【論　文】

Spending and Sources of Finance in the American Welfare State : Option for Reform (上)

この論文は平成9年度厚生科学研究費（社会保障・人口問題政策調査研究事業）の補助金を受けて行われた「社会保障給付費の財源としての租税と社会保険料の在り方に関する研究」（主任研究者　井堀利宏東京大学経済学部教授）の一環としてThe Brookings InstitutionのDr. Gary Burtlessから寄稿されたものである。この論文の趣旨はアメリカの社会保障（年金，医療，福祉）に関する議論のうち，負担に焦点を当ててその現状，論点，改革の方向をまとめ，日本へのインプリケーションを記述することである。

今回（No. 124）と次号（No. 125）の2回に分けて掲載される予定であるが，以下に日本へのインプリケーションの部分の要約を掲げて本論文のイントロダクションに代える。

財政赤字の削減，人口の高齢化，等の共通の背景のもとに日米とも社会保障改革が進められているが（日本では介護保険制度の創設，医療保険改革，社会福祉基礎構造改革など；アメリカではHealth Reform, Welfare Reform, Medicare Reform, Social Security Reformなど），日本とアメリカは少なくとも次の3点で大きく異なっている。

1) 高齢化は日本の方がはるかに急速で，かつ，深刻である。
2) 医療費増加の抑制に日本は成功しているが，アメリカではうまくいっていない。
3) 所得格差の拡大のスピードはアメリカの方が早い。

公的年金の財政問題はアメリカでは確かによく話題になり，議論されているが，むしろ日本でより深刻な問題であり，アメリカでは相対的に小さな問題である。IMFの推計によれば1995年における日本の公的年金の債務はGDPの105%に達し（アメリカは25%），2030年における公的年金支出の対GDP比はアメリカの7%に対して日本は2倍以上の16%である。一方，医療費はアメリカでより深刻な問題であり，1994年のメディケアとメディケイドの支出（GDPの6.1%）だけで日本の国民医療費（GDPの5.6%）を上回っている。

アメリカの年金改革の議論ではa.給付引下げ，b.支給開始年齢引上げ，c.拠出引上げ，d.事前積立方式への移行，の4種類の対応策が挙げられている。給付引下げにもいろいろな方法があるが，所得比例給付を定額にすれば確かに支出は減らせるが，インセンティブの問題が起きる。また，定額制になれば額をできるだけ低く抑えようという圧力が働き，貧困を増加させる原因となる。スライド率を低くすることも給付引下げの一つの方法であるが，企業年金など他の給付の多くが物価スライドされていないなかで，公的年金のスライド率を下げればやはり貧困の問題が生じる。支給開始年齢の引上げは不人気であるばかりでなく，何十年にもわたって引退年齢の早期化が進展しているという事実に逆行する。しかしながら，日米とも今日決められている老齢年金の支給開始年齢（日本では2013年から65歳，アメリカでは2027年から67歳）をさらに引上げなければならないであろう。拠出の引上げは「負担の限界」とも関係して不人気である。また，拠出上限所得の引上げは給付に反映されれば効果が薄れる。以上のa.b.cはいずれも現行の賦課方式でも可能な対策である。一方，事前積立方式への移行は公的制度でも可能であるし，民営化という選択肢もある。賦課方式のもとでの収益率が以前は4～7%と高かったが，最近では2%以下に下がっており，負になる可能性もでてきた。これに対して，民間投資では現在でも年3%以上の収益率をあげている。しかしながら，日米ともに巨額の年金債務をかかえており，積立方式へ移行する際の二重負担の問題をいかに解決するかがkeyとなっている。完全積立をめざすにしろ，部分積立にとどまるにしろ，積立水準の上昇が経済成長に役立つかどうかが最も重要な点である。

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Spending and Sources of Finance in the American Welfare State : Options for Reform (I)

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Abstract : This report describes the present condition and significant challenges facing social welfare policy in the United States, particularly with respect to financing of different components of the social safety net. The report focusses mainly on three main pillars of the social welfare system : social security pensions, public and private health insurance, and means-tested cash and near-cash assistance programs.

IN THE SIX DECADES since Congress passed the Social Security Act in 1935, the American social welfare system has undergone major change and almost continuous reform. This report describes the current status of the U.S. social safety net, discusses the major financing problems the system will face over the next few decades, and reflects on the implications of the American policy debate for social welfare reform in Japan.

The U.S. system confronts three fundamental challenges. First, the American population is growing older. In 2010 the post-war Baby Boom generation will begin to enter retirement. Over the twenty years from 2010 to 2030 the aged dependency ratio—the ratio of Americans older than 64 to Americans aged 20 to 64—will climb from about 21 percent to almost 36 percent. Population aging will put enormous pressure on social welfare budgets because most social welfare spending is devoted to pensions and health insurance for the aged.

Second, medical care costs have increased faster than other U.S. prices. Although medical care inflation has moderated in the past half decade, prices charged by hospitals, doctors, and other health care providers have typically climbed faster than other prices and faster than American incomes. Moreover, utilization of medical services has risen among important groups in the population.

Finally, adverse labor market trends and shifts in the composition of families have tended to boost income inequality in the United States. As a result, a growing number of poor families has applied for and become eligible to receive public assistance benefits. Publicly funded health insurance under medicaid grew fastest, but spending on many means-tested programs has increased faster than other public spending since the mid-1980s. Unless labor market trends and family composition shifts are reversed or eligibility conditions for benefits are tightened, the demand for means-tested benefits will continue to rise.

The political environment for spending on social welfare was also affected by the enormous rise in the federal budget deficit over the 1980s. In 1981, soon after Ronald Reagan became president, corporate and personal income tax rates were slashed, reducing income tax revenues and boosting the deficit in the national government's budget. Measured as a percent of U.S. national income, the deficits reached record peacetime levels in the middle and late 1980s. These deficits, in turn, placed enormous pressure on Congress to hold down public spending, particularly new spending on social welfare initiatives. Budgetary rule changes in the late 1980s and budget agreements passed in 1990 and 1993 led to enactment of new laws that make it more difficult for Congress to initiate new programs or expand old ones. If Congress wants to expand an old program or establish a new one, it must identify a source of funds to pay for the added spending. The funds may come from a reduction in spending in some existing program or an increase in scheduled tax revenues. Since it is ordinarily difficult for Congress to accomplish either

of these things, the President and Congress have for the most part refrained from making major expansions in social welfare spending.

The new budget rules combined with rapid growth in federal tax revenue over the 1990s produced a sharp reduction in the federal deficit from 1993 through 1997, and some budget analysts now predict that the deficit will be eliminated within the next few years. Nonetheless, Congress remains very cautious about expanding social welfare spending, in part because the strict budget rules remain in effect and in part because most lawmakers recognize that population aging will push up public spending on social welfare in the next 15 years, even if there is no expansion in existing social welfare programs.

The report is organized into two major parts. The first major section deals with the situation in the United States. The second contains a discussion of the implications of the American debate over social welfare spending for Japan, a society which faces some of the same problems as the United States. The first major part of the report contains four sections. In the next section I briefly outline the main components of the American social welfare system. The following three sections describe recent changes and possible future reforms to address the financing problems in three main pillars of the system : social security pensions, public and private health insurance, and means-tested cash and near-cash assistance.

Part One

I. Organization of U.S. Social Welfare System

The U.S. social welfare system offers two main kinds of income protection to protect the living standards of American families : means-tested income assistance and social insurance. In addition, most employed persons and their families obtain health insurance under group health plans sponsored and partly financed by their public or private employers. The government-funded social safety net consists of a large number of federal, state, and local programs. The most important are listed and briefly described in Table 1.

Means-tested programs. Means-tested programs distribute money and other resources directly to poor or near-poor families. Middle- and high-income families are not eligible for such benefits, unless they have suffered serious economic reverses which temporarily reduce their incomes to very low levels. Certain kinds of means-tested benefits are restricted even more narrowly to particular classes of poor Americans—the aged, the disabled, single parents and their children. Examples of means-tested programs include Temporary Assistance to Needy Families, food stamps, and medicaid (a form of medical insurance provided to the poor).

Social insurance. Much greater redistribution takes place in the nation's popular and expensive social insurance programs—social security, medicare medical insurance, workers' compensation, and unemployment insurance. These programs are largely financed by payroll taxes imposed on the currently employed and their employers. Benefits typically go to people with low current wage earnings —the retired, the temporarily or permanently disabled, dependents of deceased workers, and the insured unemployed. Cash social insurance payments are always calculated on the basis of the past average earnings of covered workers. These cash benefits are only available to people who have become eligible for payments on the basis of their previous contributions to social insurance.

Unlike means-tested benefits, social insurance payments are received by middle- and high-income families as well as the poor. If a well-to-do worker reaches age 65, retires, and has made payroll contributions to the social security and medicare programs for a minimum number of years, he or she can receive social security pensions and medicare insurance, regardless of the wealth or the amount of other income received by the family.

Table 1. Means-tested and Social Insurance Programs in the United States

Program	Purpose and population served	Cost in FY 1995 (billions)
Means-tested benefits		
Cash assistance		
Temporary Assistance to Needy Families (TANF)/Joint federal and state program	Cash aid to poor families containing *children under age 18*	$ 22
Supplemental Security Income (SSI)/ Primarily federal program	Cash aid to indigent *blind, disabled, and persons 65 and over*	28
General Assistance (GA)/State and local program	Cash aid for *able-bodied persons under 65* who have no children	4
Veterans Assistance/Federal program	Cash aid for poor *veterans* with no service-related disabilities	3
In-kind assistance		
Medicaid/Joint federal and state	Medical insurance for most poor children and all adults eligible for cash public assistance	$ 156
Housing assistance and public housing/ Federal and municipal	Housing subsidies and publicly provided apartments for poor families	24
Food stamps and other nutrition/ Primarily federal programs	Coupons to purchase minimally adequate diet for all low-income families	26
Energy assistance	Subsidies to pay for heat and electricity	1
Social insurance		
Cash programs		
Old-Age and Survivors Insurance (OASI)/Federal	Retired insured workers over 62 ; surviving spouses and dependent children of deceased workers	$ 294
Disability Insurance (DI)/Federal	Severely disabled insured workers under age 65	41
Unemployment Insurance (UI)/Joint federal and state	Unemployed workers with about one year of covered work experience who have been unemployed 26 or fewer weeks	24
Workers' Compensation (WC)/Primarily state and private	Cash benefits and medical insurance for workers who are injured on the job	43*
In-kind programs		
Medicare-Hospital Insurance (HI)/ Federal	Pays hospital bills of persons who collect Disability Insurance or who are 65 and older	$ 115
Medicare-Supplementary Medical Insurance (SMI)/Federal	Pays physician and laboratory bills or persons who collect Disability Insurance or who are 65 and older	65

*Federal and state spending only, calendar year 1993.

Note : For purposes of comparison, U.S. GDP in fiscal year 1995 was $ 7,181 billion.

Sources : U.S. House of Representatives, Committee on Ways and Means, *1996 Green Book* ; and OASDI Board of Trustees, *1997 OASDI Trustees Report.*

In-kind and cash. Both means-tested assistance and social insurance are provided in two primary forms, as weekly or monthly cash payments and as in-kind transfers. The most costly social insurance programs—Old-Age and Survivors Insurance, unemployment compensation, and worker's compensation —provide cash payments to beneficiaries. The most expensive means-tested programs provide in-kind aid—free medical care, coupons to buy food, and subsidized housing. Until 1965 nearly all social insurance and means-tested transfers were provided in the form of cash. But in the two decades after 1965 public spending on medical insurance, food stamps, and housing programs rose dramatically, altering the balance between cash and in-kind benefits. The percentage of all social insurance and means-tested benefits that consists of in-kind aid continues to increase, mainly because health care prices continue to rise faster than other prices and utilization rates are increasing.

