

## CHAPTER 3

# **Making Fiscal Policy Choices Within and Across Generations**

THE ROLE OF GOVERNMENT in a modern market economy was discussed in Chapter 1. That discussion largely centered on what government should do. This chapter shifts the focus to how government should be financed. Although these decisions are inter-related, separating them permits more detailed analysis of each. In particular, this chapter examines the tradeoffs between equity and efficiency that are pervasive in government finance.

The primary means of obtaining resources to fund government activities is the tax system. Even if public goods and services are financed initially by debt, the costs of debt service in later years and the ultimate repayment of the debt are covered through taxes. Decisions regarding the design of tax systems incorporate compromises between the sometimes competing concerns of economic efficiency and equity, as well as reflect competition among entities seeking favorable treatment. The current U.S. tax system reflects these considerations in various ways both large (the proportion of revenue raised by various components of the tax system) and small (provisions affecting single industries).

Recently numerous policymakers and others have called for an overhaul of the tax system because the current system is complex and sometimes has inappropriate economic incentives. In thinking about major or minor reforms to the tax system, it is important to judge them on several criteria: equity, economic efficiency, revenue adequacy, and simplicity. One should also remember that the details of tax proposals can affect greatly the extent to which a reform would satisfy these criteria.

As if the fiscal policy environment facing today's policymakers were not challenging enough, demographic trends are likely to make future fiscal policy choices even more difficult. Today the United States has 3.3 workers for every retiree. Under reasonable projections, by 2030 that number is expected to fall to 2.0. This will have major implications for government transfer programs such as Social Security and Medicare. Private sector institutions may also come under stress from these large and largely predictable demographic changes. How the U.S. economy adjusts to these changes may be the single greatest economic challenge facing today's chil-

dren as they grow older. The second part of this chapter examines the policy implications of these demographic changes.

## THE STRUCTURE OF THE TAX SYSTEM

The Federal Government raises revenues from payroll taxes, individual and corporate income taxes, estate and gift taxes, and excise taxes on a wide range of commodities. Revenues from each component of the tax system are the product of established tax rates (e.g., cents per gallon, percentages of taxable income) applied to defined tax bases (e.g., gallons of gasoline, dollars of taxable income). In some cases, tax bases are easy to define, while in others (such as taxable income) the definitions can be quite lengthy and complex. Statutory rules and administrative interpretations affect the amounts raised, as do the levels of compliance.

For over 200 years, Americans have debated the appropriate base for taxation of individuals. Some have claimed that income is the most appropriate base, because it provides a measure of an individual's (or household's) ability to pay tax. Others have claimed that consumption is a more appropriate tax base, because it measures how much of the resources available to society are claimed (or consumed) by an individual or household. Economics generally cannot settle this debate over what is, at heart, a philosophical concern. However, economists can contribute to the debate by analyzing the consequences of choosing alternative tax bases. For instance, generally the broader the tax base, the lower the rate required to raise a given amount of revenue. Since income in any period equals consumption plus saving, a broad-based consumption tax is assessed on a smaller base than a comprehensive income tax. In effect, a consumption tax exempts saving from taxation, whereas an income tax does not. This means that to raise the same revenue, lower tax *rates* can be applied to an income base than to a consumption base. But this simple arithmetic ignores possible supply responses to different tax systems (e.g., changes in saving behavior or labor supply). Economic analysis can provide insight into the likely magnitudes of these responses, contributing further to the policy debate.

The Federal tax system (like most State and local systems) has evolved into a hybrid, incorporating elements of both a consumption tax and an income tax. Elements of consumption taxation are the various excise taxes and the favorable tax treatment provided to capital income under both the individual income tax (e.g., individual retirement arrangements, pensions, favorable treatment of capital gains income, favorable treatment of investment in owner-occupied housing) and some provisions of the corporate income tax (e.g., immediate expensing of certain investments and accelerated

depreciation). These provisions either partly or completely exempt the normal returns to capital investments from tax, either directly through a low or zero tax rate on this income (as with capital gains income; Box 3-1), or by allowing a deduction of all or part of an investment from taxable income. Table 3-1 lists a number of consumption tax components of today's income tax (individual and corporate), along with the amount of tax expenditure associated with each. (A tax expenditure is the revenue loss due to preferential provisions of tax law, such as special exclusions, exemptions, deductions, credits, deferrals, or preferential tax rates. These revenue losses are measured against a comprehensive income tax base.) Taken together, these components mean that the existing tax system is part income tax, part consumption tax.

Contrary to what some have claimed, taxes collected at all levels of government—Federal, State, and local—have been a fairly constant proportion (between 26 and 30 percent) of gross domestic product (GDP) for the last 30 years, despite numerous major changes in the Federal and State tax structures. By this same measure, the United States ranks among the lowest taxed of the countries of the Organization for Economic Cooperation and Development (OECD) (Table 3-2).

Federal revenues as a fraction of GDP have not changed dramatically over the past few decades (mostly fluctuating between 17 and 20 percent). However, the same cannot be said for the composition of revenues. Three major changes in revenue composition are illustrated in Table 3-3: an increased reliance on payroll taxes (Social Security, Medicare, and unemployment insurance), a reduced reliance on the corporate income tax, and a reduced reliance on excise taxes. Increased payroll taxes reflect changes in the Social Security system as well as the creation of Medicare. The reduction in corporate tax revenues reflects both lower corporate income tax rates and, more important, a reduction in recent years in domestic corporate profits as a share of the economy, as business organizational structures and financing arrangements have evolved. Through this period, the significance of the individual income tax has ebbed and flowed without any discernible pattern. Over time, tax base and rate changes have combined to more or less maintain the relative importance of the individual income tax as a Federal revenue source.

The level of taxation is important, but so is the distribution of the tax burden among individuals of different incomes. The recent debate over the tax system reveals considerable confusion about the share of taxes borne by taxpayers at various income levels. The Office of Tax Analysis of the Treasury Department estimates that, in 1995, effective tax rates for households generally increased with family economic income, which is a broad measure of income (Box

### **Box 3-1.—Taxation of Capital Gains Income**

A capital gain (or loss) is the difference between what a taxpayer sells an asset for and the purchase price. Under current law, capital gains income is favored compared with other forms of income, and especially other forms of capital income:

- Capital gains income for individuals is never taxed at more than 28 percent, whereas other income is taxed at rates up to 39.6 percent. This preferential rate provides those facing the highest marginal tax rate with a benefit equivalent to excluding 30 percent of the gain.
- Capital gains income is not taxed until the asset generating the gain is sold with the timing of the sale at the option of the owner. Other forms of income (e.g., labor and interest income) are taxed as earned. This feature provides two distinct advantages to capital gains income. First, for assets held many years, deferral of tax liability significantly reduces the tax burden on capital gains assets compared with assets that generate income taxed annually. Second, taxpayers can strategically time sales of assets with accumulated gains and choose to realize gains in a year when they face a temporarily low tax rate.
- Under the “step-up in basis at death” provision, the income tax liability on assets with accumulated gains is forgiven when the asset holder dies. Heirs claim a new tax basis for these assets: the fair market value at the time of the previous owner’s death. Each year more than \$25 billion in capital gains income escapes taxation permanently through this provision.
- Taxpayers may defer gains from the sale of one primary residence by purchasing another of greater value. Moreover, those age 55 and over may exclude up to \$125,000 of gain on personal residences from taxation.
- The 1993 budget act contained a provision excluding half of the gains on equity investments in certain “small” businesses held at least 5 years.

The tax advantages enjoyed by capital gains income tend to benefit disproportionately those taxpayers with the highest incomes, who tend to have the largest asset holdings. The 1 percent of the population with the highest adjusted gross incomes report over half the total capital gains realized and Treasury Department estimates that for a recent year, about 12,000 taxpayers realized gains over \$1 million.

