959-1998**

<u>Year</u>	<u>Net Private Saving</u>			<u>Public Savings</u>	<u>Net National Savings</u>
	<u>Personal Savings</u>	<u>Net Business Savings</u>	<u>Net Private Savings</u>		
1959	4.97	3.25	8.22	2.41	10.63
1960	4.60	2.91	7.50	3.29	10.79
1961	5.36	2.88	8.24	2.44	10.68
1962	5.19	3.67	8.87	2.48	11.35
1963	4.78	3.89	8.67	2.98	11.65
1964	5.49	4.12	9.61	2.35	11.96
1965	5.38	4.60	9.98	2.57	12.56
1966	5.09	4.47	9.56	2.53	12.08
1967	5.99	3.92	9.91	1.08	10.99
1968	5.25	3.32	8.57	1.89	10.45
1969	4.88	2.65	7.52	3.03	10.56
1970	5.99	2.00	7.99	0.65	8.63
1971	6.21	2.71	8.92	-0.32	8.60
1972	5.27	3.15	8.42	0.95	9.37
1973	6.62	3.09	9.71	1.61	11.32
1974	6.69	1.80	8.50	0.91	9.41
1975	6.61	2.89	9.51	-2.84	6.67
1976	5.52	3.01	8.53	-1.17	7.36
1977	4.80	3.48	8.27	-0.08	8.19
1978	5.16	3.47	8.63	0.91	9.54
1979	5.33	2.84	8.16	1.33	9.49
1980	6.07	1.58	7.66	-0.24	7.42
1981	6.65	1.81	8.46	-0.08	8.38
1982	6.51	1.62	8.12	-2.57	5.55
1983	4.83	2.38	7.21	-3.12	4.09
1984	6.19	2.99	9.18	-1.77	7.41
1985	4.96	2.96	7.92	-1.72	6.20

<u>Year</u>	<u>Net Private Saving</u>			<u>Public Savings</u>	<u>Net National Savings</u>
	<u>Personal Savings</u>	<u>Net Business Savings</u>	<u>Net Private Savings</u>		
1986	4.26	2.17	6.43	-1.87	4.57
1987	3.60	2.34	5.94	-0.96	4.98
1988	3.87	2.65	6.52	-0.70	5.82
1989	3.58	1.92	5.50	-0.34	5.16
1990	3.71	1.96	5.68	-1.30	4.38
1991	4.12	2.21	6.33	-2.03	4.29
1992	4.23	2.20	6.42	-3.12	3.31
1993	3.21	2.59	5.80	-2.49	3.31
1994	2.54	2.90	5.44	-1.29	4.15
1995	2.47	3.52	6.00	-0.86	5.13
1996	2.07	3.42	5.49	0.16	5.65
1997	1.49	3.66	5.15	1.39	6.54
1998	0.15	3.55	3.70	2.81	6.51
Average 1960-69	5.22	3.64	8.86	2.42	11.28
Average 1970-79	5.71	2.92	8.63	0.22	8.85
Average 1980-89	4.84	2.28	7.13	-1.30	5.83
Average 1990-98	2.51	2.97	5.48	-0.54	4.94

Note: 1998 figure is annualized figure for the third quarter of 1998.

Source: Department of Commerce, Bureau of Economic Analysis.

**Table 3.—U.S. Personal Saving as a Percentage of Disposable
Personal Income, Selected Years, 1929-1998**

Year	Personal saving as a percentage of disposable personal income
1929	3.2
1939	2.6
1944	25.1
1949	3.9
1954	6.3
1959	7.2
1964	7.9
1969	7.2
1974	9.5
1975	9.3
1976	7.9
1977	6.9
1978	7.5
1979	7.7
1980	8.5
1981	9.4
1982	9.0
1983	6.7
1984	8.6
1985	6.9
1986	5.9
1987	5.0
1988	5.4
1989	5.0
1990	5.1
1991	5.6
1992	5.7
1993	4.4
1994	3.5
1995	3.4
1996	2.9
1997	2.1
1998 ¹	0.2

Source: Department of Commerce, Bureau of Economic Analysis.

¹ Quarterly data for third quarter, seasonally adjusted to an annual rate.

Prior to 1980, domestic saving generally financed domestic investment as well as providing funds for the United States to be a net investor abroad (negative net foreign investment). During the 1980s, net savings fell short of domestic investment as a share of GDP. Domestic investment declined from its 1984 peak and net foreign investment provided for the difference in domestic savings and investment. Thus, although the decline in U.S. saving was coincident with a decline in investment, this decline was not as severe as it might have been had there not been foreign investment.

Comparison between the saving rates of the U.S. and other countries

The United States' national saving rate is low when compared to that of other nations. Table 2 shows that the United State's net national saving averaged approximately 6 percent of GDP in the 1980s and approximately 5 percent thus far in the 1990s. The net national saving rate of Canada during the 1980s averaged 7.3 percent of GDP. For Japan, the comparable rate was 17.9 percent; Germany, 9.2 percent; Italy, 8.3 percent; France, 6.7 percent; the United Kingdom, 4.5 percent; and Australia, 3.4 percent.¹⁶ Table 4 presents a comparison for household or personal saving. As Table 4 indicates, the household saving rate of the United States during the past decade was below the household saving rates of Canada, Germany, Japan, and the United Kingdom.¹⁷

¹⁶ Organization for Economic Co-Operation and Development, *National Accounts, 1960-1989*, vol. 1, 1991.

¹⁷ The data on international saving rates in the text and in Table 4 are not directly comparable to the data in Tables 2 and 3 because such data are not always compiled consistently across nations. For example, in computing household saving rates, the OECD subtracts household interest expense from income to determine U.S. household disposable income. The Bureau of Economic Analysis does not make a similar adjustment in defining household disposable income. Also, while the source of the international comparisons draws on data from the OECD, which attempts to provide data on an internationally comparable basis, the data are not fully comparable. For example, in computing household saving rates, the definition of the household sector is not identical across all countries. In particular, except in Japan, France, and Italy, private nonprofit institutions are included in the household sector. See, Andrew Dean, Martine Durand, John Fallon, and Peter Hoeller, "Saving Trends and Behaviour in OECD Countries," OECD, Economics and Statistics Department Working Paper, No. 67, June 1989.

**Table 4.--Net Household Saving as a Percentage of Disposable Household
Income in Certain Countries, Selected Years, 1972-1997**

<u>Country</u>	<u>1972</u>	<u>1976</u>	<u>1980</u>	<u>1984</u>	<u>1988</u>	<u>1990</u>	<u>1992</u>	<u>1994</u>	<u>1995</u>	<u>1996</u>	<u>1997</u>	<u>Average 1988-1997</u>
United States	7.5	7.6	8.4	8.6	5.3	5.2	5.7	4.2	4.9	4.4	4.0	5.2
Japan	18.2	23.2	17.9	15.8	13.0	12.1	13.1	12.8	13.0	13.8	13.6	13.2
Germany	14.4	13.3	12.8	11.4	12.8	13.8	12.9	11.7	11.6	11.7	11.8	12.4
United Kingdom	6.4	10.9	13.4	11.1	6.2	8.2	12.0	10.4	11.7	11.4	11.1	10.0
Canada	8.7	11.8	13.6	15.0	9.7	9.7	10.3	7.6	7.0	5.9	1.9	9.1
Australia	11.8	11.1	10.8	9.9	6.1	6.9	4.6	3.2	2.6	4.6	3.9	4.1

Source: Organization for Economic Co-Operation and Development, *OECD Economic Outlook*, 63, June 1998 and earlier issues.

