CONGRESS OF THE UNITED STATES
CONGRESSIONAL BUDGET OFFICE

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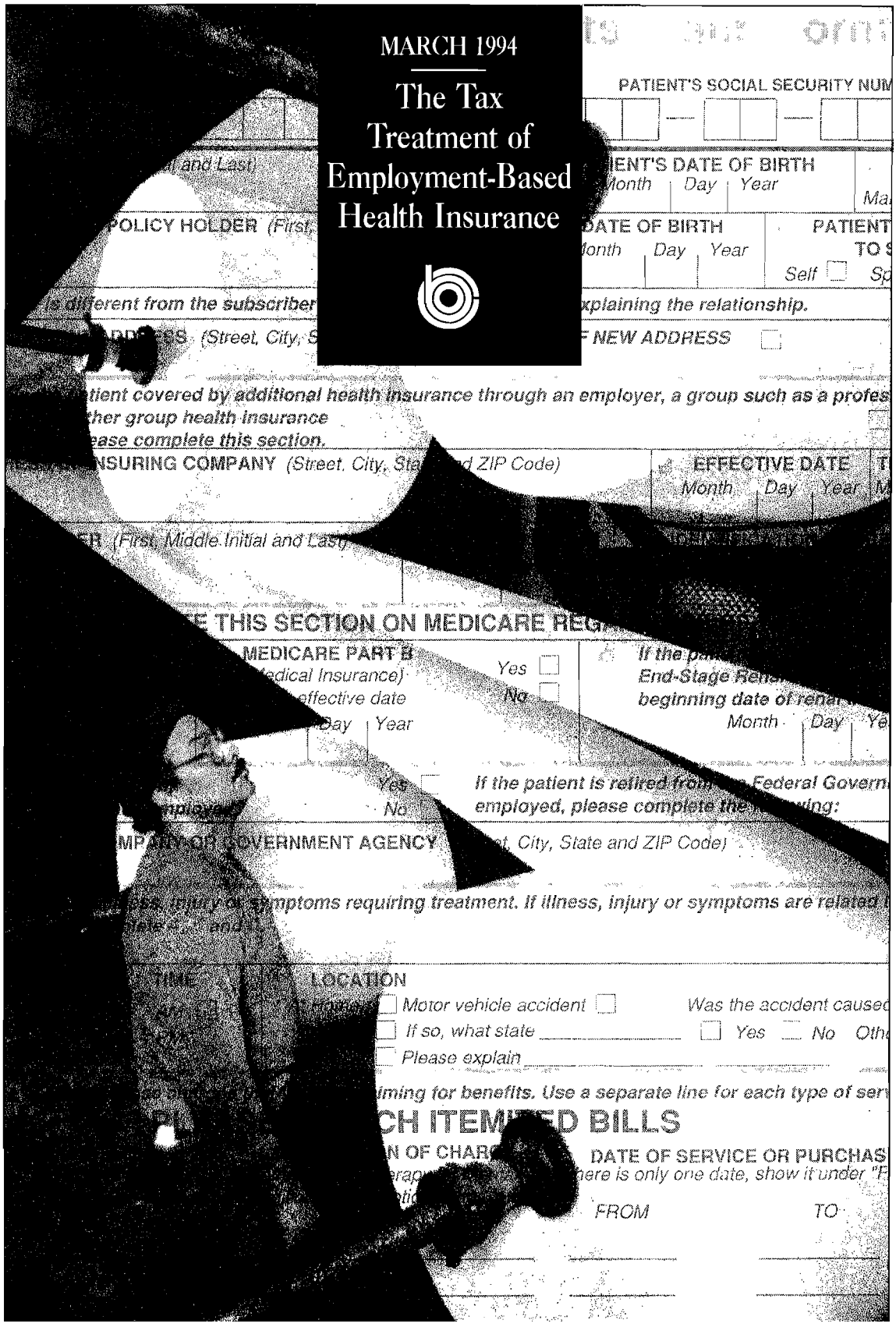
CBO

STUDY

MARCH 1994

The Tax Treatment of Employment-Based Health Insurance



THE TAX TREATMENT OF EMPLOYMENT-BASED HEALTH INSURANCE

The Congress of the United States
Congressional Budget Office

NOTE

Preface

Employment-based health insurance covers about 60 percent of the population in the United States. The widespread access of working people to such insurance has been encouraged through a tax subsidy: compensation paid in the form of health insurance is not included in taxable income, unlike compensation paid in the form of cash. This study considers how the tax subsidy affects the cost and availability of health insurance and compares the present subsidy with other subsidy mechanisms similar to those that have been part of recent legislative proposals. The study was prepared for the House Budget Committee at the request of the Honorable Bill Gradison, when he was the Ranking Minority Member. In keeping with the mandate of the Congressional Budget Office (CBO) to provide objective analysis, the study contains no recommendations.

Leonard Burman of the Tax Analysis Division prepared the study under the direction of Rosemary Marcuss and Frank Sammartino. Jack Rodgers collaborated on early drafts of several chapters before leaving CBO. Carol Frost analyzed the Current Population Survey data from the Bureau of the Census for the tables in Chapter 2. Roberton Williams developed the models for the tables in Chapters 5 and 6, wrote the appendix, and provided valuable advice. B.K. Atrostic contributed extensive materials on administration and compliance costs. Matthew Melillo checked the report for accuracy. Many people provided helpful comments, including Linda Bilheimer, Edith Brashares, Anna Cook, Ellen Breslin Davidson, Al Davis, Bob Dennis, Doug Elmendorff, Nancy Gordon, Bill Gradison, Maureen Griffin, Doug Hamilton, Teresa Hannah, Mary Hevener, Rick Kasten, Linda Laarman, Kathy Langwell, Larry Ozanne, Kevin Quinn, Pearl Richardson, Murray Ross, Philip Simon, Eric Toder, and Paul Van de Water.

Leah Mazade edited the study, and Christian Spoor provided editorial assistance. Denise Jordan prepared the manuscript with help from Simone Thomas. Martina Wojak-Piotrow and Kathryn Quattrone prepared the report for publication.

Robert D. Reischauer
Director

March 1994

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Summary

The high and growing costs of health care and the inability of many families to obtain health insurance have led to a national debate about health care reform. Employment-based health insurance, which covers 60 percent of the population, is a pillar of the U.S. health care system. It is valued by businesses and workers and receives support from the federal government through tax subsidies. Yet those subsidies exacerbate the high cost of health care as well as some of the problems of uninsured people.

This study explores how the tax subsidy for employment-based health insurance affects the way health insurance is provided and its cost and availability. The study evaluates the advantages and disadvantages of the present system and three options for changing the tax treatment of employment-based health insurance: capping the amount of health insurance premiums that can be excluded from employees' taxable income, replacing the exclusion with a progressive refundable tax credit for health insurance expenditures up to certain limits, and repealing the tax exclusion.

Limiting the open-ended tax subsidy for employment-based insurance is an important condition for increasing the cost-consciousness of people as consumers of health care. In fact, many experts consider it a key element in any "managed competition" strategy for health care reform.

Overview

Employment-based health insurance covers 75 percent of workers and their families. Higher-income workers are more likely to be insured than lower-income workers, and older workers are more likely to be insured than younger workers. Workers in heavily unionized industries, such as manufacturing and mining, are more likely to be insured than workers in retail, construction, or agricultural jobs. Workers in large firms are more likely to be insured than workers in small firms.

The amounts that employers pay for their employees' health insurance are not counted as income for tax purposes. This so-called tax exclusion has been an important factor in the widespread access of working people to comprehensive health insurance and high-quality medical care. The tax exclusion creates a substantial tax subsidy for employment-based health insurance; in 1994, it will reduce federal revenues by about $74 billion. In combination with the corresponding exemptions from state income taxes, the tax exclusion can reduce the after-tax cost of health insurance by half for some upper-bracket taxpayers.

The tax exclusion provides welcome relief to employees from the high and growing costs of health insurance. But the exclusion has itself contributed to those costs as well as to the high cost of health care. Because workers who receive health insurance as a fringe benefit are shielded from much of the cost of that insurance, they have been slow to switch to lower-cost providers of insurance and health maintenance organizations. People who are covered by more expensive (that is, more comprehensive) insurance are more concerned about the quality of the care they receive and less concerned about its cost. As a result, the rapid growth in the consumption of medical services and in medical expenditures has been able to proceed relatively unchecked.

In addition, the money taxpayers save because of the exclusion must be made up through other taxes, higher deficits, or reduced government spending. Thus, the direct benefits of the tax exclusion are less than they might appear to be. Although part of the tax subsidy for people with comprehensive employment-based health insurance comes at the expense of the uninsured and underinsured, part of it comes in the form of higher taxes (either direct or indirect) on the people who benefit from the exclusion. Moreover, some would view it as unfair to tax uninsured people to subsidize insurance for those with the most generous coverage.

Advantages of the Tax Exclusion

Although markets often work best without government interference, the market for health insurance may be an exception. Without government intervention, many fewer people would have health insurance today. Comprehensive medical insurance is most attractive to people with a higher-than-average risk of being sick. People who wish to purchase health insurance are thus likely to be sicker than average. As a result of this so-called adverse selection, insurers, who can measure risk only imperfectly, must increase premiums to cover their costs. But when premiums increase, more people with low risk decide not to purchase insurance, and it becomes even more expensive. Ultimately, fewer people are insured, and premiums are higher than they would be without adverse selection.

Employment-based group policies are less expensive than individual policies for several reasons, but primarily because employment groups can minimize adverse selection as long as people pick their employers for reasons unrelated to their health insurance status. Large employers--who can pool risks among many workers and efficiently process the information required to set and collect health insurance premiums--would probably sponsor health insurance for their employees even if there were no tax subsidy. Consequently, employers provide a natural base for access to health insurance.

By heavily subsidizing the price of employment-based health insurance for many people, the tax exclusion encourages employers to sponsor health insurance plans. Because more people are covered by group health insurance, adverse selection is less severe. The unlimited exclusion also simplifies tax accounting compared with tax options that would require employers to report much more information about the health insurance that they provide to their employees.

Disadvantages of the Exclusion

Because the amount of the tax subsidy increases with the size of the health insurance premium, the subsidy not only encourages employers to provide insurance but also encourages them to provide the most expensive health insurance policies. Employees who have a choice among health insurance options are more likely to choose more expensive plans because they have to pay only part of the additional costs.

Special conditions in the market for health insurance strengthen the tendency to buy more expensive insurance. Health insurance causes people to care little about the cost of health care because they pay few or none of the costs directly when they get sick. Thus, insured people have little incentive to seek out efficient providers of health care. Insurers themselves have an incentive to try to limit health care expenditures of only marginal value, but the tax exclusion diminishes that incentive. Even if cost containment measures reduce health insurance premiums, the savings are not worth much to employees because they pay only a portion of those premiums. As a result, market forces have less effect on the proliferation of expensive new technologies or the behavior of doctors than they could have if the subsidy did not exist.

Tying health insurance to employment causes further inefficiencies. Small employers pay much higher premiums for health insurance than do large employers. Consequently, the tax subsidy, which is

proportionate to premiums, helps large firms by lowering their labor costs relative to small firms. This difference in costs encourages industry concentration and discourages workers from seeking out firms at which they might be more productive. In addition, workers who are sick or who have a sick family member can get trapped in their jobs because most new insurance policies will not cover the "preexisting condition." Finally, because insurance is tied to one's job, it is inherently insecure. Employees can lose their insurance if they lose their jobs or if their employers stop carrying insurance.

Who Benefits from the Tax Subsidy?

The tax exclusion provides a subsidy for employment-based health insurance premiums that increases with the size of premiums, the share of the premiums paid by employers, and the marginal tax rate of the employee. These factors all increase with income. Among insured workers, premiums paid for employment-based health insurance also increase with income (see Summary Table 1). Average premiums for families with incomes below $20,000 are about half the amount paid by families with incomes above $50,000. Average premiums differ by income because higher-income people are more likely to be employed (and have insurance) for the entire year, to be covered by more than one policy, and to have family rather than individual coverage. Moreover, families with higher incomes are much more likely to have employment-based health insurance than are families with lower incomes.

Employers pay about 86 percent of health insurance premiums for workers. The average employer share varies by income from about 83 percent for families with incomes below $10,000 to 89 percent for families with incomes above $200,000.

Summary Table 1.
Distribution of Tax Subsidies for Employment-Based Health Insurance, by Family Income

	All Families		Families with Employment-Based Health Insurance			
Income (Dollars)[a]	Average Subsidy (Dollars)	Subsidy as Percentage of After-Tax Income	Percentage of Families Covered	Average Premium (Dollars)	Average Employer Share (Percent)	Subsidy as Percentage of After-Tax Income
1 to 9,999	10	0.2	8	1,830	83	2.9
10,000 to 19,999	150	1.1	34	2,370	80	3.0
20,000 to 29,999	500	2.2	62	3,080	84	3.5
30,000 to 39,999	700	2.3	78	3,650	84	2.9
40,000 to 49,999	920	2.4	85	4,370	86	2.8
50,000 to 74,999	1,170	2.3	89	5,080	87	2.6
75,000 to 99,999	1,590	2.2	91	6,010	87	2.5
100,000 to 199,999	1,710	1.6	89	6,410	88	1.8
200,000 or More	1,390	0.4	76	5,530	89	0.5
All Incomes	690	1.9	61	4,310	86	2.4

SOURCE: Congressional Budget Office.

NOTES: Families are groups of related people who live together; people not living with relatives are considered one-person families.

The figures in the table are based on 1994 levels of income.

a. Adjusted gross income reported on tax returns plus certain nontaxable forms of income including employers' contributions to the cost of health insurance premiums and tax-exempt interest.

Finally, families with higher incomes receive larger tax subsidies because they are in higher income tax brackets. Thus, the reduction in taxable income that the exclusion produces is worth more to them on average than it is to families in lower tax brackets.

Options for Change

Modifying the tax treatment of employment-based health insurance could be an important component of efforts to address the problems of the U.S. health care system. The tax exclusion could be modified or eliminated to reduce the incentive for overconsumption of health insurance while maintaining or even increasing the incentive for individuals to obtain it. In addition, the subsidy could be redesigned so that more of the benefits would accrue to those who need the most help in affording health insurance.

Limit the Tax Exclusion

To curtail the incentive for overconsumption, the amount of excludable health insurance premiums could be subject to a maximum level depending on the kind of policy (for example, family or self-only). Alternatively, the tax exclusion could be limited to the cost of a health insurance plan that provided a fixed set of benefits. This approach, called a tax cap, would prevent employees from receiving any additional tax benefits for premium payments in excess of the cap. Put another way, if the employer spent an additional $100 on health insurance above the cap, the employee's taxable income would rise by $100, just as it would if the additional compensation was being paid in the form of cash.

A tax cap would retain the employment base, with all of its advantages and disadvantages, and would continue to provide the greatest benefit to higher-income (high-tax-rate) people. But because insurance policies that exceeded the dollar cap would be most prevalent among high-income taxpayers, the limitation would affect them more than middle- and lower-income people. Capping the tax exclusion would give employees and their employers a strong incentive to make more cost-conscious choices about health insurance and health care. In addition, the additional tax revenues that a cap would generate could be used to expand the access of lower-income people to insurance. A tax cap could also reduce the disparities in tax treatment between those with very generous and those with more limited health insurance policies (or those with no insurance at all).

A tax cap would increase receipts from income and payroll taxes. The net distributional effects of a cap (and the ultimate effects on the health market and overall economic efficiency) would depend on how the additional receipts were used. Most people currently without employment-based health insurance are likely to gain under most limitations on the tax exclusion. But the distribution of gains and losses among people with and without insurance could vary dramatically, depending on how the revenues were redistributed.

The primary concerns about a tax cap are that it may be hard to administer and hurts people with high health care costs. For example, firms would have an incentive to recharacterize their expenses artificially to avoid paying tax on premiums above the cap, incurring costs themselves in rearranging their accounting and making the tax authority's job more difficult. Establishing different caps that varied with regional prices or individual health status would add further administrative complexity.

Replace the Exclusion with a Credit

To better target the subsidy, the exclusion could be replaced with a refundable tax credit. The credit could be designed to cost the same amount of revenues as the tax exclusion. It could also be designed to limit the tax subsidy to the same extent as the hypothetical tax cap in the previous option. The illustrative tax credit considered in this study would provide qualifying individuals with a credit against their income taxes depending on their expenditures for health insurance--whether made directly or indirectly through their employers--and on their incomes. Individuals with incomes so low that their credit exceeded their tax liability would still receive

a "tax refund" for the difference between the tax credit and the tax liability. Thus, the tax credit would essentially be a voucher for health insurance provided through the tax system.

The illustrative tax credit would give the largest subsidy to families with low incomes and provide little or no subsidy to families with higher incomes. By focusing the subsidy on those least likely to purchase insurance without help, the tax credit could increase the number of people covered by health insurance. But because the tax credit is phased out at higher-income levels, it could encourage families whose incomes were at or near the phase-out level to work less. Administrative and compliance costs would be greater under a tax credit than under a flat cap on the tax exclusion.

Repeal the Exclusion

Finally, the tax exclusion could be repealed and the additional revenues used for other purposes. This option has the virtue of simplicity, but it could significantly reduce the number of people with health insurance.

Chapter One

Introduction

The current national debate about health care has focused on two related problems. The costs of health insurance and health care have grown much faster than incomes, consuming ever larger shares of the budgets of individuals, businesses, and governments. And as a result of the rising cost of health insurance, a growing proportion of working people and their families are uninsured.

Still, most working people have health insurance, and the vast majority of them receive it as a tax-subsidized fringe benefit through their own or their spouse's employer. Unlike compensation paid in the form of wages, compensation paid in the form of health insurance is not considered taxable income for employees, nor is it part of the tax base for figuring employer payroll taxes such as Social Security. In addition, both wages and contributions for health insurance are fully deductible business expenses for the employer. Excluding compensation paid as health insurance from income and payroll taxes significantly reduces the taxes of both employees and employers, compared with compensation in the form of cash.[1]

This tax subsidy, or tax exclusion, has increased the availability of health insurance, but it has also made workers much less sensitive to the price of insurance than they would be if there were no subsidy. As a result, workers are less responsive to the savings in costs that might be offered by efficient insurers and health maintenance organizations (HMOs). By dampening the demand by workers for cost-effective systems of health care delivery, the tax exclusion has contributed to the high cost of health insurance for everyone at the same time that it has increased access to health insurance for employed people.

An often overlooked point is that the employer share of the cost of "employer-provided" health insurance is ultimately passed on to workers in the form of lower wages and reductions in fringe benefits other than health insurance. For that reason, and also because some health insurance is organized through labor unions rather than employers, this study calls health insurance that employees receive at work "employment based" rather than "employer provided."

Who Pays for Employment-Based Health Insurance?

Why must employers pass on their share of health insurance premiums to workers? The answer is that, in a competitive industry, employers must pass on those costs in order to stay in business. In a competitive labor market, employees must be paid the value of their contribution to a firm's output. If a firm pays a worker more than the value of what that worker produces, it loses money. Either compensation must be cut, or the firm will eventually go

1. The reduction in payroll taxes may also reduce future Social Security benefits. Thus, the current savings in payroll taxes overstate the value of the tax subsidy over a person's life.

bankrupt. If an employer pays a worker too little, another firm can pay the worker more and increase its profits. For that reason, employers adjust compensation to the level needed to stay in business.

For a number of reasons, employee compensation--wages and fringe benefits--may not exactly match the value of labor for every employee at every point in time. The inevitable trade-off between a dollar of wages and a dollar of fringe benefits does not always hold because employees choose firms and firms choose employees for many reasons. Health insurance is only one of them, but it is growing in importance. In addition, employees may be paid more or less than the value of what they produce at different stages of their careers. For example, employees tend to be paid more than what they produce early in their careers--while they are learning the job--in exchange for a rate of pay somewhat below what they produce later in their most productive years. But over the long run, employers have to pay workers what they are worth--at least on average--if they want to stay in business.

As a result, if an employer "provides" health insurance, it has to reduce wages (or slow the rate of growth of wages) until the cost of compensation again matches the value of what the employee produces. If an employer spends more for health insurance, either because its price increases or the employer selects a more comprehensive plan, the employer can pass on the additional cost as lower wages only if employees are willing to pay that cost --in the form of forgone wages and other benefits. If employees are unwilling to pay the cost, they will either convince the employer to find a less expensive health insurance plan, or they will leave to work for another employer.

At least in the long run, then, the employer is simply acting as the employee's agent. The employee--not the employer--pays for health insurance.

The Tax Exclusion and the Market for Health Insurance

When most people think of federally financed health care, they usually think of Medicare and Medicaid, the two largest programs of government expenditures. Gross federal outlays for Medicare totaled $143 billion in 1993; for Medicaid, $76 billion. Yet the health care financing policy that affects the most people is not a direct expenditure at all but a subsidy conveyed through the tax system: the exclusion of employers' contributions for employee health insurance from income taxes and Social Security payroll taxes. Employment-based health insurance covers about 60 percent of the population. Excluding employers' contributions for that insurance from income and payroll taxes will cost the federal government about $74 billion in 1994.