TABLE 3-1.—*Selected Consumption Tax Elements of the Income Tax*

[Billions of dollars]

Consumption tax elements	Estimated tax expenditure at FY 1996 level
Expensing of:	
Small investments .....	1.1
Research and development costs .....	2.6
Timber-growing costs .....	0.4
Multiperiod agricultural production costs .....	0.1
Accelerated depreciation of:	
Nonresidential real property .....	4.4
Machinery and equipment .....	20.9
Exclusion of:	
Pension contributions and earnings (employer plans) .....	59.0
Interest on life insurance savings .....	11.2
Deduction of IRA contributions and deferral of earnings .....	6.4

Source: Office of Management and budget.

TABLE 3-2.—*Tax Share of GDP in Selected OECD Countries, 1994*

Country	Percent of GDP
Group of Seven	
United States .....	31.5
Japan .....	32.3
Germany .....	46.5
France .....	48.9
Italy .....	44.9
United Kingdom .....	36.4
Canada .....	42.2
Australia .....	32.9
Austria .....	47.5
Belgium .....	51.1
Denmark .....	60.0
Finland .....	53.1
Greece .....	35.4
Ireland .....	41.6
Netherlands .....	51.4
Norway .....	55.3
Portugal .....	45.7
Spain .....	39.0
Sweden .....	58.4

Source: Organization for Economic Cooperation and Development.

3-2). These data (shown in Table 3-4) indicate that the Federal tax system maintains some degree of progressivity. (A progressive tax system is one where the proportion of income paid in taxes rises with a person's income.) This overall progressivity reflects the fact that the more progressive elements in the tax system outweigh the effects of the less progressive elements. When State and local taxes are factored into the analysis, this overall progressivity is reduced but not eliminated.

The Federal tax system has become somewhat less progressive over the past few decades, as payroll taxes came to account for a greater proportion of overall revenues. But the tax changes made

TABLE 3-3.—*Composition of Federal Receipts*

[Percent of total receipts]

Fiscal year	Individual income taxes	Corporation income taxes	Social insurance taxes and contributions	Excise taxes	Other <sup>1</sup>
1950 .....	39.9	26.5	11.0	19.1	3.4
1955 .....	43.9	27.3	12.0	14.0	2.8
1960 .....	44.0	23.2	15.9	12.6	4.2
1965 .....	41.8	21.8	19.0	12.5	4.9
1970 .....	46.9	17.0	23.0	8.1	4.9
1975 .....	43.9	14.6	30.3	5.9	5.4
1980 .....	47.2	12.5	30.5	4.7	5.1
1985 .....	45.6	8.4	36.1	4.9	5.0
1990 .....	45.3	9.1	36.9	3.4	5.4
1995 <sup>2</sup> .....	43.7	11.2	36.0	4.3	4.8

<sup>1</sup> Includes estate and gift taxes, customs duties and fees, and Federal Reserve earnings transferred to the Treasury.

<sup>2</sup> Estimate.

Note.—Detail may not add to 100 percent because of rounding.

Source: Office of Management and Budget.

### Box 3-2.—Family Economic Income

The Treasury Department uses a broad measure of economic well-being, called family economic income, when performing distributional analyses on tax proposals. Family economic income combines the incomes and taxes of related family members who form a single economic unit. This fairly comprehensive measure of income starts with adjusted gross income as reported to the Internal Revenue Service and then adds an estimate of unreported income; deductions claimed for individual retirement account (IRA) and Keogh contributions; employer-provided fringe benefits such as health coverage; earnings on pensions, IRAs, Keoghs, and life insurance policies; tax-exempt interest; nontaxable cash transfer payments; and imputed rent on owner-occupied housing. Capital gains are computed on an accrual basis, with the inflation component removed (if possible). Inflation adjustments are also made to the incomes of borrowers and lenders.

in the 1990 and 1993 budget acts tended to increase progressivity, both in the income tax and overall.

Chart 3-1 shows Gini coefficients for the before-tax distribution of income in the United States and for the distribution after tax and transfer programs are included. (The Gini coefficient is a measure of income inequality, indicating the extent to which the actual income distribution differs from equal incomes for all. A coefficient of 0.0 indicates exactly equal incomes and a coefficient of 1.0 maximum income inequality.) The smaller Gini coefficient for after-tax incomes indicates that the Federal tax and transfer system acts to reduce income inequality. In general, the after-tax data tell a story

TABLE 3-4.—*Projected Effective Federal Tax Rates, 1996*

Family economic income class <sup>1</sup>	Effective tax rate <sup>2</sup>
0–\$10,000 .....	8.0
\$10,000–\$20,000 .....	8.8
\$20,000–\$30,000 .....	13.3
\$30,000–\$50,000 .....	17.5
\$50,000–\$75,000 .....	19.9
\$75,000–\$100,000 .....	21.1
\$100,000–\$200,000 .....	22.0
\$200,000 and over .....	23.7
Total .....	20.1

<sup>1</sup> Family economic income (FEI) is defined as the sum of adjusted gross income, unreported income, IRA and Keogh deductions, nontaxable transfer payments, employer-provided fringe benefits, tax-exempt interest, inside build-up on tax-favored investments, imputed rental value of owner-occupied housing, and inflation-adjusted capital gains and losses accrued during the year. FEI aggregates the incomes for all family members.

<sup>2</sup> Effective tax rate equals total taxes divided by family economic income.

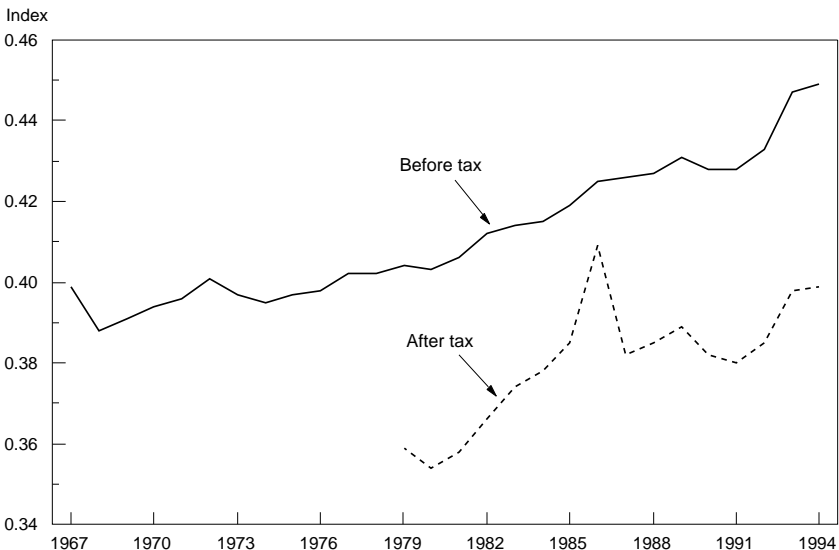
Note.—Estate and gift taxes and custom duties are excluded. It is assumed that: individual incomes taxes are borne by the people who pay them; corporate income taxes are borne by all owners of capital; excise taxes on purchases by individuals are borne by the purchaser and those on business purchases are borne by individuals in proportion to total consumption; and payroll taxes are assumed borne by employees.

Source: Department of the Treasury.

similar to the before-tax measures, with substantial increases in income inequality occurring in the 1980s.

Chart 3-1 **Gini Indexes for Before- and After-Tax Income of Households**

After-tax income inequality, as measured by the Gini index, is less than before-tax inequality. Both before- and after-tax incomes became more unequal in the 1980s.



Note: Different methods are used in calculating the two Gini indexes shown. For details see Current Population Reports, Series P60-188. After-tax income is definition 14.

Source: Department of Commerce.

When considering the distributional consequences of government actions, it would be desirable to incorporate all aspects of the tax-and-transfer system. However, distributional analysis for some important government transfer programs (such as Medicare, Medicaid, Food Stamps, and others) and discretionary spending is not as completely developed as the analysis for the tax system. Steps to integrate both tax and transfer programs into the same distribution tables can, in principle, lead to more informed decisionmaking. In contrast, omitting tax components such as the earned income tax credit from a distributional analysis of a tax proposal may be misleading.