Health insurance. The United States does not require employers to offer their employees health insurance benefits or retirement health benefits, although many employers offer both types of benefits. Employers offer group health insurance policies to their employees for two reasons. Health insurance is relatively inexpensive to obtain when purchased for large groups of workers (that is, the cost is low relative to its cost when purchased by individuals). Insurance is therefore an extremely popular fringe benefit. Employers offer this benefit in order to attract and retain good workers. The tax treatment of employer-purchased insurance is also very favorable. Employers are allowed to treat their premium payments as a cost of doing business, but employees do not pay any income taxes on the compensation they receive as employer contributions to their health insurance.

About 84 percent of full-time and 78 percent of part-time workers are insured under a health plan provided by their employer (Bureau of the Census, 1997, p. 2). Insurance coverage is highest among workers employed by the public sector and by businesses with 100 or more employees. Many smaller employers do not offer health insurance benefits, in spite of the significant tax advantages from doing so. The lack of a comprehensive national health insurance plan or any government requirement that employers offer health insurance benefits to their employees means that many working-age Americans and their families are not covered by an insurance plan. In 1996, nearly 42 million Americans—more than one in seven—were not covered by a public or private health insurance plan during any part of the year (Bureau of the Census, 1997, p. 1). The lack of comprehensive health insurance coverage is unusual among advanced industrialized countries. However, most uninsured Americans have some access to low-cost or free emergency medical care through public hospitals, charity care in private hospitals, and, more rarely, public health clinics.

In 1995, medical care spending in the United States amounted to $988 billion, or about 13.6 percent of GDP. Of this total, roughly one-fifth was financed from business contributions to employee group health plans. Nearly half was financed through government budgets, primarily under the medicare and medicaid programs. Most of the remainder was financed by households, either as out-of-pocket payments for medical services or as premium payments for insurance.

II. Social Security Pensions

Social security is the largest item in the federal budget. In 1995 social security expenditures represented 4.6 percent of GDP and a little less than 22 percent of overall federal spending. After the income tax, the program also provides the most important source of federal tax revenues. In fact, because social security taxes exceed benefit payments and administrative costs, the program's surplus revenues have been lent to the Treasury to help finance other government spending.

Over the next 10 to 15 years the financial outlook for social security is relatively secure, even under pessimistic assumptions about the state of the economy. The program will continue to collect more payroll tax revenue than needed to finance benefit payments. Growing surpluses will be lent to the

Treasury, where the funds will earn the rate of return payable on government debt sold to the public. The reserves of the system, which are held in Trust Funds, will increase by between $70 billion and $150 billion each year, providing the program with an ample contingency fund even in the event of a lengthy recession. When the baby boom generation reaches retirement age in the second decade of the next century, however, benefit payments will begin to climb much faster than tax revenue. Outlays will exceed taxes and will eventually exceed tax revenues plus interest payments earned by the Trust Funds. Under the intermediate and pessimistic assumptions of the Social Security Trustees, the Trust Funds will begin to shrink. Unless benefits are trimmed or tax rates increased, the Trust Funds will eventually fall to zero, making it impossible under current law to make timely benefit payments.

This section of the paper offers an overview of the budget outlook for social security and a survey of reforms that can close the long-term financing gap (see also Bosworth and Burtless, 1997a, and Burtless, 1997). It begins with a review of the demographic and economic factors that influence social security finances and an assessment of how these factors will affect revenues and spending in the future. The section concludes with a brief survey of policy changes that would eliminate the funding imbalance in social security.

Trends in spending and revenue. The impact of population aging on the federal budget is large and economically significant because older Americans pay for a large fraction of their consumption using public transfers. Social security benefits account for about 44 percent of the cash income received by aged families (Employee Benefit Research Institute, 1996, p. 1). The medical insurance protection provided under medicare makes a sizeable contribution to the well-being of the elderly as well. The cost of providing medicare insurance to a retired worker is nearly half the cost of his or her social security pension (Social Security Administration, 1996, Tables 5.C and 8.B).

Future federal spending on the aged depends on the rate of growth in the elderly population, which can be predicted with some confidence, and the rate of change in spending per old person, which is harder to predict. It is highly unlikely that future spending trends will mirror those of the past thirty-five years, a period which saw the liberalization of social security pensions and the introduction of medicare and medicaid. As programs for the elderly absorb a growing percentage of federal spending, it becomes increasingly difficult to afford (or justify) continued liberalization in benefit levels. In fact, the 1977 and 1983 amendments to the Social Security Act significantly scaled back pension levels for future generations of retirees. Cost controls in the medicare program sharply reduced the rate of increase in real spending per enrollee after 1985 (U.S. House of Representatives, Committee on Ways and Means, 1996, pp. 980-81).

The largest component of federal spending on the elderly is spending on social security. It is also the item that has received the most sustained and systematic analysis. The Social Security Act requires the Trustees of Old-Age, Survivors, and Disability Insurance (OASDI) to report each year on the financial and actuarial status of the Trust Funds. The Trustees' reports, and the detailed actuarial analyses that support them, have been issued regularly for several decades. The annual reports include three different projections, labeled "low cost," "intermediate," and "high cost," corresponding to optimistic, intermediate, and pessimistic forecasts of the future solvency of the Trust Funds. The forecast period extends over the next 75 years.

The assumptions used in the annual report to project future social security spending and revenues are adjusted from time to time to reflect changes in recent economic and demographic experience. The intermediate forecast is intended to represent the Trustees' best estimate of the future course of the population and the economy. It is the one most widely used inside and outside the Social Security Administration to forecast the long-term budget outlook for OASDI. (Equivalent long-term forecasts are prepared for the Hospital Insurance, or HI, portion of medicare.) In the 1997 *Annual Report,* for

example, the total fertility rate is projected to stabilize after 2021 at a rate of 1.9 births per American woman, somewhat below the rate of the past few years but above the rate of the 1970s and early 1980s. Under the optimistic projection the total fertility rate is assumed to rise slightly from its current level and reach a rate of 2.2 by 2021. The pessimistic projection assumes the fertility rate will fall to 1.6, somewhat below the lowest rate attained in the mid-1970s but above current rates in most West European countries and Japan.

Table 2 shows trends in the population, work force, and dependency rate under the Social Security Trustees' intermediate assumptions. The lower portion of the table shows three different ratios that are critical in thinking about the pressures associated with population aging. The first of these is the aged dependency ratio, the ratio of persons 65 and older to the working-age population (assumed here to be between 20 and 64 years old). Beginning in 2010, when the Baby Boom generation reaches retirement age, the aged dependency rate will rise sharply, reaching 0.36 by 2030, and then drift gradually higher in subsequent decades. The effect of the population bulge associated with the baby boom is to first delay and then accelerate what would otherwise be a gradual upward drift in the aged dependency rate. The underlying cause of this long-term trend is the steady increase in life expectancy combined with slow growth in the working-age population because of low fertility.

While the future population of the aged can be predicted with some confidence, growth in the future labor force is more uncertain because of potential changes in future birth rates and immigration policy. A principal reason for the long-term increase in the aged dependency ratio is the slow expected growth of the working-age population. The slow growth of the working-age population in turn reflects the 40-percent drop in the fertility rate over the past quarter century. U.S. fertility is projected to attain a rate that is slightly below that required to maintain a stable population (about 2.1 births per woman), but immigration is assumed to be high enough to permit the population to continue to grow. Nonetheless, the number of workers contributing to social security is expected to climb very slowly after 2020, leading to a slow decline in the ratio of contributing workers to social security beneficiaries (bottom row in Table 2).

Table 2. Covered Work Force, Number of Beneficiaries and Dependency Rates, Selected Years, 1960-2040

Population/Work force measure	1960	1980	2000	2020	2040
			In millions		
Total population	190	235	285	327	353
Covered workers	73	112	146	162	168
Beneficiaries (OASDI)	14	35	46	68	85
			Ratios		
Aged dependency ratio \1\	0.173	0.195	0.210	0.275	0.368
Total dependency ratio \2\	0.904	0.749	0.695	0.700	0.789
Worker/beneficiary ratio	5.1	3.2	3.2	2.4	2.0

\1\ Ratio of persons aged 65 and over to the number of persons aged 20-64.

\2\ Ratio of non-working-age to working-age population--population under 20 plus population 65 and over divided by population 20-64.

Source : Congressional Budget Office, based on Board of Trustees of OASDI (1996) intermediate assumptions.

The aged dependency ratio may provide a misleading picture of the consequences of population aging because it overstates the change in overall dependency. The working-age population must support not only the retired elderly but also the dependent young. Because of low fertility, the proportion of the population under age 20 is shrinking, reducing the burden on workers of providing support to children. If the population under age 20 is included in the numerator of the dependency ratio, the overall dependency ratio is of course higher than the aged dependency ratio (compare the fourth and fifth rows in Table 2). However, the pattern of change in the dependency ratios is very different. The total dependency ratio peaked in the early 1960s, when the baby boom generation was young, and it will continue to decline for a number of years before beginning to grow. Even in 2040 it will remain significantly below its level in 1960. Children are of course much less expensive to support than the aged, and a much smaller percentage of their support is provided through government budgets. Nonetheless, the decline in the proportion of children in the population will offset some of the extra burden of supporting a larger elderly population.

Future cost trends in social security, as well as their financial implications, are easiest to understand if we focus on the program's cost rate, the ratio of total benefit payments and administrative expenses to wages that are subject to the social security tax. The cost rate provides a direct measure of the pay-as-you-go tax rate needed to finance the system in a given year. In 1995 the cost rate was slightly above 11 ½ percent of taxable payroll. The Social Security Actuary predicts the cost rate will drift slowly upward between now and 2015. It will then rise sharply over the next twenty years when the baby-boom population moves into retirement. The OASDI system is currently generating a surplus, but according to the most recent forecast of the Social Security Actuary, annual outlays will surpass revenues by 2020 and the reserve fund will be exhausted in 2029.

Disregarding administrative costs, which are very small, the cost rate (CR) can be further decomposed into two components, the program dependency ratio (DR) and the benefit replacement rate (BRR):

$$CR = DR \times BRR.$$

The program dependency ratio is the ratio of beneficiaries to active workers who pay taxes into the system. (It is the reciprocal of the worker/beneficiary ratio shown in Table 2.) If the early entitlement age for benefits remains unchanged, changes in the dependency ratio will largely reflect the role of changing demographic patterns and labor force and retirement behavior. The benefit replacement rate is the ratio of the average pension benefit to the average covered wage. Trends in the replacement rate ordinarily reflect economic trends and changes in benefit legislation. (Since both benefits and the ceiling for taxable wages are indexed, the social security program is largely unaffected by variations in the rate of inflation that are equally reflected in both prices and wages.)