Generally, saving rates of all nations have declined from the rates of the late 1960s. In percentage terms, the decline in the national saving rate of the United States between 1967 and 1995 is greater than the decline of the saving rates of Japan and Germany, but comparable to the decline of some other western, industrialized countries.

Although many people have pointed to the low saving rate in the United States as a cause of declining productivity, others argue that the United States has long been a relatively low-saving nation, and yet has enjoyed substantial economic growth. They note that many of the nations with higher saving rates were nations which needed to rebuild after the destruction of war on their own territory.

Furthermore, some argue that the low saving rate in the United States may be a product of demographics, and that the saving rate will increase as the baby boomers continue to enter their forties and fifties, typically the years during which people do much of their retirement saving. However, others note that in the past, demographic changes have not been very successful at predicting saving rates.

In general, the decline in private saving rates is not well understood. It is likely that demographic changes, capital market liberalization, increased insurance availability, and increased social security benefits have all contributed to the decline. However, these factors have not proved significant enough to account for the total decline in the saving rate. Similarly, there is no convincing explanation for why saving rates have declined in other nations as well.

B. Tax Incentives for Saving

Goals of tax incentives for saving

Some argue that tax incentives for saving are appropriate because the income tax system taxes the return to income that is saved, thereby lowering the return to saving. This lower return on saving affects both the national saving rate, as well as the assets that taxpayers accumulate for particular purposes. There is some disagreement about whether the goal of tax incentives for saving should be to encourage saving for particular purposes or to increase national saving. These purposes are not mutually exclusive; if effective, incentives to save for particular purposes will increase national saving. However, general saving incentives will not necessarily fulfill more specific goals. Whether new tax incentives for saving should be aimed at increasing national saving in general, or increasing retirement saving, depends on the perceived adequacy of each type of saving.

Efficacy of tax incentives for saving

Overview

Tax incentives for saving may have a number of attributes that may affect a taxpayer's saving decision. First, investments in tax-advantaged assets or accounts earn a higher after-tax rate of return than investments in other assets which may lead to an increase or decrease in saving. Second, a targeted savings incentive may provide an incentive for a specific form of saving relative to other forms of saving. Third, a tax incentive for saving may provide a psychological incentive to save. Fourth, advertising by banks and other financial institutions of tax-benefitted savings vehicles may influence people's saving decisions. The following discussion focuses on each of these attributes.

Rate of return

Tax exclusions or deferrals for the income earned from saving increase the rate of return to saving. When the return on saving increases, the price of future consumption decreases, because the taxpayer has to forgo fewer dollars today to consume a dollar's worth of consumption in the future.

This price decrease can affect saving in two ways. Since future consumption is now cheaper, taxpayers may choose to substitute future consumption for current consumption. This effect increases saving. When the price of future consumption falls, though, the amount of investment necessary to achieve any particular level of income in the future decreases. For example, a taxpayer in the 28-percent marginal tax bracket may set aside \$1,300 today to help defray tuition expenses of his child 15 years from now. If the taxpayer's investment earns 8 percent annually and those earnings are taxed annually at a 28-percent tax rate, in 15 years the investment will be worth \$3,000. If the taxpayer instead invested in a Roth IRA, an investment of only \$946 today would be worth \$3,000 in 15 years (assuming the same 8-percent return). This effect decreases saving because the tax benefit permits the taxpayer to save less to accumulate the same amount of money in the future.

Substantial disagreement exists among economists as to the effect on saving of increases in the net return to saving. Some studies have argued that one should expect substantial increases in saving from increases in the net return.¹⁸ Other studies have argued that large behavioral responses to changes in the after-tax rate of return will not necessarily occur.¹⁹ Empirical

¹⁸ See, Lawrence H. Summers, "Capital Taxation and Accumulation in a Life Cycle Growth Model," *American Economic Review*, 71, September 1981.

¹⁹ See, David A. Starrett, "Effects of Taxes on Saving," in Henry J. Aaron, Harvey Galper, and Joseph A. Pechman (eds.), *Uneasy Compromise: Problems of a Hybrid Income-Consumption Tax* (Washington: Brookings Institution), 1988.

investigation of the responsiveness of personal saving to after-tax returns provides no conclusive results. Some find personal saving responds strongly to increases in the net return,²⁰ while others find little or a negative response.²¹

Even if increasing the rate of return on all saving does increase saving generally, it is still possible that increasing the rate of return on qualified plans or IRAs would not affect saving. For increased rates of return to influence taxpayers to substitute future consumption for current consumption, the marginal rate of return on savings must increase so that if the taxpayer increases saving, that saving receives a higher rate of return. In order for a savings incentive to increase the marginal return to saving, taxpayers must not be able to finance the tax-preferred saving profitably by borrowing, must not have other similar assets that can be easily shifted into tax-preferred assets or accounts, and must (in the absence of the saving incentive) intend to save less than the maximum contribution allowed.

Type of saving

The above discussion focused on saving in general. Many authors have noted that qualified plans and IRAs may provide incentives for retirement saving, as opposed to saving for other purposes.²² For instance, consider the effect of a qualified plan, distributions from which are subject to additional tax unless held until retirement or used for other qualified purposes. An individual who is saving only for a “rainy day” may not have much saving that is expected to last until retirement. When offered a higher rate of return on retirement saving, that individual may choose to increase the total amount of saving by maintaining the rainy day saving and adding retirement saving.

Psychological factors and effects of increased advertising

Several observers have observed that factors other than rates of return, or what might be termed “non-economic” factors, are important in motivating saving through qualified plans and other saving incentives. Researchers have found that both participation in and contributions to voluntary savings plans, such as qualified pension plans, are significantly higher when employers offer retirement seminars. These analysts found that the effect was stronger for nonhighly

²⁰ See, Michael Boskin, “Taxation, Saving, and the Rate of Interest,” *Journal of Political Economy*, 86, April 1978.

²¹ See, George von Furstenberg, “Saving,” in Henry Aaron and Joseph Pechman (eds.), *How Taxes Affect Economic Behavior* (Washington: Brookings Institution), 1981.

²² See the discussion in William G. Gale and John Karl Scholz, “IRAs and Household Saving,” *American Economic Review*, 84, December 1994, and Steven F. Venti and David A. Wise, “Tax Deferred Accounts, Constrained Choice, and Estimation of Individual Saving,” *Review of Economic Studies*, 53, August 1996.

compensated employees than for highly compensated employees. Moreover, the frequency of such seminars was an important correlate to saving behavior, but the provision of written materials in the absence of seminars appeared to have no effect.²³ Other research suggests that high school level education in financial decision-making appears to raise asset accumulation by the students once they reach adulthood.²⁴

Some observers have noted that IRAs may have a larger impact on saving than standard economic analyses would predict.²⁵ These observers suggest that the immediate reward of the tax deduction and the active marketing campaigns in the mid-1980s contributed to the high IRA participation rates observed; in fact, IRA participation was larger than was expected. The sharp decline in advertising after 1986 may explain the decline in IRA contributions among taxpayers who are still eligible.

Furthermore, there may also be a psychological factor that contributes to the impact of IRAs on saving. One study found that taxpayers who owed money to the IRS in excess of taxes withheld were significantly more likely to make IRA contributions than were other taxpayers.²⁶ One might expect this psychological factor only to induce deductible IRA contributions, which will have an immediate effect on taxes paid. However, another author²⁷ noted that taxpayers who owe the IRS money generally have higher incomes and this may be why they are more likely to contribute to IRAs, rather than any psychological factor.