## CHARACTERISTICS OF A WELL-DESIGNED TAX SYSTEM

Three main traits define a well-designed tax system: fairness, economic efficiency, and simplicity. As with almost everything else in government finance, design of a tax system requires tradeoffs among these desirable properties. Policymakers need to be aware how the various components of the existing tax system contribute toward meeting these objectives and how any potential reform of the tax system measures up.

### FAIRNESS

Fairness is generally characterized as horizontal and vertical equity. Horizontal equity means similar tax treatment (i.e., tax payments of equal size) for similarly situated taxpayers. Economists generally view taxpayers as similarly situated when they have similar abilities and similar levels of human capital and financial wealth. However, economists may not agree about the type of adjustments necessary to reflect other personal circumstances (e.g., health status). Components of a tax system that do not meet the basic standards of horizontal equity will appear unfair.

Vertical equity is often associated with a progressive tax system. For the overall tax system to be progressive requires that at least some major revenue-raising components be progressive. The individual and corporate income taxes are generally judged to be the most progressive elements in the portfolio of taxes that make up the U.S. tax system. These elements more than offset the effects of the other, less progressive elements.

Horizontal and vertical equity can be thought of as objective, measurable indicators of fairness. But the *perceived* fairness (a less measurable indicator) of a tax system is also key to its acceptance by the public, which in turn is a very important determinant of the level of compliance.

## EFFICIENCY

To be economically efficient, a tax system should not impede economic growth and should avoid excessive interference with private economic decisionmaking. In general, a tax characterized by a broad base and a low tax rate will cause less distortion of economic decisionmaking than one with a narrower base and higher rates that raises a similar amount of revenue. Minimal distortion means that competitive prices can better serve as reliable market signals, promoting an efficient allocation of resources and, hence, overall economic efficiency. These efficiency effects can be quite large and, if economic decisions affected by the tax are sensitive (elastic) to the tax rate, these distortions can be quite costly to the economy. A key issue in this regard is *how* sensitive various economic decisions are to contemplated changes in tax rates. For instance, many economists believe that the interest elasticity of saving is relatively low, so that reducing taxes on returns to a broad range of saving may not elicit much additional private saving. In fact, unless revenues are made up elsewhere, aggregate national saving may actually be reduced, as the increased Federal deficit (lower public sector saving) resulting from lower tax revenues more than offsets any increased private saving.

*Correcting Market Failure.* A tax system can also be used to address market failure: the under- or overprovision of goods by the private sector. For instance, a tax subsidy for research activities may offset the tendency for private organizations to undertake too little research because they cannot appropriate for themselves all the benefits of that activity. In the case of negative externalities, or spillover effects (e.g., pollution), a tax on the activities generating the externality may discourage them. It may be possible to design a revenue-neutral “tax swap” where, for example, revenues generated by a pollution tax can be used to reduce the rate of a distortionary tax elsewhere in the tax system. Judicious choice of the elements of such a tax swap can, in principle, enhance economic efficiency.

*Direct Spending Versus Tax Expenditures.* The government often has a choice of methods to promote activities considered desirable (e.g., because they yield positive externalities): it can do so either through the tax system (tax expenditures) or through direct spending programs. Two key issues in assessing the relative merits of these alternative approaches are *targeting* and *administrative costs*. The essential goal in targeting is “bang for the buck”: how much extra stimulation of the desired activity can be accomplished per dollar of forgone tax revenue or dollar of direct expenditure. Some beneficiaries of either tax expenditures or direct expenditures would have undertaken the desired activity anyway, but claim the benefit nonetheless. This concern may be addressed in a direct

spending program by screening mechanisms to identify subsidized activities that would not have been undertaken without the subsidy. Of course, such mechanism requires administrative resources (e.g., the cost of obtaining the required information). However, direct spending programs are not always better at targeting. In some situations, the tax system may be more effective than spending programs at targeting subsidies, especially where income is a criterion for targeting.

Sometimes the administrative costs of providing incentives through the tax code can be lower than those for direct spending provisions. Because tax incentives piggyback on the existing structure of the tax system, the added administrative costs of providing an additional subsidy may be minimal. In contrast, spending programs may require a bureaucratic structure to deliver the subsidy, increasing administrative costs. For some cases, then, the savings in administrative costs associated with a tax subsidy can outweigh its somewhat inferior targeting, compared with a well-designed direct spending program. In other cases, however, the overall cost to the Internal Revenue Service of administering tax expenditure programs can be quite substantial. Moreover, the costs of tax administration for particular incentives may be hidden in the overall budget for the Internal Revenue Service. The administrative costs of direct spending programs, however, are explicitly accounted for.

The annual review process to which appropriated expenditures are subjected may be another advantage of direct spending programs over tax expenditures. This regular review is especially important in today's austere fiscal environment to ensure that obsolete programs do not remain on the books. Tax code provisions do not generally undergo annual scrutiny (although a handful routinely expire and must be renewed by the Congress). A determination that tax subsidies are desirable policy should be subject to the same criterion that spending programs are: do the society-wide benefits delivered exceed the social costs of the forgone revenues?

*Corporate Subsidies and Loopholes.* Subsidies can take the form of tax preferences or direct Federal payments, or more subtle forms such as import quotas that limit competition with domestically produced goods, below-market-rate sales or credits, or implicit government guarantees. Recently many observers have called for a reexamination of these subsidies, with an eye toward trimming those that lack adequate justification.

One strength of a market economy is that the incentives provided by prices and profits—not government subsidy—generally lead to the efficient supply of essential goods and services. The argument for government intervention must be predicated on the undersupply, absent government help, of valuable goods and services. Such is the case for many expenditures on research and tech-

nology development where large spillovers benefit other individuals and firms. Government support for research activity can offset a tendency for the private sector to underinvest in research. But other subsidies do not generate such spillover benefits and are much more difficult to justify on efficiency grounds.

Some might argue that government subsidies are necessary to prevent profits in an industry from falling below the normal rate of return, threatening the industry's existence. However, with or without subsidies, industries whose products are valued by consumers will survive. The only issue is their ultimate scale of operation and absent a significant market failure, such as associated with an externality, market prices provide appropriate signals for expansion or contraction. Market entry and competitive markets tend to ensure that private, risk-adjusted rates of return, taking into account all available government subsidies, are equated across activities through adjustments in prices and aggregate supply. Removing unwarranted subsidies would begin a process of exit from the industry, driving up the returns for those that remain until they reach competitive levels. In the end, ironically, because the value of government subsidies is likely to get capitalized in the value of scarce resources associated with an industry, the benefit of current subsidy payments may accrue not to the current subsidy recipient but to a previous owner of the scarce resource.

The bottom line is that unwarranted business subsidies lower economic efficiency. In contrast, subsidies that compensate for market failures, such as large positive spillovers, increase economic efficiency (as described in detail in Chapter 1).

Many business subsidies are hidden and receive scant attention from policymakers, in part because they do not show up in annual appropriations bills or on lists of tax expenditures, and because they confer relatively subtle benefits. However, hidden subsidies can be brought to light and undone in many ways. User fees can be set to cover the full costs of service provision. Auctions can be used to transfer resources to the private sector (e.g., portions of the electromagnetic spectrum). Other hidden subsidies could include below-market interest rates on government provision of credit to businesses and the implicit Federal guarantee provided to government-sponsored enterprises. Addressing these subsidies could increase overall economic efficiency (for instance, well-designed auctions would ensure that resources are allocated to those who can best use them), eliminate a source of unfairness, and raise substantial Federal revenues.

