

Report for Congress

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Tax Subsidies for Health Insurance for the Uninsured: An Economic Analysis of Selected Policy Issues for Congress

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Summary

In spite of strong sustained growth in U.S. output of goods and services, personal income, and employment in the past decade, the number of Americans without health insurance has increased. An estimated 42.2 million people under the age 65 were uninsured in 1999, up from 33.6 million in 1988. A major factor behind this rise has been sharp increases in health insurance premiums, driven by the rising cost of health care.

The increases in the uninsured population have sparked a renewed interest in finding ways to achieve substantial reductions in this population. While a variety of approaches are possible, in recent years Congress has shown keen interest in the use of tax subsidies to expand health insurance coverage. Tax-based approaches have considerable appeal for some policymakers. Proponents of these approaches believe that they would improve the fairness of the tax code by expanding the proportion of taxpayers eligible for tax subsidies for the purchase of health insurance; they would rely on the private insurance market rather than federal programs to expand coverage; and they would constitute a tax cut, which for some is more desirable than launching a new federal spending or entitlement program. A host of bills to offer tax credits and deductions for the purchase of health insurance to those who are uninsured or insured but ineligible for existing tax subsidies for health insurance were considered in the 106th Congress. Similar proposals are expected to resurface in the 107th Congress.

These proposals raise the issue of whether additional government intervention in the market for health insurance is justified on economic grounds. In the absence of serious problems in the health insurance market, proposals to supplement or scrap existing tax subsidies for health insurance and supplant them with more generous tax subsidies could end up making consumers as a whole worse off. The problems of adverse selection and moral hazard in the health insurance market and the existence of free riders in the health care market arguably provide an economic rationale for government intervention in the health insurance market. They also suggest that optimal public policy might attempt to encourage all individuals to purchase health insurance that avoids promoting the excessive consumption of health care.

Proposals to create tax subsidies for the purchase of health insurance by the uninsured (along with those ineligible for current tax subsidies) raise a host of important policy issues, including their potential efficacy and their impact on social welfare, equity, and the administrative burden of complying with the tax code. Recent studies indicate that these effects hinge on the design of such subsidies. In designing a tax subsidy for the purchase of health insurance, the following issues appear critical in shaping its net effects: (1) whether it is a deduction or a credit; (2) if it is a credit, whether it is refundable; (3) whether the subsidy is unlimited or capped; (4) whether it is targeted to particular income groups; (5) whether it includes insurance market reforms; and (6) whether it addresses important administrative issues like the timing of subsidy transfers and variations in health insurance premiums tied to geographic location, age, and health status.

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Tax Subsidies for Health Insurance for the Uninsured: An Economic Analysis of Selected Policy Issues for Congress

At the close of the 106th Congress, there was widespread concern about the number of Americans without health insurance, most of whom are under age of 65.¹ An estimated 42.2 million nonelderly people were uninsured in 1999, down from 43.9 million in 1998 but up from 33.6 million in 1988. What many find especially worrisome is that the uninsured population has increased during a period of sustained and at times robust growth in national and personal incomes and employment. Historically, more than 60% of nonelderly Americans have obtained health insurance through their employers. If, in the next few years, projected increases in health insurance premiums materialize, or the economy enters a period of slower growth or falls into a recession, the rate of growth in the nonelderly uninsured population could accelerate, assuming, of course, no changes in federal policy.²

Concern about the size of the uninsured population appears rooted in the disadvantages the uninsured face in receiving adequate health care and the social costs being uninsured entails. Compared with the insured, the uninsured are less likely to obtain preventive and routine health care, less likely to receive health care when they feel they need it, less likely to have a regular source of primary health care, more likely to be hospitalized for preventable or avoidable conditions, and more likely to have trouble paying medical bills.³ In addition, when the uninsured receive medical care but do not pay for it, the costs are borne by the insured population through

¹According to the results of a recent survey funded by the NewsHour with Jim Lehrer and the Henry J. Kaiser Family Foundation, a majority of Americans know someone who is uninsured and eight out of 10 Americans regard the persistent growth in the ranks of the uninsured as a serious national problem. (Complete survey results and background information on the uninsured are available at the NewsHour's website: [<http://www.pbs.org/newshour/health/uninsured/index.html>].) In addition, a survey of registered voters conducted by Princeton Survey Research Associates and released on October 16, 2000 found that health care ranked as the top issue that the next Congress and president should address. It also found that of the voters who considered health care to be an important issue in both the 2000 congressional and presidential elections, helping the uninsured get health insurance rated as the top health care policy issue. (A copy of the survey report can be obtained via the Internet at [<http://www.pbs.org/criticalcondition>].)

²See "Poll of Small Businesses Predicts Number of Uninsured May Rise in 2001," *Daily Report for Executives* (Washington: Bureau of National Affairs, July 19, 2000), p. A-18; Joel E. Miller, *Deja Vu All Over Again: The Soaring Cost of Private Health Insurance and Its Impact on Consumers and Employers* (Washington: National Coalition on Health Care, May 2000), pp. 7-8.