²³ Patrick J. Bayer, B. Douglas Bernheim, and John Karl Scholz, "The Effects of Financial Education in the Workplace: Evidence from a Survey of Employers," National Bureau of Economic Research, Working Paper #5655, July 1996.

²⁴ B. Douglas Bernheim, Daniel M. Garrett, and Dean M. Maki, "Education and Saving: The Long-Term Effects of High School Financial Curriculum Mandates," National Bureau of Economic Research, Working Paper #6085, July 1997.

²⁵ See, Richard H. Thaler, "Psychology and Savings Policies," *American Economic Review*, 84, May 1984.

²⁶ Daniel Feenberg, and Jonathan Skinner, "Sources of IRA Saving," in Lawrence Summers (ed), *Tax Policy and the Economy*, vol. 3, (Cambridge: Massachusetts Institute of Technology Press), 1989.

²⁷ Jane Gravelle, "Do Individual Retirement Accounts Increase Savings?" *Journal of Economic Perspectives*, 5, Spring 1991.

C. The Adequacy of Retirement Savings

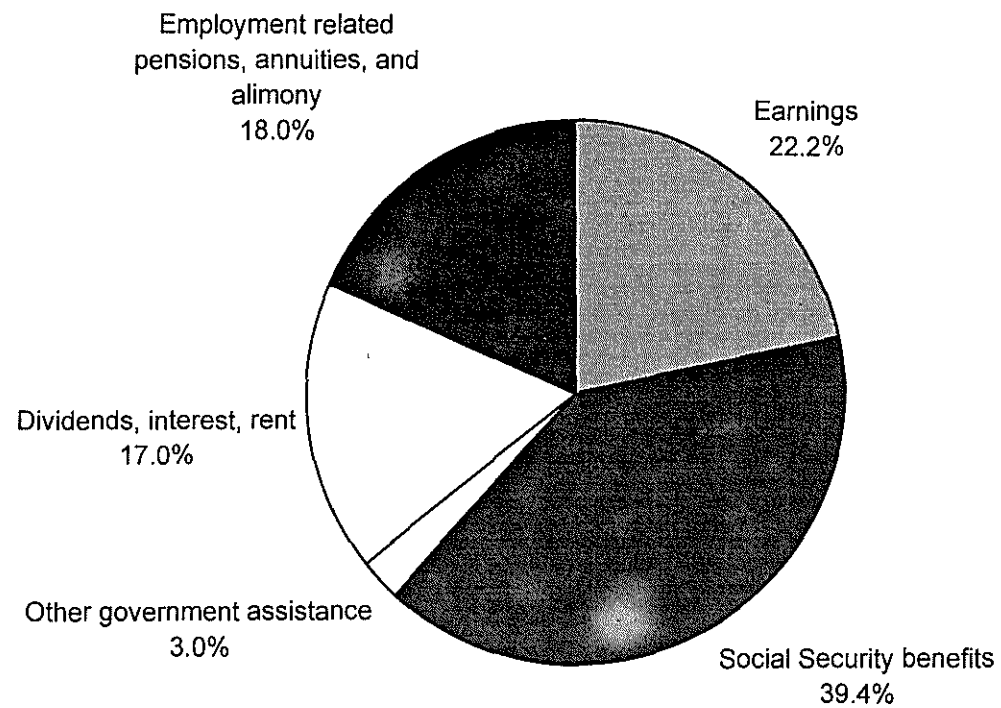
1. Economic status of the elderly

Sources of retirement income

Social Security is the largest source of retirement income (39 percent in 1996), followed by earnings (22 percent in 1996), employee pensions, annuities, and alimony (18 percent in 1996), and income from assets (17 percent in 1996).²⁸ (See Figure 1.) Many researchers have attempted to measure whether people have adequate savings for retirement. A common measure of retirement savings adequacy is called the replacement rate, which is defined as the ratio of retirement income to income during the working years.

²⁸ Calculations by staff of the Joint Committee on Taxation based on Social Security Administration, *Annual Statistical Supplement to the Social Security Bulletin*, 1998, November 1998, Table 3.E.3.

Figure 1.--Shares of Money Income From Earnings and Other Sources of the Aged, 1996



The issue of what replacement rate should be called adequate depends on a number of factors. A replacement rate of 100 percent means that the person's income during retirement is equal to their income during working years. There are a number of reasons that a replacement rate of 100 percent may not be optimal. First, people may desire to have more income during the working years because some of that income is saved for retirement. If people choose to have constant consumption over time, they save during their working years and dissave during retirement. Thus, if a household has a 10-percent saving rate during their working years, a 90-percent replacement rate would be sufficient for the household to maintain constant consumption in retirement. Second, most elderly own their own homes (in 1996, more than 81 percent of those households headed by an individual aged 65 to 74 and 75.3 percent of households headed by an individual age 75 or over²⁹) and most of these have paid off their mortgages. Only 25 percent of households headed by a person aged 65 to 74 years old had any mortgage or home equity debt. Among households headed by a person aged 75 years or older, only seven percent had any mortgage or home equity debt.³⁰ Thus, most elderly receive housing without incurring any expenses beyond maintenance, property taxes, insurance, and utilities, whereas during their working years, they were likely to have been making mortgage payments. Third, few elderly households care for children, and therefore household expenses are likely to be lower. Fourth, the elderly are generally covered by Medicare, which provides insurance against large medical expenses and pays for most expenditures on health. Fifth, retirement income generally bears a lower tax burden than does wage income. Salaries and wages are subject to the payroll tax. Retirement benefits are not. Also, Social Security benefits, which represent the major source of retirement income, are largely untaxed.³¹ Thus, Social Security benefits can be smaller than income earned during the working years and still provide the same after-tax income. For the lowest income groups, this effect is not large since earned income is subject to the payroll tax, but may not be subject to the income tax.

These arguments suggest that the appropriate replacement rate for the elderly to have adequate retirement savings is less than 100 percent. However, there may be some factors which dictate that the replacement rate should be higher than 100 percent. First, although the elderly are covered by Medicare, they are also more likely to incur large medical expenses which may not be completely covered by Medicare. Similarly, Medicare generally does not cover nursing home care or the costs of care in other long-term care facilities, and only those elderly poor enough to receive Medicaid or eligible through veterans' assistance are covered. Second, the elderly may find it necessary to hire service providers for tasks that younger households provide for

²⁹ *Statistical Abstract of The United States 1997*, Table 1200, p. 725.

³⁰ *Statistical Abstract of The United States 1997*, Table 780, p. 513.

³¹ Social security benefit recipients with modified AGI exceeding certain limits have to include up to 85 percent of their benefits in income. The Joint Committee on Taxation staff projects that in 1999, 33 percent of all elderly will include some portion of Social Security benefits in taxable income.

themselves. For example, elderly households may contract for home repair work that young households self-provide.