*Other Efficiency Effects.* Two other effects of the tax system contribute to economic efficiency: the provision of macroeconomic automatic stabilizers and the provision of a form of society-wide income insurance. Automatic stabilizers are mainly associated with the in-

come tax components of the tax system (i.e., the individual and corporate income taxes). As the economy expands sharply, progressive tax rates ensure that individual income tax revenues grow even faster than the economy. Similarly, since corporate profits follow the business cycle, an economic expansion leads to increased corporate income tax revenues. These increased revenues exert a contractionary effect by lowering the Federal deficit (or increasing the surplus). The same effect happens in reverse when the economy slumps: tax revenues fall, widening the deficit (or reducing the surplus). The tax system thus helps stabilize the swings of the broader economy. Although any tax that raises additional revenue when incomes increase may function as an automatic stabilizer, progressive taxes are likely to be more effective automatic stabilizers than proportional or regressive taxes.

A progressive component of the tax system, such as the individual income tax, can also provide a form of income insurance in an economy where income fluctuations are unpredictable. This occurs because a progressive income tax can substantially reduce the variability of after-tax incomes without reducing average income very much. If incomes increase, in part because of an earner's good fortune, a progressive income tax system claims more than a proportional share of this increase. These additional revenues can be thought of as providing income insurance to those whose incomes are low, in part because of bad luck, by reducing their tax burden more than proportionally. The progressive rate structure of the income tax (including the earned income tax credit) accomplishes a significant amount of this income insurance.

This income insurance has the direct benefit of reducing the income risk borne by individuals themselves, shifting it to society as a whole, but it also provides an indirect benefit. Because households will be willing to bear more risk if they have access to income insurance, they will undertake investments (in both financial and human capital, including increased labor mobility) with greater risk and greater expected return. Aggregated over all individuals, the effect of undertaking such investments is a higher expected national income. Private markets will not offer such income insurance because the inherent difficulty of separating effort and luck from an individual's ability subjects private purveyors to adverse selection: those who expect poor outcomes would be more likely to purchase the insurance. The income tax system, in contrast, applies to virtually all economically active people, mitigating concerns with adverse selection.

## SIMPLICITY

The third element of a desirable tax system is simplicity, as measured both by the cost of compliance to taxpayers and by the

administrative cost to the government. Recent studies have suggested high costs of compliance (e.g., one study reports total compliance and administrative costs of around \$75 billion, or around 6 percent of revenues). These estimates may be overstated, however, because it is difficult for taxpayers (especially businesses, for which the costs may be especially high) to separate out tax compliance costs from accounting and business planning costs they would incur anyway. However, even if true compliance costs (those above costs incurred for ordinary business reasons) are only half those reported, the concern is well-founded, because resources used to comply with the tax system do not increase output but are simply the costs associated with transferring resources from one party to another. A well-designed tax system attempts to minimize the sum of administrative and compliance costs, subject, of course, to the system attaining the other objectives.

## ASSESSING THE CURRENT TAX SYSTEM

With respect to horizontal equity, the current U.S. tax system has some shortcomings. Different types of income are taxed differently, the composition of a household or family can affect its tax liability but not its ability to pay tax, and some forms of consumption are favored over others. Many of these departures from horizontal equity result from decisions by the Congress and partly reflect the difficulty in determining whether individuals are truly in “similar” positions in terms of ability to pay taxes.

Evaluating the current system in terms of vertical equity is more difficult, because economic reasoning provides no objective guide to what the degree of progressivity should be. We do know that the current tax system is progressive and that the tax-and-transfer system accomplishes a significant amount of redistribution. But observers disagree about whether the overall system exhibits an appropriate degree of progressivity.

Survey data provide one way to analyze the perceived fairness of the tax system. Public opinion polls often find that a substantial portion of Americans view their tax system as unfair. This may reflect the concern that others are able to exploit loopholes and avoidance mechanisms to reduce their tax payments. Whatever their origin, these feelings that the tax system is unfair have attracted the attention of policymakers and tax administrators. One concern is that, absent corrective action, these perceived inequities could lead to erosion of the present level of compliance.

Concerns with efficiency often focus on the possible adverse incentive effects of high marginal tax rates. Some advocates of the reforms that lowered the highest individual marginal tax rates in 1981 and 1986 argued that they would unleash supply-side re-

sponses that would lift the economy to new heights and, as a result, would raise rather than lower overall tax revenues. The evidence does not support these claims. Far from raising total tax revenues, the tax reductions of 1981 were followed by reduced individual and corporate income tax revenues as a share of GDP. Even though payroll taxes were increased, this led to the first huge peacetime budget deficits in the United States. These deficits crowded out private investment and led to the fiscal morass from which we are now just emerging. Moreover, the statistical evidence shows no significant break in the pace of productivity increases or labor force participation rates with either the 1981 or the 1986 tax changes. Whatever can be said for these tax changes, it cannot be claimed that they had marked effects on economic growth.

The minor effects of these tax rate reductions on labor supply are consistent with other evidence. Conventional estimates suggest that primary earners in a household generally change their behavior very little in response to relatively small changes in tax rates. The response of secondary earners is generally found to be larger. However, since secondary earners work fewer hours than primary earners, the overall labor supply response to a change in marginal tax rates is often quite limited. Similarly, conventional estimates of the response of saving behavior to changes in after-tax rates of return suggest that changes in individual income tax rates should not have a major effect on our low national saving rate.

Since 1986, marginal rates for individuals with the very highest incomes have been raised modestly in order to reduce the Federal deficit. Some have claimed that these rate increases (e.g., in 1993) would do severe harm to the economy by creating a disincentive for individuals to work and save. Again, these forecasts turned out to be false, just as did the earlier, supply-side forecasts of rapid economic growth from tax reductions.

Some critics claim that increases in marginal tax rates fail to raise the predicted revenues. One recent study estimated that the rate increases on high-income individuals in the 1993 budget act raised less than half the revenues predicted by the Treasury. But as Box 3-3 argues, subsequent analysis indicates that the 1993 provisions did raise the revenues predicted.

The current income tax system is often characterized as complex. A large part of the complexity results from eight decades of statutory and administrative modifications to address economic situations unforeseen when the income tax was originally enacted. Another part stems from tax initiatives intended to address important policy concerns. Policymakers should periodically review existing law to determine which provisions have outlived their usefulness and which can be streamlined or otherwise simplified. This Administration, as part of its National Performance Review and other ef-

forts, has proposed several simplifications. One example is the pension simplification initiative announced in June 1995 and incorporated in the Administration's 1997 budget proposal. Other examples include simplified forms, greater use of electronic filing, and increased access to filing individual tax returns by telephone.

The Administration recognizes that the current tax system has some real and perceived problems. Some progress toward addressing them was made in the 1993 budget act. Further steps proposed in the budget for fiscal 1996 are described in Box 3-4.

## EVALUATING REFORM PROPOSALS: THE FLAT TAX

Several proposals for a so-called flat tax have been offered over the past few years. In its most basic form, a flat tax applies a single tax rate on all business activities and individuals. This discussion focuses on the flat tax in its prototypical form, which may differ in some details from any particular legislative proposal.

The prototype flat tax is effectively a consumption tax—that is, a tax on wage income plus a tax on consumption from existing wealth at the time the tax is imposed. As such, a flat tax shares many of the benefits and shortcomings of other consumption taxes.

On the business side, all new investment could be immediately expensed under a flat tax, effectively exempting the normal returns to investment from tax. All types of business organizations would be subject to the flat tax: sole proprietorships, partnerships, and corporations. No deduction would be allowed for interest or dividends paid. Purchases from other businesses could be deducted, as could wage payments. However, the cost of fringe benefits (except for employer-provided pensions) would not be deductible.

For individuals, a flat tax would provide a standard deduction and some level of personal exemption for dependents. These amounts are intended to be large enough to exempt many households from tax. But few, if any, other deductions would be allowed. Moreover, individuals who run a business likely would have to file both a business and an individual return, with wage compensation from the business appearing as income on the individual return.