³Catherine Hoffman and Alan Schlobohm, *Uninsured in America: A Chart Book*, 2nd Edition, Kaiser Commission on Medicaid and the Uninsured (May 2000), pp. 56-81.

higher health insurance premiums, local, state, and federal governments through higher subsidies for uncompensated care, and health care providers through reduced incomes.

Yet, though most Americans believe that health care should be provided to everyone, there is a notable lack of consensus on how to solve the problem of a large and growing uninsured population. Respondents to a recent survey on health care issues by the NewsHour with Jim Lehrer and the Henry J. Kaiser Family Foundation seemed divided on the issue of paying more in taxes to provide health insurance to the uninsured and expressed equal support for four policy options to address the problem: 21% were in favor of expanding existing public programs like Medicaid and the State Children's Health Insurance Program (SCHIP); 21% backed a proposal to require firms to offer private health insurance to their employees; 21% liked the idea of creating a national health insurance system to cover all Americans; and 20% favored extending tax deductions and credits to help uninsured individuals purchase health insurance in the non-group market.⁴

The persistent growth of the uninsured population at a time of sustained economic expansion has prompted policymakers to search for ways to expand access to adequate and affordable health care. While a variety of approaches have been considered, recent Congresses have shown a strong interest in tax-based strategies for expanding health insurance coverage. Numerous bills to create tax deductions or tax credits for the purchase of health insurance by those not covered by employment-based health insurance were introduced in the 106th Congress, and both houses passed measures that would have granted a tax deduction for health insurance expenditures to those who do not itemize yet pay for a large share of their health insurance premiums. Similar proposals are likely to emerge in the 107th Congress.

Proposals to create tax subsidies for the purchase of health insurance by the uninsured raise numerous policy issues. This report discusses several of these issues. Specifically, it examines the potential impact of these proposals on the size of the uninsured population, the revenue cost of these proposals, their distributional effects among major income groups, their potential revenue cost relative to the potential gains in the insured population, and some of the administrative issues raised by the proposals. To lend some needed context to the analysis, the report begins with a profile of the U.S. uninsured population, a description of current federal tax subsidies for health insurance, and a discussion of the economic justification for government intervention in the health insurance market.

Profile of the U.S. Uninsured Population

This much is certain about the U.S. uninsured population: it is sizable and has grown substantially in the past 10 to 15 years. According to U.S. Census Bureau estimates, 42.5 million Americans (or one of every six citizens) lacked health

⁴See footnote # 1.

insurance in 1999.⁵ This figure excludes the many persons who gained and lost health insurance during the course of that year. Nearly all the uninsured in 1999 were under age 65 (42.2 million or 99.3% of the total), and of those, 10 million (or 24% of nonelderly uninsured) were under age 18. The nonelderly uninsured population expanded from 31.8 million (or 14.8 % of nonelderly Americans) in 1987 to 43.9 million in 1998 (or 18.4%), before dipping to 42.2 million (or 17.5%) in 1999.

Many factors have been cited to explain the recent rise in the uninsured population, including increases in the number of employers who do not offer health insurance and in the number of employees who choose not to participate in employer-provided health plans because their out-of-pocket costs, and the recent transition of former welfare recipients to low-paying jobs without health insurance.⁶ But perhaps the most important economic factor has been faster growth in per-capita spending on health care than per-capita personal income through much of the 1990s.⁷ The cost of medical services plays a major role in the pricing of health insurance in that premiums are set to cover expected claims for these services – along with the selling and administrative costs of policies – and still yield profits for insurers. Recent surveys indicate that most nonelderly uninsured persons lack health insurance because they find it too expensive, and that only a small share of the uninsured say that they do not want or need it.⁸ As the cost of medical care (and by extension, health insurance) rises faster than personal incomes, individuals are forced to spend more of their incomes on a given set of health benefits; at some point, the expected benefits of the insurance policy are not worth the cost.

Health insurance coverage is closely tied to household income. Not surprisingly, most uninsured households fall in the bottom half of the personal income scale. In 1998, according to Census data, 27% of nonelderly uninsured households had pre-tax incomes below the federal poverty level (which for a family of three was \$13,650 in 1998), and 29% of nonelderly uninsured households earned pre-tax incomes between 100% and 200% of that level.⁹ In addition, it is estimated that 85% of uninsured households have incomes that are below the median household income for their family structure, 45% of the uninsured have no federal income tax liability, and over 60% of the uninsured have tax liabilities of less than \$1,000.¹⁰ Yet not all the uninsured can

⁵See U.S. Department of Commerce, Bureau of the Census, *Health Insurance Coverage: 1999* (Washington: September 2000), 15 p.

⁶Jack A. Meyer, Sharon Silow-Carroll, and Elliot K. Wicks, *Tax Reform to Expand Health Coverage: Administrative Issues and Challenges* (Washington: Economic and Social Research Institute, January 2000), pp. 4-5.

⁷See Richard Kronick and Todd Gilmer, "Explaining the Decline in Health Insurance Coverage, 1979-1995," *Health Affairs*, vol. 18, March/April 1999, pp. 30-47.