In the long run, the system's cost rate will be driven mainly by demographic factors——fertility, immigration, and mortality. The dependency rate will rise by 50 percent between 1995 and 2025, and by another 20 percent by 2050. In contrast, the benefit rate is projected to fall about 8 percent by 2025 as a consequence of the scheduled increase in the normal retirement age from 65 to 67.[1] The net result is a 50 percent increase in the cost rate from 11.6 percent of taxable payroll in 1995 to 16.2 percent in 2025 and to 17.5 percent in 2050. The projections in both the 1996 and 1997 annual reports show an actuarial deficit equal to 2.2 percent of payroll.[2]

The rise in the cost rate overstates the increased burden on future workers of paying for social security pensions, however. The projections assume a continued erosion of the tax base because money wages are expected to fall as a percentage of total labor compensation. More compensation will flow into tax-exempt fringe benefit plans, such as employer health insurance and private pensions. Furthermore, taxable wages are currently only about 40 percent of GDP. If social security payments are

measured as a share of GDP rather than as a share of taxable wages, the increased burden of social security seems much more manageable. In the intermediate forecast, social security outlays are predicted to rise from 4.7 percent of GDP in 1995 to 5.8 percent of GDP in 2020 and to 6.6 percent of national income in 2060 (Table 3). To put this 65-year trend in perspective, note that the change is actually smaller than the decline in U.S. defense spending between 1985 and 1995.

Sustainability of the present program. The lower panel in Table 3 offers a fairly clear picture of the gross and net impact of social security on the federal budget. Gross outlays of the program, measured as a share of national income, are displayed in the first three rows of the panel ; the difference between social security tax revenues (exclusive of interest) and outlays are shown in the bottom rows of the panel. Under current law and the intermediate assumptions of the most recent Trustees' report, social security will absorb an additional 2 percentage points of national income over the next 65 years. Eighty-five percent of the increase, or 1.7 percentage points, will occur in the twenty years after 2010. Because social security tax revenues are predicted to grow more slowly than GDP, the annual OASDI deficit (excluding interest payments) will climb 2.4 percent of GDP over the next 65 years. In order to hold the present federal deficit roughly unchanged as a percentage of GDP, Congress must find ways to cut benefits or identify new sources of revenue that total about 2 to 2 percent of GDP by 2060.

Table 4 shows trends in major categories of federal government spending over the past three decades. The table sheds some light on public willingness to pay for added spending on social security. Actual outlays on social security rose 2.1 percent of GDP between 1965 and 1995, about the same increase that will be required over a comparable period after 2010 if promised benefit levels are maintained. Most

Table 3. OASDI Outlays and Annual Balance under Alterative Assumptions, 1995-2060

	Calendar year				
	1995	2010	2020	2040	2060
	As percent of taxable wages				
Outlays					
Low cost projection	11.6	11.0	13.2	14.3	13.7
Intermediate	11.6	12.5	15.1	17.8	18.7
High cost	11.6	14.1	17.4	22.4	26.6
Annual balance \1\					
Low cost projection	1.0	1.7	−.3	−1.3	−.7
Intermediate	1.0	.3	−2.2	−4.6	−5.4
High cost	1.0	−1.3	−4.4	−9.0	−12.9
	As percent of GDP				
Outlays					
Low cost projection	4.7	4.4	5.2	5.6	5.2
Intermediate	4.7	4.9	5.8	6.7	6.6
High cost	4.7	5.4	6.4	7.9	8.8
Annual balance \1\					
Low cost projection	.3	.6	−.2	−.5	−.3
Intermediate	.3	.1	−.9	−1.7	−2.0
High cost	.3	−.5	−1.6	−3.2	−4.3

\1\ Annual outlays minus revenues, excluding interest earnings on the Trust Funds.
Source : Board of Trustees of OASDI (1997), intermediate assumptions.

of the money to pay for social security is derived from a highly visible, earmarked tax on workers' wages. In spite of periodic and large increases in the tax, the program remains steadily popular, even among workers forced to pay the tax. This kind of evidence suggests that the tax increases needed to pay projected benefits in the next century will probably be forthcoming. Previous generations of voters willingly accepted big payroll tax increases to maintain the generosity of pensions and retiree health insurance.

Evidence on the trend in overall federal revenues is less reassuring, however. After rising about as fast as government outlays from the end of World War II until the early 1970s, federal revenues have stopped growing, suggesting that U.S. voters and their representatives may be unwilling to tolerate federal taxes much above 20 percent of national income. If this is true, it will be difficult to finance the increase in social security spending that would be needed to preserve the current package of benefits.

Although the increase in OASDI spending is not particularly large when measured as a percentage of national income, it will occur in an environment of rapidly rising medicare costs (see the next section). Under the intermediate projections reported in the 1997 annual Trustees' report, expenditures on the HI portion of medicare will climb from 1.7 percent of GDP in 1995 to 2.4 percent in 2010, 4.0 percent in 2030, and 4.7 percent in 2060. Net federal spending on the Supplemental Medical Insurance (SMI) portion of medicare, currently about 40 percent of outlays on HI, is financed out of general revenues and is expected to grow even faster than HI spending. Thus, higher federal spending on medicare could easily absorb an additional 3½ percent of national income by 2030. In combination with the rise in social security spending, this implies that federal lawmakers must identify additional revenues amounting to almost 5½ of GDP if the present benefit structure is to be preserved and the federal debt level

Table 4. Outlays for Major Spending Categories and Federal Revenues as a Percentage of GDP for Selected Years, 1965-1995

Spending category	*Fiscal year*						
	1965	1970	1975	1980	1985	1990	1995
Discretionary spending							
Defense and international	8.1	8.5	6.1	5.5	6.6	5.6	4.1
Domestic	3.2	3.4	4.0	4.7	3.5	3.2	3.5
Subtotal, discretionary	11.3	11.9	10.2	10.2	10.1	8.8	7.6
Entitlements and mandatory spending							
Social Security	2.5	2.9	4.1	4.3	4.5	4.3	4.6
Medicare	0.0	0.7	0.9	1.2	1.7	1.9	2.5
Medicaid, AFDC, SSI, and food stamps	0.4	0.8	1.3	1.3	1.3	1.4	2.1
Other entitlements and mandatories	1.6	1.8	3.4	2.8	2.1	2.3	1.1
Net interest	1.3	1.4	1.5	1.9	3.2	3.2	3.2
Subtotal, mandatory	5.9	7.5	11.2	11.5	12.9	13.2	13.6
Total	17.2	19.4	21.4	21.7	23.0	22.0	21.2
Memo: Social Security and Medicare	2.5	3.6	5.0	5.5	6.2	6.2	7.1
Federal revenues	17.0	19.1	18.0	19.0	17.9	18.1	18.9

Note: Totals may not be exact due to rounding.
Source : Congressional Budget Office.

contained. Some of the funds could be obtained by cutting outlays on other government programs, but the scope for such cutbacks is not large. As shown in Table 4, spending in several budget categories, including national defense and domestic discretionary accounts, has already been scaled back significantly.

These considerations make it easy to understand why many young workers are skeptical they will collect a social security pension. Young workers do not expect to collect benefits in the next century because they do not believe future workers will be willing to pay the higher taxes that would be needed to keep social security solvent. The fears of young workers are exaggerated for a couple of reasons. First, social security and medicare are widely popular. The percentage of voters who have a strong interest in protecting the programs will grow as the population ages. If social security and medicare enjoy broad political support today, when comparatively few voters draw benefits, it is hard to believe support for the programs will collapse when a sharply higher percentage of voters reaches retirement age, starting around 2010.

A second reason that social security pensions are likely to remain an important source of retirement income is that it does not take any extra effort to keep modestly generous benefits flowing. The combined employee-employer contribution rate for social security is now 12.4 percent. If this tax rate were left unchanged, social security benefits would have to shrink, but they would not fall to zero. Under the intermediate assumptions in the 1997 annual Trustees' report, the Trust Funds will be exhausted by 2030. However, tax revenues after that year are predicted to be large enough to finance between 70 percent and 75 percent of the benefits promised under current law. Even if future voters refuse to authorize additional funding for the program, which seems doubtful, young workers can still expect to collect significant social security benefits.

Reform. To restore long-term solvency in social security, Americans face a choice among three basic reform alternatives : reduce pension benefits (perhaps by raising the retirement age) ; increase tax contributions ; and shift the retirement system away from pay-as-you-go financing toward advance funding of future pensions. The third option could be implemented either within the present social security system or in a parallel system of privately owned and managed pension funds. I consider each reform alternative in turn.

The first two alternatives will reduce the rate of return obtained by future retirees on their payroll tax contributions to social security. The real rate of return enjoyed by current retirees typically exceeds 3 percent. In the future, however, fertility rates and slow real wage growth will mean that the return received by future cohorts of retirees will be much lower and could be negative, even under present law. If future benefits are cut or the payroll tax is increased, the return would be reduced still further. The third reform alternative holds out the promise of boosting workers' future returns. Because part of future benefits will be derived from investments in the capital market, returns would not be tightly linked to real wage increases and labor force growth as they are in a pay-as-you-go retirement system. If real returns in the capital market exceed the rate of growth of real social-security-covered earnings, many workers would be better off under a partially or fully advance-funded retirement system than they are under the present system.

It is inevitable that the resolution of the long-term financing problem will create conflict among generations, but the various reform options resolve the conflict in different ways and result in very unequal fiscal burdens on different generations. Benefit cuts can be imposed immediately and can reduce the pensions of all generations who are now alive, including the both the young and the elderly. The sooner a benefit cut becomes effective, the smaller the size of the cut needed to restore social security to long-term solvency. The later the benefit cut is postponed, the larger the required cutback. Americans who are already old would thus benefit from a *delayed* cut in benefits, while young Americans

would be better off if the benefit reduction occurred *immediately*. The burden of a tax hike would fall mainly on the young, especially if the only tax that is raised is the payroll tax. The elderly do not have much labor earnings, so they would not be required to pay much of the tax increase if payroll taxes were hiked.

The relative fiscal burden of reform options on different generations can be examined more precisely using so-called "generational accounts" (Auerbach, Gokhale, and Kotlikoff, 1992). Generational accounts describe a nation's fiscal policy in terms of the policy's effects on the lifetime budget constraints of successive generations. Changes in the value of what each generation can consume are discounted to the present and summed over all present and future generations. Generational accounting requires choosing a base year (say, 1998), projecting future population and spending totals, assigning all current and future taxes and transfers (or *changes* in taxes and transfers) across existing and unborn generations, and discounting each generation's taxes and transfers back to the base year using an assumed discount rate. Even if policy makers do not rely on generational accounts, however, it is usually straightforward to calculate which generations must make the greatest sacrifice to achieve long-term social security solvency.

Benefit cuts. The simplest kind of benefit reduction is one that cuts the basic pension of all retirees. The long-term deficit in social security is about 15 percent of the long-term cost rate, so a 15-percent cut in benefits, if effective immediately and across the board, would eliminate the 75-year imbalance. Americans are unlikely to accept a benefit reduction this large on people who are already collecting benefits, however. A benefit reduction that is restricted to new retirees would require time to have its full effect on total benefit payments, implying that a reduction of about 18 percent in the initial pension, if phased in when new claimants begin to collect benefits, is needed to restore actuarial balance. The actuarial balance will continue to deteriorate over time as current surplus years are replaced with future years of deficit. If benefit reductions are delayed until 2030, when the Trust Fund is exhausted, and if benefits after 2030 are financed on a pay-as-you-go basis, the required benefit reduction in 2030 would be about 25 percent for all pensioners who are then on the rolls. Larger cuts would be needed in later years. By 2070 a 30-percent benefit cut is needed to keep pensions affordable under the current tax rate. (All calculations are based on the intermediate projections in recent Trustees' reports.)