The prototypical flat tax would be less progressive than the current income tax. Its single tax rate would be set far below the highest marginal rate in the present individual income tax. Therefore, for the same amount of total revenue, it would raise less revenue from upper income households than the taxes it would replace (generally the individual and corporate income taxes). It follows that lower and middle-income households would see their taxes raised. If the earned income tax credit were repealed as part of the

### **Box 3-3.—Revenue Effects of the 1993 Tax Rate Increases**

The Omnibus Budget Reconciliation Act of 1993 (OBRA93) raised income tax rates on higher income taxpayers. The marginal tax rate on couples with taxable income over \$140,000 (over \$115,000 for single taxpayers) was raised from 31 to 36 percent, and a 39.6 percent marginal rate was imposed on taxpayers with taxable incomes above \$250,000. A taxable income of \$140,000 roughly corresponds to an adjusted gross income of \$200,000, so these rate increases apply to the 1.2 percent of the population with the highest incomes.

The Treasury Department predicted that these rate changes would raise \$16 billion in the initial year. But some claim that revenues from these high-income taxpayers were as much as 50 percent smaller than predicted, as taxpayers reacted to the changes. The data generally do not support these claims and show that the revenues came in as predicted.

Analysts claiming substantial revenue shortfalls point to the difference between income growth among a “control group” not affected by the tax change and that of the affected group. This technique has several shortcomings. First, the Treasury Department estimates that taxpayers shifted at least \$20 billion in income from early 1993 to late 1992 in anticipation of higher tax rates for 1993. This estimate is corroborated by data from the Bureau of Economic Analysis, which show a \$20 billion spike in personal income in the fourth quarter of 1992. Such income shifting (which is to be expected when taxpayers can choose the timing of income receipts) is sufficient to explain the revenue shortfall claimed by critics of the OBRA93 tax increases. This is true even after accounting for another income shift: some wage and salary payments moved from 1994 to 1993 in response to a scheduled increase in the Medicare payroll tax.

Second, the incomes of taxpayers affected by the OBRA93 tax rate changes are notoriously hard to predict. Year-to-year income variations for those in the top 1 percent of the income distribution are large, because of the large share (over 50 percent in 1993) of nonwage income (interest, dividends, capital gains, and business income) in these taxpayers’ total income. Predictions of income for this group on the basis of changes in a lower income control group’s income are very imprecise.

Thus, although the marginal rate increases in OBRA93 may affect economic behavior over the longer term, the evidence to date suggests that they raised the revenues predicted.

### **Box 3-4.—Tax Proposals in the Middle Class Bill of Rights**

The Administration's Middle Class Bill of Rights contains a three-part tax package: a tax credit of \$500 per child, a tax deduction for postsecondary training and education, and an expansion of individual retirement accounts to all middle-class families. These proposals would encourage taxpayers to save and invest in themselves and their children.

The proposed child tax credit is meant to partly compensate for the failure of the personal exemption for dependent children to keep pace with inflation and income growth over the last 50 years. The \$500 credit would apply to taxpayers with children under age 13 and would be nonrefundable (that is, it would not exceed the amount of tax otherwise due). It would be phased out for families with adjusted gross incomes (AGIs) between \$60,000 and \$75,000.

Taxpayers, their spouses, and dependents would be eligible for the proposed deduction for postsecondary training and education. When fully phased in, the measure would allow taxpayers to deduct up to \$10,000 per year in qualifying educational expenses (generally those paid to institutions and programs eligible for Federal assistance). The deduction would be phased out for married couples with AGIs between \$100,000 and \$120,000.

The expanded IRA is intended to encourage households to save more. The proposal doubles the existing income limits on deductible IRAs for taxpayers with employer-provided pension coverage. IRA contributions up to \$2,000 would be completely deductible for joint filers with AGIs below \$80,000, with the amount deductible phased out for those with AGIs up to \$100,000. In addition, these income limits and the maximum deductible contribution (\$2,000) would be indexed for future inflation. The proposal would also permit taxpayers to make withdrawals from an IRA before age 59½ without payment of the 10 percent excise tax for the following purposes: to buy a first home, to pay for postsecondary education, to defray large medical expenses, or to cover expenses during spells of long-term unemployment. Finally, the Administration proposes a new form of IRA to which contributions would not be deductible but whose earnings would never be subject to income tax.

proposal, the tax burden of lower income working families would be raised substantially.

Often the tax rate contained in flat tax proposals is between 15 and 20 percent. Revenue estimates generally conclude that such

proposals would raise significantly less revenue than the taxes they would replace, increasing future Federal budget deficits. One example is the Treasury Department analysis of H.R. 2060 (the Armey-Shelby flat tax proposal). At its proposed 17 percent rate, this tax plan would raise about \$138 billion less per year (at 1996 income levels) than the taxes it would replace. Proponents of a flat tax respond that lower tax rates will so stimulate economic growth, and therefore raise tax revenues, that the projected shortfalls will vanish. However, these claims are generally not supported by the available evidence, including the historical record of the 1980s. A prudent reading of the economic literature suggests that the effects of a shift to a flat tax on economic growth are likely to be small.

Other shortcomings of a flat tax have received much less attention. For instance, since a flat tax effectively exempts capital income from taxation at the individual level, it would create strong incentives for entities to recharacterize payments to individuals as capital income. Similarly, since businesses would be taxed on gross receipts from the sale of goods and services but not on interest income, they would have an incentive to relabel payments they receive from other entities as interest. This distinction between the taxation of payments labeled "interest" and other payments creates an enormous potential loophole, and the concern is magnified when multinational firms enter the picture (because firms outside the United States would be subject to completely different tax regimes). This is a problem that could be solved, but only at the expense of introducing some complexity in distinguishing between payment types. Such a solution, though, undercuts one of the main arguments for the flat tax, namely simplicity. In addition, it indirectly points out that defining the tax base often is a major source of complexity, rather than the tax rate schedule.

The flat tax would change the relative desirability of many assets. Owner-occupied housing has received particular scrutiny in this regard. Housing would become much less tax-advantaged under a flat tax that eliminates the deduction for mortgage interest. The result could be a sizable drop in housing values. But owner-occupied housing is only one type of asset that could be affected in this manner. For example, existing plant and equipment or tax-exempt bonds could also suffer a marked decline in value. The impact on these assets indicates that tax reform proposals must be attentive to short-run effects; designing adequate transition rules is a crucial task.

A flat tax would apply to more types of organizations than the current tax. In addition to requiring separate business and individual tax returns for sole proprietorships and partnerships, a flat tax could require many currently tax-exempt entities to file.

Finally, since much middle-class saving is in the form of pensions and IRAs and is thus already effectively exempt from income tax, a flat tax would provide little additional benefit to saving for many middle-income families. Instead, it would skew much of the benefit of exempting capital income to the very wealthiest in society.

Although the flat tax discussed here is not the answer, reforms of the current tax system can certainly be found that can meet these three traditional tests. Our challenge is to design policies that recognize the inherent tradeoffs among them and that reflect deeply held American values. Moreover, decisions made today regarding tax reform are not made in a static economy. Any reforms made must not only be appropriate for today's economy but, more important, must also be flexible enough to address the long-term challenges affecting tomorrow's economy.

## LONG-TERM DEMOGRAPHIC CHALLENGES

Both Republicans and Democrats agree that the Federal budget should be balanced over the next 7 years. Balancing the budget will require many tough choices, but putting our fiscal house in order is an important first step toward meeting the many challenges that stem from the aging of the population that is projected to begin in the early part of the next century.