The tax exclusion--which has been in effect almost continuously since the enactment of the modern income tax in 1913--creates a strong incentive for employees to purchase comprehensive medical insurance through their employers. Employment-based insurance covered three out of four workers in 1992. In large firms, the level of coverage was even higher: 6 out of 7 employees of firms with 100 or more employees were covered by employment-based insurance.

Employees benefit directly from the open-ended tax subsidy because it gives them a cushion against the rapidly rising costs of health insurance. (An open-ended subsidy has no limits on the amount of health insurance contributions that can be excluded from taxes.) For example, an employee who earns $3,000 in the form of health insurance can save over $1,000 in federal income and Social Security taxes compared with an otherwise identical employee who receives the $3,000 in cash wages. If the employer's insurance contributions increase, either because of inflation or because benefits expand, the tax subsidy increases roughly in proportion.

Yet employees and other consumers of health care are also harmed by the open-ended subsidy, because it contributes to the nation's current high level of spending for health care. People who have health insurance receive health care for a fraction of its cost because the insurer pays all or most of their medical bills. As a result, people with insurance have little reason to "shop around" for a low-cost health care provider or to take other actions to reduce their health care costs. By reducing the cost of health insurance policies, the tax exclusion has encouraged employees to demand from their employ-

ers policies that are more comprehensive and that have fewer constraints on spending.

People who get insurance at work pay, on average, 26 percent less than the true cost of the insurance because of the tax exclusion--that is, because premiums for health insurance are not subject to tax but wages are. Thus, if an insurer or HMO reduces premiums by $100 per policy through aggressive controls on costs or by requiring policyholders to pay a larger share of the cost of seeing a doctor, the reduction in premiums is worth only $74 to the typical employee. The costs that such controls impose on individuals--including indirect costs such as limits on some services, restrictions on the choice of physician, or queues for elective services--take on disproportionate weight when compared with the diminished savings in premiums.

Tying health insurance to the workplace has certain advantages. Large employers can often purchase health insurance for much less than individuals. Most workers are healthy (that is, without major health problems), and people choose where to work primarily for reasons unrelated to their health status. Thus, the mix of workers at any given firm will probably not include a disproportionately large number of unhealthy people. In addition, because employers can use their normal payroll operations to collect premiums efficiently as well as to generate much of the information that insurers require, their overhead costs can be substantially lower than those of non-employment-related groups that might offer health insurance. Linking health insurance with employment also reduces the costs of insurers: marketing insurance to an employer that represents thousands of employees is much less expensive per covered person than marketing to individuals.

Tying health insurance to a job, however, has disadvantages for workers. Workers who develop health problems get trapped in their job because a new employer's insurance often will not cover preexisting conditions--or sometimes will not even cover such workers at all. And employment-based insurance is only as secure as the job it is tied to. If workers lose their job, they may lose their insurance; even if they keep their job, their employer may drop or change their health insurance coverage. Employers may also suffer from the link between employment and health insurance. Because labor costs depend in part on a firm's insurance costs, small firms with high costs per employee are at a competitive disadvantage relative to large firms with low insurance costs. That cost discrepancy would exist even without a tax exclusion, but the subsidy magnifies it.

Why Focus on the Tax Exclusion?

How important is the tax exclusion to the problems of health care costs and access? Total national health expenditures are expected to be about $980 billion in 1994. In comparison, the $74 billion in forgone taxes on employment-based health insurance is a small sum. Even if every dollar of the tax subsidy was translated into higher health costs, it would amount to less than one year's increase in expenditures. Arguably, other aspects of the problems in the health sector are more important.[2]

But even though the tax exclusion represents only a small part of national health expenditures, it creates incentives that thwart efforts to contain costs. Limiting the tax exclusion is therefore an important way to put downward pressure on health insurance premiums. For example, Alain Enthoven and Richard Kronick have suggested redesigning the exclusion to give insurers a positive incentive to compete for business.[3] Under their proposal, insurance policies would qualify for the tax exclusion only if they offered a fixed menu of services, which would make it easier to compare plans based on their costs. The tax exclusion would be limited to the cost of the

2. See, for example, Joseph P. Newhouse, "Medical Care Costs: How Much Welfare Loss?" *Journal of Economic Perspectives*, vol. 6, no. 3 (Summer 1992). Newhouse argues that although the tax exclusion may explain, in part, why the cost of health care is so high, it has little effect on the rate of increase of health spending. He conjectures that the pace of technological change and lack of information about the efficacy of alternative treatments explain much of the increase. On this point, see also Henry J. Aaron, *Serious and Unstable Condition: Financing America's Health Care* (Washington, D.C.: Brookings Institution, 1991); and Burton A. Weisbrod, "The Health Care Quadrilemma: An Essay on Technological Change, Insurance, Quality of Care, and Cost Containment," *Journal of Economic Literature*, vol. 29, no. 2 (June 1991).

3. See Alain C. Enthoven and Richard Kronick, "Universal Health Insurance Through Incentives Reform," *Journal of the American Medical Association*, vol. 256, no. 19 (May 15, 1991).

least expensive adequate plan. Thus, individuals who chose the "Cadillac" health plan over the "Chevy" version would have to pay the difference in price out of after-tax dollars. Enthoven and Kronick and others argue that this heightened cost-consciousness (along with several other important features of their proposal) is necessary to give insurers and health maintenance organizations an incentive to limit costs.

Altering the tax exclusion could also help in financing expanded access to health insurance. Limiting the exclusion to the cost of a typical health insurance policy, as discussed in Chapter 6, could raise $19 billion in additional federal income and payroll taxes in 1994. States with income taxes would also obtain more revenue. Those funds could be used, for example, to expand Medicaid or to pay for subsidies for low-income working families without insurance and people with high insurance costs.

Because the income tax is progressive, people with relatively high incomes (and high tax rates), who may need the least assistance in getting health insurance, benefit the most from the tax exclusion. A different subsidy mechanism could direct the benefits of the subsidy toward people with low incomes or especially high medical costs. The tax credit option that Chapter 6 discusses is one way to address the former objective. Before considering options, however, it is important to understand the special tax status of employment-based health insurance and who is covered by that insurance.

Chapter Two

Background

The Internal Revenue Service (IRS) has treated employers' contributions for the accident and health insurance of their employees as nontaxable fringe benefits from the inception of the income tax in 1913. This substantial tax preference, as well as certain advantages that employers gain from providing health insurance, has stimulated the growth of employment-based coverage. As a result, most workers and their families get health insurance at work.

Access to health insurance is uneven nonetheless. Employees in manufacturing, for example, are more than three times as likely to be insured as employees in agriculture. Higher-income workers are more likely to have health insurance (as well as other fringe benefits) than are lower-income workers. And the problems of access have been getting worse. The number of uninsured people has increased by almost 55 percent over the past 13 years.

This chapter summarizes the legislation that subsidizes and regulates the provision of health insurance by employers and examines the differences between people who get health insurance at work and those who do not.

History of the Tax Exclusion and Related Laws

As noted above, the IRS has treated employers' contributions for the accident and health insurance of their employees as nontaxable fringe benefits since 1913. The tax exclusion applies only to the employer share, however; if the employer's contribution does not cover the entire premium, the employee pays for the remainder out of after-tax dollars.

Although a de facto tax exclusion has always prevailed, its treatment by the Internal Revenue Code has changed over time. Up until 1943, the IRS had made no explicit ruling on employers' contributions, but it took the position that most fringe benefits that were not paid in cash should be excluded from taxation. In 1943, the IRS ruled that employers' contributions to group health insurance policies were exempt from taxation. Yet in 1953, an IRS Revenue Ruling stipulated that employers' contributions to individual health insurance policies were taxable. In response, the Congress enacted section 106 of the Internal Revenue Code of 1954, which reversed the 1953 ruling. Employers' contributions for health and accident insurance are also exempt from payroll taxes under section 3121 of the code. The federal government imposed some restrictions on employment-based health insurance, however, through the Employee Retirement Income Security Act of 1974 (ERISA) and its amendments.

Employers may purchase insurance for their employees or provide insurance themselves, a practice known as self-insuring (although an insurance company typically manages the plan). Self-insured employee benefit plans are subject to special rules under ERISA. Self-insured plans cannot discriminate among higher- and lower-paid employees in providing benefits, but ERISA exempts those plans from

Table 1.
Primary Source of Health Insurance for the U.S. Population, by Age, 1992

Source of Insurance	Total, All Ages	0 to 17 Years	18 to 64 Years	65 Years and Older
	People (Millions)			
Employment-Based	149.8	45.5	102.7	1.6
Medicare	31.7	0	3.2	28.5
Medicaid	19.3	11.2	8.2	0
Department of Veterans Affairs	0.7	0	0.7	0
Other Private	14.4	1.1	13.2	0.2
None	35.4	8.4	26.8	0.3
Total	251.4	66.2	154.7	30.6
	Percentage of Age Group			
Employment-Based	59.6	68.7	66.4	5.1
Medicare	12.6	0.1	2.0	93.3
Medicaid	7.7	16.9	5.3	0.1
Department of Veterans Affairs	0.3	0	0.4	0.1
Other Private	5.7	1.7	8.5	0.5
None	14.1	12.7	17.3	0.9
Total	100.0	100.0	100.0	100.0

SOURCE: Congressional Budget Office tabulations based on the March 1992 Current Population Survey.

NOTE: Numbers may not add to totals because of rounding.

state regulations that would otherwise apply to insurers.[1] The most important of those regulations are mandates for covering specific illnesses and services provided by practitioners other than medical doctors. ERISA also exempts self-insured plans from state taxes on health insurance premiums, which apply to third-party insurers.

The Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) amended ERISA to establish additional requirements for coverage. COBRA requires that employers that provide health insurance and that have 20 or more employees (whether self-insured or not) allow participants and other beneficiaries (family members) to purchase continuing coverage for at least 18 months after coverage would otherwise cease--for example, because of job loss, death, or divorce. In addition, the law prevents employers from charging more than 102 percent of the applicable premiums for covered employees to continue coverage.[2]

1. The Tax Reform Act of 1986 extended the nondiscrimination rules to firms that purchase health insurance, but those broader rules were repealed in 1988.

2. For other laws and special arrangements that apply to employee benefits, see Edward F. Shay, "Regulation of Employment-Based Health Benefits: The Intersection of State and Federal Law," in Marilyn J. Field and Harold T. Shapiro, eds., *Employment and Health Benefits: A Connection at Risk* (Washington, D.C.: National Academy Press, 1993).

In 1978, the Congress enacted section 125 of the Internal Revenue Code, which allows employers to set up so-called cafeteria plans for certain employee benefits. A cafeteria plan allows employees to choose to receive part of their compensation in the form of one or more nontaxable fringe benefits or in the form of taxable wages. The benefits may include an optional health insurance plan or choice of plans; out-of-pocket expenses for such items as medical and dental services, prescription drugs, and eyeglasses; and the employee share of the cost of health insurance provided by employers. The law excludes benefits for medically related items paid for through a cafeteria plan from employees' taxable income. As a result, employees with access to such a plan may pay for all or most of their medical costs with pretax dollars.

In general, people who purchase their own insurance directly cannot deduct the cost. Individuals may, however, deduct the portion of their health insurance premiums plus other medical expenses that exceeds 7.5 percent of their adjusted gross income. From 1987 to 1993, self-employed people could deduct 25 percent of the cost of their insurance premiums under section 162(l) of the Internal Reve-

Table 2.
Trends in the Primary Source of Health Insurance for the U.S. Population, 1980-1993

Source of Insurance	1980	1983	1987	1990	1993
			People (Millions)		
Employment-Based[a]	148.0	149.5	150.3	153.1	148.6
Individual	15.5	15.1	14.8	14.7	15.1
Medicare	24.0	25.9	28.7	30.5	32.6
Medicaid	11.5	12.4	14.0	14.6	20.5
None	24.2	26.6	31.0	33.4	37.4
Total	223.2	229.6	238.8	246.2	254.2
			Percentage of Population		
Employment-Based[a]	66.3	65.1	62.9	62.2	58.5
Individual	6.9	6.6	6.2	6.0	6.0
Medicare	10.7	11.3	12.0	12.4	12.8
Medicaid	5.2	5.4	5.9	5.9	8.1
None	10.8	11.6	13.0	13.6	14.7
Total	100.0	100.0	100.0	100.0	100.0

SOURCE: Congressional Budget Office (CBO) estimates based on data from the March Current Population Surveys of the Bureau of the Census and other sources.

NOTES: CBO is currently revising its estimates of the distribution of insurance coverage. The estimates presented here are preliminary.

Numbers may not add to totals because of rounding.

a. Also includes coverage provided through the Department of Veterans Affairs.

nue Code.[3] These supplemental tax subsidies for health insurance reduce income tax revenues by about $5 billion a year. By comparison, the exclusion for employment-based health insurance will cost about $74 billion in lost income and payroll taxes.[4] This study focuses on the role of the latter subsidy.

Who Is Covered by Employment-Based Health Insurance?

Based on data from the Bureau of the Census's Current Population Survey, approximately 103 million nonelderly adults (ages 18 to 64), or 66 percent of that age group, were covered by employment-based insurance in 1992 (see Table 1 on page 6). In addition, 69 percent of children were covered. The next biggest source of coverage for nonelderly adults was privately purchased insurance, which covered 9 percent of that group. Medicaid covered 17 percent of children and 5 percent of adults. A significant fraction of the nonelderly population had no insurance: 17 percent of adults and 13 percent of children. In contrast, primarily because of Medicare, only 1 percent of the elderly were uninsured.

The likelihood of being uninsured has increased over time (see Table 2 on page 7). In 1980, 11 percent of the population was uninsured; by 1993, that proportion had increased to 15 percent. The number of uninsured people increased by 55 percent during that interval.

Working people are more likely to be uninsured than nonworking people. Most adults who are not in the labor force are either retired, and usually eligible for Medicare, or single parents who are eligible for Medicaid. In 1992, about 72 percent of the 35 million uninsured people in the United States were part of a family with a working adult. Another 13 percent were members of families in which the head of the household was temporarily laid off or looking for work. Only 15 percent of uninsured people lived in a household whose head was out of the labor force.

Lower-income workers are the group most likely to be uninsured. Table 3 shows that in 1992, more than half of all workers whose income was below the poverty level were uninsured. The likelihood of being uninsured declines as income grows, falling to about 7 percent for workers with family income of three times the poverty level or more. The same pattern appears in insurance status by wage level. Workers earning less than $5 per hour were 10 times as likely to be uninsured as workers earning more than $15 per hour. Workers in heavily unionized industries, such as manufacturing and mining, and white-collar industries, such as finance and public administration, were much less likely to be uninsured than workers in other industries.

For a given level of benefits, the cost of insurance depends on the size of the firm. Compared with small firms, large firms are better able to pool risks and can distribute the costs of providing insurance among more workers (thereby reducing the share that any single worker pays). In 1988, average administrative and other overhead costs exceeded 35 percent of premiums for firms with fewer than 10 employees, compared with 12 percent or less for firms with more than 500 employees.[5] In addition, many small firms are not incorporated; as a result, those employers can no longer deduct any of the cost of their own insurance (although they can deduct 100 percent of their employees' insurance). In part because of these differences, in 1992, a worker in a firm with fewer than 10 employees was more than three times as likely to be uninsured as a worker in

3. The provision that allowed self-employed people to deduct 25 percent of their premiums for health insurance expired at the end of 1993. Several proposals, including the Administration's, would increase the deduction for the self-employed to 100 percent of premiums.

4. The Congressional Budget Office estimates that the tax exclusion will reduce income tax revenues to the federal government by $44 billion and payroll tax revenues by $30 billion, for a total of $74 billion in 1994. The Joint Committee on Taxation estimates that revenue will be reduced by about $90 billion in 1995, based on a somewhat different model.

5. These estimates were calculated by Hay/Huggins Company, Inc., based on underwriting practices of major insurers. See Congressional Budget Office, *Rising Health Care Costs: Causes, Implications, and Strategies* (April 1991), p. 78.

Table 3.
Primary Source of Health Insurance for Workers Under Age 65, by Demographic Category, 1992

Category	Number of Workers (Millions)	Percentage Distribution by Source of Insurance				
		Own Employer	Other Employer	Individual Policy	Public Insurance[a]	No Insurance
All Workers	107.3	60.2	14.8	7.6	2.3	15.2
Industry						
Agriculture	2.6	24.2	14.2	25.2	3.4	33.0
Construction	6.3	45.5	14.2	9.7	2.4	28.2
Finance	7.3	65.7	15.9	7.9	1.1	9.5
Government	5.3	83.8	8.3	1.9	1.5	4.5
Manufacturing	19.1	76.9	8.0	3.2	1.2	10.7
Mining	0.6	81.1	6.0	3.0	1.1	8.7
Retail Trade	16.1	42.4	18.4	10.6	3.8	24.9
Services						
Professional	26.2	62.1	19.6	7.0	2.3	8.9
Other	11.4	39.0	18.7	12.1	3.9	26.2
Transportation	7.9	77.1	7.5	4.7	1.0	9.6
Wholesale Trade	4.5	67.2	13.4	6.3	1.5	11.6
Wage Rate[b]						
Below $5.00	9.0	21.6	18.3	12.0	9.9	38.2
$5.00 to $9.99	36.9	53.7	17.5	6.2	2.8	19.8
$10.00 to $14.99	24.2	76.0	11.5	3.9	0.8	7.7
$15.00 or more	23.7	84.9	8.2	2.9	0.3	3.7
Family Income as Percentage of Poverty Level						
Under 100	6.5	16.4	2.8	12.8	15.7	52.3
100 to 199	15.4	43.4	9.3	9.2	4.9	33.2
200 to 299	19.7	58.2	14.9	7.9	1.5	17.5
300 and over	65.7	69.1	17.2	6.6	0.5	6.6
Firm Size (Number of employees)						
Fewer than 10	21.2	24.6	24.6	19.9	3.2	27.7
10 to 24	9.3	46.4	18.4	9.5	3.3	22.4
25 to 99	13.7	57.5	14.6	5.9	2.6	19.4
100 to 499	15.2	69.4	12.6	4.1	2.2	11.7
500 to 999	6.0	74.8	11.7	3.6	1.6	8.4
1,000 or more	41.7	76.9	10.2	3.3	1.6	8.0
Age (Years)						
Under 30	26.7	51.9	11.4	8.6	3.4	24.6
30 to 39	33.5	61.4	15.9	5.9	2.3	14.5
40 to 49	26.8	64.1	17.2	6.8	1.5	10.3
50 to 64	20.2	64.2	14.1	10.0	1.5	10.2

SOURCE: Congressional Budget Office estimates based on the March 1992 Current Population Survey.

a. Public insurance includes Medicaid, Medicare, and coverage provided by the Department of Veterans Affairs.

b. "Wage" is the hourly wage for hourly employees and earnings per week divided by hours worked for nonhourly employees. The figures exclude individuals for whom an hourly wage could not be determined.

a firm of 500 or more employees (see Table 3).[6] Almost half of all uninsured workers worked for firms with fewer than 25 employees, even though those firms accounted for less than 30 percent of total employment.

Younger workers are more likely to be uninsured than older workers. For example, 25 percent of workers under the age of 30 were uninsured in 1992, compared with 10 percent of workers ages 50 to 64. Young workers tend to have lower wages, which makes insurance relatively less affordable. They also tend to be healthier than average, which means that premiums for group health insurance are likely to exceed what young workers expect to pay in health care costs.

6. There are more reasons why small firms would be less likely than large firms to provide health insurance. Small firms, on average, pay lower wages, have higher turnover, and employ relatively more part-time workers than large firms. See Charles Brown, James Hamilton, and James Medoff, *Employers Large and Small* (Cambridge, Mass.: Harvard University Press, 1990).

Chapter Three

The Rationale for a Tax Subsidy for Health Insurance

Economists evaluate tax policies in terms of their effects on markets, fairness, and the costs of administration and compliance (see Box 1). This chapter begins such an assessment of the tax exclusion for health insurance by asking a more basic question: Is *any* price subsidy justified as a correction for inherent problems in the market for health insurance?

The tax exclusion for employment-based health insurance effectively subsidizes the price that workers pay for health insurance. In well-functioning markets, subsidies (and taxes) exact an efficiency cost. Subsidies cause too many resources to be devoted to producing the subsidized good or service, leaving too few resources for producing everything else. The efficiency cost is compounded because any subsidy must eventually be financed by higher taxes, which cause other distortions.

Yet even if the markets for health insurance and health care were left alone, they might not function efficiently--for a number of reasons.[1] Economic efficiency requires that both buyers and sellers have accurate information, but insurers have imperfect information about the health status of their customers, in part because it is costly to obtain. Similarly, physicians have imperfect information about the efficacy of different kinds of treatment, and consumers are less knowledgeable than physicians.

Economic efficiency also requires that the price of any good or service reflect the cost of the resources used to produce it, but the point of insurance is to reduce the price of the service when an insured event occurs. Therefore, health insurance as it is traditionally offered allows patients and their doctors to choose treatment for a malady with little regard for the price of care. A related health market problem is the availability of charity care, which discourages lower-income people from purchasing health insurance. Economic efficiency requires that people pay for the services they receive. Finally, markets should exist for all variants of goods and services that people are willing to buy. But there are no markets for renewable health insurance on fair terms.