⁸Catherine Hoffman, *Uninsured in America: A Chart Book*, Kaiser Commission on Medicaid and the Uninsured (June 1998), p. 3.

⁹U.S. Library of Congress, Congressional Research Service, *Health Insurance Coverage: Characteristics of the Insured and Uninsured Populations in 1998*, by Madeleine Smith, CRS report 96-891 EPW (Washington: October 6, 1999), p. 6.

¹⁰Jonathan Gruber, *Tax Subsidies for Health Insurance: Evaluating the Costs and Benefits*, (continued...)

be considered poor: in 1998, about 8% of the uninsured lived in households with pre-tax incomes of \$75,000 or above, and 27% of the uninsured lived in households with pre-tax incomes equal to 300% or more of the federal poverty level.

Contrary to the conventional image of the uninsured as persons who are chronically unemployed and living on the margin of society, many are the working poor and their dependents. In 1998, 83% of the nonelderly uninsured lived in households headed by workers, 61% of the heads of uninsured households worked full-time throughout the year, and 56% of the nonelderly uninsured were adults who worked part-time or full-time.¹¹ Employees of small firms are much more likely to be uninsured than employees of large firms: in 1998, 34% of workers in firms with fewer than 10 employees were uninsured compared with 13% of workers in firms with 1,000 or more employees, and 47% of nonelderly uninsured workers were employed by firms with fewer than 100 employees. Presumably, the link between firm size and health insurance coverage stems from the fact that the cost of insurance depends in part on the size of the risk pool it serves. Assume a single firm constitutes such a pool. As the number of employees rises, the cost per employee of marketing and administering the insurance plan falls, and the risk of claims for costly health problems is spread over more individuals, reducing the average risk per employee.

While the uninsured exhibit considerable diversity in age, household income, racial or ethnic status, and employment status, a profile of the typical uninsured individual can be sketched from the tangle of available data on the U.S. uninsured population. Such an individual is as likely to be male as female, likely to be white, likely to work for a small firm, likely to be under the age of 35, likely to be single with children, likely to reside in a household with at least one full-time worker, and likely to reside in a household with an income above the federal poverty level.

Existing Tax Subsidies for the Purchase of Health Insurance

Many recent congressional proposals to establish tax subsidies for the purchase of health insurance by uninsured individuals sought to build on or supplement existing tax subsidies for health insurance. Thus, in order to understand the proposals' possible equity, efficiency, and administrative effects, it is helpful to have a clear picture of how the current federal tax code subsidizes the purchase of health insurance. Most nonelderly Americans benefit from them to one extent or another. Jonathan Gruber, an economist at the Massachusetts Institute of Technology, has estimated that, in 1996, 84% of nonelderly Americans were eligible for a tax subsidy

¹⁰(...continued)

Working Paper 7553 (Cambridge, MA: National Bureau of Economic Research, February 2000), p. 7; and Jonathan Gruber and Larry Levitt, "Tax Subsidies for Health Insurance: Costs and Benefits," *Health Affairs*, vol. 19, January/February 2000, p. 74, 78.

¹¹Paul Fronstin, *Sources of Health Insurance and Characteristics of the Uninsured: Analysis of the March 1999 Current Population Survey* (Washington: Employee Benefit Research Institute, January 2000), p. 15.

for the purchase of health insurance and the tax code subsidized 81% of U.S. spending on private health insurance.¹²

The federal tax code contains several provisions that subsidize the purchase of health insurance in the private market. They are in the form of deductions or exclusions from income. As the value of a deduction or exclusion hinges on an individual's income tax bracket, they become more valuable as personal income rises. Each provision is described briefly below.

Exclusion of Employer Payments for Employee Health Insurance

Under section 106 of the Internal Revenue code (IRC), employees pay no income or payroll taxes on compensation received in the form of employer contributions for health insurance premiums. And employers may deduct these payments as ordinary and necessary business expenses. There is no dollar limit on the exclusion, and it applies whether the employer self-insures or contracts with private insurers to provide individual or group health insurance plans for its employees. Moreover, employees who participate in so-called cafeteria plans established by their employers under IRC section 125 may exclude their payments for employer-provided health insurance premiums from taxable income. Cafeteria plans are benefit packages that give employees a choice between receiving qualified benefits – such as accident and health insurance – or taking the equivalent amount in cash. Employees who opt for the benefits may exclude them from their taxable income, but those who receive cash instead must include it in their taxable income. Many firms also offer health benefits to employees through flexible spending accounts (FSA). Under a health FSA, an employee chooses a benefit limit at the beginning of a plan year and makes claims against the account as he or she incurs medical expenses; a FSA may be used to pay for annual health insurance deductibles and copayments and other expenses not covered by the employer's health plan. FSAs are funded either through salary reductions or employer contributions, both of which are exempt from federal income and employment taxes.¹³

The exclusion for employer-paid health insurance premiums has had a major impact on the evolution of the U.S. health insurance market since the early 1940s. In 1942, a ruling by the War Labor Board permitted employers to offer generous fringe benefits in a bid to attract scarce workers without violating the wage and price controls then in effect because of U.S. involvement in World War II; and in 1943, the Internal Revenue Service (IRS) ruled that employers' payments to insurance companies for group medical and hospital insurance premiums were not taxable as employee income.¹⁴ The two rulings set in motion a process that culminated in the

¹²Gruber, *Tax Subsidies for Health Insurance: Evaluating the Costs and Benefits*, p. 4.