Replacement rates for Social Security and pension income for retired workers are calculated using two methods. The first method calculates the ratio of Social Security and pension benefits relative to a worker's highest career earnings.³² The second method calculates benefits relative to the average earnings in the five years preceding retirement.³³ It seems likely that the career high earnings overstate average earnings, and earnings during the five years preceding retirement understate average earnings. Thus, these two replacement rates may be seen as upper and lower bounds of estimates of the replacement of average career earnings. These replacement rates measure the replacement of income through retirement benefits, and do not include any income earned during retirement or any income from savings. Such calculations indicate that Social Security and pension benefits replace roughly 33 percent of the career high earnings and 50 percent of earnings over the last five years for individuals. When spousal benefits are taken into account, replacement rates are slightly higher, averaging 30 to 33 percent of highest earnings but 60 to 70 percent of last earnings. Such calculations also demonstrate that replacement rates are highest for the poor. For the lowest income quartile, individual replacement rates varied between 34 and 39 percent of highest earnings, and 72 to 94 percent of last earnings.³⁴

Analysis of more recent retirees suggests similar outcomes. A recent study calculated replacement rates for families with at least one individual between the ages 52 and 61 years old in 1992. Such individuals generally would be expected to retire between 1993 and 2006.³⁵ This study attempted to account for all sources of non-earnings income of retiree households: social security benefits; pension benefits; private saving; equity in personal residences; and equity in business assets. The authors calculate that in 1992, prior to actual retirement, these households, on average, held assets sufficient to produce income in retirement that would replace 86 percent of their pre-retirement income. For households in the median 10 percent of the population (i.e., those with incomes between the 45th and 55th percentiles of the income distribution), the

³² Earnings are indexed by the rate of wage growth. Highest career earnings are defined as the average of the highest five years of earnings.

³³ This measure is calculated only for those individuals who worked a significant amount during the five years preceding retirement.

³⁴ Susan Grad, "Earnings Replacement Rates of New Retired Workers," *Social Security Bulletin*, 53, October 1990.

³⁵ Alan L. Gustman and Thomas L. Steinmeiner, "Effects of Pensions on Savings: Analysis with Data from the Health and Retirement Study." National Bureau of Economic Research, Working Paper #6681, August 1998. Replacement rates in this study are measured relative to pre-retirement earnings of the household.

replacement rate was 97 percent. The bottom 10 percent of earners had the highest replacement rates and the top five percent of earners had the lowest replacement rates.³⁶ However, other analysts reviewing the same data suggest a less optimistic outlook. They conclude that, if the median household intended to retire at age 62, it would need to save 16 percent of future annual earnings to preserve pre-retirement consumption. The authors observe that a saving rate of 16 percent exceeds the median household's observed saving rate of approximately 5 percent.³⁷

Finally, Social Security benefits have increased over time. Social Security benefits relative to the income of the elderly have increased substantially over the past 40 years. On the other hand, a current concern is whether the Federal Government will be able to continue paying the promised benefits. If benefits were to be reduced for future retirees, the replacement rates reported above would overstate likely future replacement rates.

Poverty

Another method used to examine the economic status of the elderly is to compare their rates of poverty to those of the general population. Poverty among the elderly has declined dramatically over the last 30 years, from over 35 percent in 1959 to 12.6 percent in 1985. By 1985, the poverty rate of the elderly was less than the poverty rate of the general population. In 1996, the poverty rate of the elderly was 10.8 percent and the poverty rate of elderly persons living in families (with a spouse or children) was 5.6 percent, lower than for any other group.³⁸ The major explanation for this decline in poverty is the increase in Social Security benefits and coverage described above.

³⁶ The reported replacement rates measured replacement income in terms of nominal dollars. If the calculation were to account for future inflation, the authors estimated that real (inflation adjusted) replacement rates averaged 60 percent across all of the households in the sample and 66 percent of the real value of the pre-retirement earnings for the median 10 percent of households. See, Gustman and Steinmeier, "Effects of Pensions on Savings," pp. 18-19.

³⁷ James F. Moore and Olivia S. Mitchell, "Projected Retirement Wealth and Savings Adequacy in the Health and Retirement Study," National Bureau of Economic Research, Working Paper # 6240, October 1997. Moore and Mitchell estimate that the necessary saving rate falls to 7 percent per year if the household would defer retirement until age 65. Moore and Mitchell measure "pre-retirement consumption" by reference to replacement rates of less than 100 percent. Thus, if a 100-percent replacement rate were the goal, an even greater saving rate would be necessary.

³⁸ Social Security Administration, *Annual Statistical Supplement to the Social Security Bulletin*, 1998, November 1998, Table 3.E.2.

2. Expected retirement income and needs of current workers

The above discussion demonstrates that, as a group, the elderly are as well off as the rest of society, indicating that, given Social Security and pension benefits, savings were adequate. However, to determine whether the savings of current workers are enough to provide adequate retirement income, it is necessary to examine how this group might differ from current retirees.

Social security and employer-provided pension plan coverage

Social security coverage.--Because social security coverage of workers has increased over time,³⁹ and because the labor force participation of women has also been increasing, current workers are more likely to be covered by social security than current retirees. In 1996, out of more than 150 million workers, 6.6 million workers were not in employment covered by Social Security. Most of these were Federal, State, and local government employees. The percentage of uncovered workers will further decrease in the future as all Federal employees hired after 1983 are covered and beginning in 1991 all State and local employees who are not members of a public retirement system were mandatorily covered under Social Security.

Current pension coverage.--Similarly, pension coverage of current workers is also substantially larger than that of current retirees.⁴⁰ The term "covered," as used here, means that an employee is accruing benefits in an employer pension or other retirement plan. The best current comprehensive evidence on pension coverage comes from a supplement to the April 1993 Current Population Survey conducted by the Bureau of the Census. The data referred to below come from that survey unless otherwise noted.

As of April 1993, 63 percent of full-time wage and salary workers employed in the private sector reported that they worked in firms with an employer-sponsored pension plan. Half of the full-time wage and salary workers employed in the private sector were covered by an employer-sponsored pension plan. Most of these workers were covered by basic defined

³⁹ For a discussion of the legislative history of social security coverage, see Committee on Ways and Means, *1998 Green Book* (WMCP 105-7), May 19, 1998, pp. 6-11.

⁴⁰ *EBRI Databook on Employer Benefits*, Fourth Edition 1997. Table 10.2 on page 84 reports that in 1975, 31 million employees were participants in private sector pension plans. By 1993 this number had expanded to 45 million employees. Among all civilian workers, the percentage participating in a pension plan has grown from 44 percent in 1979 to 51 percent in 1993 (Table 10.4, p. 86).

benefit or defined contribution plans (23 percent), and another 10 percent had both a basic plan and a 401(k) type contributory plan (see Table 5).⁴¹ For another 17 percent, the 401(k) type plan was their only retirement plan.

Pension coverage varies substantially among full-time, privately employed workers. Differences depend on the age of the worker, job earnings, the industry of employment, and the size of the firm. Younger workers are much less likely to be covered by a pension than middle aged and older workers. Coverage rates rise steadily from 21 percent for those under age 25 to about 60 percent for those between ages 40 and 60 before falling off somewhat. This pattern holds for both men and women. However, the jump in coverage for middle aged men is slightly larger than the increase for middle aged women (see Table 6).

Higher paying jobs are more likely to offer pensions. Just 8 percent of full-time private wage and salary workers earning less than \$10,000 per year in 1993 were covered compared to 81 percent of those earning \$50,000 or more (see Table 7). Coverage may be higher for higher paying jobs because of the greater value of the pension tax benefits to workers in higher tax brackets and because of the declining replacement rate of Social Security at higher earnings levels.

⁴¹ Some private-sector employees contribute to 403(b) tax-sheltered annuities instead of 401(k) plans.