These factors and other problems of the market for health insurance might provide a rationale for a price subsidy or other intervention by the government, but such a judgment is hard to justify given the available information. An unsubsidized market might create institutional arrangements that would allocate resources efficiently in the face of the market's overriding constraints. For example, renewable health insurance, which a worker could carry from job to job, might exist if there were no subsidy for employment-based health insurance (which is not "portable"). In addition, the market might have developed cost containment mechanisms that would have produced results similar to what would have occurred if consumers had had to pay the full price of health care. Thus, assessing whether a price subsidy is justified requires a judgment about

1. See Mark V. Pauly, "Taxation, Health Insurance, and Market Failure in the Medical Economy," *Journal of Economic Literature*, vol. 24, no. 2 (June 1986).

what the markets for health care and health insurance might look like without a subsidy.

Calculating whether a subsidy is justified has further complications because few markets satisfy all of the economist's requirements for economic efficiency. The actual efficiency costs of either a subsidy or a laissez-faire approach depend on how resources are allocated in the rest of the economy. The economist's general presumption in favor of laissez-faire arises because the nebulous benefits of a subsidy must be weighed against the certain efficiency cost exacted by the taxes that must be levied to pay for the subsidy.

Given these caveats, what are the effects of failures in efficiency on the markets for health care and health insurance? What role, if any, may subsi-

Box 1.
Public Finance Principles for Evaluating a Tax Subsidy

A good tax system should promote economic efficiency and be perceived as fair, and it should cost as little as possible for the government to administer it and for people to comply with it. Tax subsidies, such as the tax exclusion for employment-based health insurance, can be evaluated in terms of how well they meet these objectives.

Efficiency

Economic efficiency means that resources are allocated in such a way that there is no waste. Theoretically, once efficiency is achieved, resources cannot be reallocated to produce more of some goods without producing less of others; similarly, because all resources are being fully used, the lot of some consumers cannot be bettered without harming the lot of others. Under certain conditions, competitive markets may allocate resources efficiently, assuring that consumers get what they want (given their budgets) and that goods and services are produced as cheaply as possible. Those conditions include the following: that there be many buyers and sellers of every commodity--that is, that monopolies not exist; that firms be able to assess easily the cost of what they are selling and that consumers be able to assess easily the value of what they are buying; that one person's production or consumption of a good not affect the well-being of other people; that people who do not pay for something be kept from consuming it; and that markets exist for every product or service that people are willing to pay for.

These criteria are not met in every market, and given other societal objectives that require taxation, a purely efficient allocation of resources is impossible. In the real world, the efficiency objective of taxation is formulated in terms of a "second-best" allocation of resources: goods and services should be produced and consumed in proportion to the levels that would prevail in the purely efficient market. In the realm of practical public finance, this amounts to interfering as little as possible with efficient markets and designing taxes or subsidies to move consumption and production toward efficient levels in markets that fail to meet the conditions for efficiency.

Equity

Tax equity requires that people be taxed according to their ability to pay. There are two elements of tax equity. The first is that people with equal ability to pay should pay the same tax. Economists call this principle "horizontal equity." The second principle is "vertical equity"--people with greater ability to pay should pay more tax. Some people would also add that those individuals with greater ability to pay should pay proportionately more tax than people with lesser ability. That principle underlies the progressivity of marginal tax rates in the income tax.

Compliance and Administrative Costs

The cost to the government of administering a tax and the cost to individuals and businesses of complying with it represent a loss of resources to society. A simpler tax system means that fewer of society's resources must be allocated to the unproductive activity of tax compliance and that more are available to produce valuable goods and services. In addition, if a tax is hard to enforce or a subsidy hard to monitor, aggressive or dishonest taxpayers may pay less tax than they should and less tax than others who are equally able to pay, thus violating horizontal equity.

dies play in mitigating those failures? And what new inefficiencies may subsidies produce? These questions need to be considered in relation to the two components of the health insurance that employers commonly offer.

The Two Components of Health Insurance

Health insurance comprises two distinct services: prepayment for routine medical care and treatment of ongoing chronic conditions, and true insurance against unpredictable illness and accidents. The prepayment component includes predictable expenditures such as routine physicals, normal obstetric care, and eyeglasses. The true insurance component is the risk that the insurance company assumes regarding the future health care expenses of the insured person.

Rationale for Subsidizing the Prepayment Component

The prepayment component of health insurance smoothes out medical expenditures in much the same way that a seasonal budget plan offered by a utility company smoothes out utility costs. But third-party payment of medical bills is expensive. The overhead costs of paying for routine care are almost surely greater than the benefits that come from smoothing the stream of payments for most people. Before income and Social Security taxes were significant factors in the decisions individuals made about insurance, insurance policies typically covered only hospitalization. The scope of health insurance has expanded to cover more routine services as income and payroll tax rates have increased. In turn, more comprehensive insurance has tended to increase the demand for routine services. Unless people underestimate the value of these services, the insurance-induced increase in visits to physicians and in the demand for eyeglasses and other services is inefficient.

However, because patients do not always know when it is medically appropriate to visit the doctor, reducing the price hurdle might conceivably improve efficiency. For example, some individuals may incorrectly evaluate the risk of neglecting prenatal care or physicals.[2] In addition, decisions about health care may affect people other than the decision-maker. Prenatal care, for instance, may improve the health of newborn babies, and preventive health care or better access to acute care may reduce the number of sick days that employees take. Subsidizing the availability of comprehensive private health insurance might also increase the incentives to work for some low-wage earners, who would qualify for free routine and catastrophic health care through Medicaid if they were not employed.

Rationale for Subsidizing the Insurance Component

The insurance component of health insurance protects the purchaser against all or part of the cost of a catastrophic illness or accident. Economic efficiency requires the existence of insurance markets, but for a number of reasons, too little health insurance might be provided if the government did not intervene. Thus, a rationale for a subsidy might stem from the failure of the private market to provide an efficient amount of health insurance.

A fundamental problem in the market for health insurance, as in other insurance markets, is a lack of information. Insurance companies have only a limited ability to determine the health status of any individual--and thus the risk they assume by insuring that person. As a result, if a health insurance company sets a fixed price for individuals in a particular category, the insurance is most attractive to those with the highest risk. This phenomenon--known as adverse selection--causes the average purchaser of insurance to have above-average risk, which raises the insurer's costs and thus forces premiums to rise. Higher premiums drive out more of the low-risk individuals, and the spiral continues. In theory, if

2. They may also overvalue some services. For example, several medical researchers have concluded that routine physicals might not be worthwhile for people without symptoms. See Don Colburn, "The Annual Physical: Who Needs It?" *The Washington Post*, September 7, 1991.

Box 2.
The Inevitability of Rationing

An efficient allocation of resources requires that goods and services be provided only up to the point where their benefits equal their costs. But applying that criterion to the market for medical care would sometimes have heartbreaking consequences. It would lead to people dying who could have been saved by aggressive and expensive treatment. It would also lead to people being denied expensive medical treatment that could have substantially improved their quality of life.[1]

Comprehensive medical insurance allows sick people and their families and doctors to avoid these painful choices because all or most medical care is paid for by insurance. But society cannot avoid these choices. If medical care is provided without regard to its cost, more and more money will be spent on procedures and treatments whose benefits are less than their costs. That kind of spending, in turn, raises the price of medical insurance, which causes more people to become uninsured. The result is the rationing of medical care based on whether people have insurance, rather than on whether the care is worth its cost.

In many markets, the price system performs rationing most efficiently. When prices reflect the cost of a commodity, consumers can easily determine whether the commodity is worth its cost. In the health care market, however, consumers often cannot assess the different values of health care options, and insurance obscures the price of care. For this reason, some external entity, such as the insurer, the health maintenance organization, or the government, must ration care.

1. For a discussion of the choices made under the British health care system, see Henry J. Aaron and William B. Schwartz, *The Painful Prescription: Rationing Hospital Care* (Washington, D.C.: Brookings Institution, 1984).

adverse selection is severe enough, a market might not even exist.[3]

The medical care that health insurance covers is a unique service. When people get sick, they will do almost anything to get well. Physicians, too, want to provide any care that they believe may help. Calculating whether a course of treatment is worth its cost plays a minor role in the decision. Patients often lack the knowledge to make an informed decision. And at times doctors lack accurate information about the benefits of treatment and could not perform a cost-benefit calculation even if they wanted to.[4] Patients may have an even harder time assessing the quality of care that they receive. The problem with insurance from an economic point of view is identical to its virtue from the point of view of the individual: it allows sick people and their doctors to make choices about health care with little regard for costs (see Box 2).

Insurance gives people an incentive to consume too much health care because they have to pay only a fraction of the cost (called the copayment). As a result, they will demand medical procedures as long as the benefit to them is equal to their out-of-pocket expense. If there is no copayment, they may continue to consume care until it produces no additional benefit.

Moreover, the interests of doctors and patients are not always the same. To avoid malpractice suits, doctors may have an incentive to prescribe care beyond the point where the costs exceed the benefits from the patient's perspective. In addition, doctors have a financial incentive to overprescribe care because their income depends on how many services they perform. Insurance reduces the incentive for individuals to monitor the decisions of their doctors.

3. Michael Rothschild and Joseph Stiglitz, "Equilibrium in Competitive Insurance Markets: An Essay on the Economics of Imperfect Information," *Quarterly Journal of Economics*, vol. 90, no. 4 (November 1976).

4. Henry J. Aaron, *Serious and Unstable Condition: Financing America's Health Care* (Washington, D.C.: Brookings Institution, 1991).

Problems that arise from the low cost of care for people who have insurance are called moral hazard.[5]

Another classic market failure that occurs in the health market is the problem of free riders. Because hospitals generally do not turn away very sick people who need care, the incentive to purchase insurance is lessened, especially for people who have little wealth to protect. Thus, part of the health costs incurred by insured people and taxpayers is the cost of providing care for other individuals who do not have insurance. This factor causes health care to become too expensive for some people.[6]

Finally, the market fails to provide long-term contracts for health insurance. Individuals generally cannot contract for health insurance for more than one year at fixed rates or under fixed terms. Although individuals can buy policies as members of a pool whose rates are determined based on the experience of the pool, over time adverse selection causes such pools to be too expensive for healthy members. As they drop out, those who have become sick end up paying very high premiums. Thus, even in a set pool, the costs of insurance are based on health status in the future as well as health status when the policy is purchased.

Unlike the other failures of the market for health insurance, it is not clear that the lack of long-term contracts is an inherent problem of an unsubsidized market. The tax exclusion might have precluded the development of long-term contracts by tying insurance to jobs rather than to people. Still, it is uncertain whether long-term contracts would exist in the absence of a subsidy.[7] Without subsidies, such contracts would have to include mechanisms to guarantee that the insured person remains in the pool, even if he or she, because of good health, could buy a better contract from another insurer.

One possibility would be to charge higher premiums for young, healthy people in exchange for a guarantee of renewability on predefined terms. This so-called front-loading of premiums makes renewal a better deal, on average, for older subscribers. (In contrast, newly purchased policies would almost always become more expensive with age.) With front-loaded premiums, however, insurers would have to maintain substantial reserves to be able to deliver on their guarantee of health care for an aging pool of subscribers. Recent experience with savings and loan institutions and pension funds suggests that guaranteeing long-term financial soundness is difficult, even with financial instruments that are much less uncertain than a health insurance policy.

Community rating has some of the desirable characteristics of renewable health insurance contracts. Under community rating, health insurance premiums are based on the average expected costs for the entire pool of subscribers, rather than on each subscriber's health status. Community-rated premiums are similar to premiums for a front-loaded, long-term health insurance contract.[8] Young, healthy people pay premiums that are much higher than their actuarial premiums, whereas older, sicker people pay premiums that are much lower than their expected costs. The advantages of this approach are that it makes insurance accessible to sick people and avoids the substantial underwriting costs associated with determining the health status of individuals and small groups. The disadvantages are that it creates an implicit system of subsidies and taxes that affect behavior in some undesirable ways.[9] It also establishes some questionable transfers of resources. For example, under community rating, young workers who tend to have lower incomes subsidize older workers with higher incomes. In addition, because of adverse selection, community rating is inherently unstable when participation is voluntary.

5. See Mark V. Pauly, "The Economics of Moral Hazard: Comment," *American Economic Review*, vol. 58, no. 3 (June 1968).

6. Mancur Olson, ed., *A New Approach to the Economics of Health Care* (Washington, D.C.: American Enterprise Institute, 1982), argues that the tax subsidy may be justified because of the free-rider problem.

7. See Mark V. Pauly, "The Welfare Economics of Community Rating," *Journal of Risk and Insurance*, vol. 37, no. 3 (September 1970). Pauly suggests that long-term contracts are a way to deal with the problem of social insurance, but he does not explain how such contracts could be implemented.

8. Katherine Swartz, "Community Rating: An Idea Whose Time Has Come (Again)," *Journal of American Health Policy*, vol. 3, no. 1 (January/February 1993).

9. Pauly, "The Welfare Economics of Community Rating."

Conclusions

The markets for health care and health insurance fail in a number of ways to meet the requirements for economic efficiency. These failures have two important implications. On the one hand, because of adverse selection, moral hazard, and free riders, the price of insurance is inflated, causing too few people to have insurance. On the other hand, those who have insurance are likely to consume too much health care. The health insurance market is also incomplete because long-term contracts do not exist. The market thus provides too little insurance against the risk of developing long-term chronic illness.

These failures suggest several economic criteria for evaluating both subsidy and market-based approaches to health insurance. The approach should:

- Encourage people to participate in the health insurance market;
- Discourage people with insurance from consuming health care that is of minimal value;
- Not encourage the prepayment component of health insurance;
- Encourage the development of renewable health insurance contracts or an alternative, such as community rating; and
- In the case of a subsidy, interfere as little as possible in other (nonhealth) markets (for example, the labor market).

The next three chapters explore how well the tax exclusion for employment-based health insurance and some alternative policies meet these objectives.

Chapter Four

How the Tax Exclusion Affects the Health Insurance Market

The catalog of failures in the health insurance market that Chapter 3 discusses suggests that subsidies might improve the market's operation. This chapter examines whether the tax exclusion is the right tool for trying to improve the market for health insurance.

As explained earlier, the tax exclusion is really a special kind of price subsidy for health insurance that is conveyed through the tax system to those who obtain insurance through their employers. Two questions arise in evaluating the economic effects of such a subsidy. First, can a price subsidy improve the efficiency of the health market? Second, what are the implications of using this particular kind of price subsidy?

What Are the Effects of Subsidizing the Price of Health Insurance?

A subsidy might be justified if failures in the market would make the price of health insurance inefficiently high without a subsidy. The price does tend to be too high because part of the premiums for health insurance pay for the cost of free riders who will not or cannot insure themselves.[1] Insurance is also too expensive for relatively healthy people because of adverse selection.

But health insurance also causes spending on health care to be inflated because of moral hazard. Subsidizing insurance exacerbates this problem because it encourages people to purchase more comprehensive insurance with fewer controls on costs. It also creates a strong incentive to prepay the costs of services that would otherwise be paid for with after-tax dollars.

In sum, a case might be made for encouraging the purchase of insurance but not for encouraging the purchase of more expensive or more comprehensive health insurance.

Effects on Health Insurance Participation and Comprehensiveness of Insurance

A price subsidy causes more people to purchase insurance than ordinarily would and for the policies they purchase to be more expensive than they otherwise would be. The increase in participation that a subsidy induces enhances efficiency, and it might also serve other social objectives. But the induced increase in the comprehensiveness of insurance is probably inefficient.

1. The tax exclusion for employment-based health insurance more than offsets the free-rider component of health insurance premiums. The Congressional Budget Office has estimated that the total charges for uncompensated care for the uninsured were $26 billion in 1991, only a part of which would be included in premiums for private health insurance. The tax exclusion conveyed a subsidy worth more than twice that much. See Congressional Budget Office, "Single-Payer and All-Payer Health Insurance Systems Using Medicare's Payment Rates," CBO Staff Memorandum (April 1993).

The importance of these effects depends on how sensitive participation and demand for more comprehensive insurance are to the price of insurance. Ample evidence suggests that people respond to differences in that price. For example, the prevalence of employment-based insurance suggests a significant response to the great advantage in price offered by that kind of coverage.[2] Nearly all employees who are offered insurance by their employer accept it if they are not covered under a spouse's plan.[3]

Evidence on Participation. Based on a sample of workers without employment-based insurance, M. Susan Marquis and Steven Long estimated that the participation rate would increase by about 0.6 percent if the price of individual (nongroup) health insurance declined by 1 percent.[4] Jonathan Gruber and James Poterba studied the response of self-employed people who were allowed a partial tax deduction for their insurance premiums after 1986.[5] Gruber and Poterba estimated that participation could be quite responsive, and, indeed, the proportional decrease in after-tax health insurance premiums was roughly matched by proportional increases in the percentage of self-employed people who purchased health insurance, after controlling for other influences.

Thus, a price subsidy might substantially increase the number of people covered by insurance.

Evidence on Demand for More Comprehensive Insurance. M. Susan Marquis and Charles Phelps estimated that the amount of supplemental insurance that people purchased was similarly responsive to price based on questions asked of participants in RAND's Health Insurance Experiment.[6] Marquis and Phelps estimated that a 1 percent drop in the price of insurance would increase the quantity of insurance purchased by 0.6 percent. That estimate is consistent with Martin Feldstein's and Bernard Friedman's computations based on a simulation model.[7] The estimated responsiveness of the demand for insurance to its price is substantially greater than the estimated responsiveness of the demand for medical care to its own price measured in RAND's Health Insurance Experiment, but that experiment only measured the demand for medical care rather than the demand for insurance.[8] Those two demands are quite different. The demand for care could be unresponsive, but the demand for insurance could be quite responsive if people wanted to reduce their risk of financial loss.[9]

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2. The average rate of the federal tax subsidy varies from 9 percent of premiums for low-income families to 39 percent for families in the highest income category. Marginal rates are even higher for some families. In combination with the exclusion of health insurance premiums from state income tax liability, the effective subsidy rate can approach 50 percent.

3. Congressional Budget Office, *Rising Health Care Costs: Causes, Implications, and Strategies* (April 1991).

4. M. Susan Marquis and Steven H. Long, "Worker Demand for Health Insurance in the Non-Group Market," RAND Contract J-9-P-2-0017 (RAND, Santa Monica, Calif., June 1993).

5. Jonathan Gruber and James Poterba, "Tax Incentives and the Decision to Purchase Health Insurance: Evidence From the Self-Employed," NBER Working Paper 4435 (National Bureau of Economic Research, Washington, D.C., August 1993).

6. M. Susan Marquis and Charles E. Phelps, "Price Elasticity and Adverse Selection in the Demand for Supplementary Health Insurance," *Economic Inquiry*, vol. 25, no. 2 (April 1987). See also M. Susan Marquis and Jeannette A. Rogowski, *Participation in Alternative Health Plans: The Role of Financial Incentives in Medicare Beneficiaries' Decisions*, RAND Report R-4105-HCFA (Santa Monica, Calif.: RAND, 1991); and Willard G. Manning and M. Susan Marquis, *Health Insurance: The Trade-Off Between Risk Pooling and Moral Hazard*, RAND Report R-3729-NCHSE (Santa Monica, Calif.: RAND, 1989). These studies, using the same data but different underlying behavioral models, developed elasticity estimates ranging from -0.54 to -0.75. The more recent study also found evidence that individuals imperfectly accounted for risks, as was found by Amos Tversky and Daniel Kahneman, "Judgment Under Uncertainty: Heuristics and Biases," *Science*, vol. 185, no. 4157 (September 1974). Accounting for the imperfect assessment of risk reduced the magnitude of the estimated price elasticity from -0.75 to -0.61.

7. Martin Feldstein and Bernard Friedman, "Tax Subsidies, the Rational Demand for Insurance, and the Health Care Crisis," *Journal of Public Economics*, vol. 7, no. 2 (April 1977).

8. Willard G. Manning and others, "Health Insurance and Demand for Medical Care: Evidence from a Randomized Experiment," *American Economic Review*, vol. 77, no. 3 (June 1987). The estimate is also higher in absolute value than estimates by Martin Holmer in "Tax Policy and the Demand for Health Insurance," *Journal of Health Economics*, vol. 3, no. 3 (December 1984). Holmer's estimates used data on choices made by participants in the Federal Employees Health Benefits Program, but those estimates were flawed by the mismeasurement of the marginal price of insurance in the federal program. The program is designed so that most marginal increases in health premiums are paid for out of after-tax dollars. As a result, the price of insurance may have little relationship to the average tax-price measure used by Holmer. For a discussion of this issue, see Marquis and Phelps, "Price Elasticity and Adverse Selection."

9. For technical reasons, it is hard to measure these response parameters with much accuracy. For a discussion of the biases inherent in the estimates, see Congressional Budget Office, "Behavioral Assumptions for Estimating the Effects of Health Care Proposals," CBO Memorandum (November 1993).