It does not make sense to impose indiscriminate benefit cuts, however. Social security is the main source of income for most retirees, providing over 40 percent of the cash income available to elderly individuals and couples. Because many older Americans have modest incomes that are only slightly above the poverty line, the government cannot reduce social security pensions at the lower end of the income scale without increasing poverty. This makes Congress reluctant to enact proportional across-the-board reductions. Many proposals for scaling back pensions therefore emphasize some form of means-testing to spare the low-income elderly from steep benefit cuts.

There are two approaches to means testing. The more obvious one bases the means test on a pensioner's *current income*. For example, Peter G. Peterson proposes that social security applicants with annual incomes above $40,000 be subject to an "affluence test." Under his suggested formula, as an applicant's non-social-security income rises above the $40,000 threshold, social security benefits would be cut by a steeply progressive amount (Peterson, 1996, p. 162). This approach to trimming benefits enjoys some public support. In a recent opinion poll, respondents were presented with four plans for saving social security: increasing the retirement age, hiking the payroll tax, reducing the annual cost-of-living adjustment, and eliminating benefits to people with incomes above $100,000. The last plan was the only one that commanded majority support. The other plans were favored by fewer than one-third of respondents (Tanner, 1997).

Means-testing public pensions on the basis of retirees' current income can significantly reduce costs.

However, by imposing a high tax on asset and private pension income, it would discourage many workers from saving privately for their own retirement, either in individual retirement accounts or in an employer-sponsored pension plan. A means test that potentially affects a large percentage of middle-and high-income retirees might reduce private saving by a significant amount.

Means-testing raises other concerns. It can deprive social security of crucial political support by changing the attitudes of high-income workers and retirees, who currently support social security but who might receive no benefits under a means-tested system. It may encourage retirees to shift assets to their children in order to avoid the means test. It may also encourage over-investment in assets, such as housing, that provide a stream of in-kind income that is excluded from the means test. Medicaid payments for nursing home care are now based on a means test. Evasion of the test through concealment of income and assets has been a major problem in that program.

An alternative approach to means testing is to scale benefits according to *lifetime* income rather than annual income during retirement. The formula already provides proportionately much more generous pensions to workers with low lifetime earnings than to those with high lifetime earnings. A means test is implicitly imposed on workers' lifetime earnings rather than on their non-social-security incomes at the time they claim retirement benefits. This form of means-testing creates fewer incentive problems, especially with regard to retirement saving and tax avoidance in old age.

One of the reform plans suggested by the 1994-96 Social Security Advisory Council would operate in this way (Advisory Council on Social Security, 1997). It would change in the replacement rate factors in the formula for calculating the basic pension. Workers earning high average lifetime wages would receive lower marginal increases in their benefits as their average wages increase. This kind of reform can have only a limited effect in closing the financing gap, however, because the redistributional tilt in the benefit formula is already very disadvantageous to workers with high lifetime earnings. While a disproportionate benefit reduction for workers with high lifetime wages may protect retirees near the poverty line, it would reduce the already low marginal benefit received by high-wage workers, thereby increasing labor market distortions and pressures on employers to convert taxable money wages into untaxed fringe benefits.

Pensions can also be trimmed by reducing the annual cost-of-living adjustment. For pensions already in force, the adjustment is currently equal to the annual percentage change in the consumer price index for urban workers (CPI-W). The CPI has been criticized because of the widespread view among economists that it overstates changes in the cost of living. According to a recent report by a Senate-appointed commission to study the CPI, biases in the index lead to an overstatement of changes in the cost of living that average about 1.1 percent a year (Advisory Commission to Study the Consumer Price Index, 1996, p. 68). One suggestion is to reduce the cost-of-living adjustment by approximately the amount of overstatement found by the commission. Reducing the adjustment by the full amount suggested by the Advisory Commission would eliminate almost three-quarters of the 75-year imbalance.

This step is probably premature, at least as a permanent method for dealing with social security's financing problems. About half of the overstatement found by the Advisory Commission is attributable to unmeasured quality improvements in goods and services. It is not obvious that the commission offered an accurate estimate of the size or even direction of this mismeasurement, nor did it propose a feasible method to improve the measurement of quality.

Reducing the cost-of-living adjustment would have no effect on a worker's initial benefit, which would continue to be indexed to past wage growth, but it would progressively reduce the real benefits of retirees as they age. If continued during every year of retirement, a 1-percent cut in the cost-of-living adjustment would reduce the pension of an 80-year-old person by about 16 ½ percent. Because few other sources of retirement income are indexed, this would exacerbate a pattern in which retirees' real

incomes decline with age. Poverty and low income are more serious problems among the very aged than they are among new retirees, so it is almost certain that a permanent reduction in the cost-of-living adjustment would increase poverty more than a cut in initial pensions that achieved the same long-run cost saving.

A common proposal to reduce social security benefits is to raise the normal retirement age, that is, the age at which an unreduced pension can first be claimed. An increase in the retirement age from age 65 to 67, phased in over a two-decade period beginning in 2002, is already scheduled to occur as a result of Social Security Act amendments passed in 1983. While the normal retirement age has been fixed at age 65 since the program's inception, life expectancy at birth has risen almost 11 years for men and 13 ½ years for women since 1940. Life expectancy at age 65 has increased by nearly 30 percent among men, rising from 11.9 years in 1940 to 15.3 years today, and it is projected to rise by an additional 11 percent over the next 40 years (Board of Trustees, Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds, 1995, p. 62). Even though the normal retirement age will be increased to 67 by 2025, workers will remain eligible for actuarially-reduced early retirement benefits that begin at age 62.[3] Under these circumstances, there is not much practical difference between an increase in the normal retirement age and a reduction in the basic pension. Both reforms scale back retirement and old-age survivors benefits across the board. For a worker with the average life expectancy who retires at age 65, the increase in the normal retirement age from 65 to 67 is equivalent to a 12-percent reduction in the basic pension.

A number of policymakers suggest that the phase-in of the higher retirement age should begin immediately and the process should be extended so that the normal retirement age is eventually lifted to 70 rather than 67. If the normal retirement age were increased to age 70 by 2030, about one half of the current long-term deficit in social security would be eliminated. If the age of early retirement were also increased at the same time from 62 to 67, the currently projected deficit would essentially disappear. (However, if mortality rates continued to fall after the end of the current 75-year projection period, the deficit would eventually recur.)

Increasing the early retirement age can be criticized on the grounds that, while life expectancy has increased, the health condition of many older workers—and their ability to continue working—has not improved. This objection is not valid for typical workers, since there is good evidence that improvements in life expectancy are linked to overall improvements in the health status of people in their 60s. Moreover, the proportion of jobs requiring strenuous or even moderate physical exertion has fallen over time.

A higher retirement age would be widely unpopular among Americans, especially among workers employed in physically demanding jobs. To ease the burden of a higher early retirement age on workers in these occupations, future workers might be allowed to apply for disability insurance under liberalized eligibility standards once they attain age 62. However, it is administratively costly to evaluate the health condition of prospective early retirees to determine whether they qualify for disability benefits. Experience over the past two decades also suggests that the determination of health disabilities is inconsistent over time, leading to frequent legal and political battles over eligibility criteria.

Higher contributions. Raising contribution rates is a second major option. According to the OASDI Trustees' intermediate assumptions, a 2.2 percentage point increase in the payroll tax, if effective immediately, would eliminate the 75-year deficit. But the payroll tax rate is already so high (15.3 percent including the tax for part of medicare) that further increases would be unpopular. The present tax applies to an earnings base that is far less than 100 percent of labor compensation, however. Wages are taxed only up to a limit ($65,400 in 1997). Most fringe benefits are untaxed. Broadening the tax base could obviously close some of the gap. The shift in the composition of labor compensation toward

untaxed fringe benefits might be reversed by this step. The reform would also eliminate some labor market distortions by treating all forms of labor payment in equivalent fashion, and it would increase the relative tax on high-wage workers because of the greater importance of fringe benefits to the highly paid. But some of the extra revenue would eventually be offset by higher pension payments to workers credited with higher average earnings. And many fringe benefits, such as health insurance, are hard to value, making it difficult to calculate each worker's required contribution.

Another reform option is to seek sources of revenue in addition to the payroll tax. This strategy is used in many public retirement systems in the rest of the world, where national governments often make contributions to the public pension fund that are linked to the size of the taxable earnings base or to the level of employee and employer payroll contributions. For the past 60 years the United States has avoided financing social security out of general revenues. Nonetheless, some funds are obtained from the income tax. A modest percentage of OASDI revenues is derived from imposing federal income taxes on social security benefits received by moderate- and high-income recipients. (Before 1984, social security benefits were completely exempt from the income tax.) All members of the 1994-96 Social Security Advisory Council agreed that the taxation of current benefits should reformed to include more benefits in the tax base, with the extra revenue to be placed in the OASDI Trust Funds.

The use of the income tax is appealing because it is administratively simple to collect and distributes the financing burden more broadly than a tax that is imposed only on earnings. In particular, the current elderly, who can expect to receive benefits that will far exceed their past contributions, would be forced to help pay for a solution to the long-term funding problem. The elderly obviously avoid this burden if tax increases are concentrated solely on active workers and their employers through increases in the payroll tax. A broadening of the tax base would also reduce the size of the required tax hike, potentially reducing the distortionary effects of the higher tax. However, including all social security benefits in the tax base and placing the resulting revenues in the Trust Funds does not reduce the long term deficit by a significant amount.

Advance funding. Proposals to address social security's financing problem through benefit cuts and tax increases are politically divisive. They force generations and income classes into conflict over which group will have to make the larger sacrifice in order the restore the solvency of the system. It is possible to reduce some of this conflict by increasing the future national income that will finance the consumption of both workers and retirees. To achieve this, the current generation must increase its saving to finance more of its own retirement. Larger accumulations in the retirement system would raise the nation's capital stock and increase future national output. In the next century, the nation would still be forced to spend a bigger percentage of national income on pensions, but it would pay for these obligations out of a larger economic pie, leaving a bigger slice for future workers. From the point of view of younger social security contributors, advance funding is also a way to increase the rate of return on their contributions. Part of each worker's retirement benefit would be derived from earnings on capital investments, and the rate of return on these investments can easily exceed the return obtainable in a pay-as-you-go retirement program.

The current system of financing public pensions does not significantly boost national saving and may actually reduce it. Payroll taxes from today's workers are used mainly to pay for pensions to current retirees, leaving only a small annual surplus for accumulation in a pension fund. During the 1950s and 1960s, pay-as-you-go financing looked like a good deal. The labor force was growing rapidly, and real wages were climbing 2 ½ percent a year. The real returns on contributions once the system was mature were expected to be at least 4 percent a year, more than ordinary workers could earn on their own savings. Declining labor force growth and the dramatic slowdown in productivity have eliminated the rate-of-return advantages of a pay-as-you-go system. The real return will fall below 2 percent a year

for most workers and may eventually become negative for a majority of them. Private investment alternatives offer workers and pension fund managers real returns that exceed 3 percent a year. In view of the difference in expected rates of return, many of today's young workers would be better off in a prefunded pension program rather than a pay-as-you-go system.

The present social security system has accumulated huge pension liabilities to retirees and older workers, however. A democratic government is not likely to default on these obligations. Over the next several decades, current and future workers must pay for all or most of the promised pensions, regardless of whether the country moves to an advance-funded system. The double burden of paying off those obligations *and* saving in advance for their own retirement makes it costly for younger workers to move from a pay-as-you-go to an advance-funded system.