¹³Meyer, Silow-Carroll, Wicks, *Tax Reform to Expand Health Coverage: Administrative Issues and Challenges*, p. 8.

¹⁴Melissa A. Thomasson, *The Importance of Group Coverage: How Tax Policy Shaped U.S. Health Insurance* (Cambridge, MA: National Bureau of Economic Research, February (continued...))

widespread coverage of nonelderly Americans under employment-based group health plans by the late 1950s. It can be argued that the exclusion played a pivotal role in this process because it improved access to group health insurance, which is easier to obtain and generally cheaper than comparable individual or non-group insurance.

Nowadays, the vast majority of nonelderly Americans (65% in 1998, including dependents) and nonelderly American workers (73% in 1998) receive health insurance through their employers.¹⁵ While it is not clear what share of this coverage can be attributed to the exclusion, there is no doubt that it gives employees a robust incentive to receive part of their compensation in the form of employer-provided health insurance. To illustrate this incentive effect, assume that a worker's wages are equal to his or her taxable income. If that individual is paid an annual wage of \$50,000 and faces a combined income and employment tax rate of 20%, then his or her after-tax income equals \$40,000; but if the same worker receives \$47,000 in wages and \$3,000 in employer contributions to health insurance, then his or her after-tax income is \$37,600 but his or her total after-tax compensation is worth \$40,600. As this example shows, the exclusion for employer-provided health insurance makes compensation as health insurance more valuable than compensation as wages. In effect, it reduces the after-tax cost of health insurance by a factor equal to an employee's combined income and employment tax rate. Economists Jonathan Gruber and James Poterba have estimated that the exclusion lowers the after-tax cost of health insurance by 32% relative to the after-tax cost of other goods and services.¹⁶

Such a generous subsidy is bound to be costly when it is widely used. The Lewin Group has estimated that the exclusion could cost the federal government \$74.5 billion in forgone tax revenue in 2000.¹⁷

Itemized Deduction for Medical Expenses

Under IRC section 213, an individual is allowed a deduction for qualified medical expenses for himself or herself and his or her spouse and dependents that exceed 7.5% of adjusted gross income (AGI). The deduction is available only to taxpayers who itemize on their tax returns and is mainly limited to unreimbursed medical expenses and health insurance premiums paid out-of-pocket. The income threshold for the use of the deduction limits the number of taxpayers claiming it. For example, only 4.4% of the 124.7 million federal individual income tax returns filed for 1998 claimed the

¹⁴(...continued)
2000), p. 2-3.

¹⁵Fronstin, *Sources of Health Insurance and Characteristics of the Uninsured*, Table 1 (p. 4) and Chart 4 (p. 6); and U.S. Office of Management and Budget, *Analytical Perspectives: Budget of the United States Government, Fiscal Year 2001* (Washington: 2000), p. 114.

¹⁶Jonathan Gruber and James Poterba, "Fundamental Tax Reform and Employer-Provided Health Insurance," in *Economic Effects of Fundamental Tax Reform*, Henry J Aaron and William G. Gale, eds. (Washington: Brookings Institution Press, 1996), p. 135.

¹⁷John Sheils, Paul Hogan, and Randall Haight, *Health Insurance and Taxes: The Impact of Proposed Changes in Current Federal Policy* (Washington: National Coalition for health Care, October 1999), p. 6.

deduction. Consequently, its revenue cost to the federal government is relatively small: the Lewin Group estimates that this cost could total \$4.8 billion in 2000, or about 4% of the revenue cost of the exclusion.¹⁸

It seems that the deduction's impact on the decision to purchase health insurance is ambiguous. On the one hand, it subsidizes the purchase of medical care and health insurance by lowering the after-tax cost of medical expenses and out-of-pocket health insurance premiums above 7.5% of AGI for taxpayers who itemize. On the other hand, the deduction gives the same group of taxpayers an incentive not to buy health insurance by reducing their after-tax cost of major medical expenses.¹⁹ In reality, it is unclear which effect predominates. If anything, the deduction probably has little influence on the decision to purchase health insurance because most taxpayers are unlikely to be able to claim the deduction in any given tax year.