**Table 5.—Employer Sponsorship and Employee
Coverage Under Pension or Retirement Plan,
Private Wage and Salary Workers**

[Percent]

Item	Total	Full time	Part time
Employer sponsorship:			
Employer sponsors plan	58	63	37
Basic pension only	24	24	23
Basic and 401(k) type	14	16	4
401(k) type only	21	23	10
Employer does not sponsor	35	32	49
Does not know	7	5	14
Employee coverage:			
Employee covered under plan	43	50	12
Basic pension only	20	23	7
Basic and 401(k) type	8	10	2
401(k) type only	15	17	4
Employee is not covered	50	44	73
Does not know	7	6	14
Number of private wage and salary workers (in thousands)	88,679	72,752	15,927

Source: U.S. Department of Labor, 1994, tables A2, B1, B2.

**Table 6.—Coverage Under Employer-Sponsored Pension
or Retirement Plans for Full-Time Private Wage and
Salary Workers**

Age (in years)	Percent covered		
	Total	Men	Women
Under 25	21	19	22
25-29	41	41	42
30-34	50	50	51
35-39	54	57	51
40-44	58	61	54
45-49	63	66	59
50-54	61	60	62
55-59	59	60	57
60-64	56	59	52
65 or older	46	54	34
Total	50	51	48

Source: U.S. Department of Labor, 1994, table B5.

**Table 7.—Coverage Under Employer-Sponsored Pension
or Retirement Plans for Full-Time Private Wage and
Salary Workers by Workers' Wages**

Wages	Percent covered		
	Total	Men	Women
Under \$10,000	8	7	9
\$10,000-\$14,999	27	21	31
\$15,000-\$19,999	42	35	49
\$20,000-\$24,999	57	51	65
\$25,000-\$29,999	62	61	64
\$30,000-\$34,999	67	66	71
\$35,000-\$39,999	73	74	72
\$40,000-\$49,999	78	79	77
\$50,000-\$74,999	81	81	80
\$75,000 or over	81	82	78
Total ¹	50	51	48

¹ Total includes workers not responding on wages, not shown separately.

Source: U.S. Department of Labor, 1994, table B11.

Significant differences in coverage also are apparent between full-time private wage and salary workers and other wage and salary workers. Coverage is much lower among part-time workers and much higher among public employees. Among part-time, private wage and salary workers, 12 percent are covered. Seventy-seven percent of public sector wage and salary workers are covered including 85 percent of those who are full-time workers (see Table 8).

Coverage is much lower for smaller firms. Smaller firms are less likely to offer comprehensive fringe benefit packages as part of total compensation. Only 13 percent of full-time private wage and salary workers in firms with fewer than 10 employees are covered. The rate rises with employer size but does not reach 50 percent (the average across all firm sizes) until firms have 100 or more employees.

The data above report pension coverage of individuals. When assessing the effectiveness of pensions in providing retirement income, it is more relevant to think of pension coverage of households. Thus, if both the husband and wife work and only the wife accrues pension benefits, the tables above would record that 50 percent of individuals are covered by a pension. However, in this example, 100 percent of the households (the married couple) receive pension retirement benefits. A recent study highlights the importance of this distinction. It found that in 1992, half of all individuals aged 51 to 61 years old, that is on the verge of retirement, had rights to a pension from a current or prior job, but two-thirds of all households with at least one member aged 51 to 61 years old owned the rights to a pension from a current or prior job.⁴²

Trends in pension coverage.-- At the outset of World War II, private employer pensions were offered by about 12,000 firms. Pensions spread rapidly during and after the war, encouraged by high marginal tax rates and wartime wage controls that exempted pension benefits. By 1972, when the first comprehensive survey was undertaken, 48 percent of full-time private employees were covered. Subsequent surveys found that coverage reached 50 percent in 1979, but by 1983 had fallen back to 48 percent. The decline continued in the 1980s, reaching 46 percent in 1988.⁴³ By 1993, coverage had returned to 50 percent.

⁴² Gustman and Steinmeier, "Effects of Pensions on Savings," pp. 8-9.

⁴³ J.R. Woods, "Pension Coverage Among Private Wage and Salary Workers: Preliminary Findings from the 1988 Survey of Employee Benefits," *Social Security Bulletin*, 52, p.17.

**Table 8.—Coverage of Wage and Salary Workers Under
Employer-Sponsored Pension or Retirement Plan,
by Private or Public Sector**

Sector	Percent covered		
	Total	Full time	Part time
All wage and salary workers	49	56	15
Men	51	56	9
Women	46	56	17
Private sector	43	50	12
Men	46	51	8
Women	39	48	15
Public sector	77	85	30
Men	80	86	22
Women	74	84	33

Source: U.S. Department of Labor, 1994, table B1.

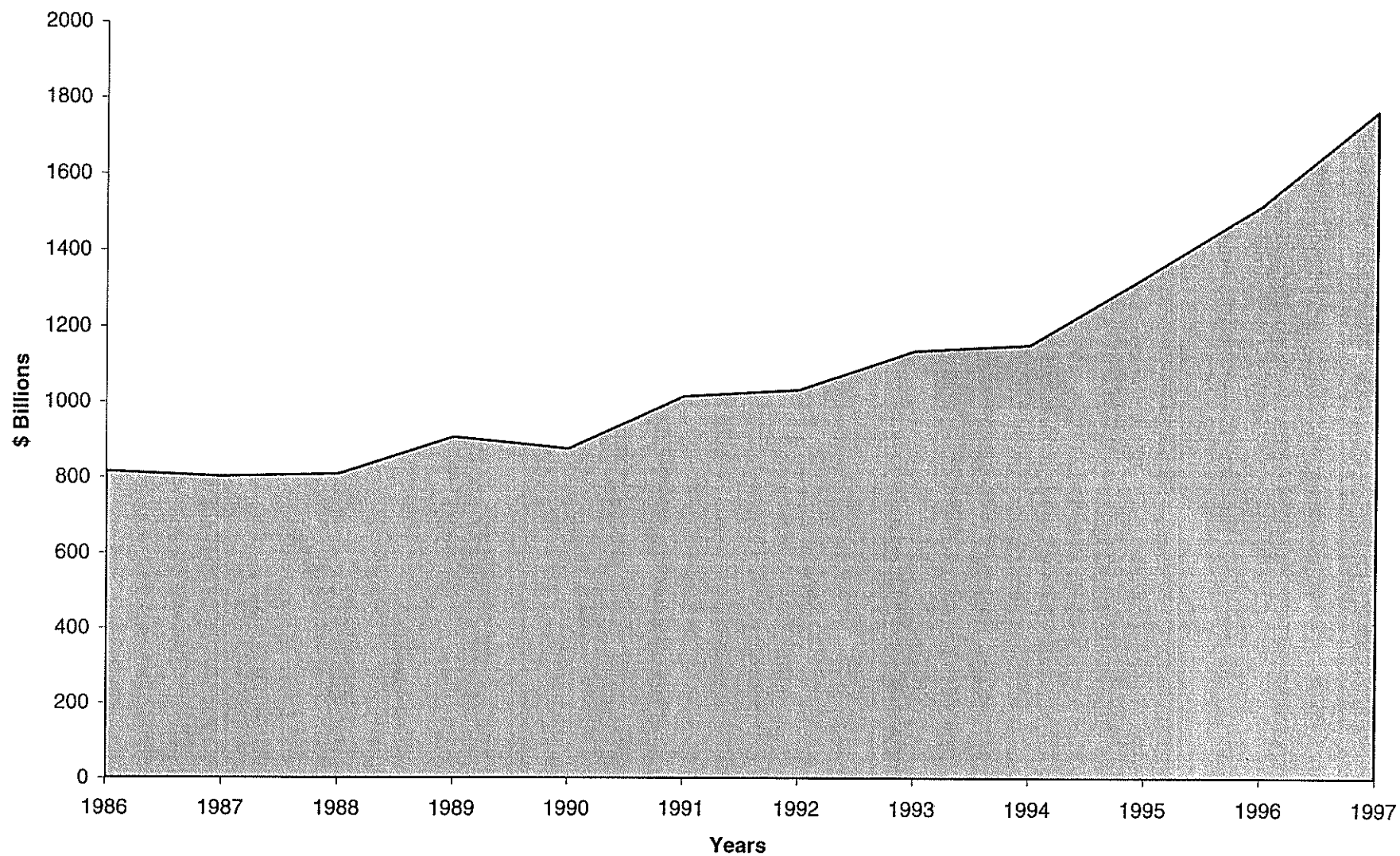
The decline in coverage in the 1980s was concentrated among younger men. The coverage rate among older men has fallen less dramatically, and among women it has risen at some ages and fallen at others.