### DEMOGRAPHIC TRENDS

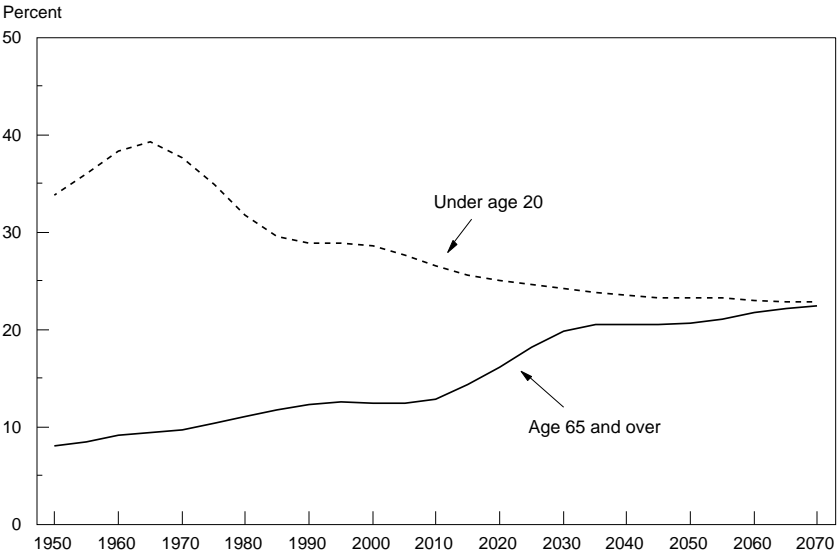
The median age in the United States in 1995 was 33 years. By 2015 it is projected to be 37, and by 2030 it will be 39. The elderly as a share of the population is projected to increase from roughly 13 percent today to over 20 percent by 2035 (Chart 3-2).

This aging of the U.S. population is the result of two demographic forces: a decline in fertility (lifetime births per woman of childbearing age) since the 1950s and 1960s (Box 3-5), and an increase in life expectancy. Whereas the average woman in 1950 had three children over her lifetime, the average woman today has only two. This decline in fertility means fewer children today and fewer workers tomorrow. With the increase in life expectancy, more people survive to age 65, and those who do live longer beyond 65. The result is an increase in the share of the over-65 population. Between 1950 and 1995, life expectancy at birth increased roughly 7 years for men and 8 years for women; life expectancy at age 65 increased 2.5 years for men and 4 years for women over this same period. In the future, life expectancy is projected to continue to increase, although at a somewhat slower rate.

The total dependency ratio—the ratio of dependents (children and elderly) to workers—can be used to summarize the effects on the economy of the decline in fertility and the increase in life ex-

**Chart 3-2 Past and Projected Population Shares by Age**

The U.S. population is aging. By 2030 more than 20 percent of the population will be age 65 and over, and only 25 percent will be under age 20.



Source: Social Security Administration.

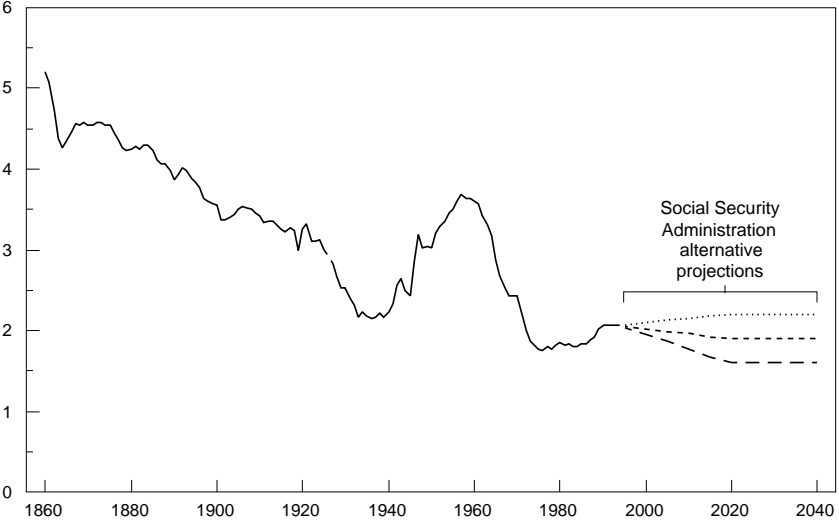
### **Box 3-5.—Changes in Fertility Over Time**

Chart 3-3 reports changes in the total fertility rate, defined as the number of children a woman would bear in her lifetime (assuming she survives her entire childbearing period) if she were to experience the average birth rate by age observed in the selected year. It seems clear that the baby bust associated with the Great Depression and World War II, and the postwar baby boom that followed it, were temporary blips in a long-run trend of declining fertility. Without the postwar baby boom, elderly dependency ratios would be climbing steadily and by 2070 would reach the levels currently projected. The cycle of baby bust and baby boom actually observed accounts for the path of dependency between now and then: relatively little change over the next 20 years, as the relatively small cohort born in the 1930s and 1940s reaches retirement, followed by the rapid increases associated with the retiring of the baby-boom generation.

Chart 3-3 **Past and Projected Fertility Rates**

The baby boom of the 1940s and 1950s appears to be a temporary aberration in a long-run trend of declining fertility.

Births per woman



Note: Data prior to 1920 are for whites only.

Source: Data prior to 1920: Coale, A. and M. Zelnick (1963), "New Estimates of Fertility and Population in the U.S.," Princeton University Press; all other data: Social Security Administration.

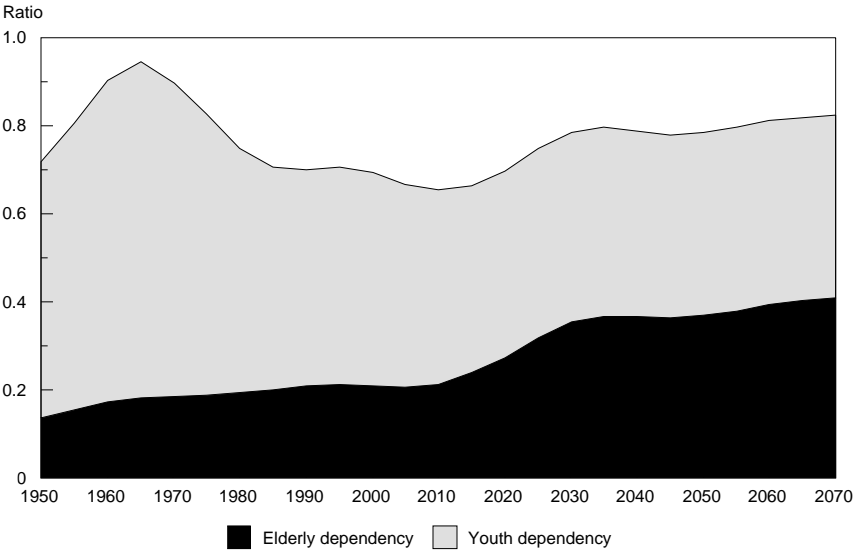
pectancy. The ratio is a rough measure of how many nonworking people must be supported by the output of the economy's workers. Chart 3-4 reports trends in the total dependency ratio and its two major components: the elderly dependency ratio, calculated as the ratio of the population over 65 to the population aged 20 to 64, and the youth dependency ratio, the ratio of those under 20 to those aged 20 to 64.

The chart reveals that the total dependency ratio is currently quite low by recent historical standards, because the youth dependency ratio is relatively low and the elderly dependency ratio has risen very little recently. In contrast, in the 1960s the ratio of children to workers was very high, and in the future (after 2010) the ratio of elderly to workers is expected to be high. Although the total dependency ratio is expected to climb significantly in the future, it will be climbing from a relatively low level and is not projected to reach the high rates experienced—and supported without great difficulty—in the mid-1960s. From this perspective, the expected aging of the population does not look so threatening.

Yet children demand different resources from society than the elderly, so it is worth separating elderly dependency from total dependency. Looking only at the elderly dependency ratio does show a dramatically different picture. The ratio of elderly to the working-age population rose slowly between 1950 and 1995, is expected to

**Chart 3-4 Past and Projected Elderly and Youth Dependency Ratios**

The projected increase in total dependency is smaller than the projected increase in elderly dependency.



Note: Elderly dependency is the ratio of the population age 65 and over to those age 20-64; youth dependency is the ratio of the population under 20 to those age 20-64.

Source: Social Security Administration.

stay roughly constant between 1995 and 2010, and then is expected to increase sharply, by roughly 75 percent, in the years between 2010 and 2035.