Deduction for Health Insurance Purchased by the Self-Employed

Yet another tax subsidy for the purchase of health insurance is the deduction for health insurance purchased by the self-employed for themselves and their immediate families allowed under IRC section 162. In 2000 and 2001, the self-employed may deduct 60% of eligible health insurance expenses, and this share is scheduled to rise to 100% in 2003 and thereafter. Self-employed individuals are defined as sole proprietors, working partners in a partnership, and employees of subchapter S corporations who own more than 2% of the stock. The deduction is taken "above-the-line," meaning the deduction is available to all eligible self-employed individuals, not just those who itemize. It lowers the after-tax cost of health insurance by a factor equal to 60% of a self-employed individual's marginal income tax rate in 2000 and 2001. Use of the deduction is limited in the following ways: (1) self-employed persons may not deduct their health insurance expenses in computing their self-employment tax liability; (2) the deduction cannot exceed the taxpayer's net earned income from the trade or business in which the health insurance plan was established, minus the deduction for 50% of the self-employment tax and the deduction for contributions to pension plans; (3) the deduction is not available for any month in which a self-employed person is eligible to participate in a health insurance plan maintained by his or her employer or his or her spouse's employer; and (4) any deduction claimed cannot be included in the expenses used to compute the itemized deduction for medical expenses.

In 1998, an estimated 12.5 million workers were self-employed, or 9% of the nonelderly labor force. Of these, 53% received employment-based health insurance, 19% purchased their own insurance, and 25% were uninsured. Thus, it appeared that 44% of the self-employed (or 5.5 million individuals) were eligible to claim the deduction for that year. According to IRS figures, 3.2 million individuals (or 58% of

¹⁸*Ibid.*, p. 11.

¹⁹Jonathan Gruber and James Poterba, *Tax Subsidies to Employer-Provided Health Insurance*, Working Paper 5147 (Cambridge, MA: National Bureau of Economic Research, June 1995), p. 9.

those eligible) claimed the deduction on their income tax returns for 1998. The revenue cost to the federal government of the deduction is expected to amount to \$1.2 billion in 2000.²⁰

Medical Savings Accounts

The federal tax code also subsidizes enrollment in high-deductible health insurance plans through the tax treatment of contributions to medical savings accounts (MSAs). MSAs are personal savings accounts established for the express purpose of paying for health care costs not covered by health insurance, including insurance copayments and deductibles.²¹ Under IRC section 220, an employer or an individual (but not both) may contribute to a MSA up to an annual amount of 65% of the deductible for an insurance plan covering a single person (which may range from \$1,550 to \$2,350 in 2000) and 75% of the deductible for a plan covering more than one person (which may range from \$3,100 to \$4,650 in 2000) to a MSA. Only the self-employed and employees of firms with fewer than 50 employees are eligible to establish MSAs. Employer contributions are exempt from federal income and employment taxes, and individual contributions are deductible from gross income. Earnings on account balances are not taxed. To be eligible for these tax benefits, an individual must be covered by a high-deductible health plan and no other insurance (with some exceptions). Withdrawals from MSAs are tax-exempt if they are used to pay for medical expenses not covered by the high-deductible insurance plans (including those needed to satisfy the deductible), health insurance continuation coverage required under federal law, or health insurance when an individual is unemployed. There are no limits on withdrawals for qualified expenses. Withdrawals for other purposes are included in a person's gross income and subject to a 15% penalty (except in the cases of disability, death, or reaching age 65).

The law establishing the tax benefits for MSAs, the Health Insurance Portability and Accountability Act of 1996 (P.L. 104-191), authorized the creation of 750,000 MSAs in 1997 through 2000 as a demonstration project; this amount did not include MSAs opened by those who previously were uninsured. Eligibility for the same number of MSAs has been extended to the end of 2002 as a result of the enactment of the last piece of tax legislation considered by the 106th Congress: the Community Renewal Tax Relief Act of 2000 (P.L. 106-554). MSAs have been much less popular than originally hoped: by one estimate, about 100,000 MSAs had been established as of early 2000.²²

²⁰U.S. Office of Management and Budget, *Analytical Perspectives: Budget of the U.S. Government, Fiscal Year 2001*, p. 114.

²¹For a comparison of MSAs and flexible spending accounts, see U.S. Library of Congress, Congressional Research Service, *Flexible Spending Accounts and Medical Savings Accounts: A Comparison*, by Bob Lyke, CRS report 96-500 EPW (Washington: October 6, 2000).

²²Jennifer Steinhauer, "A Spending Account in Need of a Cure," *New York Times*, Sept. 3, 2000, sec. BU, p. 11. (No source for the estimate is cited in the article.)

Economic Rationale for Government Intervention in the Health Insurance Market

The tax subsidies described above represent a form of government intervention in the market for health insurance. In addition, the federal government takes on the role of an insurer by financing (at a cost of \$317 billion in fiscal year 1999) the private purchases of health care by the elderly, a large segment of the poor, and many disabled persons through the Medicare and Medicaid programs. In general, economists counsel against government intervention in private markets unless they fail to achieve efficient or equitable outcomes. These market failures are likely to arise under the following conditions: a lack of perfect competition; the existence of public goods; the existence of positive or negative externalities; the absence of markets when they should exist; the presence of imperfect information; episodes of inflation, unemployment, and other macroeconomic disequilibria; inequality in the distribution of income; and the existence of merit goods, which are goods and services that governments provide, induce, or compel people to consume in an effort to enhance social welfare.²³

Is there reason to believe that the private health insurance market would fail to achieve efficient or equitable outcomes in the absence of government involvement?