The price subsidy created by the tax exclusion makes health insurance a great bargain for many people because the insurance premiums are paid for out of pretax dollars but the insured events would otherwise be paid for out of after-tax dollars. Were it not for limitations in the tax law (and the extreme form of moral hazard that would result), insurers might be able to sell expensive policies that paid more than 100 percent of medical costs.[10]

Thus, a price subsidy will increase the number of people covered by insurance, but it will also make people buy more comprehensive insurance policies. Ultimately, the subsidy might not even increase participation much because the demand for more comprehensive health insurance increases prices for both health care and insurance. Consequently, after prices reacted to the increased demand, the net increase in participation would be smaller than suggested by the estimated response of participation, which assumes that the price does not change.[11]

Effect on Efforts to Control Costs

A price subsidy discourages efforts by insurers to limit the moral hazard that people face when they can consume unlimited medical services at no additional cost. For example, Feldstein and Friedman estimated that in 1970, the average coinsurance rate would have increased by about 40 percent for taxpayers in the 29 percent tax bracket if the tax subsidy had been removed. Gail Jensen, Michael Morrisey, and John Marcus reported further evidence of the bias against cost sharing that the subsidy produces. They found no trend toward increased cost sharing despite substantial increases in insurance costs.[12]

Moreover, increased copayments and deductibles may not be the best way to limit moral hazard. People who face high copayments but have little information about the efficacy of care are as likely to economize on cost-effective care as on less necessary treatment. A better alternative may be for the insurer or health maintenance organization to monitor medical choices so that care is fully covered only if its expected benefits are worth the cost.[13]

Subsidizing insurance discourages strategies for cost containment that involve time or other nonpecuniary costs, which are not subsidized. A low-cost insurance plan may require subscribers to travel to a central hospital to receive care or to wait for a bed or equipment to become available. The expected cost in terms of time and inconvenience may be $100 per year, for example, but the average individual would prefer the low-cost plan only if premiums were reduced by at least $139 because the tax subsidy reduces the value of the savings in premiums.[14]

The price subsidy gives insurers a strong incentive to make policies comprehensive. Because individuals have heterogeneous preferences and differing attitudes toward risk, group insurance typically provides some marginal services that are worth their price only to a subset of members. The incentive to tailor coverage to individual preferences is offset by the costs of eliciting those preferences and monitoring the care that people receive under different contracts. In addition, healthy individuals are unlikely to be well informed about the value of the covered services. Because individuals pay only part of the costs of more comprehensive services, they have little incentive to economize on coverage.

A price subsidy also discourages alternatives to fee-for-service health insurance from realizing their

10. Mark V. Pauly, "Taxation, Health Insurance, and Market Failure in the Medical Economy," *Journal of Economic Literature*, vol. 24, no. 2 (June 1986).

11. See Martin S. Feldstein, "The Welfare Loss of Excess Health Insurance," Part 1, *Journal of Political Economy*, vol. 81, no. 2 (March/April 1973).

12. Gail A. Jensen, Michael A. Morrisey, and John W. Marcus, "Cost Sharing and the Changing Pattern of Employer-Sponsored Health Benefits," *The Milbank Quarterly*, vol. 65, no. 4 (Fall 1987).

13. Another market failure, outside of the realm of taxes, is a particular problem here. For monitoring to be effective, insurers or HMOs need information about the effectiveness of different courses of treatment. But because information would be valuable to all providers and insurers, it is unlikely that any single insurer would adequately produce it. Such research, which has benefits to society as a whole that far exceed its value to any individual or firm, is likely to be undersupplied unless the government intervenes in the market. See Henry J. Aaron, *Serious and Unstable Condition: Financing America's Health Care* (Washington, D.C.: Brookings Institution, 1991).

14. The average subsidy rate is 28 percent (see Figure 1 on page 26), which implies that a reduction in premiums of $139 is only worth $100 (72 percent of $139).

full potential for savings in costs. On average, HMOs do not appear to have lower premiums than fee-for-service insurance, although they were set up as a way to control medical costs.[15] HMOs offer lower copayments than conventional fee-for-service insurance and an expanded menu of services, in part, perhaps, as a response to the disinclination of employers to provide incentives for employees to choose the lower-cost health insurance option.[16] Thus, HMOs must offer compensating features to compete with fee-for-service insurance that is available to employees for the same cost. The tax subsidy also provides little incentive for HMO members to demand lower premiums.

HMOs can also contribute to inefficient health spending: once an HMO has set up the apparatus to limit excessive demands for services, it is well suited to offer prepaid services that its customers would otherwise have purchased with after-tax dollars. In contrast, a fee-for-service insurer might worry that if it fully insured routine physicals, for example, doctors would prescribe excessive tests, raising the cost. (This is the moral hazard problem discussed in Chapter 3.) But an HMO can decide exactly what constitutes a physical and thus allow prepayment with little concern about moral hazard. Without a large price subsidy, these additional services may not be worth their additional cost to subscribers. Thus, the expanded menu of services is inefficient.

If the price subsidy applied to health care as well as to health insurance, the demand for insurance would probably fall.[17] Applying the subsidy to health care would amount to full coverage by the government with a copayment at the rate of one minus the tax rate. Because everyone with tax rates above zero would have some health insurance, the demand for additional insurance would decline. In essence, the government would reduce the risk of individuals by sharing part of the cost in the event of an illness. Bryan Dowd and Roger Feldman simulated the effect of allowing tax deductions for out-of-pocket expenses in addition to the tax exclusion for employers' contributions for health insurance. They found that the amount of insurance would decrease, but overall spending for health care would increase.[18]

All of this suggests that the price subsidy for insurance can be a significant contributor to the high level of health care spending. Moreover, although the health care subsidy provided through cafeteria plans may mitigate the increase in the demand for insurance, it may also increase spending for health care.

What Are the Effects of Providing the Subsidy Through Employers?

Some employers would want to sponsor health insurance plans for their employees even without a tax subsidy. In the absence of a subsidy, tying

15. The average monthly premium for a family plan in 1991 was $351 for conventional insurance plans and $353 for staff-model and group-model HMOs. The corresponding averages for individual coverage were $149 for conventional plans and $131 for HMOs. See Cynthia B. Sullivan and others, "Employer-Sponsored Health Insurance in 1991," *Health Affairs*, vol. 11, no. 1 (Winter 1992), p. 179. In 1989, about 30 percent of HMOs did not charge for an office visit, compared with only 9 percent of conventional plans that required no copayment. See John Gabel and others, "Employer-Sponsored Health Insurance, 1989," *Health Affairs*, vol. 9, no. 3 (Fall 1990). Note, however, that aggregate comparisons of costs may be misleading because HMOs are more prevalent in certain markets than in others and insurance premiums vary considerably across regions. On the difficulty of determining how well HMOs control administrative costs, see Kenneth E. Thorpe, "Inside the Black Box of Administrative Costs," *Health Affairs*, vol. 11, no. 2 (Summer 1992).

16. Provided that an area is being served by an HMO, the Health Maintenance Act of 1973, as amended, requires businesses with 25 or more employees to offer access to it if the HMO or an employee requests that option.

17. Cafeteria or flexible-benefit plans actually make it possible to pay health-related expenses out of pretax income. Although there are some limits on spending through cafeteria plans, many participants essentially have access to a blanket tax subsidy for health expenditures. Although not widespread, cafeteria plans have become more prevalent in recent years. About 10 percent of full-time workers in medium and large private establishments had access to such a plan in 1991. See Bureau of Labor Statistics, *Employee Benefits in Medium and Large Private Establishments, 1991*, Bulletin 2422 (May 1993), p. 3. The two-thirds of employees not covered by the survey--in small establishments and government--probably had much less access to cafeteria plans.

18. Bryan E. Dowd and Roger Feldman, "Voluntary Reduction in Health Insurance Coverage: A Theoretical Analysis," *Eastern Economic Journal*, vol. 13, no. 3 (July-September 1987).

health insurance to the employment group would limit adverse selection because most workers choose employment for reasons unrelated to their health status. Moreover, health insurance and pensions are most valuable to decisionmakers and senior employees, personnel in whose training the firm has invested the most resources.[19]

But these are reasons for the existence of employment-based health insurance regardless of its tax treatment. Providing a tax subsidy for employment-based health insurance magnifies whatever cost advantages some firms may have had in purchasing insurance--for example, because they are large. The subsidy raises the after-tax value of compensation by more for some employers than for others, and as a result, it distorts the labor market. In addition, because insurance is tied to employment, labor is less mobile because workers with health problems or workers whose family members become sick may stay with their current employer rather than risk losing their health insurance.

Finally, because the subsidy is provided through a system of progressive income taxes, it provides the smallest subsidies to those who most need to be encouraged to acquire health insurance. Consequently, the tax exclusion reduces adverse selection and free-ridership less than a direct price subsidy could.

Effect on the Labor Market

As discussed earlier, the tax exclusion affects the labor market because it is tied to employee compensation. This form of subsidy benefits employers who can purchase health insurance cheaply compared with employers who cannot afford to purchase it at all for their employees. It also affects employees' choices of where to work and whether to change jobs. In addition, the exclusion may distort the way employers organize their work forces.

The Tax Exclusion Distorts the Cost of Labor. Providing health insurance through employers does not eliminate the problem of adverse selection. Individuals who value insurance--either because they want to minimize uncertainty or because they represent a high level of risk--prefer firms that provide health insurance over firms that do not, other things being equal.

Excluding employment-based health insurance from taxation effectively alters the relative costs of labor among firms. Small firms pay more than large firms for the same health insurance coverage, all else being equal, because the costs of setting premiums based on risk characteristics (underwriting) and administrative overhead are spread over fewer employees in a small firm. Larger firms can save on insurance marketing costs because those costs are spread over more employees and their payroll systems are likely to be well suited to collecting premiums and the information necessary for insurance enrollment. In addition, larger groups tend to have lower risks than smaller groups, which means that insurers have to spend less on underwriting. As a result, large firms are more likely than small firms to offer health insurance to their workers, and the policies they offer are likely to be more generous.

One requirement for economic efficiency is that different firms face the same costs for identical inputs into the production process. One such input is labor. For example, if both Acme Anvils and Pinnacle Pliers can hire new college graduates with similar skills for $25,000 per year (including fringe benefits), they will both continue hiring as long as each person they hire produces at least $25,000 worth of additional output. In other words, the last person hired produces output exactly equal to what he or she is paid. In that equilibrium, moving one worker from Acme to Pinnacle or vice versa would have no effect on either the income of the firms or the value of what is produced. But if Acme could hire workers for $24,000, the owners of Acme could increase their profits by hiring more workers, and they would continue hiring until the last worker produced $24,000 worth of output. But this allocation of labor is inefficient. If a worker was shifted from Acme to Pinnacle, output of anvils would fall by $24,000, but output of pliers would increase by

19. Richard B. Freeman, "The Effect of Unionism on Fringe Benefits," *Industrial and Labor Relations Review*, vol. 34, no. 4 (July 1981).

$25,000. Output in the economy could thus increase by $1,000 with the same amount of labor, which means that the equilibrium in which Acme faces lower labor costs is inefficient.

To illustrate how the tax subsidy magnifies the cost advantage of large firms, suppose that health insurance were treated as part of taxable income. If Acme was a large firm and Pinnacle a small one, Acme might offer its workers $22,000 in cash wages and $3,000 worth of health insurance, whereas Pinnacle, facing much higher costs for health insurance, would pay the entire $25,000 in cash wages (and not offer health insurance at all). Now, suppose that health insurance is removed from the base for income and payroll taxes. If Acme and Pinnacle did not alter their compensation packages, an Acme employee with a marginal tax rate of 28 percent would save about $1,000 in income and payroll taxes. In addition, Acme would save over $200 in employer payroll taxes. Employees at Pinnacle would want to work for Acme because the after-tax value of compensation would be higher. Wages at Pinnacle would have to increase or wages at Acme would have to fall, or both, before the after-tax value of compensation at the two firms was equal. After wages adjusted, Acme would face lower labor costs than Pinnacle.

Pinnacle might decide to start providing health insurance in response to the demand for the tax-free fringe benefit by its workers, but it would still be at a disadvantage. The firm did not offer health insurance in the first place because insurance was a more expensive form of compensation than cash. Thus, when Pinnacle decides to provide health insurance, its labor costs will increase; at the same time, the labor costs of Acme will decline because it can pay lower wages. In this way, the tax subsidy for health insurance creates an inefficient labor subsidy for large firms relative to small ones.[20]

Other features of the labor market compound this inefficiency. Small firms typically pay lower wages than large firms.[21] As a result, their employees, on average, face lower marginal tax rates, making fringe benefits relatively less valuable to them than to higher-income workers at large firms. For the same reason, firms in industries dominated by large firms (for example, the auto industry) have an advantage in hiring over firms in industries with more small firms (for example, farming). In addition, the commercial insurers who sell insurance to small firms are often subject to state mandates to cover particular procedures and groups of providers and taxes on premiums that large employers can avoid by self-insuring.[22]

Finally, some small firms are unincorporated sole proprietorships. The owners of these firms do not receive a tax subsidy for their own health insurance premiums, which causes a further disadvantage relative to other firms. (A smaller subsidy than the tax exclusion--the 25 percent income tax deduction for health insurance premiums of self-employed people--expired at the end of 1993.) Unless the larger implicit subsidy to big firms is offset by other subsidies that favor small firms, the result will be a less efficient allocation of labor among firms and therefore a lower level of productivity than might otherwise be achieved.[23]

The Tax Exclusion Impairs Labor Mobility. Because insurance is tied to the job, workers may be less mobile than they would be otherwise. Workers who change jobs may not be covered immediately under their new employer's health insurance for preexisting conditions. Workers may stay with a job they do not like, or leave one they do, because of the availability of health insurance or the lack of it.

The empirical evidence on this question is mixed. Brigitte Madrian estimated that men with employment-based health insurance who were not covered under another policy were 25 percent less likely to change jobs than men covered under an-

20. B.K. Atrostic and Leonard Burman, "Allocative Effects of Fringe Benefit Taxation," unpublished draft (Congressional Budget Office, December 1990).

21. Charles Brown, James Hamilton, and James Medoff, *Employers Large and Small* (Cambridge, Mass.: Harvard University Press, 1990).

22. Gail A. Jensen, "Regulating the Content of Health Plans: A Review of the Evidence," unpublished draft (American Enterprise Institute, October 1991).

23. As an example of offsetting subsidies, small firms benefit from being exempted from many federal, state, and local regulations that apply to big businesses.

other policy.[24] Madrian found this "job-lock" to be even more severe when a man's wife was pregnant. Douglas Holtz-Eakin, however, found little evidence of job-lock in a comparative statistical study of data from the United States and Germany.[25]

The Tax Exclusion Affects the Organization of Employment. Because health insurance is likely to be worth more to highly compensated employees than to other workers, employers may shift individual workers or broad classes of workers to independent contractor status to avoid providing benefits for them. They may also contract for employees through intermediaries (labor-leasing firms) for the same reason. The money spent to recharacterize employees artificially to avoid providing benefits is pure waste. Moreover, to the extent that having employees rather than contractors gives a firm organizational advantages, the recharacterization may reduce productivity.[26]

Adverse Selection and Community Rating Within the Firm

Employment groups can avoid some of the problems of adverse selection because individuals choose where to work based on many factors other than health status. Because employers do not typically charge their employees different premiums for the same class of coverage, the employment group effectively provides community-rated premiums. Moreover, to the extent that employers make implicit long-term employment contracts with young employees, employment provides some of the aspects of renewability that are lacking in annual health insurance contracts.

The Employer Group and Renewable Health Insurance. The Employee Retirement Income Security Act of 1974 prevents self-insured firms from discriminating among their employees in providing fringe benefits. That prohibition seems to require community-rated premiums within a firm, but unlike the process carried out in the community at large, community rating within a firm does not guarantee that premiums will not be set to reflect health status.

Employees cannot fully insure themselves against future risks if their insurance is provided through employers. Employment-based insurance is fully renewable only if the worker remains employed and the employer chooses to continue providing insurance.

Health insurers recalculate premiums each year based on the experience of the firm. In small firms, because the risks are spread over only a few people, the degree of insurance is reduced. Employees who become sick or whose family members become sick will face higher premiums or may lose their insurance coverage (or at least coverage for the serious illness) if their employer changes to a new insurance carrier that excludes preexisting conditions. All of the people who work for the firm with a seriously ill employee could lose their coverage. Alternatively, an employee with higher-than-average health costs might receive relatively smaller salary increases than other employees.[27]

Rising costs lead some employers to drop coverage for an illness when a worker gets sick. A 1989 court decision found that an employee whose employer limited coverage for the treatment of the acquired immune deficiency syndrome (AIDS) after the employee contracted the disease "was not entitled to health benefits whose terms never change."[28] Some employers have tried to dismiss workers who

24. Brigitte C. Madrian, "Employment-Based Health Insurance and Job Mobility: Is There Evidence of Job-Lock?" *Quarterly Journal of Economics*, vol. 109, no. 1 (1994).

25. Douglas Holtz-Eakin, "Health Insurance Provision and Labor Market Efficiency in the United States and Germany," NBER Working Paper 4388 (National Bureau of Economic Research, Washington, D.C., June 1993).

26. See Congressional Budget Office, *An Analysis of the Administration's Health Proposal* (February 1994), pp. 62-65.

27. For a discussion of this point and some evidence, see Holtz-Eakin, "Health Insurance Provision."

28. See *John McGann* v. *H&H Music Company et al.*, 946 F.2d 401 (5th Cir. 1991). The plaintiff sought protection under the provisions of the Employee Retirement Income Security Act of 1974, which prohibits discrimination "against a participant or beneficiary for exercising any right to which he is entitled under the provisions of an employee benefit plan." However, the recently enacted Americans with Disabilities Act may provide an additional recourse in situations like McGann's in the future, although its applicability is uncertain.

became sick and whose health insurance would have become too expensive if they had been retained.[29]

Job losses pose an even greater threat to insurance coverage for workers who become sick or whose family members become sick. When workers change jobs, their new employer's health insurance often excludes preexisting conditions from coverage. If the worker is the family member with the serious illness, the worker may lose his or her job as well as the insurance coverage. The risk of losing one's job for reasons not related to health status also carries this added risk of losing both income and health insurance.[30]

Employers might also discriminate in hiring to control their health insurance costs. Older workers, families, and women have higher-than-average health insurance costs. Self-insured employers cannot discriminate in providing insurance to workers after they hire them, but they may avoid hiring them in the first place. Such discrimination is illegal, but cost pressures can create an environment in which subtle forms of discrimination are likely to occur.

Adverse Selection. As noted earlier, health insurance provided through employers can reduce adverse selection if individuals choose where they work for reasons unrelated to their health status. Yet with a significant share of compensation provided in the form of health insurance, decisions about where to work become more and more entwined with health status.

Health insurance has grown to become by far the most costly fringe benefit that employers provide. In 1992, employers' contributions for group health insurance made up 6.0 percent of total compensation, up from 5.1 percent just three years earlier.[31] By comparison, employers' contributions to pensions and profit-sharing plans constituted 1.5 percent of payroll in 1992, and all other benefits totaled 1.4 percent.

At present, about three-quarters of all employees are insured through their employers. Employers' contributions for insurance premiums averaged about 7 percent of payroll for covered employees in 1991. At current rates of growth in insurance premiums and wages, health insurance could reach 10 percent of compensation in 5 years and 15 percent in 10 years. At that level, workers who had much lower-than-average risks (or who were covered under a spouse's plan) would have a strong incentive to choose employers who offered more wages and less health insurance.

Four polls of workers conducted by the Gallup organization between September 1990 and November 1992 found that from 90 percent to 94 percent of respondents viewed benefits as important to their choice of employer.[32] About three-quarters of the respondents viewed them as very important. Moreover, health insurance has been increasing in relative importance among fringe benefits: 68 percent of respondents in the polls called health benefits the most important fringe benefit in November 1992, compared with 61 percent in September 1990. In the most recent poll, 19 percent of respondents said that they or a family member had accepted, quit, or changed jobs because of benefits. About 10 percent of respondents in a December 1991 poll indicated that they had refused a job offer because of inadequate health benefits.

This self-selection by employees is a classic example of adverse selection. The result is that

29. For example, an employee was dismissed after he developed multiple sclerosis. The U.S. District Court for the Western District of Missouri found in *John R. Folz* v. *Marriot Corporation*, 594 F. Supp. 1007 (1984), that the dismissal was intended "to deny the plaintiff the advantages of certain employee benefit plans," which is illegal under ERISA.

30. Under Title X of the Consolidated Omnibus Budget Reconciliation Act of 1985 and its amendments, employers with 20 or more employees are required to offer continuation of health insurance coverage for employees and their dependents in the event of job loss. The employer, however, is permitted to charge the full cost of the coverage plus 2 percent for administrative costs. Moreover, the employer is allowed to discontinue the coverage after 18 months for employees and 36 months for dependents.