The decline in pension coverage has occurred at the same time that employers have been shifting from defined benefit plans. Defined benefit plans provided basic plan coverage for 87 percent of private wage and salary workers in 1975.⁴⁴ This proportion dropped to 83 percent by 1980 and to 71 percent by 1985. This shifting composition has largely been the result of rapid growth in primary defined contribution plans. Employee stock ownership plans and 401(k) plans have been among the most rapidly growing defined contribution plans.

Figures 2 and 3 utilize data from the Federal Reserve Board's Flow of Funds Accounts to show the value of assets accumulated in defined benefit and defined contribution pension plans. At the end of 1997, the value of assets in each type of plan was equal to approximately \$1.8 trillion. The figures also document the rapid accumulation in assets in defined contribution plans compared to that of defined benefit plans over the past 10 years.

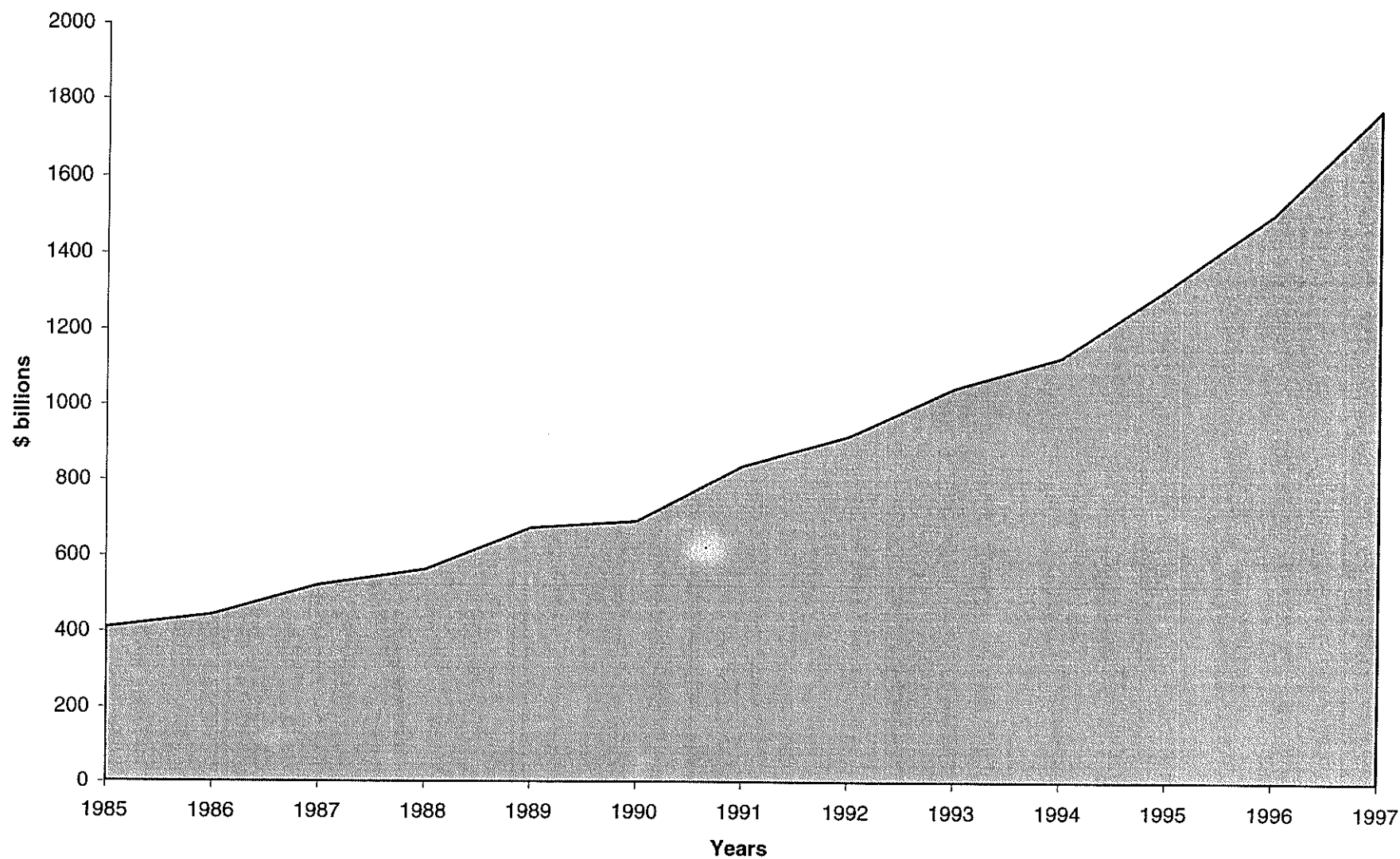
⁴⁴ J.A. Turner and D. Beller, *Trends in Pensions*, (Washington, D.C.: U.S. Department of Labor), 1989, pp. 65 and 357.

Figure 2.--Total Financial Assets in Defined Benefit Plans, 1985-1997



Source: Federal Reserve Board of Governors, Survey of Consumer Finances.

Figure 3.--Total Financial Assets in Defined Contribution Plans, 1985-1997



Source: Federal Reserve Board of Governors, Survey of Consumer Finances.

Personal saving

Aggregate saving.--Although coverage by pensions and Social Security is expected to be higher for current workers than it is for current retirees, the saving rate of current workers may be lower than the rate at which current retirees saved during their working lives. This would imply that although two sources of retirement income, Social Security and pension benefits, are expected to be higher for current workers, another source, income from savings, may be lower.

The measure of personal saving used in the National Income and Product Accounts attributes all corporate pension contributions and earnings to the household sector. Thus, the increased pension coverage is already included in the measure of household saving. Table 2, above, and Figure 4, show that personal saving has been declining over the past 15 years. Private saving, which includes the saving of business, and which may provide a better measure of total households saving since businesses are ultimately owned by household, exhibits the same downward trend. Thus, the saving of the current generation of workers for their retirement seems to be low relative to the past. On the other hand, the National Income and Product Accounts measures of saving measure only cash flows not consumed. The purpose of saving for retirement is to accumulate wealth which can be drawn upon in retirement. If, as in the past few years, the market value of assets increases, adequate wealth accumulation may be attained with relatively low saving rates.