Answering this question is difficult because it entails making counterfactual judgments about how the insurance market would operate without federal support for health insurance coverage. Nonetheless, it is possible that without government intervention too little health insurance would be supplied relative to its potential efficiency gains. The presence of more than 40 million Americans without health insurance, many of whom reside in low-income households, suggests that such a scenario is more than just a theoretical possibility.

Mainstream economic theory holds that social welfare is enhanced by the presence of actuarially fair health insurance.²⁴ This is because risk-averse individuals are thought to be better off when they can reduce their financial risks and transfer them to entities that have a comparative advantage in risk bearing because of their capacity for risk pooling and diversification. Accordingly, most individuals presumably would want to buy health insurance to protect themselves against the catastrophic financial losses that serious illnesses or injuries can entail. Health insurance is most likely to yield efficiency gains when risks are large and neither individuals nor insurers know the probability that these same individuals will experience specific costly health problems.

Yet because of fundamental problems in the U.S. markets for health insurance and health care, an inefficient amount of health insurance might be provided and its

²³For more details, see Joseph E. Stiglitz, *Economics of the Public Sector*, 3rd Edition (New York: W.W. Norton & Co., 2000), pp. 77-85.

²⁴James M. Poterba, "Government Intervention in the Markets for Education and Health Care: How and Why," in *Individual and Social Responsibility: Child Care, Education, Medical Care, and Long-Term Care in America*, Victor R. Fuchs, ed. (Chicago: University of Chicago Press, 1996), p. 282.

distribution may be inequitable without government intervention. The chief problems are adverse selection and moral hazard in the health insurance market and the presence of free riders in the medical care market.

Adverse selection refers to the condition that arises when a majority of buyers of a given health insurance plan have above-average risks of suffering costly health problems relative to the group or segment of the population for which the plan was developed and to which it is being marketed. Such a condition is likely to develop in health insurance markets where participation is voluntary and there are many insurers offering consumers a range of competing plans with varied benefits. Adverse selection stems from two defining features of the health care market: the risk of ill health and the propensity to use health care vary considerably in the population at large (with a small percentage accounting for a large percentage of medical expenditures); and individuals know more about their health status and preferences for health care than do insurers, despite the steps taken by insurers to gather this information. In theory, adverse selection can trigger an upward spiral in premiums for generous policies that drive many individuals out of health insurance risk pools.

Moral hazard refers to the efficiency losses that stem from the impact of health insurance on the demand for health care. Economists view moral hazard as a problem of incentives rather than a matter of immoral or unethical behavior. Health insurance lowers the prices that insured individuals pay out-of-pocket for most health care services, making them less sensitive to the marginal costs and benefits of these services and encouraging excessive consumption of health care. Health insurers, of course, are keenly aware of this problem and try to control it by limiting coverage for specific services, requiring individuals to share the cost of the care through the payment of deductibles and copayments, excluding certain services from coverage, and closely monitoring the use of care. The presence of moral hazard suggests that there is an inescapable trade-off between the risk reduction and spreading insurance offers and the overutilization of health care it fosters.

In addition, the health care market is rife with imperfections, one of which is the existence of free riders. In every state, it is unlawful for health care providers – especially publicly funded hospitals – to deny treatment to someone with life-threatening or serious health problems. This legal sanction lessens the incentive to purchase health insurance – especially for individuals with few financial assets to protect – and endows health care with a principal trait of public goods: the impossibility of excluding anybody from consuming such a good. Since in practice nobody can be excluded from consuming urgent medical care, consumers have less of an incentive to pay for it or to purchase health insurance, giving rise to a free rider problem.²⁵ The cost of uncompensated care – which totaled an estimated \$37.9 billion for community hospitals and private physicians in 1994²⁶ – is passed on to

²⁵The problem can be defined as the incentive to allow other individuals pay for a public good while you enjoy the benefits it provides. For more details, see Harvey S. Rosen, *Public Finance*, 5th Edition (New York: Irwin/McGraw Hill, 1999), p. 69-70.

²⁶Peter J. Cunningham and Ha T. Tu, “A Changing Picture of Uncompensated Care,” *Health* (continued...)

consumers through higher prices for health care services and higher health insurance premiums, to health care providers through reduced incomes, and to local, state, and federal governments through increased subsidies for charity care (the cost of which ultimately is borne by taxpayers).

The problems of adverse selection, moral hazard, and free riders have important implications for the health insurance market, as the Congressional Budget Office noted in a 1994 report²⁷. On the one hand, they can raise the price of health insurance, causing too few individuals to be covered by it. On the other hand, those who are insured are likely to consume an inefficient amount of health care. Both outcomes produce efficiency losses, and although it is unknown how large these losses are, the fact that they could occur arguably provides an economic rationale for government intervention in the health insurance market.