31. All statistics in this paragraph are from *Survey of Current Business*, vol. 78, no. 3 (August 1993).

32. Sarah Snider, "Public Opinion on Health, Retirement, and Other Employee Benefits," EBRI Issue Brief 132 (Employee Benefits Research Institute, Washington, D.C., December 1992).

insurers must presume that firms that offer insurance have riskier employees than firms that do not, and must then raise premiums. As premiums increase, however, more workers will choose to go without insurance, and more employers will choose not to offer it--which exacerbates the adverse selection. The effect may be that, over the long run, many employers will not be able to offer insurance and still compete.

Targeting of the Tax Subsidy

Because the subsidy for health insurance is provided in the form of a tax exclusion, it is worth most to those who face the highest marginal tax rates.[33] Under the progressive income tax, those people have higher incomes and tend to be older--the same people who are most likely to purchase insurance in the absence of a subsidy. Older workers tend to have higher health costs as well, and higher-income people have the most wealth to protect with insurance and are most able to pay the premiums.[34] The subsidy provides relatively little encouragement to the young or the poor to purchase insurance.

The subsidy rate generally increases with both age and income (see Figure 1). The effective subsidy rate is the employee's combined marginal income and payroll tax rate (including both the employer and employee shares). The higher the rate, the stronger is the incentive for an employee to trade taxable wages for nontaxable fringe benefits such as health insurance.

The progressivity of income tax rates with income is offset partly by the Social Security tax, which is capped and thus does not affect high-income earners on the margin.[35] The average marginal Social Security tax rate falls from 14.0 percent for families in the lowest income class to 8.4 percent for families in the top class. However, when Social Security payroll taxes are reduced as a result of excluding fringe benefits from taxable income, future benefits under Social Security are also reduced. Because the structure of benefits for Social Security is progressive, it is unclear to what extent the current savings in Social Security taxes from the tax exclusion are a long-term benefit to taxpayers.

Considering only marginal tax rates on income (the shaded bars in the figure), the pattern with income is progressive, as would be expected. Marginal income tax rates also increase with age except for the group ages 55 to 64, whose incomes decline slightly because of early retirees.

Other Implications for Efficiency

The tax exclusion has several other advantages and disadvantages. A key advantage is that it is simple for the Internal Revenue Service to administer and for employers to comply with. As long as employers' contributions for health insurance premiums are fully deductible by firms and are excluded from the income of employees, the accounting for health insurance is no more complicated than for any other business expense.

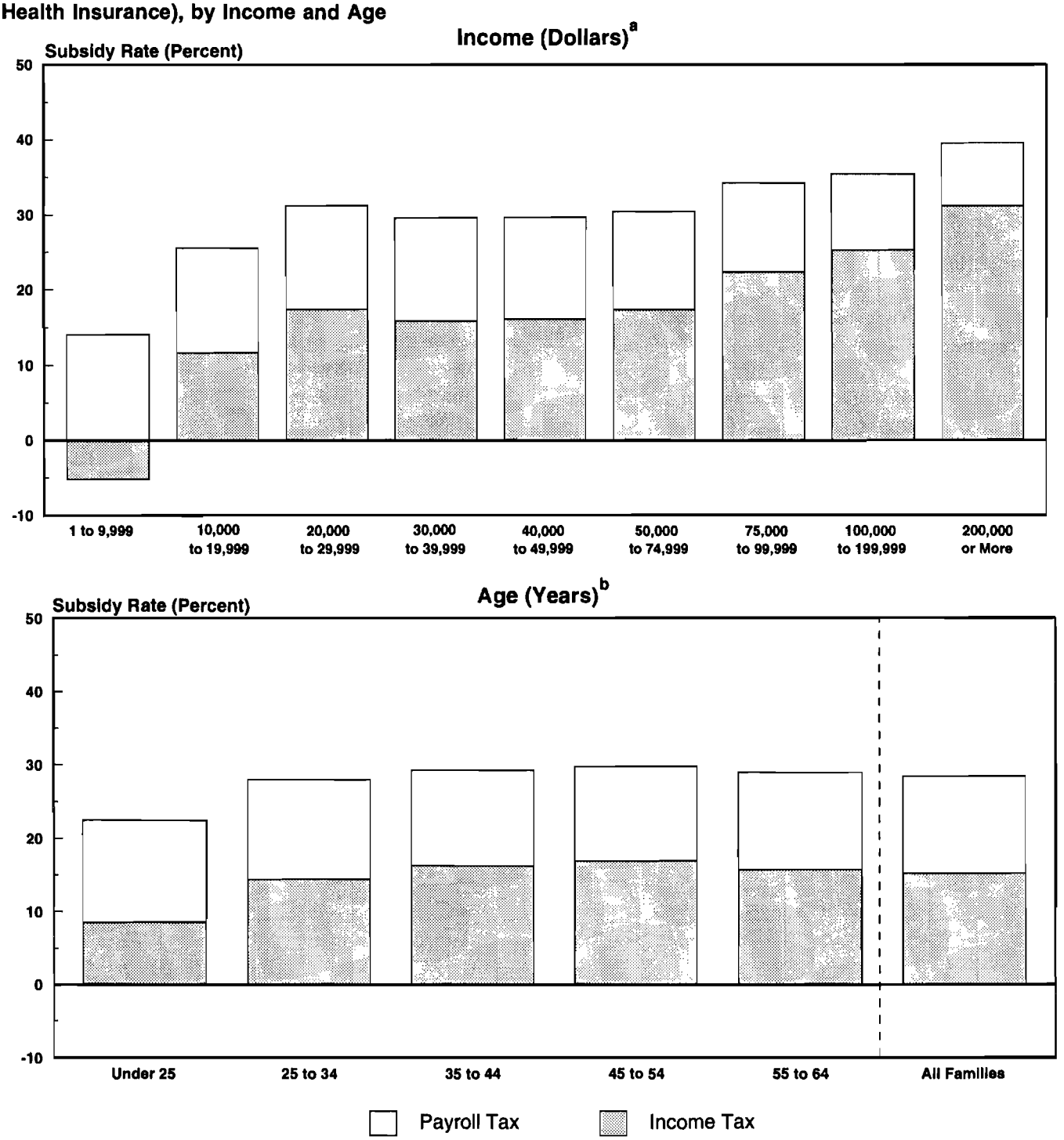
A disadvantage is that the provision of health insurance as a fringe benefit reduces the ability of employees to make efficient decisions because they may lack information. If employees are not aware of how much their insurance costs, they will make even less cost-conscious choices about health insurance than would be expected given the large tax subsidy. It is in an employer's interest to determine if the insurance that the firm is providing is worth its cost to employees. If the insurance being provided by employers is not worth its cost, employers

33. The marginal tax rate, which includes both income taxes and employer and employee payroll taxes, is the tax rate that would apply to an additional dollar of earned income. In other words, if 15 cents of the additional dollar goes to income taxes and 15.3 cents to payroll taxes, the marginal tax rate is 30.3 percent. Marginal tax rates are a measure of the disincentive to earn additional taxable income. They tend to increase with income because the income tax is progressive; additional income is subject to progressively higher tax brackets as it increases.

34. The theoretical effect of wealth on the demand for insurance is ambiguous because wealthy people are better able to self-insure than others. The empirical evidence discussed earlier, however, suggests that the demand for health insurance increases with income (and, presumably, wealth).

35. As used here, the Social Security tax refers to both the employer and employee shares of the tax for Old-Age, Survivors, and Disability Insurance (OASDI) and Medicare Hospital Insurance (HI). The OASDI portion, 12.4 percent, applies to wages of up to $60,600 in 1994; the HI portion (2.9 percent) applies to all wages without limits.

Figure 1.
Effective Subsidy Rates for All Families (With or Without Employment-Based Health Insurance), by Income and Age



SOURCE: Congressional Budget Office.

NOTES: The effective subsidy rate is the family's combined marginal income and payroll tax rates. The data include only nonelderly working families. People not living with relatives are considered one-person families.

The figure is based on 1994 levels of income.

a. Adjusted gross income reported on tax returns plus certain nontaxable forms of income including employers' contributions to the cost of health insurance premiums and tax-exempt interest.

b. For married couples, "age" is the age of the older spouse.

could lower their labor costs by substituting wages for insurance.

Conclusions

Although there is ample evidence in the markets for health care and health insurance of their failure to achieve economic efficiency, the argument for a price subsidy of any kind is tenuous. A price subsidy reduces adverse selection and induces more free riders to participate, which tends to improve the efficiency of the market. But it also discourages efforts to control health care costs and exacerbates problems of moral hazard.

Providing the subsidy in the form of an open-ended tax exclusion for employment-based health insurance creates an additional set of concerns. The tax exclusion does less than a price subsidy would to reduce adverse selection and encourage participation by free riders because under a progressive income tax, the largest tax subsidy is received by the highest-income people. Those individuals tend to be older (with higher health care costs) and to have the least incentive to be free riders.

An advantage of the subsidy for employment-based health insurance is that it allows employees of large firms to receive health insurance that is essentially community rated. But employment-based insurance inherently is only as secure as the job it is tied to. Moreover, employees in small firms may not be insulated from the costs of illness. The tax exclusion also distorts the labor market. It raises the labor costs of small firms relative to large ones and may limit the mobility of employees.

Chapter Five

Who Benefits from the Tax Exclusion?

Like any tax subsidy, the tax exclusion for employment-based insurance affects people in different ways. People who are uninsured or who purchase their insurance privately receive no benefit at all. Even among the insured, the benefits of the tax exclusion vary widely. This chapter briefly considers the present distribution of those benefits.

Horizontal Equity

One of the principles of tax policy (see Box 1 on page 12) is that people with the same ability to pay tax should pay the same amount of tax. Like other tax preferences, the tax exclusion violates this principle. People with employment-based health insurance pay less tax than do otherwise similar people without such insurance. Self-employed people and people who are out of the work force receive no benefit from the tax exclusion (although until the end of 1993 the self-employed could deduct 25 percent of their premiums). People whose employers provide more expensive health insurance policies receive a greater benefit than people with less generous coverage. People whose employers pay a larger share of their health insurance premiums benefit more than people whose employers pay a smaller share.

Coverage by employment-based health insurance varies widely within income groups (see Table 4). For example, only 8 percent of families with yearly incomes below $10,000 receive health insurance at work. As incomes increase, more and more people are covered by employment-based insurance, but in every income group, significant minorities do not have it. Among families with an income of more than $200,000 a year, the prevalence of employment-based insurance drops because a significant proportion of that group comprises either self-employed people or people who are not employed.

Among insured people, employers' contributions for health insurance also vary substantially within each income group. Part of that variation reflects different levels of generosity of health insurance coverage. Another portion of the variation reflects differences in the share of premiums paid by employers. Because family income in all the tables in this study includes the value of employment-based health insurance, differences in the tax subsidy reflect differences in the composition of compensation rather than differences in the ability to pay.

The differences in premiums that result from regional variation in the cost of health insurance and differences in health status within employment groups might be seen as reflecting differences in the ability to pay taxes if health insurance is viewed as a necessity. If health insurance is viewed instead as one of many items that people purchase with their fixed budgets, then even these sources of difference in tax treatment might be hard to justify on equity grounds.

Table 4.
Premiums and Tax Subsidies for Families with Employment-Based Health Insurance, by Income

Income (Dollars)[a]	Percentage of Families in Income Class	Average Premium (Dollars)[b]	Employer Share of Premium (Percent)[b]	Average Subsidy (Dollars)	Tax Subsidy as a Percentage of Premiums[b]
1 to 9,999	8	1,830	83	190	11
10,000 to 19,999	34	2,370	80	450	19
20,000 to 29,999	62	3,080	84	800	26
30,000 to 39,999	78	3,650	84	900	25
40,000 to 49,999	85	4,370	86	1,090	25
50,000 to 74,999	89	5,080	87	1,320	26
75,000 to 99,999	91	6,010	87	1,740	29
100,000 to 199,999	89	6,410	88	1,910	30
200,000 or More	76	5,530	89	1,830	33
All Incomes[c]	61	4,310	86	1,130	26

SOURCE: Congressional Budget Office.

NOTE: The table excludes families in which all members are covered by Medicare or Medicaid.

a. Adjusted gross income reported on tax returns plus certain nontaxable forms of income including employers' contributions to the cost of health insurance premiums and tax-exempt interest.

Vertical Equity

Another principle of tax policy is that people with more ability to pay should pay more tax than people with less ability to pay. This principle has been applied to policies like the tax exclusion for health insurance, but it is not clear that the principle is relevant in this case. Although it is easy to show that higher-income people benefit more than lower-income people from most tax exclusions, the net distributional effect of any policy depends on how it is financed. Other aspects of the tax code, such as higher marginal tax rates on other income, are likely to be designed so that the tax code as a whole, including its tax preferences, meets current social perceptions of vertical equity.[1]

1. Charles Clotfelter, "Equity, Efficiency, and the Tax-Treatment of In-Kind Compensation," *National Tax Journal*, vol. 32, no. 1 (1979).

The likelihood of being insured and the amount of the premiums from employment-based health insurance that can be excluded from taxation both increase with income. The average premiums for a family with income of less than $20,000 a year will be under $2,400 in 1994, whereas the average premiums for returns with income of more than $50,000 will be more than twice that amount (see Table 4). The differences in premiums reflect several factors. Higher-income families are more likely to be covered by multiple policies and have family rather than self-only coverage. People in lower-income families are more likely to have been unemployed for part of the year and thus to have had premiums paid for only a portion of it.

The average employer share increases slightly with income, from 83 percent for families with less than $10,000 of income to 89 percent for families with income of more than $200,000. The benefit of the tax exclusion is greatest for high-income people

Table 4.
Continued

Income (Dollars)[a]	Average After-Tax Premium	Tax Subsidy as a Percentage of After-Tax Income: Families with Employment-Based Health Insurance	Tax Subsidy as a Percentage of After-Tax Income: All Taxpayers	After-Tax Premium as a Percentage of After-Tax Income
1 to 9,999	1,640	2.9	0.2	25
10,000 to 19,999	1,920	3.0	1.1	13
20,000 to 29,999	2,280	3.5	2.2	10
30,000 to 39,999	2,750	2.9	2.3	9
40,000 to 49,999	3,280	2.8	2.4	9
50,000 to 74,999	3,770	2.6	2.3	7
75,000 to 99,999	4,270	2.5	2.2	6
100,000 to 199,999	4,500	1.8	1.6	4
200,000 or More	3,710	0.5	0.4	1
All Incomes[c]	3,190	2.4	1.9	7

b. Premium data are based on the 1987 National Medical Expenditure Survey conducted by the Agency for Health Care Policy and Research of the Department of Health and Human Services. The data and imputation methods are described in the appendix.

c. Includes families with zero or negative income.

because the income tax is progressive. Families in the lowest-income group receive an average tax subsidy worth 11 percent of their premiums, compared with a subsidy of 33 percent of the premiums for the highest-income group.[2] Consequently, although insurance policies for high-income families cost three times as much as policies for low-income families before taxes, they cost only 2.3 times as much after taxes.

Looked at another way, however, the subsidies constitute the largest share of income for lower-income people who receive health insurance through their employers. The average subsidy is almost 3 percent of after-tax income for low-income families who are covered by employment-based health insurance, compared with less than 1 percent for the highest-income families. Although the tax subsidy is progressively distributed among people with employment-based health insurance, it is nearly proportional to after-tax income for most of the population (with incomes between about $20,000 and $100,000) because of differences in rates of participation in health insurance.

If one assumes that health insurance premiums are paid instead of wages, then the after-tax cost of employment-based health insurance is a much larger share of income for low-income workers than for high-income workers. For those earning less than $10,000 and receiving health insurance through an employer, health insurance premiums represent about 25 percent of income after accounting for the tax advantages. For those earning more than

2. The subsidy percentage is the product of the subsidy rate, as shown in Figure 1 on page 26, and the employer share. The average tax subsidy as a percentage of premiums, 26 percent, is slightly lower than the average subsidy rate of 28 percent in Figure 1. This difference arises from two factors that have opposite effects. First, the overall employer share is less than one, which reduces the average subsidy as a percentage of premiums. Second, the typical family covered by employment-based health insurance, shown in Table 4, has higher income--and thus a higher marginal tax rate--than the population at large, shown in Figure 1.

$100,000, the average after-tax cost is less than 5 percent of income.

Conclusions

The tax exclusion benefits people with employment-based health insurance at the expense of otherwise similar people who are uninsured or who purchase their own insurance. These horizontal inequities are most pronounced in lower-income groups in which a relatively small number of families are covered by employment-based health insurance. The benefits of the tax exclusion appear to be tilted in favor of higher-income families, but those benefits might be partially, fully, or more than offset by the other taxes that must be raised to make up for the lost tax revenues. Finally, it should be noted that if, indeed, the exclusion contributes to higher costs for health care, it implicitly taxes everyone--whether insured or not. This implicit tax might offset the benefits of the exclusion for people in low tax brackets whose employers pay only a small share of their premiums for health insurance.

Chapter Six

Options for Changing the Tax Subsidy

This chapter evaluates three illustrative options for changing the current tax subsidy for employment-based insurance. The first two options--a cap and a tax credit--would retain the primary advantage of the tax exclusion (expanded access to health insurance) while limiting its primary shortcoming (the incentive to purchase more expensive insurance). The first option would impose a fixed limit, or cap, on the amount of premiums that qualified for a subsidy. The second option would replace the tax exclusion with a refundable tax credit on premiums up to the same limit. The rate of the credit would vary depending on the income and filing status of each taxpayer. The third option would repeal the tax exclusion altogether. The additional tax revenues that any of the options would generate could be used to finance direct expenditures to increase access to heath insurance, reduce the deficit, cut taxes, or finance non-health-related government expenditures.

All of the options offer potential gains in efficiency, but all of them would also entail extra costs related to administration and compliance. In addition, all of the options would redistribute the benefits from the tax exclusion. The overall distributional effects of any change in policy depend on how the revenues gained from the change are spent. Any income group could be made better or worse off, on average, under any of the options by using the revenues differently.

Many bills have been introduced in the Congress to reform the nation's health system. Some would impose caps on the tax exclusion or issue credits; a few would replace the system of employment-based health insurance altogether, using the revenues raised by repealing the tax exclusion to help pay for universal health insurance coverage (see Box 3). Most of these proposals include other structural changes to the markets for health insurance and health care. For example, some include mandates on employers or individuals to purchase insurance. Some would require insurers to provide a standard form of coverage and to set premiums without regard to health status (community rating). This chapter focuses solely on options related to the tax exclusion--highlighting the inherent advantages and disadvantages of each approach--and so should not be construed as an evaluation of any specific proposal.[1]

Cap the Tax Exclusion

To avoid the drawbacks of an unlimited subsidy for insurance, many proposals for health care financing would limit to fixed amounts the tax subsidy for employment-based health insurance. Health insurance premiums for each type of policy issued in excess of these "caps" would be included in the employee's taxable income for income and Social Security tax purposes. The so-called tax caps would apply to amounts paid by individuals through cafe-

1. For an analysis of a specific proposal, see Congressional Budget Office, *An Analysis of the Administration's Health Proposal* (February 1994).

Box 3.
Proposals to Modify the Tax Exclusion

Bills have been introduced in the current Congress to cap the tax exclusion, replace it with a tax credit, or eliminate the subsidy altogether. The Administration's health proposal (H.R. 3600) would continue to exclude all employers' contributions for health insurance plans that provided the standard benefit package that the proposal mandates. Most employers' contributions toward cost sharing would also be excluded, as would such payments made through a cafeteria plan. Employers' contributions for supplemental health insurance could be excluded from employees' income only until 2003, and employees would not be able to purchase that or any other kind of health insurance through cafeteria plans. Employees would, however, continue to be able to pay for their share of premiums and out-of-pocket expenses with pretax dollars channeled through an employer-funded flexible-spending account.

Several bills would impose a cap on the exclusion. The bill introduced by Congressman Jim Cooper (H.R. 3222) and by Senator John Breaux (S. 1579) would impose an excise tax of 34 percent on employers' contributions in excess of the lowest-cost qualifying plan defined in the bill, as well as on any employers' contributions to nonqualifying plans.[1] The Health Equity and Access Reform Today bill introduced by Congressman William Thomas (H.R. 3704) and by Senator John Chafee (S. 1770) would include in employees' taxable income employers' contributions for health insurance that exceed the average cost of low-cost plans in each region *and* would disallow a deduction by employers for such costs. The cap on both the employer and the employee causes employers' contributions above the cap to be taxed twice, compared with wages, which are taxed once. As a result, employers would have a very strong incentive to reduce their contributions to the level of the cap. Caps are also included in H.R. 191, H.R. 1976, and S. 223 (introduced by Congressman George Gekas, Congressman Craig Thomas, and Senator William Cohen, respectively).

The Consumer Choice Health Security Act introduced by Congressman Cliff Stearns (H.R. 3698) and by Senator Don Nickles (S. 1743) would replace the tax exclusion with a refundable tax credit targeted toward lower-income families. President Bush's health plan would have provided assistance directly through vouchers, as would H.R. 1965 (introduced by Congressman Ralph Regula). Tax credits are also included in H.R. 196, S. 28, S. 223, and S. 728 (introduced by Congressman Amo Houghton, Senator John McCain, Senator William Cohen, and Senator Mitch McConnell, respectively).