Nonetheless, today's workers could increase the percentage of retirement income they expect to derive from capital income and reduce the percentage coming from the payroll contributions of future workers. The nation could move toward partial funding of future retirement obligations either by modifying the current public system or by converting it fully or partially into a private system. Another option is change government tax policy to provide employers stronger incentives to expand the current voluntary system of company-sponsored pensions. Under any reform option the central question is whether the increase in funding would really add to national saving and boost future national income or whether it would be offset by reduced public or private saving.

The beneficial effects of an increase in the net national saving rate are displayed in Table 5. These results are taken from a recent study by Bosworth and Burtless (1998) of the impact of a one-percentage point increase in the American net national saving rate that is caused by reform in the social security or private pension system. In this particular simulation, net national saving is increased by one percent of net national product (NNP) in the year 2000, held at the higher rate for 50 years, and is invested in the United States rather than overseas. For the present purposes, it makes no difference whether the increase in saving is assumed to occur in the public sector (through larger social security surpluses) or in the private sector (through larger private pension accumulations). In either case most of the extra

Table 5. Economic Effects of a Permanent Rise in the U.S. Saving Rate, Invested Domestically

Percent change from baseline

Year	Wealth	Capital Services	GDP	NNP	Consumption	Rate of Return	Wage Rate
2000	1.0	0.9	−0.1	−0.1	−1.3	−0.4	0.0
2010	9.8	10.9	1.9	1.1	−0.2	−8.5	2.7
2020	18.2	20.6	3.8	2.4	1.0	−15.7	5.1
2025	22.5	25.5	4.8	2.9	1.5	−19.1	6.3
2030	26.8	30.2	5.7	3.5	2.0	−22.3	7.4
2040	34.9	39.2	7.4	4.4	2.8	−28.3	9.4
2050	43.1	48.1	9.0	5.2	3.5	−34.0	11.3

Note : Net saving rate raised by one percent of NNP beginning in 2000. Percentage changes measured in constant prices.

Source : Barry Bosworth and Gary Burtless, "Social Security Reform in a Global Context," in *Social Security Reform : Links to Saving, Investment and Growth* (Boston, MA : Federal Reserve Bank of Boston, 1998).

saving will flow into the American business sector, where the added investment increases the level of the capital stock. The supply of capital services expands by nearly one percent a year compared with its level in the low-saving baseline. By 2025 capital services are 25 percent higher than in the baseline (column 2).

As a result of the larger capital stock, national output, labor productivity, and real wages all rise. The enlarged flow of capital services contributes to a 2.9 percent gain in NNP after 25 years and a 5. 2 percent increase in NNP after 50 years (column 4). Not surprisingly, the policy of increased saving means that consumption must fall over the first 10 years, but the additional investment and larger capital stock eventually boost consumption, which rises 1.5 percent by 2025 (column 5). The U.S. Congressional Budget Office estimates that population aging and rising social security and medicare costs will push up federal program outlays by 4 percent of national output between now and 2025. By implication a permanent increase in the national saving rate amounting to 2 or 3 percent of NNP would be needed to boost consumption in 2025 by enough to offset the extra burden of higher federal spending.

A high-saving policy offers large benefits to future wage earners. Real wages are predicted to rise 6 percent above their baseline level by 2025 (column 7). The average real wage rises in line with gross output per worker. The percentage gain in net national income (NNP) is considerably smaller, however, because a larger capital stock generates higher annual depreciation, which is subtracted from gross output in the determination of net output. Of course, these benefits of higher saving depend on the assumption that higher saving in the social security trust fund or in private pension funds is translated into higher total national saving. If extra saving in the social security trust fund were offset by lower saving on the part of businesses or households, no increase in overall national saving would occur.

Advanced funding is administratively easiest to accomplish within the existing social security system. This strategy leaves accrued pension claims intact. Increased payroll tax rates or reduced social security benefits (or both) could be used create a larger Trust Fund reserve, which should be strictly separated from other government accounts. The larger reserve would then be invested in either public or private securities. From the point of view of increases in future national income, it does not matter whether the funds are invested in public or private securities. If the Trust Fund reserves continued to be invested exclusively in Treasury debt, more private saving would be available to finance private investment, because less of it would be used to buy government securities. If instead the Trust Fund reserves were invested in private debt or equities, private savers would be forced to purchase more government debt. A large minority of members of the 1994-96 Advisory Council recommended that Trust Fund reserves be invested in private securities in order to raise the rate of return earned by the Funds.

Public management of a huge retirement fund raises ticklish political issues, however. Political considerations might have adverse effects on the Trustees' investment decisions. Even worse, Congress might use the larger reserve accumulations to offset growing deficits in other government accounts. In that case, the increase in the social security reserve will have no effect on public or national saving and hence on future national income.

Private retirement accounts reduce these political risks, because private fund managers rather than politicians would have control over the pension reserves. In addition, private accounts offer workers flexibility in managing their own retirement savings. Partial privatization along the lines of the two-tier, public-private system adopted by Chile is one possibility. A first tier public program could provide a flat benefit or one related to the number of years of participation in order to protect low-wage workers from poverty when they retire. The second tier program could support a private defined-contribution pension program, with individual accounts invested in a range of capital market assets by the individual contributors. This basic scheme was proposed by a plurality of members of the 1994-96 Advisory

Council.

But privatization carries risks, too. It is not certain that workers' contributions to new private investment accounts will increase their overall private saving. Some workers may reduce other kinds of saving, including saving in company pension plans, if they are forced to contribute to a new pension plan that looks a lot like existing pension accounts. Moreover, the retirement income of elderly Americans would depend heavily on their success in investing their required contributions. Some workers would invest much less successfully than average, and their modest retirement annuities would reflect this fact. Wide disparities in the investment success of different workers would produce wider disparities in older Americans' incomes than has been the norm since the 1950s, when public social security benefits became an important component of older people's incomes.

Explicitly separating the redistributional element of the pension system from the earnings-related component could create strong political pressure to reduce the scope of the redistributional element. A two-tier, partially privatized system might then provide inadequate income protection for retirees with low lifetime wages. The administrative costs of managing private, decentralized retirement funds are much higher than those of managing a single public fund. A privately managed defined-contribution system relies heavily on workers' expertise in investing their own retirement savings. Unfortunately, many workers are poorly prepared to make good investment decisions. Workers with poor investment experiences will end up with low retirement incomes. Converting individual accounts into annuities when workers retire or become disabled also presents a huge challenge. Solving this and other problems entails high management costs that can eat into the returns of small accounts.

Another approach to reform is to rely more heavily on voluntary, employer-sponsored pension plans to provide Americans with old-age income. Employer-sponsored pension plans now provide roughly one-fifth of the income received by retired American workers and their families (Reno, 1993, p. 21). This is almost half the percentage of elderly families' income that is derived from social security pensions. Employer-sponsored pensions also account for a slowly rising fraction of retirees' income. The percentage of U.S. workers participating in a pension plan increased rapidly from the end of World War II to the beginning of the 1970s but has remained comparatively stable since that time (Beller and Lawrence, 1992). One of the main attractions of pensions is the favorable tax treatment they receive under the income tax law. Employer contributions to a qualified pension or profit-sharing plan are deductible by the employer as a current business expense. At the same time, the employer's contributions—as well as the income earned on the contributions—are excluded from employees' taxable income until employees begin to collect distributions under the plan, presumably after they retire.

The federal government could try to increase the percentage of employers offering private pensions or encourage employers to offer more generous pensions. Analysts do not fully understand why the percentage of workers covered by pensions has failed to rise over the past two decades. As coverage rates among full-time public-sector workers, unionized workers, and workers in large firms approached 80-90 percent, further increases in coverage could only be achieved by boosting coverage rates among part-time workers, young workers, and workers in small firms. For a variety of reasons, it has not been easy to increase the coverage of these kinds of workers. Nonetheless, the abruptness of the slowdown in pension coverage is striking. In 1940, just 17 percent of the full-time private wage and salary workforce was covered by an employer pension. By 1970, 52 percent of these workers were covered by a pension plan. The coverage rate did not change by a significant amount for the next two decades (Beller and Lawrence, 1992, p. 75).

To increase the percentage of employers offering pensions to their workers, the federal government could pursue several strategies. It could require employers to offer minimal pensions to their workers. It could relax current regulations on company pension plans to make it administratively less expensive

for employers to offer good pensions to their workers. It could require that employers offer at least *voluntary* pensions to their workers, and it could then subsidize workers' contributions to those plans. It could offer more generous tax subsidies to employers who provide pensions. Few of these approaches are popular among employers, and unions and worker organizations have not put pressure on the government to expand private pension coverage. (Most worker organizations are much more interested in assuring that existing company pension plans are prudently regulated and supervised.)

Even if private pensions could be expanded on a voluntary basis, there remains a danger that many workers would not become entitled to receive large pensions when they retire. Some workers might never work long enough with any single employer to qualify for a large pension. Others might work for employers who offer very small pensions. And still others might experience poor returns on their pension investments. Company pensions are a desirable fringe benefit for most workers, but increased reliance on employer-provided pensions would almost certainly produce increased income inequality among retired workers and their families. This tendency could be offset if the remaining social security system became more progressive, offering more generous pensions to poorly paid workers or less generous pensions to highly paid workers. It is questionable whether this kind of reform would enjoy much political support among middle-income and highly paid workers, however.

Individual retirement accounts are obviously appealing to high-wage workers, particularly those with confidence in their own investing abilities. It is not so clear that the long-term effects of a shrunken public system will be as attractive to low-wage workers. Moreover, prolonged periods of low or negative private market returns can leave entire cohorts of workers facing the prospect of low retirement incomes. The shortfall in retirement income might then be a problem for more than just the affected workers. If American voters insist on secure and comfortable incomes for retired workers, the shortfall can also create a major problem for the federal budget, which would be forced to assume the burden of supplementing the meager incomes of unlucky retirees.

The United States will have to support its retired workers out of the national income available when each generation reaches retirement age. Whether retirees receive most of their income through public pensions, as they presently do, or from private pensions, as they would under a private system, their consumption will be derived from the output of future workers and the future capital stock. If future productivity grows rapidly, the elderly can be generously supported and active workers can enjoy steady increases in their after-tax incomes. If productivity grows slowly, future workers will have to accept lower after-tax incomes or retirees smaller pensions unless workers can be persuaded to delay their retirement. The implications of slow growth will be the same whether pension incomes come from public or private sources.

The choice between the public and private reform alternatives depends largely on political rather than economic considerations (Burtless and Bosworth, 1997). Advocates of privatization are skeptical that elected officials can be trusted to manage the accumulation of a big retirement fund. They fear that larger social security surpluses will be spent on other government consumption (and hence not saved) or that fund accumulation will be invested unwisely. Opponents of privatization believe that explicit separation of the redistributional component of social security into a smaller public program will cause the public component to be viewed as a public assistance program. This could undermine the popularity and perhaps even the sustainability of large-scale redistribution to the low-income elderly. A public plan offers stronger assurances to low-wage workers, but a private plan is more appealing to average-wage and high-wage workers who want a better return on their contributions.