To say that in theory there is an economic justification for federal subsidies for the purchase of health insurance is not to suggest that current federal involvement in the health insurance market leads to optimal outcomes. Some would contend that the existence of over 40 million uninsured is sufficient proof that current federal policy toward health insurance is far from optimal. But the problems that invite government intervention in the health insurance market also offer some guidance about how the intervention could be structured to achieve something closer to optimal results. Among other things, they imply that federal policy should at once encourage all individuals to purchase health insurance but discourage individuals from purchasing insurance that promotes the excessive consumption of health care.

Economic Effects of Current Federal Tax Subsidies for Health Insurance

The federal tax code subsidizes the purchase of health insurance by lowering its after-tax price relative to the after-tax prices of most other goods and services. It does this through a variety of deductions and exclusions, the most important of which in revenue cost is the tax exclusion for employer contributions to employee health insurance premiums. Tax subsidies of these types are more valuable to high-income households than low-income ones because the subsidy rates reflect an individual's marginal tax rate. Through their price effects, the subsidies directly boost U.S. health insurance coverage. And through their impact on health insurance coverage, they indirectly boost the consumption of health care. As noted in the previous section, insured individuals are likely to spend more on health care and be less sensitive to its marginal costs and benefits than uninsured individuals because insurance dramatically lowers the out-of-pocket cost of this care. The Lewin Group estimates that current

²⁶(...continued)

Affairs, vol. 16, July/August 1997, pp. 167-175.

²⁷U.S. Congressional Budget Office, *The Tax Treatment of Employment-Based Health Insurance* (Washington: GPO, March 1994), pp. 13-16.

tax subsidies for the purchase of health insurance could cost the federal government \$125.6 billion in forgone income and employment tax revenues in 2000.²⁸

Are these subsidies desirable from the perspective of economic efficiency and equity? They appear to be something of a mixed blessing.

On the one hand, it can be argued that current federal tax subsidies for health insurance improve social welfare by increasing health insurance coverage and expanding access to health care among the nonelderly. In 1998, about 155 million nonelderly Americans (or 65% of the nonelderly population) were covered by employment-based health insurance. The deductibility of health benefits as a business expense makes employers indifferent between paying workers in health benefits or wages, and the exclusion of employer payments for health insurance from employees' taxable income gives employees a robust incentive to seek compensation in the form of generous health benefits. In addition, health insurance offered through employers is less likely to fall prey to adverse selection. (See the previous section for an explanation of adverse selection and its efficiency effects.) Employment-based groups narrow the scope for adverse selection because individuals generally choose where to work for reasons other than their health status and expected health care needs, and large groups of employees typically encompass a wide range of health risks, making it possible for insurers to use community rating in setting health insurance premiums.²⁹ Group health insurance is much cheaper than individual or non-group insurance, mainly because of its advantages in risk pooling and its economies of scale in marketing and plan administration.

On the other hand, not all the efficiency and equity effects of existing tax subsidies for the purchase of health insurance are desirable. Critics maintain that the exclusion for employer health insurance premium payments contributes to excessive consumption of health care by encouraging eligible individuals to seek comprehensive health insurance with generous benefits and low copayments or deductibles. It will be recalled from the discussion of moral hazard in the previous section that increases in health benefits stimulate increases in the consumption of health care. Health economist Charles Phelps has estimated that in the absence of the exclusion for employer-provided health insurance, employment-based health insurance premiums would be significantly lower, because the demand for generous health insurance coverage would be significantly less.³⁰

Furthermore, critics contend that current tax subsidies for health insurance are inequitable on two grounds. One is that they benefit wealthy individuals more than poor individuals, even though poor individuals not covered by Medicaid are more likely to be uninsured and thus have a greater need for financial assistance in the

²⁸Sheils, Hogan, and Haight, *Health Insurance and Taxes: The Impact of Proposed Changes in Current Federal Policy*, p. 6.

²⁹U.S. Congressional Budget Office, *The Tax Treatment of Employment-Based Health Insurance*, p. 23.

³⁰Charles E. Phelps, *Health Economics*, 2nd edition (Reading, MA: Addison-Wesley, 1997), pp. 356-357.

purchase of health insurance. The Lewin Group has estimated that in 2000, the average value of available tax subsidies for health insurance for families with incomes over \$100,000 will be \$2,638, compared with \$79 for families with incomes of less than \$15,000.³¹ The second reason why the tax subsidies are inequitable is that not all taxpayers can claim them. In particular, two groups receive no tax benefits under current law: those who work for firms that offer no health insurance and those who are unemployed or retire before becoming eligible for Medicare. Together, they represent up to 16% of the nonelderly population, according to estimates by Gruber.³²

And there is some concern that the exclusion for employer contributions for health insurance causes strains in the labor market that may result in efficiency losses. Critics charge that it distorts the cost of labor by giving larger firms an advantage over smaller firms in offering health insurance to prospective workers. The exclusion also affects the decisions of where to work and whether to change jobs in ways that might reduce individual welfare.³³ While the average worker may be indifferent between insurance coverage and additional wages in his or her compensation, workers with pre-existing health problems or a strong preference for continuous health insurance coverage are unlikely to have the same view. As a result, these workers will be less likely to leave jobs with health insurance or take jobs without this coverage. In addition, in periods of rising health care costs and stagnant or falling real incomes, not all workers are willing to accept lower wages to pay for increases in the cost of health insurance. This is especially true of low-income workers. Employers have responded to this reluctance by increasing their use of contingent workers, temporary workers, and part-time workers, for whom health benefits are not generally provided.³⁴