Major proposals to eliminate the tax exclusion would also create an alternative financing scheme that is at least as comprehensive. For example, part of the financing for the bill introduced by Congressman Jim McDermott (H.R. 1200) and by Senator Paul Wellstone (S. 491), which would create a single-payer system of universal health insurance, comes from eliminating the tax exclusion. (The exclusion serves no purpose in a single-payer system.)

Many proposals would create new tax subsidies for health insurance. For example, the Administration's health proposal would allow the exclusion of employers' contributions for long-term care insurance and would allow self-employed people to deduct 100 percent of the cost of their health insurance. Other proposals would create tax-sheltered medical savings accounts or allow individuals to deduct fully the cost of the insurance that they purchase.

1. See Mark Merlis, "Health Insurance," CRS Issue Brief, IB91093 (Congressional Research Service, January 21, 1994).

teria plans and flexible-spending accounts, as well as to employers' contributions for health insurance. Alternatively, some proposals would impose caps on the amounts employers could deduct as business costs, but the economic effect is likely to be the same.[2] If the caps were set at or below the cost of most health insurance premiums, they would make taxes irrelevant in the choice between more and less expensive health insurance policies.

Implications for Efficiency

Tax caps that were set below the level of contributions that employers currently make toward their employees' health insurance would raise the after-tax cost of that insurance for workers and encourage them to demand less expensive health insurance options from their employers. The incentive to economize would be strongest for employees whose employers paid the entire health insurance premium and for employees who paid for health insurance premiums through a cafeteria plan. The after-tax price of insurance subject to caps would increase most when the full premium had been excluded in the past from taxable wages.

For example, suppose that the cap for a family policy was set at $4,000 per year ($333 per month), and suppose that before the cap was enacted, the employer was paying 100 percent of the premiums for a policy costing $4,100 per year. Before the cap was imposed, the last $100 of premiums would have cost the average employee $72 in forgone wages after taxes (see Figure 1 on page 26). After the cap had been enacted, the price would have increased to $100. If before the cap the typical employee had been indifferent as to whether he or she received another dollar of cash wages or a dollar's worth of health insurance, after the cap the employee should prefer to receive more wages and less health insurance.

Even if the caps were initially set above the level of most current health insurance premiums, they would eventually constrain the demand for health insurance. As health insurance premiums rose, fixed dollar caps (or ones that grew more slowly than the rate of growth of premiums) would become binding on more and more employees as their premium costs were inflated above the level of the caps.

The change in the incentive to economize would be smaller if employers paid for less than 100 percent of their employees' health insurance premiums and if employees could not pay for health insurance through a cafeteria plan. For example, if the employer paid 80 percent of the costs of health insurance, the after-tax cost of the last $100 of insurance in the above example would be $77.60 (the after-tax cost of the employer share, 72 percent of $80, plus the employee share, $20). If the cap was set below the level of the employer share of health insurance premiums, workers would still have an incentive to demand less expensive health insurance, but that incentive would be smaller.

Some employers pay only a fixed amount toward the health insurance premiums of their employees. For example, the federal government pays 75 percent of the average cost of the lowest-cost plans from which employees may choose in the Federal Employees Health Benefits Program. Those employees who select medium- or higher-cost plans pay the full additional cost of the more expensive plans without any tax subsidy on that part of the cost. In essence, the federal government and other employers with similar policies already impose their own caps. If caps such as those proposed in the Congressional Budget Office's (CBO's) illustrative option were set below the government's contribution toward federal employees' health insurance, they would raise the tax liability of federal workers without affecting the additional cost of selecting a more expensive health plan. Thus, when employers' contributions are fixed, caps reduce employees' after-tax income without affecting employees' choices. For the employees of such firms or organizations,

2. Robert Helms of the American Enterprise Institute pointed out in testimony before the House Ways and Means Committee, Subcommittee on Health (February 10, 1994), that a cap on the tax exclusion and a cap on the employer deduction could create different incentives in the short term: "Among other effects, those two types of tax caps could have substantially different effects on labor-management relations. It is my opinion that the former [cap on the exclusion] could create a mutual interest among labor and management in effective cost containment while the latter [cap on the deduction] would tend to drive a wedge between the interests of labor and management."

caps would have little or no effect on their choice of health plan.

The objective of caps on the tax exclusion is to reduce the amount of insurance people purchase without affecting their decision to purchase insurance in some amount. But one of the problems with insurance is that a significant fraction of its price pays not for insurance coverage but for the fixed costs of setting premiums and administering insurance to a group. When employers scale back coverage, those fixed costs do not change. As a result, the amount of insurance coverage per dollar of premiums falls as spending is curtailed. In response, some employers that currently provide insurance would choose to stop if the subsidy were reduced, since the value of the diminished insurance would no longer be worth its cost to employees.

The importance of this problem would depend on how responsive individuals were to the price of health insurance and how large fixed costs were relative to the overall costs of insurance. If people's demand for insurance was highly responsive to its price or if overhead costs were a large share of premiums, the number of insured people could fall substantially as a result of imposing caps, unless their levels were very high. Empirical evidence on the demand for insurance suggests that it is only moderately responsive to price.[3] Small firms, however, face substantial overhead costs--as much as 40 percent of premiums for firms with fewer than five employees.[4] For those firms, the cost per unit of insurance would increase precipitously as the quantity of insurance fell. Thus, many small firms might stop offering health insurance if binding caps were imposed unless other policies were enacted to reduce the fixed costs in underwriting insurance.

The problem could be addressed by setting the caps in terms of the cost of a basic package of benefits rather than a fixed dollar amount. Variable caps of that kind would adjust for the different costs of providing insurance in different size firms, as well as for differences arising from regional variations in health costs, different risk factors in different firms, or trends in the price of insurance coverage. Variable caps could be more difficult to administer, however, as the discussion later in the chapter explains.

Another alternative would be to enact policies that reduced the fixed costs in underwriting insurance. For example, some so-called small-group reform proposals would reduce the extent to which insurance companies could underwrite, thus lessening the fixed costs of providing insurance and also reducing the difference in cost between premiums at small and large firms. Another option would be to require firms to provide insurance, which would prevent surviving small firms from terminating their insurance coverage. However, because small firms face the highest costs for insurance, requiring them to provide it could impose a substantial implicit tax on those firms relative to larger ones.[5]

Effects on Equity

CBO's illustrative caps would establish the following limits on the amount of health insurance premiums that could be excluded from taxable income: $4,000 for joint returns, $3,400 for heads of households, and $1,600 for single returns. Those levels correspond roughly to the typical employer share of the premium for health insurance plans for different size families in 1994. For those families with less generous health insurance policies, the caps would have no immediate effect on their behavior. Those families with policies that exceeded the caps would

3. Note that the relevant response parameter is the response of the quantity of insurance (that is, how generous the insurance plan is) to its price, which is relatively unresponsive, rather than the participation response. The quantity response is the relevant parameter because caps increase the price of insurance per unit of coverage. In other words, as firms reduce their coverage (that is, as quantity decreases), the per-unit "price" of that coverage increases because the fixed-cost component grows in importance.

4. Congressional Budget Office, *Rising Health Care Costs: Causes, Implications, and Strategies* (April 1991), p. 78. By comparison, the overhead costs for firms with more than 10,000 employees fall to 5.5 percent, suggesting that at least 34.5 percent of the premiums paid by small firms are fixed costs.

5. See Congressional Budget Office, *Selected Options for Expanding Health Insurance Coverage* (July 1991).

have an incentive to demand less comprehensive health insurance over time.

Employers would have two possible responses to caps on the tax exclusion. They could scale back their health insurance premiums to the caps, in which case employees would gradually receive increases in taxable wages (as well as, perhaps, a small increase in other fringe benefits). Or they could continue to provide the same health insurance policies, in which case the portion of the premiums that exceeded the caps would be included in taxable income. Except for a small amount of shifting of funds into other fringe benefits, the net effects on federal tax revenues of the two behavioral responses by employers would be nearly identical. Taxable income and the payroll tax base would increase in both instances by almost the same amount that current health insurance premiums exceeded the caps. (Taxable wages would not increase dollar for dollar because employers would have to pay Social Security taxes on the additional taxable wages. That increase in the employer payroll tax is assumed to be passed on to workers in the form of slightly lower wages.)

The illustrative caps would raise tax revenues by about $18.9 billion in 1994--$12.4 billion in income taxes and $6.4 billion in Social Security payroll taxes (see Table 5). The average change in tax liability as a result of imposing the illustrative caps increases with income and goes from virtually no

Table 5.
Increase in Tax Liability for Families Before Transfers Under the Illustrative Tax Caps

Income[a]	Number of Families (Millions)	Increase in Tax Liability: Income Tax (Millions of dollars)	Payroll Tax (Millions of dollars)	Total (Millions of dollars)	Average (Dollars)
1 to 9,999	15.3	0	40	40	0
10,000 to 19,999	18.3	170	280	450	20
20,000 to 29,999	16.9	960	760	1,730	100
30,000 to 39,999	13.8	1,190	910	2,090	150
40,000 to 49,999	10.7	1,390	1,000	2,380	220
50,000 to 74,999	17.3	3,360	1,860	5,220	300
75,000 to 99,999	7.5	2,560	880	3,450	460
100,000 to 199,999	5.4	2,320	610	2,920	540
200,000 or More	1.4	480	80	560	410
Total, All Incomes[b]	108.1	12,430	6,420	18,850	170

SOURCE: Congressional Budget Office.

NOTES: Families are groups of related people who live together; people not living with relatives are considered one-person families.

CBO's illustrative caps would establish the following limits on the amount of health insurance premiums that could be excluded from taxable income: $4,000 for joint returns, $3,400 for heads of households, and $1,600 for single returns.

The figures in the table assume that the illustrative tax caps are in place in 1994, based on projected levels of income.

a. Adjusted gross income reported on tax returns plus certain nontaxable forms of income including employers' contributions to the cost of health insurance premiums and tax-exempt interest.

b. Includes families with negative or zero income.

Table 6.
Change in Average Tax Liability for Families Under the Illustrative Tax Caps with a $153 Rebate (In dollars)

Income[a]	Rebate per Family[b]	Change in Average Tax Liability			Percentage of Families with Employment-Based Insurance
		All Families	Families with Employment-Based Insurance	Families Without Employment-Based Insurance	
1 to 9,999	160	-150	-120	-160	7
10,000 to 19,999	160	-140	-90	-160	34
20,000 to 29,999	170	-60	0	-170	62
30,000 to 39,999	170	-20	30	-180	77
40,000 to 49,999	180	50	90	-180	84
50,000 to 74,999	190	120	150	-190	89
75,000 to 99,999	210	260	300	-200	91
100,000 to 199,999	220	320	390	-190	89
200,000 or More	190	220	350	-170	76
All Incomes	170	0	110	-170	61

SOURCE: Congressional Budget Office.

NOTES: Families are groups of related people who live together; people not living with relatives are considered one-person families.

CBO's illustrative caps would establish the following limits on the amount of health insurance premiums that could be excluded from taxable income: $4,000 for joint returns, $3,400 for heads of households, and $1,600 for single returns.

The figures in the table assume that the illustrative tax caps are in place in 1994, based on projected levels of income.

a. Adjusted gross income reported on tax returns plus certain nontaxable forms of income including employers' contributions to the cost of health insurance premiums and tax-exempt interest.

b. The rebate is assumed to be a refundable tax credit paid to all nondependent tax units. It is computed by dividing the total increase in taxes for families with employment-based insurance by the number of nondependent tax units. The average tax reduction is greater than $153 because some families have more than one tax unit.

change in the lowest-income group to a $540 increase in the group with incomes between $100,000 and $200,000. Three factors explain such a range. First, because higher-income families are taxed at higher rates, an equal increase in taxable income for all families results in a larger tax increase in the upper-income brackets. Second, higher-income people are more likely to be covered by employment-based insurance and to be covered for the whole year. Third, upper-income families tend to have more family members covered by employment-based health insurance because their employers are more likely to provide family coverage and they are more likely to be covered by more than one plan. The exception to this pattern is the highest-income group, which includes many self-employed people and others without wage income.[6]

The increases in tax liability suggest that every income group would be worse off under tax caps, but that is a very misleading impression. The $18.9 billion of additional revenue shown in Table 5 would make some people better off, but the exact distributional consequences would depend on how the additional revenues were used.

6. The appendix discusses the sources of variation in insurance premiums in more detail.

For example, if policymakers intended to limit only the incentive to overconsume health insurance, they could reduce taxes in such a way that, on average, each income group would be unaffected. Thus, within each group, people without insurance or people whose insurance was below the caps would benefit relative to people with above-average insurance coverage. This approach would reduce the disparity in tax treatment between the current insurance "haves" and "have-nots."

To illustrate the range of redistributive effects of such policies, CBO simulated two simplified alternatives. One alternative rebates the additional revenues in equal shares as lump sums to all taxpayers. That alternative roughly represents an egalitarian government program that would have approximately the same value for all the recipients of the lump-sum transfers. A variation of this option would target the transfers, directing them solely toward low-income families who do not already receive subsidized federal health insurance--that is, to those families who are not covered by Medicare or Medicaid.

The second alternative would use the revenues to reduce income taxes proportionately for all taxpayers. Because the tax code is progressive--tax

Table 7.
Change in Average Tax Liability for Families Under the Illustrative Tax Caps with a Targeted $189 Rebate (In dollars)

Income[a]	Rebate per Family[b]	Change in Average Tax Liability		
		All Families	Families with Employment-Based Insurance	Families Without Employment-Based Insurance
1 to 9,999	100	-90	-130	-90
10,000 to 19,999	130	-110	-90	-120
20,000 to 29,999	160	-60	-10	-140
30,000 to 39,999	180	-30	10	-160
40,000 to 49,999	200	20	60	-180
50,000 to 74,999	220	80	120	-190
75,000 to 99,999	240	220	260	-190
100,000 to 199,999	260	280	340	-190
200,000 or More	210	200	310	-170
All Incomes	170	0	80	-120

SOURCES: Congressional Budget Office.

NOTES: Families are groups of related people who live together; people not living with relatives are considered one-person families.

CBO's illustrative caps would establish the following limits on the amount of health insurance premiums that could be excluded from taxable income: $4,000 for joint returns, $3,400 for heads of households, and $1,600 for single returns.

The figures in the table assume that the illustrative tax caps are in place in 1994, based on projected levels of income.

a. Adjusted gross income reported on tax returns plus certain nontaxable forms of income including employers' contributions to the cost of health insurance premiums and tax-exempt interest.

b. The rebate is "targeted" by providing it only to those tax units who have members who are not covered by government insurance (Medicare or Medicaid). It is computed by dividing the total increase in taxes for families with employment-based insurance by the number of nondependent tax units who qualify for the credit.

Table 8.
Change in Average Tax Liability for Families Under the Illustrative Tax Caps with a 3.5 Percent Income Tax Reduction (In dollars)

Income[a]	All Families	Families with Employment-Based Insurance	Families Without Employment-Based Insurance
1 to 9,999	0	30	0
10,000 to 19,999	10	50	-10
20,000 to 29,999	60	110	-40
30,000 to 39,999	70	110	-80
40,000 to 49,999	100	140	-130
50,000 to 74,999	90	130	-220
75,000 to 99,999	110	160	-390
100,000 to 199,999	-110	-40	-690
200,000 or More	-3,590	-3,610	-3,540
All Incomes	0	50	-70

SOURCE: Congressional Budget Office.

NOTES: Families are groups of related people who live together; people not living with relatives are considered one-person families.

CBO's illustrative caps would establish the following limits on the amount of health insurance premiums that could be excluded from taxable income: $4,000 for joint returns, $3,400 for heads of households, and $1,600 for single returns.

The tax reduction applies to all tax units except those with negative tax liability as a result of the earned income tax credit.

The figures in the table assume that the illustrative tax caps are in place in 1994, based on projected levels of income.

a. Adjusted gross income reported on tax returns plus certain nontaxable forms of income including employers' contributions to the cost of health insurance premiums and tax-exempt interest.

rates increase with income--this alternative would provide the greatest benefit to high-income people who pay the most tax and who currently benefit most from the tax exclusion.

If the additional income and payroll tax revenues collected under a cap were redistributed as a lump-sum rebate (modeled as a refundable tax credit of $153 per nondependent tax return), families with incomes of less than $10,000 would have an average net gain of $150, and the average family with income between $100,000 and $200,000 would lose $320 (see Table 6 on page 38).[7] Families with employment-based insurance would pay about $7 billion more in taxes to the benefit of those without employment-based insurance.

If the policy were designed differently to exclude from the rebate taxpaying units in which all members were currently insured under Medicaid or Medicare, the average rebate would increase to $189 (see Table 7 on page 39). In that case, families with employment-based insurance whose incomes were less than $40,000 would be better off on balance, as would everyone without insurance. This option would transfer $5 billion from families with

7. The payment is designed to be budget neutral over the short run; it would neither increase nor decrease the deficit. Over the long run, however, the deficit would increase because Social Security benefits, which are based on earnings, would rise. Note that the average reduction in taxes for families without employment-based insurance is greater than $153 because some families have more than one nondependent tax unit. See the appendix for further details.

employment-based health insurance to those who are currently uninsured.[8]

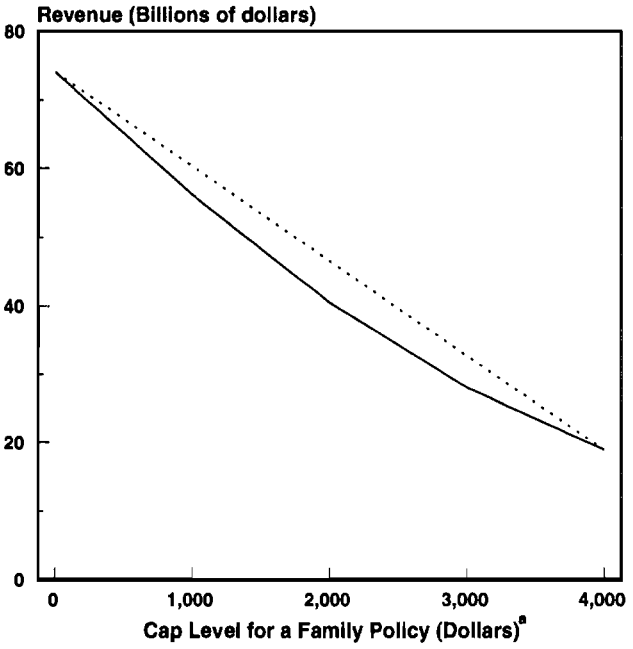
The second alternative would reduce everyone's tax liability by 3.5 percent. The beneficiaries of a proportional tax reduction would be high-income people and those without employment-based health insurance (see Table 8). This option would transfer less money from the insured to the uninsured--they would gain about $3 billion--because uninsured people tend to have low incomes and low income taxes. They therefore receive little benefit from a proportional reduction in income taxes. The average reduction in taxes for those without employment-based health insurance would be approximately $70, or about half of the reduction that would occur under the lump-sum approach. Moreover, families covered by employment-based health insurance with incomes of less than $100,000 would face average tax increases ranging from $30 to $160. Those families with incomes of more than $100,000 would, on average, find their taxes reduced.

To the extent possible, the income tax should treat people who start out in similar positions equally, a principle often referred to as horizontal equity (see Box 1 on page 12). Tax caps improve horizontal equity if "positions" are measured in terms of income. With an unlimited tax exclusion, otherwise similar people can face much different tax liabilities based on how much their employers contribute toward their health insurance premiums, if at all. Imposing caps by itself reduces the variability of tax liability that the tax exclusion creates. Redistributing the additional revenues that the caps generate in favor of the uninsured and underinsured could reduce the inequity still further.

Much of the variation in the cost of health insurance, though, is the result of regional differences in the costs of health care and differences in the health status of the people being insured. Taxing people who faced high health insurance costs more than otherwise similar people who could obtain insurance cheaply might be viewed as a violation of the principle of horizontal equity.

The potential revenues that can be raised under a set of tax caps are not a linear function of the level of the caps (see Figure 2). As the caps rise, revenues decline quickly because fewer and fewer employees are affected. If the caps are lowered, however, revenues increase at a growing rate as more and more employees become subject to the caps and more of the premiums of those employees already subject to the caps are included in employees' taxable income. For example, reducing the cap level from $4,000 to $3,000 for family policies (with self-only and head-of-household caps falling in proportion) would increase revenues by about $9 billion. But reducing the cap by another $1,000 (to $2,000) would raise an additional $12 billion.

Figure 2.
Revenue Effect of Different Cap Levels



SOURCE: Congressional Budget Office.

NOTE: The figure applies to 1994 revenues.

a. The caps for self-only and head-of-household policies were reduced in the same proportion relative to the caps in Table 5.

8. Part of the $5 billion transfer to the uninsured comes at the expense of those covered by Medicare or Medicaid who are also covered by employment-based insurance. Those families would not qualify for the rebate but would pay more tax.