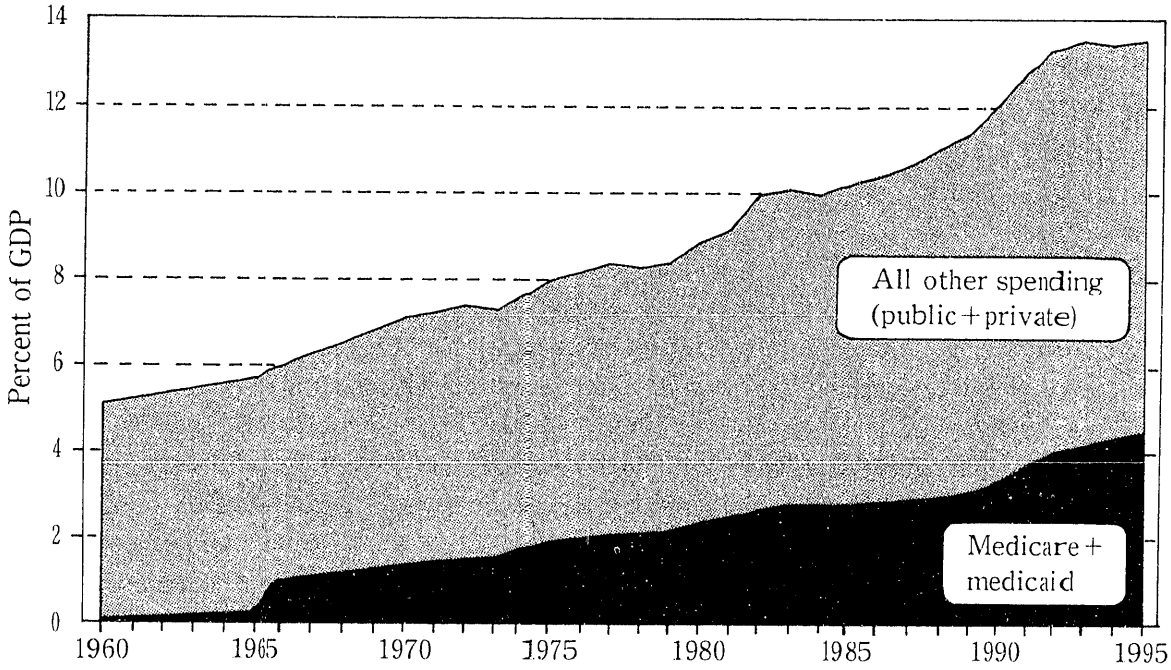
III. Public and Private Health Insurance

U.S. expenditures on health care are the highest in the industrialized world, whether these expendi-

tures are measured as absolute spending per person or as a proportion of national income. Over the past four decades the percentage of U.S. national income devoted to health care has risen almost without interruption, increasing from slightly more than 5 percent of GDP in 1960 to more than 13 ½ percent in 1995 (see Figure 1).

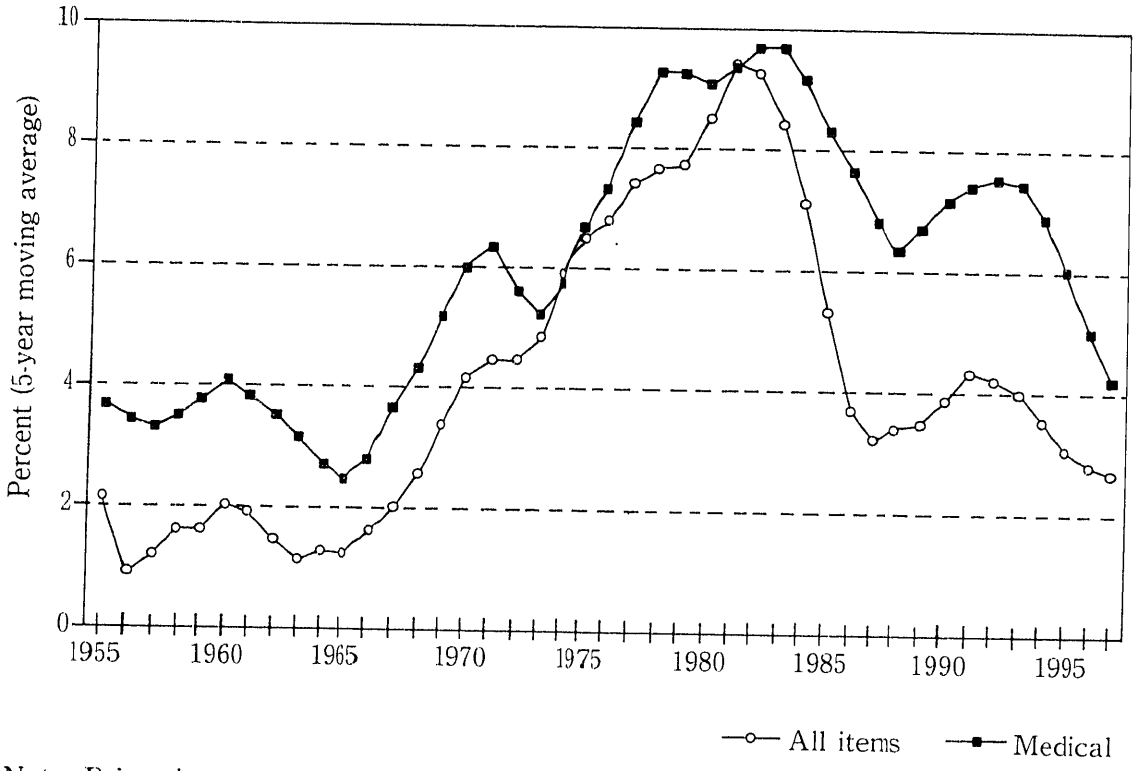
The long-term rise in spending has been the result of at least four major trends. Insurance coverage of the American population has expanded, reducing the proportion of medical care costs that must be paid directly by consumers and encouraging greater consumption. This has contributed to a second important trend, rising utilization of medical services among large groups of Americans, especially groups like the aged, poor, and physically disabled which have high potential medical demand. Third, the health care industry has seen rapid innovations in techniques that extend life, improve human functioning, and relieve pain. Many of these new technologies are extremely costly. Providers have had powerful incentives to introduce and apply these technologies, because consumers of medical care, who are sheltered by insurance from paying for the technologies' full direct cost, have been eager to use them. Finally, for a variety of reasons the prices of health care goods and services have increased faster than other prices in the economy, even in those areas where medical technology has not changed very much (see Figure 2).

The American system of paying for medical care is both complicated and administratively burdensome, a fact which has contributed to the rapid growth in U.S. spending compared with spending in other rich countries. About a quarter of Americans obtain their main health coverage under the government-funded medicare and medicaid programs, insurance programs that pay most of the physician and hospital bills of the retired elderly, insured disabled, and the poor. Most older Americans who are insured under medicare also purchase insurance under supplementary private insurance plans (called "medigap" plans) that help pay for medical bills that are not covered by medicare. Somewhat more than half the population receives insurance under an employer-sponsored health plan. Slightly less than half the people covered under employer-sponsored plans are employees or retired employees of employers;



Source : Statistical Abstract of the United States 1996.

Figure 1. U.S. Health Care Spending as a Percent of GDP, 1960-1995



Note: Price changes are measured as five-year moving average.
Source : U.S. Bureau of Labor Statistics.

Figure 2. Annual Price Change in Medical Care and All Items, 1955-1997

the remainder are insured dependents of covered employees or retired employees. Roughly one American in ten obtains insurance under individually purchased plans. (Insurance coverage rates and per capita spending levels, by age, are shown in Table 6.)

Most voters and policymakers think it is desirable to increase the percentage of Americans who are covered by an adequate insurance plan. Most also agree it is desirable to restrain the historically rapid growth in medical care spending. Clearly, however, these goals are at least partly in conflict. If people obtain new or better coverage under an insurance plan, their demand for medical services will increase, directly boosting overall spending on health care. The extra demand will also encourage health care providers to raise prices, indirectly increasing health spending even more. Almost all observers agree, for example, that the introduction of medicare and medicaid in 1966 accelerated health care spending growth through both these routes.

Slowing the rise in health care spending while at the same time increasing the fraction of Americans with good health insurance will require major innovations in the organization and financing of insurance. As long as the United States retains its mixed public-private system of insurance, innovations will be needed in both the public and private insurance sectors. Congress and the public decisively rejected President Clinton's comprehensive plan for reform in 1994, and it is unlikely Congress or the public will seriously consider a comprehensive plan anytime soon. Nonetheless, the President's and Congress's determination to reduce the federal deficit has forced policymakers to confront the financing problem in the nation's two main public insurance programs, medicare and medicaid.[4] At the same time, private insurers have recently achieved remarkable progress in restraining their health care outlays through innovations in the way they provide insurance to their employees and retirees.

David Cutler recently assessed reform options in the nation's largest single insurance plan, medicare

Table 6. Health Insurance Coverage and Per Capita Medical Spending by Age Group, 1995

		Percent of population insured						*Per capita medical spending and source*			
			Private insurance		Government						
	Total persons (millions)	Total	Total	Group health	Medicare	Medicaid	Percent uninsured	Total	Medicare	Medicaid	Other
Total	264.3	85	70	61	13	12	15	$3,082	$685	$332	$2,065
Under 18 years	71.1	86	66	62	0	23	14	1,370	1	259	1,109
18 to 44 years	108.8	78	70	64	1	9	22	1,837	69	252	1,516
45 to 64 years	52.7	87	79	71	5	6	13	3,591	291	262	3,038
65 years and older	31.7	99	69	35	96	9	1	9,959	4,761	856	4,342

Notes : "Total" percent of population insured includes people covered by other types of government insurance not shown separately. Individuals may be insured under more than one type of policy, but a person covered under more than one policy is counted only once. "Group health" insurance is obtained under an employer-sponsored plan that covers the person or another working family member. "Other" per capita spending is paid for by insurance carriers (other than medicare or medicaid) and by out-of-pocket spending by consumers.

Source : *Statistical Abstract of the United States, 1997* (Table 171); and author's tabulations of unpublished data from U.S. Congressional Budget Office.

(Cutler, 1997). He noted that decision makers face a choice among three broad policy alternatives : reducing payments to providers, increasing the contributions required of people who are insured, and redesigning the insurance package to include improved market-based incentives for efficiency and cost restraint. The same basic options are available to employers who provide insurance to workers and retirees. Because medicaid is a joint federal-state program reform in that program is complicated by divided responsibility between the federal and state governments. Federal lawmakers can achieve federal budget saving by shifting financial responsibility for medical costs to state governments. State policymakers can obtain fiscal benefits for state treasuries through adroit exploitation of federal cost-sharing rules. In each case the gain to one level of government is achieved at the expense of the other, and possibly at the expense of the insured population or medical efficiency. The remainder of this section provides an evaluation of the three main reform options.

Lower reimbursement to providers. The most direct method to reduce health outlays is to restrict or reduce the payments offered to health care providers (hospitals, physicians, nursing homes, medical laboratories, and other suppliers of drugs and medical services). This option has long been favored by public policymakers and voters. More recently it has been enthusiastically embraced by employers and private insurance companies. The medicare and medicaid programs have undergone several waves of reform in reimbursing providers. Both medicare and medicaid were originally conceived as traditional insurance plans. The insured population obtained health services from licensed providers of their choice ; the insurance plan reimbursed patients for all or a fraction of the providers' charges. In the case of medicaid, the plan paid all provider charges ; patients, who were assumed to be poor, usually paid none of the charges. In the case of medicare, an insured patient was responsible for paying for a portion of the provider's charge, and medicare reimbursed the rest. Insured people could obtain services from any licensed or certified provider. This arrangement is called traditional or "fee-for-service" third-party insurance.