## ECONOMIC EFFECTS OF AN AGING POPULATION

Much public discussion of the impact of demographic changes on the economy has focused on the potential effects of aging on government programs like Social Security and Medicare. This focus, although certainly not misplaced, may give the impression that the aging of the population would have little impact in an economy with no government programs for the aged. This is clearly not the case. Population aging has broad economic implications in any economy, regardless of the breadth of government support for the elderly.

As discussed above, the aging of the U.S. population stems from increased life spans and declining fertility. Increased life expectancy—which accounts for only a small fraction of the change in dependency over the next 40 years—has relatively direct effects on individuals. Although living longer is undoubtedly a good thing (and something in which we invest many research dollars), it does require individuals to make certain adjustments. People need to generate enough resources to support themselves over more years of life. They can do this by working more years (if they are able

to, Box 3–6), by increasing their saving rate while working, by reducing their consumption when retired, or by receiving greater transfers from those of working age during their retirement.

**Box 3-6.—Will Increases in Longevity Permit Increased Work Effort?**

The impact of an older population will depend, in part, on the ability of the elderly to remain active and economically productive. An important question, therefore, is whether tomorrow's 65-year-olds will be healthier than today's. If so, delaying retirement may be a viable option for many people. Advances in medical technology not only save lives but also improve lives by reducing the severity of disabling illnesses. For example, cataract surgery preserves vision, and hip replacements preserve the ability to walk, permitting people to remain independent and active. On the other hand, to the extent that medical advances extend life without reducing disabilities, increasing years of work would not be a viable response to the increase in longevity.

Which of these effects dominates the other is still uncertain. Still, so long as the first effect is present, some individuals can extend their working years, and the *average* work span can thus increase.

The decline in fertility rates from the levels of the 1960s means that the current generation of workers now has fewer children to care for; they can therefore consume more. This corresponds to the finding that the total dependency ratio is quite low now relative to the 1960s. As members of this generation age, however, they will also find that they have fewer children in the workforce. This corresponds to the increase in the elderly and total dependency ratios expected in the early part of the next century. Since workers today generally do not support their parents' retirement directly, this reduction in the ratio of workers to elderly should not have large *direct* effects. But it may have a number of indirect effects.

People can save for their retirement by purchasing homes and by investing in financial assets, either directly or through a pension fund, if they have one. When they retire, they support themselves with the income they earn on these assets, and with money they receive from selling them, and of course with benefits they receive from programs such as Social Security and Medicare. The value of those assets may be affected, however, by the number of workers in the next generation. For example, if the number of workers in the United States declines, the total value of what can be produced may also decline (relative to what could have been produced by a

constant number of workers). The result might be to reduce the value of U.S. financial assets. Similarly, an economy with fewer people of working age has less demand for houses, leading some analysts to predict that housing values will not increase by as much as they might otherwise, or might actually decline. On the other hand, at our current rate of productivity growth, future generations will undoubtedly be better off than current generations. And this Administration has focused on policies devoted to improving productivity—policies like job training, education, and technology investment—which should make future generations even better off. Furthermore, some researchers have found that slow growth in the workforce could actually spur productivity growth, substantially offsetting or even eliminating the effects of aging on output and on the value of assets (Box 3-7).

**Box 3-7.—Linking Productivity Growth to Demographics**

Demographic developments and the rate of productivity growth have a number of potential links. Some observers argue that population aging will lead to slower productivity growth because of two factors. First, as the growth rate of the labor force slows, so does growth in demand for new capital goods. Innovation could become less profitable as the fixed costs of innovation are spread over fewer goods. Second, the aging of the population means that the average age of the workforce will rise. If innovators tend to be young, productivity growth could suffer.

On the other hand, many analysts believe that the incentives to innovate are strongest when labor is scarce. This theory, that “necessity is the mother of invention,” predicts that as labor force growth slows, labor-saving technology will be developed to keep economic output from falling.

Finally, the actual effects of population aging in the United States will depend on international factors. If the United States were a small economy that traded freely with the rest of the world, the effects of population aging would be small: demographic changes in the United States would have little effect on the value of tradeable assets, which would largely reflect values established in international markets. But the United States is not a small economy—its population and income are too large for its demographic changes not to have significant worldwide effects. Furthermore, the demographic changes observed here are not confined to the United States—if anything, the countries that are our current principal trading partners are aging faster than we are (Box 3-8). If current trading patterns continue, we are likely to see lower returns to saving as labor force growth in the United States and in

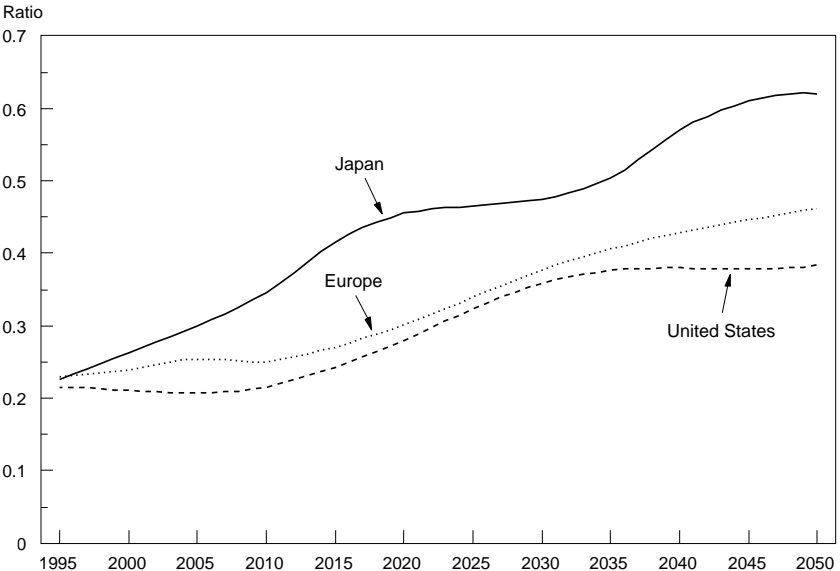
the rest of the industrialized world declines. If, however, conditions for trade between the United States and what are today's developing countries improve substantially over the next few decades, as they have over the past decade, it is possible that high-yielding investment opportunities in these countries will keep the rate of return on savings relatively high.

**Box 3-8.—Demographic Changes Around the World**

Chart 3-5 summarizes trends in the dependency ratios of the United States, Japan, and the countries of the European Union, as projected by the United Nations. Although the U.N. projections are somewhat different from those in Chart 3-4, which uses data generated by the Social Security Administration, the same general patterns emerge. In 1995, elderly dependency is quite similar across the three regions. Dependency in Europe and the United States is not projected to climb until around 2010. In contrast, the elderly dependency ratio in Japan is already on the rise. The U.N. projects that dependency in Japan will be 54 percent higher by 2010 and 110 percent higher by 2030.

**Chart 3-5 Elderly Dependency Ratios in Europe, Japan, and the United States**

Elderly dependency is projected to rise higher and faster in Japan than in the United States or Europe.



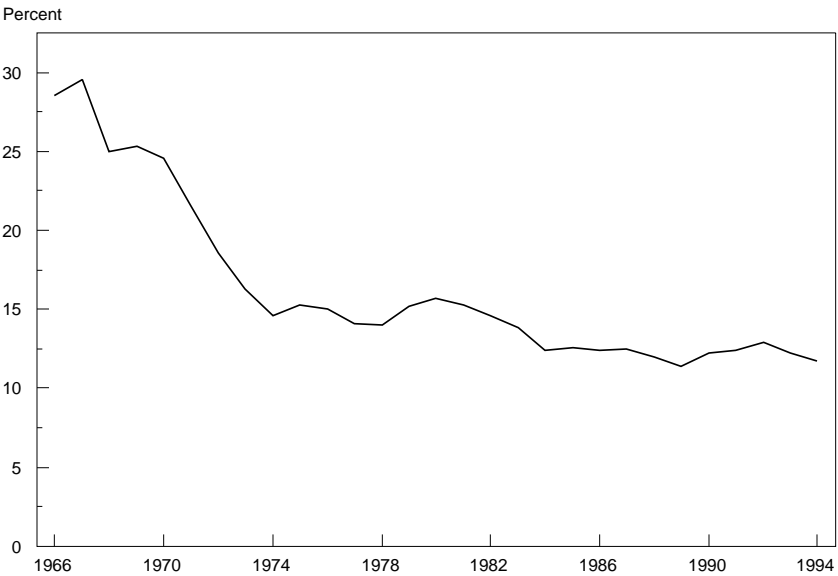
Note: Elderly dependency is the ratio of the population age 65 and over to those age 20-64.  
Source: United Nations.