Administrative and Compliance Costs

Caps on the tax exclusion would be harder to administer than the current unlimited exclusion. The relatively simple flat caps discussed above would require employers to measure and report the value of the premiums they had paid on behalf of each employee. Employees would have to include as taxable income the excess of their premiums over the caps. Because so many people receive health insurance at work, adding a few lines to W-2 forms could create a mechanism for reporting, but with 75 million forms affected, it would create a significant compliance burden as well.

A possible administrative simplification that has been proposed is to tax excess premiums at the firm, rather than the individual, level. That goal could be accomplished by either disallowing a tax deduction for health insurance premiums that exceed an aggregate cap or imposing an excise tax on that excess. Both options would have effects similar to those of caps on the premium amounts of individuals (see Box 4). Employers would have an incentive to reduce their payments for health insurance premiums to the amount of the caps and increase taxable wages. An advantage of the excise tax is that it would provide nonprofit firms with the same incentive to reduce premiums as taxable firms.

Box 4.
Employer versus Employee Caps

Some proposals would limit the amount of health insurance premiums that employers could deduct from their corporate taxable income. Others would include in the taxable income of employees the portion of health insurance premiums that exceeds a cap. Another possibility is to impose an excise tax on premiums in excess of the cap. What difference does it make which option is adopted, and are there any advantages of one approach versus another?

The answer from the perspective of standard tax policy is that health insurance premiums are a part of employee compensation, just like wages, and thus constitute a legitimate deductible business expense for employers and income for employees. But all three of the above approaches have practical advantages, and all of the alternatives would provide an incentive to constrain the amount of health insurance premiums. The effects on revenues are likely to be similar over the long run because all of the approaches provide an incentive for employers to reduce their contributions to the amount of the cap.

For example, suppose that the cap on premiums was set at the average premium currently paid by employers. Under either an employer or employee cap (or an excise tax near the level of individual and corporate tax rates), a strong incentive would exist for employers whose premiums were near the cap to seek out health insurance policies that could be purchased for the cap amount. Over time, savings in premiums would be passed along to employees in the form of higher wages (and possibly other fringe benefits). Thus, any tax penalty on employers would not be binding for long. The taxable income of employees would increase by the same amount under all three tax options.

If the cap was set so low that most employees continued to demand insurance that cost more than the cap, the ultimate response of employers and employees would be more complex. The employer facing an excise tax or limit on deductibility could reduce its contribution to the level of the cap and increase wages by the difference in premium contributions; alternatively, the employer could pay the tax and reduce wages so that the overall after-tax cost of compensation was unchanged. In theory, the choice should be determined by whether the average individual's rate for income and payroll taxes (net of any expected benefits) is more or less than the employer's tax imposed on excess premiums. If individuals would have to pay more in taxes than the firm, the firm should pay the penalty. However, given that average individual income and payroll tax rates are close to average corporate tax rates, many employers would probably choose the simplest option: reduce the employer share and increase employees' wages.

Because health insurance premiums vary by region and by firm size, fixed caps could have much different effects on people at different firms and in different branches of the same firm. However, trying to set variable caps would require a great deal of information, which does not now exist, and would increase administrative costs.

It may be difficult to determine premiums for employees of self-insured firms. Currently, employers that self-insure do not have to calculate or report their annual total or per-worker cost for their employees' health insurance; they simply deduct the cost of health benefits as a cost of doing business.[9] Tax caps, however, would require uniform reporting of the premiums paid on behalf of each employee as well as some of the same information required by the proposed regulations for former Internal Revenue Code section 89, which established nondiscrimination rules for employee benefits. (Section 89 was enacted as part of the Tax Reform Act of 1986 and repealed in 1989.) A portion of the regulations' complexity reflected the need to define in a uniform manner the contributions of employers to premiums for each employee.[10] Employers objected, for example, to the need to identify which employees had single coverage and which had family coverage. Typically, employers knew the total number of employees with each type of coverage but not the specific type chosen by particular employees.[11]

The inevitable questions that would arise under this option about characterizing and allocating costs related to health care would provide new opportunities for tax avoidance and evasion. For example, self-insured firms might be able to hide some of their insurance costs as general company overhead. They would have an incentive to artificially reallocate the cost of premiums from high-cost locations, where premiums would exceed the caps, to low-cost areas, where the caps would not be binding. Experience with section 482 of the Internal Revenue Code, which regulates the allocation of income among the separate national entities of a multinational firm, suggests that the allocation rules needed for tax caps may be complex and difficult to enforce. Moreover, to the extent that self-insured firms could avoid the caps, more firms would choose to self-insure.

An alternative to specifying aggregate or individual-specific dollar caps on premiums is to specify what constitutes a tax-qualifying insurance policy. As noted in Chapter 2, Alain Enthoven and Richard Kronick were early proponents of a tax exclusion limited to the cost of the lowest-priced standardized policy offered through regional health insurance purchasing cooperatives (HIPCs).[12] Supplemental insurance would not qualify for any tax preference.

In combination with several other important features, this approach, sometimes called managed competition, would avoid many of the administrative problems with caps on the tax exclusion because the premium for each worker would be negotiated by the HIPC.[13] But some proposals for managed competition would exempt large employers from the requirement to purchase insurance from HIPCs. Those employers are often self-insured; they are also the ones for whom measuring premiums would be most difficult. Thus, a managed competition policy that exempted large employers could retain a substantial amount of tax complexity. In addition, setting up and operating a network of HIPCs would involve sizable administrative costs.

9. Employers do, however, have to calculate average premiums for those employees who elect to continue purchasing insurance under the continuation requirement in the Consolidated Omnibus Budget Reconciliation Act of 1985 (see Chapter 2).

10. See, for example, Rosina B. Barker, "Lessons from a Legislative Disaster," *Tax Notes*, vol. 47, no. 7 (May 14, 1990). Barker observes that "section 89 began to look like a complicated version of what Congress had already rejected: a limitation on the amount of excludable health benefits, or cap" (p. 851).

11. Ibid., p. 847.

12. Alain C. Enthoven and Richard Kronick, "Universal Health Insurance Through Incentives Reform," *Journal of the American Medical Association*, vol. 256, no. 19 (May 15, 1991).

13. Congressional Budget Office, *Managed Competition and Its Potential to Reduce Health Spending* (May 1993).

Table 9.
Change in Tax Liability for Families Under the Progressive Refundable Tax Credit

Income (Dollars)[a]	Number of Families (Millions)	Percentage of Newly Insured Families	Total Percentage of Families Insured[b]
1 to 9,999	15.3	21	43
10,000 to 19,999	18.3	12	65
20,000 to 29,999	16.9	3	80
30,000 to 39,999	13.8	1	88
40,000 to 49,999	10.7	1	93
50,000 to 74,999	17.3	0	95
75,000 to 99,999	7.5	0	96
100,000 to 199,999	5.4	0	96
200,000 or More	1.4	0	93
All Incomes[c]	108.1	6	79

SOURCE: Congressional Budget Office based on the 1987 National Medical Expenditure Survey. See the appendix for details.

NOTES: Families are groups of related people who live together; people not living with relatives are considered one-person families.

Under this option, refundable tax credits are provided equal to health insurance premiums of up to $1,775 for single returns, $4,425 for joint returns, and $3,750 for head-of-household returns. The tax credit rate phases down from 100 percent to zero at between one and three times the tax filing threshold: from $6,250 to $18,750 for single returns, from $16,150 to $48,450 for joint returns, and from $12,950 to $38,850 for head-of-household returns. See the appendix for additional details.

Establish a Tax Credit

Instead of allowing an unlimited tax exclusion for the cost of premiums, the government could convey the subsidy for health insurance through a refundable tax credit. Taxpayers would qualify for a credit against their income tax for all or part of the amount that they and their employers spent on health insurance.[14] The tax credit approach is essentially identical to a direct transfer from the government or a voucher, except that it is administered through the income tax.[15]

The amount of the tax credit can be varied by income level and family status to control the cost of the subsidy and target the benefits. For example, CBO designed the following illustrative tax credit as an approximately revenue-neutral replacement for the tax exclusion in 1994. The credit would equal 100 percent of premiums up to $1,775 for single returns, $4,425 for joint returns, and $3,750 for head-of-household returns for very low income families (those earning less than the threshold for filing income taxes). The credit would be phased out for incomes between one and three times the lowest level of income that is subject to federal income tax: $6,250 to $18,750 for single returns, $16,150 to $48,450 for joint returns, and $12,950 to $38,850

14. See Stuart M. Butler, "Creating a National Health System Through Tax Reform," *Proceedings of the Eighty-Fifth Annual Conference of the National Tax Association-Tax Institute of America* (Columbus, Ohio: National Tax Association, 1993); and Mark V. Pauly and others, *Responsible National Health Insurance* (Washington, D.C.: AEI Press, 1992), for examples of proposals based on tax credits. Pauly and others note that the subsidy might also be provided directly through vouchers.

15. In fact, for budgetary purposes, the Congressional Budget Office treats the refundable portion of the earned income tax credit as if it were a direct outlay, recognizing that there is no meaningful distinction between refundable credits and vouchers.

Table 9.
Continued

Income (Dollars)[a]	Change in Tax Liability: Income Tax (Millions of dollars)	Payroll Tax (Millions of dollars)	Total (Millions of dollars)	Average (Dollars)	Number of New Tax Returns (Millions)
1 to 9,999	-11,530	240	-11,290	-740	2.0
10,000 to 19,999	-15,720	1,650	-14,080	-770	2.5
20,000 to 29,999	-10,620	3,700	-6,910	-410	2.0
30,000 to 39,999	-7,710	4,440	-3,270	-240	2.4
40,000 to 49,999	-2,650	4,550	1,910	180	1.1
50,000 to 74,999	6,650	8,770	15,420	890	0.6
75,000 to 99,999	6,550	4,040	10,590	1,420	0.1
100,000 to 199,999	6,040	2,490	8,530	1,580	0.1
200,000 or More	1,500	320	1,820	1,340	0
All Incomes[c]	-30,260	30,290	30	0	11.8

Only families with at least one member who is not eligible for Medicare or Medicaid receive tax credits.

The figures in the table assume that the tax credit is established in 1994, based on projected levels of income.

a. Adjusted gross income reported on tax returns plus certain nontaxable forms of income including employers' contributions to the cost of health insurance premiums and tax-exempt interest.

b. Includes families covered by private or employment-based insurance plans.

c. Includes families with negative or zero income.

for head-of-household returns. Thus, a family with adjusted gross income (AGI) of $25,000 in 1994 would qualify for a 72.6 percent credit on premiums up to $4,425.[16] A family already covered by Medicaid or Medicare would not qualify for the tax credit.

Implications for Efficiency

By providing a larger subsidy for low-income families, a credit would encourage more people to secure health insurance, reduce adverse selection, and discourage free riders. As a result, the credit would avoid some of the undesirable features of a tax cap. For example, a cap would cause some small employers to choose to stop providing insurance because their cost per dollar of health insurance would increase as they reduced insurance benefits. Workers at small firms, however, have lower wages on average and would therefore qualify for larger average tax credits than workers at large firms. Thus, under a credit, the after-tax cost of insurance would decline substantially for many of these workers because the credit would be worth more to them than a tax exclusion. In addition, employees of firms that stopped providing insurance would still be able to purchase subsidized insurance directly.

The illustrative tax credit would expand insurance coverage by providing 100 percent subsidies for poor people. It would also provide a strong incentive for insured people who have moderate incomes to seek out less expensive insurance because premiums subject to the credit would be capped. Those who did not receive any credit would have an

16. Under the phase-out process, the credit rate for a joint return would be computed as ($48,450 - AGI)/($48,450 - $16,150) for AGI between $16,150 and $48,450, 100 percent for AGI of less than $16,150, and zero for AGI greater than $48,450. If AGI equaled $25,000, the credit rate would be 0.726.

even stronger incentive to economize because their premiums would be paid entirely out of after-tax income.

As with any tax preference that is being phased out, a progressive tax credit would tax additional income of families in the phase-out range at high rates. Such high marginal tax rates might cause some people to work less and would discourage some spouses from entering the labor market.[17] The illustrative tax credit would increase the effective marginal tax rate on income by about 14 percentage points for families with health insurance premiums at or above the cap. On a joint return, a family with a $4,425 health insurance policy would lose 13.7 cents in credits for every dollar of additional income between $16,150 and $48,450. Combined with income and Social Security payroll tax rates of about 15 percent each, their effective marginal tax rate on wages would be about 44 percent. For some lower-income families with two or more children, the phase-out of the earned income tax credit could add another 18 percentage points at 1994 levels, and the phase-out for child care credits could add almost 5 percent.[18] After accounting for state income tax rates, families in the phase-out range for the credit could face effective marginal tax rates of between 44 percent and 75 percent.

Yet the credit would also reduce the current disincentive for welfare recipients to enter the work force. At present, welfare recipients can lose most of their benefits when they go to work. People covered by Medicaid who become ineligible because their earnings have increased can continue their coverage for up to 12 months, subject to a premium assessment after 6 months. In combination, the loss of cash assistance and the phase-out of Medicaid coverage create a large implicit tax on work. By paying for all or most of the health insurance costs of low-income workers, a tax credit would reduce this penalty.

17. For further discussion, see Charles L. Ballard and John H. Goddeeris, "Financing Universal Health Care in the United States: A General Equilibrium Analysis of Efficiency and Distributional Effects," unpublished draft (Michigan State University, March 1993).

18. The Omnibus Budget Reconciliation Act of 1993 raises the maximum phase-out rate for the earned income tax credit to 21 percent by 1996.

Effects on Equity

CBO's illustrative tax credit is targeted toward low-income families who would be the least likely to be insured without a subsidy. The average family earning less than $10,000 would have a net reduction in taxes of $740 (see Table 9 on pages 44 and 45). In addition, if everyone who qualified for the 100 percent credit used it, the percentage of insured families in that income category would jump from 22 percent to 43 percent after the credit was established. In contrast, people in the highest-income classes would receive a tax increase with virtually no direct benefit from the credit. Under this option, families with incomes between $100,000 and $200,000 would have an average increase in taxes of $1,580.

Administrative and Compliance Costs

Most tax credits are paid out after the qualifying event occurs as credits against income tax. An exception is the earned income tax credit, which may be advanced to low-wage workers by their employers. A tax credit for health insurance would have to be paid to individuals, their employers, or their insurers at the time when insurance premiums were due, rather than in the following year. But if eligibility for the tax credit depended on current income, individuals and the government might not know the size of the tax credit for which they were eligible until after the end of a year. If eligibility depended on the previous year's income, then individuals with volatile income might not qualify for a tax credit until after their need for assistance had passed. That could cause a problem--for example, if newly unemployed (and uninsured) people could not afford health insurance until a full year or more after they had lost their jobs.

An alternative approach would be to pay the credit to employers or insurers who would pass on the benefit to qualified recipients in the form of higher wages or lower premiums. If the tax credit was transferred to employers or insurers, however, provisions would have to be made for nonprofit firms that could not use the tax credits, as well as for firms that had tax losses that would devalue the credits. In addition, the employer or insurer would

have to verify that an individual was eligible for a credit of a certain size.

If the tax credit was paid directly to individuals, a large number of taxpayers who do not now file tax returns would have to file them to claim the credit. If everyone who qualified for the 100 percent credit used it, almost 12 million new tax returns would be filed. That increase would create a substantial administrative burden for the Internal Revenue Service and heavy compliance costs for low-income households, some of whom might be poorly equipped to fill out a complex new tax form. (For example, those households might have to verify premium payments in the current year and income in the prior year to compute their tax credit.)

The credit in the illustrative option would become the largest refundable tax credit available to taxpayers. The possibility of receiving such a big credit, combined with the large effective marginal tax rates discussed above, would tempt some people to engage in tax fraud--understating their income and overstating their insurance premiums.

Finally, because a credit for health insurance premiums would cap the amount of premiums qualifying for the credit, this option would be subject to the same kinds of problems in determining qualifying health insurance premiums that would occur with caps on the tax exclusion. In addition, employers would come under increased pressure from higher-income taxpayers to recharacterize health insurance costs as other business expenses so that they would continue to be excluded from employees' taxable income.

Repeal the Tax Exclusion

Repealing the tax exclusion would raise about $44 billion in income tax revenues and $30 billion in Social Security payroll taxes in 1994. These additional revenues could be used to help finance expanded direct expenditures for health care, reduce the deficit, or pay for other government services. The increased Social Security payroll taxes would eventually result in increased Social Security benefits for these taxpayers.

Implications for Efficiency

When the special characteristics of health insurance are ignored, a clear case for repeal can be made on the grounds of efficiency. Removing a price distortion and cutting marginal tax rates would always improve economic efficiency, perhaps substantially. To the extent that deficits represent future taxes, the same argument could be made for applying the revenues to reducing the deficit. In addition, if expanded access to health care would improve economic efficiency for the reasons discussed earlier, repealing the tax exclusion would raise revenues that could be used to finance a program of direct expenditures. In that case, the net effect on economic efficiency would depend on whether the direct expenditures were more or less efficient than the tax exclusion.

Abolishing the tax subsidy for employment-based health insurance would reduce or eliminate the distortions that the tax exclusion creates. But it could also fundamentally change the market for health insurance. Employers would be less likely to provide health insurance without a subsidy. Possibly only the largest employers, who have a significant cost advantage over smaller firms and other groups, would continue to offer insurance to their employees.[19] Other groups might offer health insurance in place of employers, much as they offer life insurance at present. There would be nothing, however, to prevent groups from forming especially to attract people with better-than-average risk. As a result, some people who are older or sicker than average may be much worse off than they are now.

In the absence of a tax subsidy, the typical health insurance policy would probably contain more mechanisms to control costs and reduce premiums because consumers would reap the full benefit of premium reductions. For example, with no subsidy, efficient health maintenance organizations may become relatively more attractive than fee-for-service insurance plans, and HMOs would be more likely to pass along savings in the form of lower premiums rather than an expanded menu of services.

19. Congressional Budget Office, *Rising Health Care Costs.*

Table 10.
Change in Tax Liability for Families Before Transfers If the Tax Exclusion Is Repealed

Income (Dollars)[a]	Number of Families (Millions)	Change in Tax Liability: Income Tax (Millions of dollars)	Change in Tax Liability: Payroll Tax (Millions of dollars)	Change in Tax Liability: Total (Millions of dollars)	Average (Dollars)
1 to 9,999	15.3	-20	240	220	10
10,000 to 19,999	18.3	1,160	1,650	2,810	150
20,000 to 29,999	16.9	4,650	3,700	8,360	500
30,000 to 39,999	13.8	5,150	4,440	9,590	700
40,000 to 49,999	10.7	5,290	4,550	9,850	920
50,000 to 74,999	17.3	11,480	8,770	20,250	1,170
75,000 to 99,999	7.5	7,770	4,040	11,810	1,590
100,000 to 199,999	5.4	6,710	2,490	9,200	1,710
200,000 or More	1.4	1,570	320	1,890	1,390
Total, All Incomes[b]	108.1	43,780	30,290	74,060	690

SOURCE: Congressional Budget Office.

NOTES: Families are groups of related people who live together; people not living with relatives are considered one-person families.

The figures in the table assume that repeal occurs in 1994, based on projected levels of income.

a. Adjusted gross income reported on tax returns plus certain nontaxable forms of income including employers' contributions to the cost of health insurance premiums and tax-exempt interest.

b. Includes families with negative or zero income.

Removing the tax subsidy would improve the allocation of labor among firms because the subsidy benefits large firms more than small firms (which in spite of the subsidy often do not offer insurance). Repeal would enhance labor mobility because fewer workers would have to worry about losing (or gaining) insurance based on their choice of job. But privately purchased insurance would be more expensive after taxes, and that could provide an additional disincentive to work for low-income households who would qualify for Medicaid if they stayed out of the labor market. As a result, employment of low-wage workers might decline.

The most serious drawback to repealing the tax subsidy without providing an alternative subsidy is that many fewer people would be insured; in addition, some of those who remained insured would face higher premiums because of adverse selection. Based on empirical estimates of how participation responds to changes in price, the number of people covered by insurance could fall by 16 percent to 26 percent if the average price of insurance increased by 35 percent.[20] The people most likely to become uninsured are those who are healthier than average (because without a tax subsidy, insurance would be a bad deal for them) and those who can no longer afford the premiums because of low income or poor health status of a family member. In addition, underwriting costs (determining who is a good or bad risk for health insurance) would increase because there would be fewer group policies. Thus, the gains in efficiency from repealing the subsidy might be offset by the inefficiencies that are inherent in a very selective and costly market for health insurance.

20. These estimates are derived by using the average participation elasticities of -0.6 (estimated by Long and Marquis) and -1.0 (estimated by Gruber and Poterba) as arc elasticities and computing the percentage change, based on an average increase in price from Table 4 of 35 percent (0.26/0.74). See Chapter 4 for a discussion of the elasticity estimates for participation.