The easiest way to control insurance outlays in this traditional system is gradually to reduce the maximum permitted payment for specific services. Providers might charge more than these amounts, but patients would be responsible for paying any excess charges above the maximum levels allowed by the plan. This strategy to restrict insurance outlays is practical in the case of medicaid, where the insured population is poor and politically powerless, but it is much harder to sustain in the case of medicare, where the insured population is large, relatively well off, and politically influential. In medicaid, allowable charges are so low in some states that many providers refuse to accept patients who can only pay their bills with medicaid reimbursement. Thus, medicaid-insured patients do not always have access to the services of the best providers. As medicaid reimbursement levels are reduced, the percentage of physicians and other health providers who will accept medicaid patients tends to fall.

It has proven less practical to follow this cost-containment strategy in medicare, because medicare-insured patients complain loudly and effectively if they are denied access to the best providers when the medicare-allowed charge for a procedure does not keep up with providers' customary charges. Political leaders and program administrators are then forced to improve medicare reimbursement rates or otherwise to compel providers to accept medicare-covered patients. It should also be noted that most medicare-covered patients are insured under private, supplemental insurance plans, which pay part or all of the medical bills that are not reimbursed by medicare. By 1993 slightly more than 70 percent of elderly persons covered by medicare were also covered by a supplemental private insurance plan (Komisar et al., 1997, p. 49). Thus, even if medicare reimbursement rates are low, most patients can still obtain generously insured care under a combination of medicare insurance and private supplementary insurance.

Imposing limits on the amount that providers are allowed to charge for a particular service can reduce insurance outlays in the short run, but experience has shown that U.S. providers soon learn how to provide additional services in order to maintain or increase the flow of reimbursement payments from insurers. For example, medicare might reduce the maximum allowable charge for an operation to remove an appendix to $ 2,000, cutting the reimbursement payment to hospitals which formerly charged $ 3,000 for this operation. The reduction in the allowed charge might not result in any saving to medicare if hospitals respond to the lower reimbursement by increasing the average hospital stay of appendectomy patients. If hospitals formerly kept appendectomy patients in the hospital for 3 days (at $ 800 per day) and then increased the average stay to 5 days, hospital revenues from removing an appendix would rise from $ 5,400 to $ 6,000, even though medicare has reduced reimbursement for the appendectomy *operation* by $ 1,000. At the same time, the provision of medical services would become substantially less efficient, assuming there is little or no medical benefit from keeping patients in the hospital for an additional two days.

Medicare was ultimately unsuccessful in curtailing long-run spending growth using limits on allowable charges. This failure caused policymakers to adopt a new reimbursement policy. In 1983 medicare adopted a prospective payment system for reimbursing hospital services. Under this procedure, regulators identified about 470 diagnosis related groups into which each patient admitted to a hospital is placed. In the previous example, a patient admitted with a ruptured appendix would be assigned to one of these 470 groups and, depending on the severity of the health problem, the hospital would be reimbursed by a fixed amount, regardless of the level of services provided by the hospital. If the hospital could give adequate care for less than the amount of prospective reimbursement, it would make a profit on the patient. If it provided excessive or wasteful services that cost more than the prospective reimbursement, it would lose money. The new system thus created major incentives for hospitals to deliver services efficiently. For a number of years after this new reimbursement policy was implemented, insurance outlays per enrolled person rose more slowly in the medicare program than in

private insurance plans, which were slow to adopt the new payment method. However, some of the insurance gains in reimbursing hospital care were offset by larger payments for services provided outside of hospitals. Instead of admitting a sick patient for comprehensive care in a hospital, health care providers were tempted to provide short-term care in a hospital combined with additional supplementary services (reimbursed as a separate admission) offered using some other arrangement (for example, in out-patient clinics, skilled nursing homes, or using nurses sent to the patient's home). Savings in hospital care were partly or wholly offset by additional outlays on outpatient clinics, skilled nursing facilities, and home nurses.

Private employers have adopted a different strategy to reduce their premium payments for employee group health plans. Before describing this strategy, it is helpful to outline the two primary forms of group health insurance available in the 1970s. The first, which has already been described, consisted of traditional, fee-for-service, third-party insurance. The second was provided through health maintenance organizations (HMOs). An HMO employs primary care physicians, specialists, and nurses and negotiates contracts with one or more hospitals to provide hospital services. People who are enrolled in an HMO receive all of their care from HMO employees or from hospitals under contract to the HMO. The insured population is thus restricted in its choice of providers, but is assured that all covered medical services will be provided at little or no cost to the patient so long as services are obtained in the HMO. The HMO essentially provides insurance but is also responsible for providing all medical care. It has strong incentives to provide the care as efficiently as possible in order to survive under the fixed budget constraint determined by the employer's and employee's premium contribution.

Only a small minority of Americans were enrolled in HMOs at the end of the 1970s, but the percentage gradually rose as employers offered this insurance option to an increasing fraction of insured workers. Many observers believe that HMOs were more successful than fee-for-service insurance carriers in reducing unneeded costs, because of the powerful incentives they faced to provide medical care in an efficient way.

Over the 1980s, employers began to offer their employees insurance under a hybrid form that contained elements of fee-for-service insurance and an HMO. Under this hybrid arrangement, an insurance carrier negotiates contracts with "preferred providers," who promise to offer medical services to insured people under a fixed schedule of charges. Insured people face major incentives to use preferred providers, because the net charges they pay if they use these providers are much lower than the net charges they would face at providers who are not under contract. Because insured people tend to use preferred providers, the insurance carrier enjoys a strong bargaining position with providers when negotiating a schedule of fees for specific medical services. Providers are forced to offer discounted prices to secure a contract with the insurance carrier, which effectively reduces the prices that insurance companies (and patients) pay for a wide range of medical services.

Many employers now go much further in controlling their payments to insurance companies and health care providers. They hire health management specialists to provide "managed care" to their insured employees. In a managed care insurance plan, insured people are usually required to visit a primary care physician before they can obtain costly services from specialist physicians, laboratories, hospitals, or specialized health care facilities. Health care providers are required to check with the managed care specialist to determine whether a suggested service is medically necessary and will be reimbursed by the insurance company. If the care manager declines to allow reimbursement for a procedure, the provider may use a less costly procedure or refrain from providing any service at all. This arrangement places pressure on providers to hold down charges, not only by showing restraint in the prices they charge but also by limiting their use of procedures that may have only limited medical value.

Managed care insurance plans have grown at an astonishing rate within just the past few years. Cutler reports that in 1987 about three-quarters of the privately insured population was enrolled in traditional, fee-for-service insurance plans. By 1993 the share in traditional plans fell below 50 percent (Cutler, 1997, p. 221). The growth of managed care plans explains in part the dramatic slowdown in employer contributions for employee group-health plans. Contributions to employee health insurance cost private employers $1.04 per hour worked by an employee in 1996, down from $1.06 per hour in 1995 and $1.14 per hour in 1994 according to U.S. Bureau of Labor Statistics estimates. Over that same period, hourly money wage payments rose from $12.14 an hour to $12.58 an hour (National Health Policy Forum, Issue Brief 699, p. 2). The decline in employer outlays on insurance since 1994 contrasts sharply with employers' experience over the 1970s and 1980s, when contributions to health insurance climbed much faster than money wages.

In fact, in recent years new insurance arrangements by private employers have been much more successful than those of the medicare program in restraining the rise of health care prices. In many local markets, the allowable charge for a given medical procedure is higher for the medicare program than it is for private managed care insurance plans. This discrepancy is particularly difficult to explain, since medicare is by far the largest health insurer in the United States. It should enjoy stronger bargaining power in establishing allowable charges than any private insurance carrier.

The bargaining position of the U.S. government in establishing allowable charges under medicare is weakened by the political influence of health care providers and the insured population. Most of the insured have obtained insurance under a traditional, fee-for-service plan for most of their lives. This kind of plan offers them the widest possible scope for selecting physicians and hospitals of their choice. In order to achieve the bargaining power now enjoyed by private employers and insurance carriers, the medicare program would probably have to negotiate contracts with a select group of preferred providers. However, insured people who have used particular providers for many years would be upset if faced with the choice of paying sharply higher prices if they continued to use their old providers or finding a new set of providers among the group with whom the medicare program had negotiated contracts. Private employers can ignore this kind of distress among their employees if the financial benefits from doing so are large. Democratically elected governments find it more difficult to ignore cries of distress, especially if they are voiced by politically influential groups, like physicians and the elderly.

Increasing contributions from the insured. Traditional fee-for-service insurance imposes two kinds of costs on the insured. First, insured people are usually required to pay monthly or annual premiums to obtain coverage. Premium payments are not required under some employer plans, where the employer pays the entire premium, or under the medicaid program, which insures most of the poor. Part A of medicare, which pays for hospital care, also requires no premium payments from the insured, who "earned" their right to coverage as a result of payroll tax contributions when they or their spouses worked in covered jobs. Premium payments are required under all individual plans, most employer-provided plans, and Part B of medicare, which pays for physician and other non-hospital medical services.

Second, insured patients are usually required to pay for a portion of the health care provider's charges. The fraction they pay is determined by the plan's "deductible" (the fixed amount the patient must pay before any reimbursement is obtained from the insurance carrier) and the plan's cost-sharing rate (the percentage of the provider's charge above the deductible amount that the patient must pay). Patients covered by medicaid are rarely expected to pay any of the provider's charges. People enrolled in HMOs are also usually exempt from paying any charges for medical services, so long as the services are obtained in the HMO.

One way to reduce the net *budgetary* cost of medicare and medicaid is to boost charges to insured beneficiaries. People covered by an insurance plan could be required to pay a higher monthly premium or a larger fraction of health providers' fees. These options transfer part of the cost of the system from taxpayers to beneficiaries. They may also restrain the growth in overall health spending if they reduce demand among the insured for medical services. This seems most likely in the case of an increase in the annual deductible or an increase in the patient's cost-sharing rate, changes which make it more expensive for insured people to purchase medical services. For medicare-insured patients who are also covered by a medigap insurance plan, increases in the medicare deductible and cost-sharing rate are almost certain to be offset by higher payments from the medigap plan. In order to pay for their higher reimbursement costs, the private medigap insurers would be forced to increase their monthly premiums. Consequently, an increase in the medicare cost-sharing rate might have little effect on the net price of medical services consumed but a large effect on the monthly premium for medigap coverage.

Congress and the President have not been able to agree on any plan to increase charges on people who are covered by medicaid. These people are assumed to be too poor to make significant contributions for their own care. Congress has pursued two strategies in boosting charges on medicare beneficiaries. First, it has gradually increased premiums for SMI coverage and deductible and cost-sharing rates in the HI program. These steps are politically very difficult, however, because organizations representing the elderly are vocal in protesting increased medicare charges or lower medicare reimbursement rates. Second, Congress has considered linking premiums to insured persons' incomes. Medicare-covered people who receive $50,000 or more per year might be required to pay more than $44.00 per month for SMI coverage. This step seems fair to many of the nonaged, because current medicare beneficiaries typically receive far more benefits under the program than they have paid for through their premiums or past payroll tax contributions to the HI program.

Another approach to increasing charges on beneficiaries is to restrict eligibility more tightly. The age of entitlement for medicare could be raised from 65 to 67, for example, matching the increase in retirement age that is scheduled to occur in the social security pension program. If medicare is viewed mainly as a transfer program for the aged, this step makes good economic sense. Life expectancy has increased since medicare was established in 1965. By permitting workers to continue claiming medicare at age 65 policymakers have implicitly made the program more generous, since it now offers publicly subsidized insurance for a larger portion of a typical worker's life. In spite of the increase in longevity, however, workers are now retiring at an earlier age than was common in 1965. Since most Americans who do not obtain health insurance under medicare or medicaid receive coverage under an employer-sponsored plan, an increase in the medicare eligibility age to 67 would effectively deny health insurance to many Americans aged 65 and 66. Of Americans that age, only 33 percent of men and 21 percent of women are in the labor force (Cutler, 1997, p. 219).