**Figure 4.--Personal Saving as a Percentage of GDP,
1959-1998**



Retirement saving of individuals.--It is difficult to determine how much saving outside of qualified plans is "retirement saving." Contributions to IRAs represent one measure of such non-pension plan retirement saving. Assets within IRAs have grown substantially over the past 10 years. Figure 5 below shows that IRA balances, approximately \$1.6 trillion in 1996, are nearly equal in size to the asset balances in both defined benefit and defined contribution plan. (See Figures 2 and 3 above.)

The growth of these balances is impressive in its magnitude, particularly given the relatively modest contributions of recent years. Table 9, below, reports IRA contributions between 1979 and 1996. Deductible IRAs have been very popular with taxpayers. As Table 9 reports, contributions to IRAs increased significantly when eligibility restrictions were eliminated in 1982. At the peak in 1985, over \$38 billion was contributed to IRAs. This represented almost 20 percent of personal saving for that year.

In addition to annual contributions, the current value of IRA balances, as reported in Figure 5, is comprised of balances rolled over into IRAs from qualified plans and increases in the market valuation of IRA investments.

Table 9.-- IRA Participation, 1980-1996

Year	Returns claiming IRA deduction (millions)	Percentage of all returns (percent)	Deductions claimed (\$ billions)
1979	2.5	2.6	3.2
1980	2.6	2.7	3.4
1981	3.4	3.6	4.8
1982	12.0	12.6	28.3
1983	13.6	14.1	32.1
1984	15.2	15.3	35.4
1985	16.2	15.9	38.2
1986	15.5	15.1	37.8
1987	7.3	6.8	14.1
1988	6.4	5.8	11.9
1989	5.8	5.2	10.8
1990	5.2	4.6	9.9
1991	4.7	4.1	9.0
1992	4.5	3.9	8.7
1993	4.4	3.8	8.5
1994	4.3	3.7	8.4
1995	4.3	3.6	8.3
1996	4.4	3.6	8.6

Source: Statistics of Income.

As with pension coverage, IRA coverage is not universal. Tables 10 and 11 summarize information on IRA participation in 1985 and 1996. Some have expressed concern about the distribution of taxpayers who contribute to IRAs. The concern is two-fold. First, unequal participation may lead to some taxpayers having accumulated substantial wealth for retirement while other taxpayers have accumulated little wealth. Second, because IRA contributions receive preferential tax treatment, the distribution of the tax expenditure may be viewed as inequitable. In 1985, 71 percent of all returns reporting IRA contributions had AGI below \$50,000, and 29 percent had AGI of \$50,000 or above. However, taxpayers with AGI of \$50,000 or above represented only 8 percent of all returns eligible for IRAs. Thus, although many lower-income individuals contributed to IRAs, most did not, whereas most taxpayers with AGI of \$50,000 or above did contribute when eligible. Taxpayers with AGI of \$50,000 or above were more than four times as likely to contribute to an IRA than were taxpayers with AGI below \$50,000--61.8 percent of eligible returns with AGI of \$50,000 or above reported contributions to an IRA, while only 13.8 percent of eligible returns with AGI below \$50,000 reported IRA contributions. On the other hand, the data for 1985 or 1996 represent one-year snapshots of IRA contributions. If the earning power of young individuals increases over time, an individual who did not contribute to an IRA when earning \$20,000 per year may later contribute when earning \$40,000 per year.

Higher income taxpayers made larger contributions as well. Taxpayers with adjusted gross incomes of \$50,000 or more constituted approximately 29 percent of all IRA contributors in 1985, but accounted for more than 35 percent of IRA contributions. In 1996, taxpayers with adjusted gross incomes of \$50,000 or more constituted approximately 25 percent of all IRA contributors, but accounted for approximately 34 percent of IRA contributions.

Because the value of the IRA is the effective exemption of the earnings from tax, the higher a taxpayer's marginal tax rate, the more valuable the ability to invest through an IRA. Because people in higher income classes generally have higher tax rates, the value of their IRA is larger than the value of IRAs for taxpayers in lower income classes. However, the value of the IRA depends on tax rates throughout the period the IRA is held, and not just the marginal tax rate in the year the contribution is made.

Table 10.-- IRA Participation By Income Class, 1985

Adjusted gross income class	Returns reporting IRA contributions		
	Number in millions	Percent of eligible returns ¹	Contributions (\$ billions)
All classes	16.2	17.8	38.2
Under \$10,000	0.6	2.3	1.1
\$10,000 to \$ 30,000	5.1	13.6	9.7
\$30,000 to \$ 50,000	5.7	32.9	13.5
\$50,000 to \$ 75,000	3.0	56.5	8.7
\$75,000 to \$100,000	0.9	74.1	2.7
Over \$100,000	0.8	76.1	2.6

Source: Internal Revenue Service, *1985 Statistics of Income*.

¹ Eligible taxpayers include self-employed persons as well as wage and salary employees. However, taxpayers whose income consists solely of interest income, for example, are ineligible to contribute to IRAs.

Table 11.--IRA Participation By Income Class, 1996

Adjusted gross income class	Returns reporting IRA contributions		
	Number in millions	Percent of returns with earned income ¹	Contributions (\$ billions)
All classes	4.4	4.1	8.6
Under \$10,000	0.3	1.1	0.4
\$10,000 to \$ 30,000	1.6	4.3	2.8
\$30,000 to \$ 50,000	1.4	6.9	2.4
\$50,000 to \$ 75,000	0.5	3.5	1.1
\$75,000 to \$100,000	0.2	4.5	0.7
Over \$100,000	0.4	6.6	1.1

¹ Because of the income limitations enacted by the Tax Reform Act of 1986, not all taxpayers with earned income are eligible to make deductible contributions to IRAs.

Source: Internal Revenue Service, *1996 Statistics of Income*.

It is too soon to assess the effects that the Taxpayer Relief Act of 1997 may have on IRA participation and retirement asset accumulation. Table 12, below, presents the Joint Committee on Taxation staff estimates of the eligibility of taxpayers to make deductible IRA contributions under present law for 1999. The percentage of taxpayers eligible to make deductible IRA contributions differs modestly by filing status. Among married couples filing joint returns, 58 percent are eligible for up to a \$4,000 deductible contribution, an additional 15 percent are eligible for up to a \$2,000 deductible contribution, and approximately 20 percent are ineligible to make a deductible contribution. Among single filers and head of household filers, only 14 percent are ineligible to make a deductible contribution.

**Table 12a.—Eligibility of Taxpayers with Earned Income to Make Deductible
IRA Contributions Under Present Law, Projected 1999 Returns
(Returns With Earned Income For Joint Returns)**

AGI	Returns	Percent eligible for full deduction for both spouses	Percent eligible for full deduction for one spouse only	Percent in phaseout range	Percent not eligible for any IRA deduction
Less than \$10,000	2,987	100.0	0.0	0.0	0.0
\$10,000 to \$20,000	4,442	100.0	0.0	0.0	0.0
\$20,000 to \$30,000	4,728	100.0	0.0	0.0	0.0
\$30,000 to \$40,000	4,627	100.0	0.0	0.0	0.0
\$40,000 to \$50,000	4,985	97.3	0.0	2.7	0.0
\$50,000 to \$75,000	10,275	24.3	26.1	32.1	17.4
\$75,000 to \$100,000	6,163	13.7	40.7	0.0	45.7
\$100,000 to \$200,000	5,307	19.6	27.0	2.7	50.7
Over \$200,000	1,821	15.7	0.0	0.0	84.3
Total	45,336	58.0	14.6	7.9	19.5
Average dollars eligible per return		\$3,803	\$1,997	\$2,685	

Source: Joint Committee on Taxation staff estimates.