Table 11.
Change in Average Tax Liability for Families Under the Repeal Option with a $600 Rebate (In dollars)

Income[a]	Rebate per Family[b]	Change in Average Tax Liability		
		All Families	Families with Employment-Based Insurance	Families Without Employment-Based Insurance
1 to 9,999	610	-600	-430	-610
10,000 to 19,999	630	-480	-180	-640
20,000 to 29,999	650	-160	160	-670
30,000 to 39,999	670	30	240	-700
40,000 to 49,999	700	220	400	-720
50,000 to 74,999	730	440	590	-750
75,000 to 99,999	810	780	930	-770
100,000 to 199,999	860	850	1,040	-750
200,000 or More	730	660	1,080	-670
All Incomes	690	0	420	-650

SOURCE: Congressional Budget Office.

NOTES: Families are groups of related people who live together; people not living with relatives are considered one-person families.

The figures in the table assume that repeal occurs in 1994, based on projected levels of income.

a. Adjusted gross income reported on tax returns plus certain nontaxable forms of income including employers' contributions to the cost of health insurance premiums and tax-exempt interest.

b. The rebate is assumed to be a refundable tax credit paid to all nondependent tax units. It is computed by dividing the total increase in taxes for families with employment-based insurance by the number of nondependent tax units. The average tax reduction is greater than $600 because some families have more than one tax unit.

For that reason, proposals to repeal the tax exclusion always include alternative policies to expand access to health insurance. These policies, however, have implications for efficiency that are beyond the scope of this study. For example, if the exclusion was replaced with a single-payer national health insurance plan, much additional revenue would be required, even if, as some analysts expect, such a policy constrained the growth in health care costs.[21] The additional taxes required to finance universal coverage would create disincentives to work and save that should be added to the cost of any new policy.[22]

Effects on Equity

Repeal is an extreme version of tax caps, and the distributional consequences are quite similar. Repealing the tax exclusion would raise about $74 billion in income and payroll taxes in 1994 (see Table 10). People with higher incomes would experience

21. Sheila Zedlewski and others, "The Distributional Effects of Alternative Health Care Financing Options," in Jack A. Meyer and Sharon Silow-Carroll, eds., *Building Blocks for Change: How Health Care Reform Affects Our Future* (Washington, D.C.: Economic and Social Research Institute, 1993). The authors simulate the effect of replacing the tax exclusion with national health insurance or a mandate that requires employers to provide insurance. They simulate net changes in income after taxes and health costs under different assumptions about how each reform would affect overall health costs. Although their modeling of the health market is much more complete than the modeling on which this analysis is based, the qualitative conclusions of CBO's analysis are similar to their results.

22. Ballard and Goddeeris, in "Financing Universal Health Care," model variations on national health insurance that raise tax revenues by distorting taxes. They conclude that the welfare costs of higher taxes could be substantial, although they would be smaller under a tax credit scheme with an employer mandate than under national health insurance.

the largest tax increases, although the average tax increase falls off in the highest-income group.

As in the case of tax caps, the redistributive effect of repeal depends on how the government spends the additional tax revenues. Under any redistributive scheme, however, the primary beneficiaries would be those who do not currently have employment-based health insurance. If the government rebated the tax revenues as a $600 refundable tax credit, the income tax liability of all families without employment-based health insurance would fall, whereas their Social Security payroll tax liability would not change (see Table 11 on page 49).

For those with employment-based insurance, the average family with an income of less than $50,000 would have a net reduction in income tax because the value of the exclusion from income tax under present law is less than $600. On average, higher-income people would face an increase in their income taxes, because their excluded premiums are greater and their marginal tax rates are higher, which makes the tax exclusion more valuable. In addition, most families with employment-based insurance would face an increase in payroll taxes because their premiums (or additional wages, if employers dropped insurance coverage) would be added to the tax base. As a result, among families with insurance, only the lowest-income groups would pay less tax under the option. Overall, the option would transfer about $28 billion from currently insured families to currently uninsured ones.

Table 12.
Change in Average Tax Liability for Families Under the Repeal Option with a Targeted $742 Rebate (In dollars)

Income[a]	Rebate per Family[b]	Change in Average Tax Liability		
		All Families	Families with Employment-Based Insurance	Families Without Employment-Based Insurance
1 to 9,999	370	-360	-450	-350
10,000 to 19,999	530	-370	-200	-460
20,000 to 29,999	650	-150	100	-560
30,000 to 39,999	720	-20	150	-610
40,000 to 49,999	790	140	290	-690
50,000 to 74,999	850	320	450	-740
75,000 to 99,999	950	630	770	-730
100,000 to 199,999	1,020	690	860	-730
200,000 or More	840	550	940	-680
All Incomes	690	0	310	-490

SOURCE: Congressional Budget Office.

NOTES: Families are groups of related people who live together; people not living with relatives are considered one-person families.

The figures in the table assume that repeal occurs in 1994, based on projected levels of income.

a. Adjusted gross income reported on tax returns plus certain nontaxable forms of income including employers' contributions to the cost of health insurance premiums and tax-exempt interest.

b. The rebate is "targeted" by providing it only to those tax units who have members who are not covered by government insurance (Medicare or Medicaid). It is computed by dividing the total increase in taxes for families with employment-based insurance by the number of nondependent tax units who qualify for the credit.

If taxpaying units in which everyone is currently insured under Medicaid or Medicare are excluded, the amount of the rebate to those who are still eligible would increase to $742 (see Table 12). In that case, families with employment-based insurance whose incomes were under $20,000 would pay less tax, as would everyone without insurance. This option transfers $21 billion from those families with employment-based health insurance to those who are currently uninsured.

Rebating the additional tax receipts by reducing everyone's income tax liability by 13.7 percent would benefit most people with higher incomes and those without employment-based health insurance (see Table 13). Because a large percentage of people with higher incomes have employment-based health insurance, this option would transfer the smallest amount of money--$12 billion--from the insured to the uninsured. The average reduction in taxes for those without employment-based health insurance would be about $290, or less than half of that under the lump-sum tax credit. Moreover, families covered by employment-based health insurance whose incomes were below $100,000 would face an average increase in taxes ranging from $180 per family for those with incomes under $10,000 to $600 per family for those with incomes between $20,000 and $30,000.

Table 13.
Change in Average Tax Liability for Families Under the Repeal Option with a 13.7 Percent Income Tax Reduction (In dollars)

Income[a]	All Families	Families with Employment-Based Insurance	Families Without Employment-Based Insurance
1 to 9,999	10	180	0
10,000 to 19,999	90	360	-50
20,000 to 29,999	320	600	-150
30,000 to 39,999	360	550	-300
40,000 to 49,999	420	590	-500
50,000 to 74,999	350	500	-850
75,000 to 99,999	-190	360	-1,520
100,000 to 199,999	-870	-640	-2,730
200,000 or More	-14,340	-14,470	-13,920
All Incomes	0	180	-290

SOURCE: Congressional Budget Office.

NOTES: Families are groups of related people who live together; people not living with relatives are considered one-person families.

The tax reduction applies to all tax units except those with negative tax liability as a result of the earned income tax credit.

The figures in the table assume that repeal occurs in 1994, based on projected levels of income.

a. Adjusted gross income reported on tax returns plus certain nontaxable forms of income including employers' contributions to the cost of health insurance premiums and tax-exempt interest.

Administrative and Compliance Costs

Repeal of the tax exclusion is a special case of the tax caps discussed earlier; thus, most of the administrative problems that a cap presents would apply to a repeal option as well, though to a lesser extent. Because some small employers would stop sponsoring health insurance for their employees, fewer individuals and firms would be affected over the long run. The primary problem for compliance would continue to lie in measuring premiums, especially for self-insured firms.

Conclusions

Limiting or removing the tax exclusion for employment-based health insurance would remove a significant source of inefficiency in the health care and labor markets. Depending on how such a limit was carried out, it could increase or decrease the number of people covered by health insurance. A tax credit might increase access to health insurance by directing the benefits of the credit to the segment of the population that is least likely to purchase insurance without a subsidy. But a cap on the tax exclusion might decrease health insurance coverage, especially among people who have high health insurance costs because they either have poor health, work for small employers, or live in high-cost areas.

Tax caps could be designed to limit the benefits from the exclusion to the cost of a specified set of services instead of a fixed dollar amount, but that approach would increase administrative complexity. Repealing the tax exclusion altogether might increase overall economic efficiency, but it might also substantially increase the number of people who are uninsured unless countervailing policies are put into place at the same time.

Limiting the benefits from the tax exclusion through a cap or repealing the exclusion entirely would reduce the disparity in tax treatment between those people who have access to employment-based insurance and those who do not. The overall distributional effects can vary widely, depending on how the additional tax revenues are spent.

As often happens, there is a trade-off between theoretical gains in economic efficiency and equity and the practical costs that a more complex tax system imposes. The burden of that complexity rests with businesses, individuals, and tax administrators, and it would increase under any of the three options.

Appendix

Simulating Options for Taxing Premiums for Employment-Based Health Insurance

The Congressional Budget Office (CBO) simulated the distributional effects of the policy options for taxing premiums for employment-based health insurance (discussed in Chapter 6) using its tax simulation model and health insurance information from the National Medical Expenditure Survey (NMES). The tax model is based on a sample population from the Current Population Survey (CPS), the financial characteristics of which have been adjusted to match distributions from tax data in the Statistics of Income files of the Internal Revenue Service. The simulation projected the sample population from its base year, 1990, to 1994 on the basis of the December 1992 CBO economic forecast. The model simulates tax law as it will be after the provisions of the recently enacted Omnibus Budget Reconciliation Act of 1993 are fully in effect.

The effects of simulated policies are distributed among families, who are divided into categories by income. Families are groups of related people who live together; people not living with relatives are considered one-person families. Families are classified by total cash income including realized capital gains plus the amount of employers' contributions to the cost of health insurance premiums. Family incomes are not adjusted for differences in family size.

Data on premiums for employment-based insurance--both total premiums and the shares paid by employers--were imputed to the CPS sample population based on NMES data collected in 1987. The imputation assigned total premiums and employer shares to each person in the CPS sample who reported having employment-based health insurance coverage during 1990. The assignment was based on variables found in both the NMES and CPS data, including type of insurance policy (self only or family), firm size, whether the employer paid the full premium, region, whether the appropriate health insurance unit included more than one person, and family income. Various adjustments ensured that the premium values assigned to the CPS sample came from cells in the imputation matrix that contained enough cases to be statistically meaningful. People who had been employed only part of the year were assigned full-year insurance premiums, prorated for the fraction of the year they had worked. Premiums were further calibrated to match projections of total employment-based premiums and the overall employer share of those premiums for 1994.

Health insurance coverage can be examined at various levels, focusing on the characteristics of policies, policyholders, or families. The data reported here use families as the unit of observation, prorate insurance premiums for people who worked only part of the year, and generally do not separate individual and family policies. These three choices about how to analyze coverage affect the reported distribution of average employer-based health insurance premiums. In particular, estimates of average premiums paid per policy for full-year coverage, calculated separately for individual and family plans, show only slight variation among family income classes. In contrast, the estimates of average premiums paid per family, adjusted for part-year

work and combining individual and family plans, indicate that premiums paid by families for employment-based coverage rise markedly with family income (see Table 4 on pages 30 and 31).

This difference stems from three factors. First, this study defines a family's premiums as the sum of premiums paid for all employment-based policies held by members of the family. Families with multiple policies have higher total premiums, more workers (since each policy is attached to a worker), and generally higher total family incomes than families with only one policy. Measuring premiums for families rather than policyholders thus makes average premiums rise with family income (see Tables A-1 through A-3).

The second factor is the adjustment of premiums for part-year workers. People with jobs for only part of the year generally have employment-based health insurance only while they are employed, so their premiums are less than those for a full year's coverage. In addition, their incomes tend to be lower than those of full-year workers, and consequently their family incomes also tend to be lower. Together, these conditions again lead to a positive relationship between family income and total family premiums for health insurance.

A third factor leading to the rise in average premiums with family income is the combining of individual and family policies. Individual policies have lower premiums than family policies and are more likely to be held by people in smaller families, often single people not living with relatives. Because smaller families generally have fewer workers, their incomes tend to be lower than those of larger families. Again, lower premiums are associated with lower family incomes.

Table A-1.
Characteristics of Employment-Based Health Insurance Policies Covering Individuals Only, by Family Income

Family Income (1994 dollars)[a]	Families (Thousands)	Health Insurance Policyholders (Thousands)	Policies per Family	Part-Year Workers (Thousands)[b]	Part-Year Workers per Family[b]
1 to 9,999	1,123	1,132	1.01	453	0.40
10,000 to 19,999	4,999	5,099	1.02	1,057	0.21
20,000 to 29,999	6,282	6,579	1.05	1,055	0.17
30,000 to 39,999	5,023	5,588	1.11	759	0.15
40,000 to 49,999	3,441	4,009	1.17	610	0.18
50,000 to 74,999	5,388	6,751	1.25	957	0.18
75,000 or More	4,247	5,756	1.36	836	0.20
All Incomes	30,600	35,017	1.14	5,746	0.19

SOURCE: Congressional Budget Office simulations based on data from the 1987 National Medical Expenditures Survey (conducted by the Agency for Health Policy Research, Department of Health and Human Services); the Bureau of the Census's March 1991 Current Population Survey; and the Internal Revenue Service's 1990 Statistics of Income.

NOTES: Data are for employment-based self-only health insurance policies--policies that cover only the worker. Families include all families with at least one worker who has an employment-based self-only health insurance policy.

The increased revenues that would result from eliminating the tax exclusion for employers' contributions to their employees' health insurance premiums were simulated by multiplying each insured worker's marginal federal income and payroll tax rate by the value of his or her employer's contributions to premiums, adjusted downward to reflect the employer's liability for payroll taxes. Actual revenue gains would probably be somewhat lower because some taxpayers would be able to deduct part of the newly taxable employers' contributions from their taxable income; this adjustment is not reflected in the simulations. The revenue gains from capping the exclusion were estimated in a similar manner, multiplying appropriate marginal tax rates by the amounts by which employers' contributions exceeded the hypothetical caps.

Three hypothetical means of spending the additional revenues were simulated using the same sample population. The first simulation rebated the revenues in equal lump-sum amounts to each nondependent federal income tax unit; the second rebated the revenues in equal lump sums only to those tax units in which at least one member was not covered by Medicare or Medicaid. The third simulation distributed the revenues in proportion to each unit's federal income tax liability. (Taxpayers with negative income tax liability because of earned income tax credits were left unaffected by the third simulation.) Calculations for all of these alternatives were based on estimates of tax liability from the CBO tax model.

Another option for spending the additional revenues is a federal income tax credit for total health insurance premiums (both the employer and employee shares). Credit limits and phaseout rates were chosen to make revenue losses from the credit roughly equal to the total revenue gains from taxing

Table A-1.
Continued

Family Income (1994 dollars)[a]	Premiums Adjusted for Part-Year Workers (1994 dollars)[b]		Premiums Unadjusted for Part-Year Workers (1994 dollars)[b]	
	Per Family	Per Policyholder	Per Family	Per Policyholder
1 to 9,999	1,531	1,520	1,906	1,891
10,000 to 19,999	1,864	1,828	2,016	1,976
20,000 to 29,999	2,015	1,924	2,126	2,031
30,000 to 39,999	2,138	1,921	2,231	2,004
40,000 to 49,999	2,309	1,981	2,420	2,076
50,000 to 74,999	2,503	1,996	2,621	2,091
75,000 or More	2,759	2,037	2,895	2,136
All Incomes	2,215	1,936	2,344	2,048

The table reflects 1994 levels of income.

a. Adjusted gross income reported on tax returns plus certain nontaxable forms of income including employers' contributions to the cost of health insurance premiums and tax-exempt interest.

b. Part-year workers are those who work fewer than 50 weeks during the year. Data cover only part-year workers who had employment-based self-only health insurance policies.

Table A-2.
Characteristics of Employment-Based Health Insurance Policies Covering Families Only, by Income

Family Income (1994 dollars)[a]	Families (Thousands)	Health Insurance Policyholders (Thousands)	Policies per Family	Part-Year Workers (Thousands)[b]	Part-Year Workers per Family[b]
1 to 9,999	333	335	1.00	115	0.34
10,000 to 19,999	2,259	2,291	1.01	585	0.26
20,000 to 29,999	5,096	5,198	1.02	941	0.18
30,000 to 39,999	6,315	6,575	1.04	1,035	0.16
40,000 to 49,999	6,341	6,850	1.08	1,016	0.16
50,000 to 74,999	11,349	12,902	1.14	1,509	0.13
75,000 or More	9,462	11,156	1.18	1,088	0.12
All Incomes	41,261	45,419	1.10	6,314	0.15

SOURCE: Congressional Budget Office simulations based on data from the 1987 National Medical Expenditures Survey (conducted by the Agency for Health Care Policy and Research, Department of Health and Human Services); the Bureau of the Census's March 1991 Current Population Survey; and the Internal Revenue Service's 1990 Statistics of Income.

NOTES: Data are for employment-based family health insurance policies--policies that cover workers and members of their immediate families. Families include all families with at least one worker with an employment-based family health insurance policy.

employers' contributions to premiums. The maximum credit varied by tax filing status (single, married filing jointly, or head of household), and the credit was reduced from the maximum to zero as adjusted gross income increased between one and three times the tax entry point for each filing status. The analysis assumed that joint and head-of-household returns included two dependent children. (The actual values used are given in the discussion of tax credits in Chapter 6.) All workers who are currently insured were assumed to continue their coverage, and uninsured workers were assumed to become newly insured only if they qualified for the maximum credit. The former assumption tends to overstate the number of workers insured under this option; the latter tends to understate it. The net effect of these two factors on health insurance coverage is unclear.

Table A-2.
Continued

Family Income (1994 dollars)[a]	Premiums Adjusted for Part-Year Workers (1994 dollars)[b]		Premiums Unadjusted for Part-Year Workers (1994 dollars)[b]	
	Per Family	Per Policyholder	Per Family	Per Policyholder
1 to 9,999	3,807	3,789	4,501	4,479
10,000 to 19,999	4,151	4,091	4,639	4,574
20,000 to 29,999	4,586	4,497	4,891	4,796
30,000 to 39,999	4,797	4,607	5,055	4,854
40,000 to 49,999	5,088	4,711	5,327	4,932
50,000 to 74,999	5,462	4,802	5,660	4,977
75,000 or More	5,840	4,951	6,013	5,099
All Incomes	5,192	4,718	5,435	4,938

The table reflects 1994 levels of income.

a. Adjusted gross income reported on tax returns plus certain nontaxable forms of income including employers' contributions to the cost of health insurance premiums and tax-exempt interest.

b. Part-year workers are those who work fewer than 50 weeks during the year. Data cover only part-year workers who had employment-based family health insurance policies.

Table A-3.
Characteristics of All Employment-Based Health Insurance Policies, by Family Income

Family Income (1994 dollars)[a]	Families (Thousands)	Health Insurance Policyholders (Thousands)	Policies per Family	Part-Year Workers (Thousands)[b]	Part-Year Workers per Family[b]
1 to 9,999	1,442	1,467	1.02	568	0.39
10,000 to 19,999	7,193	7,391	1.03	1,642	0.23
20,000 to 29,999	11,143	11,777	1.06	1,996	0.18
30,000 to 39,999	10,846	12,163	1.12	1,794	0.17
40,000 to 49,999	8,992	10,859	1.21	1,626	0.18
50,000 to 74,999	14,676	19,652	1.34	2,466	0.17
75,000 or More	11,305	16,913	1.50	1,924	0.17
All Incomes	65,793	80,436	1.22	12,059	0.18

SOURCE: Congressional Budget Office simulations based on data from the 1987 National Medical Expenditures Survey (conducted by the Agency for Health Care Policy and Research, Department of Health and Human Services); the Bureau of the Census's March 1991 Current Population Survey; and the Internal Revenue Service's 1990 Statistics of Income.

NOTES: Data are for employment-based health insurance policies. Families include all families with at least one worker who has an employment-based health insurance policy. Individuals not living with relatives are included in the data as one-person families.

Table A-3.
Continued

Family Income (1994 dollars)[a]	Premiums Adjusted for Part-Year Workers (1994 dollars)[b]		Premiums Unadjusted for Part-Year Workers (1994 dollars)[b]	
	Per Family	Per Policyholder	Per Family	Per Policyholder
1 to 9,999	2,072	2,037	2,524	2,482
10,000 to 19,999	2,600	2,528	2,858	2,781
20,000 to 29,999	3,234	3,059	3,436	3,251
30,000 to 39,999	3,783	3,372	3,975	3,544
40,000 to 49,999	4,471	3,702	4,682	3,876
50,000 to 74,999	5,142	3,836	5,339	3,983
75,000 or More	5,923	3,960	6,119	4,091
All Incomes	4,287	3,506	4,499	3,681

The table reflects 1994 levels of income.

a. Adjusted gross income reported on tax returns plus certain nontaxable forms of income including employers' contributions to the cost of health insurance premiums and tax-exempt interest.

b. Part-year workers are those who work fewer than 50 weeks during the year. Data cover only part-year workers who had employment-based health insurance policies.

RELATED CBO STUDIES

An Analysis of the Administration's Health Proposal, February 1994.

Trends in Health Spending: An Update, June 1993

Managed Competition and Its Potential to Reduce Health Spending, May 1993.

Projections of National Health Expenditures, October 1992.

Economic Implications of Rising Health Care Costs, October 1992.

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