## EFFECTS OF DEMOGRAPHIC CHANGE ON THE FEDERAL BUDGET

Government support programs make up a large fraction of the retirement income of the elderly. These programs have worked successfully to reduce poverty among the aged (Chart 3-6) and enhance the health and economic security of both the aged and their families. Social Security and the insurance value of Medicare alone represent roughly half of all income (including the value of Medicare) received by elderly households. These programs also account for a significant portion of Federal expenditures—over 30 percent in 1995.

Chart 3-6 **Poverty Rate of the Elderly**

The percent of America's elderly who are poor has fallen by more than half since the 1960s and is near an all-time low.



Source: Department of Commerce.

### *Social Security*

The largest program for the elderly is Social Security. This program has traditionally been financed on a pay-as-you-go basis; that is, most of the payroll taxes collected from the current generation of workers (largely the baby-boom generation) are used to pay current benefits. However, Social Security is now developing a trust fund that will permit some advance funding in the future, at least temporarily. Accumulated assets in the trust fund are currently equal to roughly 1.5 years of benefits.

As currently structured, then, Social Security is mainly an intergenerational transfer program. The aging of the population

will make such a transfer between workers and retirees more difficult. The Social Security actuaries consider three different scenarios for the program's future: one in which the Social Security program is in relatively good financial shape, with relatively high birth rates and real growth in income, and relatively slow growth in longevity; one in which the system is in relatively bad financial shape; and an intermediate scenario, which we focus on here.

Small differences in growth rates, compounded over decades, result in large differences in estimates of *levels* of expenditures and receipts. This means that we need to be cautious in interpreting any particular scenario. On the other hand, we need to be at least aware of some of the potential risks. How policy responds will depend on our degree of risk aversion and the consequences of delay. Under the Social Security actuaries' intermediate assumptions, benefits are expected to increase from the current 11.5 percent of payroll to 17.3 percent by 2030; Social Security income (tax collections plus interest on the trust fund assets) climb more slowly: from 12.6 percent now to 13.1 percent in 2030. Total income is projected to exceed benefits until 2020. After that, redemption of trust fund holdings can help finance benefits for an additional 10 years, until the trust fund finally runs out in 2030.

Clearly, steps need to be taken to ensure the long-term solvency of Social Security, and a bipartisan effort will be required. The Quadrennial Advisory Council on Social Security was charged with developing ways to balance Social Security in the long run, and is expected to release its recommendations in the near future.

Even without any changes to the program, the rate of return that people will receive on their Social Security contributions is declining. In the early years of the program, the benefits conferred on retirees far exceeded their contributions. Since then rates of return have declined because of statutory increases in tax rates, increases in the number of years that workers' wages have been subject to tax, and the slowdown in labor productivity growth, although these have been offset somewhat by increases in life expectancy. (Productivity growth affects the rate of return received on Social Security contributions because the calculation of a worker's initial benefit level reflects the productivity gains that occurred over his or her working years.) Even at current levels, Social Security, by providing returns that are fully indexed for inflation, offers a kind of economic security that is simply not available elsewhere in the market. And, increases in productivity growth beyond what is currently projected could lead to higher rates of return on Social Security contributions in the future.

### *Medicare*

Government expenditures on Medicare, the program that provides health insurance for the elderly, are also projected to grow

over the next 75 years. The projected expenditure growth over the first 25 years of that period is primarily due to projected increases in the cost of providing health care. For the remainder of the projection period, however, most of the growth is attributable to increases in enrollment stemming from the retirement of the baby-boom generation.

Medicare is composed of two parts. Part A covers inpatient hospital services, and Part B covers primarily physician and outpatient hospital services. Part A is financed by a 2.9 percent payroll tax, shared equally by employers and employees. Most of the taxes are used to finance current benefits, but like Social Security, at least until recently, some tax revenue was retained in a trust fund to finance future health care benefits. According to the 1995 Annual Report of the Board of Trustees of the Hospital Insurance Trust Fund, the trust fund for Medicare Part A is projected to be exhausted by the year 2002. Medicare reforms proposed by this Administration should extend the life of the Medicare Part A trust fund through at least 2011. Medicare Part B is financed partly from general revenues, but partly from premiums paid by beneficiaries. Expenditures on Part B are also expected to increase with the aging of the population.

Many policymakers have called for a commission, similar to the Quadrennial Advisory Council for Social Security, to develop recommendations to ensure the long-term solvency of the overall Medicare program.

### *Medicaid*

Medicaid, the program that provides health care to low-income people with little wealth, is not exclusively a program for the elderly. But Medicaid does pay for nursing home care for elderly and other Americans who have depleted their assets. In 1995 roughly one-third of total Medicaid expenditures went to the elderly (with the remaining two-thirds split about equally between people with disabilities and the nonelderly, nondisabled poor).

The aging of the population is bound to lead to a significant increase in the number of people needing long-term care assistance. Not only will the number of old people increase, but so will the average age of those over 65. People over 85 made up about 11 percent of the elderly population in 1995; according to the Social Security Administration's projections, by 2050, they will make up over 16 percent. Older people are much more likely to be in a nursing home: in 1993, 31 percent of those 85 and older spent time in a nursing home, compared to just 7 percent of the general population over 65. If this rate of nursing home utilization is maintained, population aging will bring significant increases in the nursing home population and in expenditures on long-term care.

### **Box 3-9.—Gauging the Accuracy of the Consumer Price Index**

The consumer price index (CPI) is used to index Social Security benefits as well as elements of the tax code (e.g., personal exemptions, standard deductions, and tax bracket thresholds). It is generally believed that the CPI overstates changes in the cost of living, although opinion varies about the exact magnitude of the overstatement. Correcting any bias in the CPI would ensure that Social Security benefits and tax brackets increase as intended—that is, to keep pace with the cost-of-living.

The bias comes from a variety of sources, including the problem inherent in approximating a cost-of-living index by a fixed weight price index like the CPI, and the difficulty of assessing the value to consumers of quality changes in new and existing products. (See *Economic Report of the President, 1995* for details concerning bias in the CPI.) The Bureau of Labor Statistics is engaged in a multiyear revision of the CPI and has, as well, been working to fix a technical limitation in the formula used to compute basic components of the index. By 1998, these efforts should reduce the bias in the CPI. It is more difficult to address the remaining sources of bias because they are harder to gauge and thus there is greater controversy over their magnitude.

## **MAINTAINING VALUABLE PROGRAMS**

The aging of the population will pose significant challenges for the economy and in particular for the government. Although changes to these programs are inevitable, certain features should be maintained. Medicare and Social Security do provide unique benefits that the private sector cannot provide. In particular, because Medicare and Social Security cover all Americans, they are not subject to the adverse selection problems that can plague the private annuity and health insurance markets. And Social Security and Medicare provide income streams that generate constant real purchasing power (Box 3-9). Administrative costs (which are less than 1 percent of benefits for Social Security) are far lower than for most private insurance plans or pensions. Social Security and Medicare are programs of universal participation that have received a great deal of public support. To maintain this support, it is important that these programs remain universal, but it is also important that they be put on a sound financial footing.