**Table 12b.—Eligibility of Taxpayers with Earned Income to Make Deductible
IRA Contributions Under Present Law, Projected 1999 Returns
(Returns With Earned Income For Other Filers)**

AGI	Returns	Percent eligible for full deduction	Percent in phaseout range	Percent not eligible for any IRA deduction
Less than \$10,000	22,146	100.0	0.0	0.0
\$10,000 to \$20,000	15,766	100.0	0.0	0.0
\$20,000 to \$30,000	11,821	99.9	0.1	0.0
\$30,000 to \$40,000	7,517	39.9	60.1	0.0
\$40,000 to \$50,000	5,309	23.9	8.6	67.4
\$50,000 to \$75,000	5,301	17.6	0.0	82.4
\$75,000 to \$100,000	1,253	12.2	0.0	87.8
\$100,000 to \$200,000	863	16.2	0.0	83.8
Over \$200,000	222	13.0	0.0	87.0
Total	70,188	78.7	7.1	14.2
Average dollars eligible per return		\$1,915	\$1,050	

Source: Joint Committee on Taxation staff estimates.

Other authors have noted that even the taxpayers with low income who did contribute to IRAs owned more financial assets than other low-income taxpayers and that, therefore, IRA contributors may not be representative of taxpayers in general. Table 13 presents information on the assets of households with IRAs compared to the assets of households without IRAs. For each income category, the table reports the gross financial asset holdings and non-retirement asset holdings of the median (50th percentile) household.⁴⁵ As the table details, families with IRAs have larger holdings of financial assets than do families without IRAs. However, it is also the case that families with IRAs have larger holdings of financial assets than do families without IRAs even when all IRA and pension assets are excluded. Part of the reason that IRA contributors have larger holdings of assets than noncontributors is that contributors to IRAs tend to be older than noncontributors, and older taxpayers have been accumulating assets longer.

⁴⁵ “Gross financial assets” reports only the “asset side” of the family’s balance sheet. That is, these figures do not net out the value of any of the family’s financial liabilities such as mortgage or consumer debt. “Gross financial assets less retirement assets” subtracts IRA and defined contribution plan asset balances from reported gross financial assets. Neither figure includes a calculation of the value of any accrued defined benefit pension plan benefits.

**Table 13.—Estimated Median Financial Assets of Families
with IRAs and Families Without IRAs, 1995**

Income	Families with IRAs		Families without IRAs	
	Gross financial assets ¹	Gross financial assets less retirement assets ²	Gross financial assets ¹	Gross financial assets less retirement assets ²
Less than \$10,000	\$ 56,150	33,080	\$ 300	\$ 300
\$10,000 to \$20,000	49,495	18,000	1,505	1,200
\$20,000 to \$30,000	45,850	23,850	4,505	2,500
\$30,000 to \$40,000	51,875	26,800	9,000	4,450
\$40,000 to \$50,000	81,000	38,000	11,400	6,050
\$50,000 to \$75,000	118,000	68,300	33,650	17,800
\$75,000 to \$100,000	181,000	99,600	53,750	33,750
\$100,000 and over	1,570,000	1,200,000	1,385,500	1,350,000

Source: Congressional Budget Office tabulations of the Federal Reserve Board of Governors 1995 Survey of Consumer Finances.

¹ "Gross financial assets" reports only the "asset side" of family's balance sheet. These figures do not net off the value of any of the family's financial liabilities such as mortgage or consumer debt.

² Gross financial assets less IRA balances and value of defined contribution pension plan assets. Does not include information regarding the accrued value of any defined benefit pension plan benefits.

Estimates of saving rate adequacy.--The Congressional Budget Office ("CBO") reported that while the saving rate of current workers appears low relative to the past, this may not imply that the level of savings is inadequate for retirement. That CBO study concludes that the so-called "baby boom" generation appears to be accumulating assets at a rate equivalent to that of their parents who are currently retired. The CBO concludes that the continued increase in real wages, the fact that baby boomers are more highly educated than their parents, and the increased participation of women in the labor force portend "increases in household incomes of baby boomers in retirement."⁴⁶ Some have criticized the conclusion of this study as too optimistic. Critiques note that finding that baby boomers have accumulated approximately the same amount of assets as had their parents at a similar age does not bode well for retirement income. Having the same amount of assets would imply only the potential for the same amount of income as experienced by current retirees, and as incomes grow this would imply future retirees would be less well off compared to the rest of society than are current retirees. Critics also note that current retirees benefitted from increases in Social Security benefits and unexpected capital gains on housing that the baby boomers may not reasonably expect to experience.⁴⁷ All studies of this question have emphasized the important difference within the so-called baby boom generation. Most studies note that those with the least education appear to be least well prepared for retirement in terms of accumulating private assets. Some studies suggest that the first cohort of the baby boom generation is likely to be better prepared for retirement than the last cohort of the baby boom generation.⁴⁸

3. Increased retirement costs

Finally, it is possible that the need for retirement income is increasing over time. Increases in life expectancies and trends toward earlier retirement increase the number of years in retirement and

⁴⁶ Congressional Budget Office, "Baby Boomers in Retirement: An Early Perspective," September 1993, p. xiv. Also see, Joyce Manchester, "Baby Boomers in Retirement: An Early Perspective," in Dallas Salisbury and Nora Super Jones (eds.), *Retirement in the 21st Century: Ready or Not?* (Washington: Employee Benefits Research Institute), 1994.

⁴⁷ B. Douglas Bernheim, "Adequacy of Savings for Retirement and the Role of Economic Literacy," in Dallas Salisbury and Nora Super Jones (eds.), *Retirement in the 21st Century: Ready or Not?* (Washington: Employee Benefits Research Institute), 1994. Also see Laurence Kotlikoff and Alan J. Auerbach, "U.S. Fiscal and Savings Crises and Their Impact for Baby Boomers" in the same volume. Bernheim and Kotlikoff and Auerbach project potential consumption paths of baby boomers based on their current accumulation of assets and consumption behavior. Both studies conclude that baby boomer saving is, on average, inadequate for that generation to maintain its standard of living in retirement. Bernheim estimates that, holding constant their participation in qualified plans, baby boomer non-retirement plan saving is at one-third the rate necessary to maintain pre-retirement consumption.

⁴⁸ For a brief review of this literature see Daniel B. Radner, "The Retirement Prospects of the Baby Boom Generation," *Social Security Bulletin*, 61, 1998, pp. 3-19.

therefore increase the need for saving. Furthermore, the normal retirement age for social security was changed in 1983. For those born in 1937 or earlier, the normal retirement age is 65 years old. Thus, in 1999, the normal retirement for Social Security (the age at which retirees receive full benefits) is 65. For those individuals born in 1960 or later, the normal retirement age is 67 years old. That is, by 2027, the normal retirement age will be 67 years. If the increase in the normal retirement age means that individuals will be working more years, then current saving need not adjust. However, if the historical trend toward earlier retirement continues, then the increase in normal retirement age for receipt of full social security benefits means that individuals should increase their retirement saving.

Similarly, increased life expectancies and rapid medical cost inflation increase the probability of large medical expenses. Out-of-pocket medical expenditures for the elderly have been steadily increasing over the last 15 years. Also, many people have noted that the probability of an individual requiring long-term care some time in their lifetime has been increasing.