A sensible approach to increasing medicare charges on beneficiaries would be to increase the age of eligibility for *full* insurance benefits to keep pace with increasing life spans. However, to keep insurance coverage rates high among the aged the government could continue to offer medicare insurance to all people who are at least 65 years old, with premiums and deductibles linked to each person's income. If the eligibility age for full insurance is raised to 67, for example, people who reach age 65 could continue to purchase medicare but under less favorable terms than those offered to people who are 67 or older. Someone who is 65 could purchase medicare coverage with a premium that is tied to his or her annual income. Higher income people would pay higher premiums and face higher annual deductibles than people with low incomes.

Employer-sponsored health plans have helped restrain costs by imposing higher charges on insured workers and their dependents. Since there are thousands of employer-sponsored plans, it is not easy to

measure or describe the precise mechanisms that employers have used in order to restrain costs. Based on limited surveys, it appears that at least some employers are forcing their employees to pay for a higher percentage of insurance premiums. In many smaller firms, the premium increases paid by workers were particularly large in the case of workers who have child dependents.[5] This kind of change has some logic, because the federal and state governments have been extending publicly subsidized coverage to more and more low-income children. Employers may have increased required premium contributions for child dependents as a way to encourage workers to drop their children from employer-sponsored plans in favor of a coverage under a government-sponsored plan.

Many U.S. economists think it would be desirable if public policy were aimed at making health consumers more conscious of medical care costs. This could be accomplished by requiring employers to boost deductibles or increase the cost-sharing they impose on their employees. Since nearly all employers benefit from favorable tax treatment of their contributions to health plans, the federal government can exert enormous influence over the design of employer-sponsored plans through regulatory policy. Congress has been reluctant to force employers to impose greater cost sharing, however. Most recent reforms have been aimed at assuring that employers who offer insurance provide it in an equitable way to all their employees, including employees who have costly medical conditions.

American employers have been able to achieve cost saving through a more direct route. Fewer of them now offer health insurance to their workers or employees' dependents. Because the United States lacks a law requiring employers to offer health insurance, employers can drop existing plans and new firms can be established which fail to provide health coverage. In 1988, 69 ½ percent of Americans under the age of 65 received employer health insurance, 34 percent in their own names and 35 percent as dependents of a covered worker. By 1993 only 63 ½ percent of nonelderly Americans were covered by an employer plan, with most of the decline occurring as a result of falling coverage among workers' dependents (National Health Policy Forum, Issue Brief 699, pp. 3-4). While employer cutbacks in insurance have been effective in restraining employer contributions to employee health plans, they are extremely undesirable from a social standpoint. Many nonelderly Americans who do not have insurance as an employee fringe will not obtain it on their own, either because they believe the cost is prohibitively high or because they optimistically assume their out-of-pocket medical expenses will be low. Declines in the proportion of nonelderly people who are covered by an employer plan have resulted in increases in the proportion of Americans who lack any health insurance at all.

Restructuring insurance. A third option for reform is to reorient insurance so that it can both control costs and improve the efficiency of spending. David Cutler and others suggest that this can be accomplished by converting insurance into a "choice-based" system that gives participants a broad range of insurance arrangements from which to choose while creating financial incentives for them to choose efficient, inexpensive plans (Cutler, 1997, pp. 220-28). In fact, both the federal government in its capacity as an employer-sponsor of health insurance and private companies have moved in this direction. The two major government-sponsored plans—medicare and medicaid—have not.

Cutler mentions two main reasons analysts believe this approach can work. Health analysts have become increasingly persuaded that alternatives to traditional fee-for-service insurance can reduce unnecessary spending on medical care. HMOs and managed care plans have become increasingly popular in employer-sponsored plans, in large part because they restrain price increases and limit spending on unneeded care. There is little evidence that these cost savings have been achieved at the expense of good health among the insured population. Alternatives to traditional fee-for-service insurance thus offer promise of restraining expenditures while preserving good care.

Second, Americans are probably in a better position to make reasonable, well-informed choices about health insurance than they are about other aspects of their medical care. If presented with

comprehensive information about a set of alternative plans about once a year, most consumers should be able to rationally weigh the advantages and disadvantages of competing plans. Plans that offer less complete insurance or that limit participants' choices of health care providers would be cheaper, but they might be less attractive to people who want broad coverage or wide choice among providers. A sensible consumer choice system would offer participants a fixed annual contribution for insurance, either from the employer or the government, and a choice among competing insurance carriers, each offering a different combination of premium payments, covered services, reimbursement levels, and access to health care providers. Consumers who select more expansive plans or less efficient carriers would be stuck paying a higher premium.

This kind of system has two advantages. If consumers are well informed and make rational decisions in their selection of carriers, the system provides strong incentives for carriers to operate efficiently. Carriers that charge high premiums without offering a good package of benefits or providing high quality care will lose customers or be forced to operate more efficiently in order to reduce premiums. Carriers that charge low premiums but provide a low standard of care or a poor insurance protection would also find it hard to attract and keep customers.

The same incentives that force insurance carriers to operate efficiently might also work eventually to improve the efficiency of health care providers. This incentive is clearest in the case of HMOs, which offer both insurance and a complete range of health care services. In order to survive in a choice-based system, an HMO must offer a acceptable level of care at a price that is competitive with other insurance plans available to consumers. HMOs that provide costly medical services which have only limited health benefits will be forced to charge high annual premiums, threatening their ability to attract and retain customers. Traditional fee-for-service plans might also be forced to adopt characteristics of managed care plans if they want to remain competitive in a choice-based system. In particular, if they wanted to keep reimbursements affordable they might be forced to disallow reimbursements for medical services that have little or no medical justification.

The most difficult issue in the design of a competitive, choice-based insurance system is the problem of participant self-selection. Older people and people with costly medical problems, if offered a choice of insurance plans, often select traditional fee-for-service plans with low deductibles and low rates of patient cost-sharing. Younger and healthier Americans tend to prefer HMOs and managed care insurance plans, because the premiums are often sharply lower than they are in generous fee-for-service plans. As a result, the more restrictive, least generous plans tend disproportionately to enroll people with the healthiest characteristics. The low premiums that these plans charge reflect, in part, the good health of enrollees rather than any special efficiency in delivering insurance or health care. People in the most generous plans will be disproportionately unhealthy. Their premium contributions will have to cover the high expected reimbursements for a population in relatively poor health. This penalizes the less healthy simply because they are unhealthy, offsetting some of the insurance protection the plan is supposed to provide.

The problem of participant self-selection is evident in medicare. About 90 percent of beneficiaries are enrolled in medicare's traditional fee-for-service insurance plan. The other 10 percent choose to enroll in HMOs. Medicare pays an HMO 95 percent of the average fee-for-service medicare costs for similar individuals in the same geographical area. At first glance, this arrangement appears to save the program 5 percent of the average cost of insuring medicare beneficiaries. This is unlikely to be true, however, because most HMOs actually provide benefits in addition to those provided by the traditional medicare plan. The extra benefits usually include preventive services, such as free annual physical exams, and reimbursement for prescription drugs consumed outside of hospitals. Obviously, these extra benefits cost HMOs money to provide, yet HMOs can profitably offer the enriched package of benefits

while charging only 95 percent of the cost of traditional fee-for-service insurance. The main reason is that medicare beneficiaries who enroll in HMOs are healthier and less expensive to insure than beneficiaries who choose the traditional medicare insurance package. In this case, providing choice of insurance carriers to participants has actually increased the average cost of providing insurance coverage. If they had been enrolled in the traditional fee-for-service medicare plan, beneficiaries enrolled in HMOs almost certainly would have required less than 95 percent of the average medicare reimbursement.

Participant self-selection can frustrate the goal of providing good insurance to the entire population. In order to preserve the insurance aspects of the reformed system it is necessary to create some mechanism to offset the tendency of participants to self-select into insurance plans based on their expected health spending. Cutler and other analysts propose a straightforward remedy : pay more to insurance carriers that enroll a less healthy mix of people and pay less to carriers that enroll participants with low expected health outlays. Although this solution sounds simple, it is difficult to achieve in practice. Even if medicare could compensate insurance carriers for differences in average *measurable* enrollee characteristics, there is no practical way to compensate them for differences in *unmeasurable* characteristics. Two people who are the same age and gender may nonetheless differ in their health status and their need to see a doctor or enter a hospital. The person with greater need for medical care is likely to enroll in an insurance plan that provides higher reimbursement.

Competitive choice-based insurance systems should nonetheless be able to make approximate adjustments in premium payments to reflect participant characteristics. Even if these adjustments are not perfect, a choice-based system would provide much better incentives for efficient administration and provision of health services than the old fee-for-service plan. Most Americans would welcome a wider range of choice in their options for selecting insurance carriers and insurance plans, and many would also be delighted if a competitive choice-based system produced slower medical cost inflation. Many economists who have examined the U.S. health care system believe choice-based competition would bring greater efficiency. A large number of employers have already concluded that the advantages of this system outweigh its disadvantages. They have moved aggressively to place more of their employees in plans that force employees and providers to search for ways that economize on health care outlays. In many cases, employees have selected economical insurance plans voluntarily. That is, they have selected a lower cost managed health plan even when a more costly fee-for-service plan is available to them (though at a higher cost to the employee).

The medicare and medicaid programs will almost certainly be forced to provide incentives to the insured population to choose less costly insurance options. In the long run, neither program will be able stay affordable unless major cost savings are achieved. As the population ages and the number of Americans requiring costly medical interventions increases, budgetary cost savings will have to be obtained using all three strategies discussed above. Further limits will be placed on reimbursements allowed for specific medial procedures. Participants will be asked to pay for a larger part of the cost of the services they consume. And strong incentives will have to be provided to ensure that insured Americans select an insurance plan that is economical but efficient in providing necessary health services.

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Note

1) The increase in the normal retirement age would have no effect on the average replacement rate if workers actually delayed claiming social security pensions by two years. In that case, average pension levels would be unchanged in relation to average wages. Most labor economists believe, however, that workers will not delay claiming their pensions by more than a few months. In that case, the increase in the normal retirement age will cause average pensions to fall in relation to average wages.
2) The actuarial balance is the present discounted value of the difference between future income and outgo, taking into account the initial reserves in the Trust Fund. Since passage of the 1983 amendments to the Social Security Act, the extension of the forecast horizon, changes in the actuarial assumptions, and refinement of the estimates have caused the projected 75-year deficit to rise from 0.0 percent to 2.2 percent of payroll under the intermediate assumptions.
3) By 2025 the actuarial penalty for claiming benefits at age 62 will be 30 percent of the worker's full pension, that is, the pension payable at age 67. The penalty for claiming benefits at age 62 is currently 20 percent.
4) The government also plays a major role in the insurance market in its capacity as an employer offering group-health coverage to its workers. About 20 million Americans are employed in the public sector and another 1 ½ million are members of the uniformed armed services. The overwhelming majority of these employees and their dependents is covered by government-financed group plans. Millions more receive insurance protection under group plans for retired civil servants and military personnel.
5) According to one survey employees' share of the total health insurance contribution rose from 24 percent to 29 percent between 1992 and 1995 (National Health Policy Forum, Issue Brief 699, p. 3).

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