Recent Congressional Proposals to Extend Tax Subsidies for the Purchase of Health Insurance to the Uninsured

Following the defeat of President Clinton's controversial and complex health care reform plan in 1994, policy discussions on expanding domestic health insurance coverage have focused largely on incremental reforms. Congressional consideration of the issue in recent years has taken a similar bent. Since the establishment of the State Children's Health Insurance Program under the Balanced Budget Act of 1997 (P.L. 105-33), which makes available matching federal funds for states and territories to provide health insurance for children from low-income families, Congress in

³¹Sheils, Hogan, and Haught, *Health Insurance and Taxes: The Impact of Proposed Changes in Current Federal Policy*, p. 8.

³²Gruber, *Tax Subsidies for Health Insurance: Evaluating the Costs and Benefits*, p. 4.

³³See U.S. Congressional Budget Office, *The Tax Treatment of Employment-Based Health Insurance*, pp. 20-23; and Jonathan Gruber, *Health Insurance and the Labor Market*, Working Paper 6762 (Cambridge, MA: National Bureau of Economic Research, October 1998).

³⁴David M. Cutler, "Public Policy for Health Care," in *Fiscal Policy: Lessons from Economic Research*, Alan J. Auerbach, ed. (Cambridge, MA: MIT Press, 1997), p. 190.

particular has shown a strong interest in tax-based approaches to expanding health insurance coverage.

The depth of this interest can be gauged by the numerous proposals in the 106th Congress to create new tax subsidies for the purchase of health insurance and expand existing ones. Numerous bills were introduced to accomplish one or more of the following objectives: establish tax deductions or credits for the purchase of health insurance by individuals with and without access to employment-based insurance, accelerate the schedule for making health insurance spending by the self-employed fully deductible, loosen eligibility for medical savings accounts, offer tax credits to small firms that provide health insurance to employees, and permit unused balances in cafeteria plans and flexible spending accounts to be carried over to the following year without being subject to taxation.³⁵ None of these measures was targeted exclusively at uninsured individuals and their spouses and dependents. Rather, the proposals that would have assisted the uninsured also would have benefitted in varying degrees persons who already were insured through policies they purchased in the individual or non-group market.

As a general principle, the effectiveness and equity effects of tax-based approaches to expanding health insurance coverage hinge on their design. A crucial consideration is the form taken by the subsidy: specifically, is it a deduction, a non-refundable tax credit, or a refundable tax credit? Nearly half of the uninsured have no tax liability and thus would not benefit from a deduction or non-refundable tax credit for the purchase of health insurance. A deduction would allocate more of its benefits to upper-income individuals than a credit would. An itemized deduction would have a smaller impact than a deduction that is available to all taxpayers because only 15% of taxpayers with adjusted gross incomes below \$50,000 itemize deductions on their tax returns. And only a refundable tax credit would be available to all taxpayers. But even that may be of limited assistance to the uninsured unless it is tied to the cost of group or non-group health insurance policies rather than an individual taxpayer's income tax liability. In a recent study of tax subsidies for health insurance, Jonathan Gruber of the Massachusetts Institute of Technology found that in 1997, more than 60% of uninsured taxpayers have tax liabilities of under \$1,000, while the average cost of non-group health insurance was \$2,542 for individuals and \$6,740 for families.³⁶

Tax-based approaches to expanding health insurance coverage have considerable appeal for many policymakers. They attempt to improve horizontal equity in the tax code by enabling more individuals to claim tax subsidies for health insurance. They rely on the private insurers rather than the federal government to extend coverage. And they represent a tax cut, which for some is preferable to undertaking new and possibly controversial federal spending and entitlement programs.

³⁵For a description of proposals in the current Congress to modify current tax benefits for health insurance, see U.S. Library of Congress, Congressional Research Service, *Tax Benefits for Health Insurance: Current Legislation*, by Bob Lyke, CRS issue brief IB98037, updated October 26, 2000 (Washington: updated continually), pp. 8-16.

³⁶Gruber, *Tax Subsidies for Health Insurance: Evaluating the Costs and Benefits*, p. 37.

Potential Effectiveness and Cost of Selected Proposed Tax Subsidies for Health Insurance for the Uninsured

Recent congressional proposals to employ tax policy to reduce the uninsured population raise the issues of what approach is likely to be most effective, efficient, and equitable. Two recent studies of tax subsidies for health insurance shed some light on this important policy issue. One is a study by the Lewin Group for the National Coalition on Health Care (NCHC), which is a non-profit, non-partisan organization based in Washington, D.C. that is supported by a variety of large and small firms, labor unions, consumer advocacy groups, religious organizations, and health care providers and seeks to raise public awareness of problems with the U.S. health care system.³⁷ The second study was done by Jonathan Gruber, an economist at the Massachusetts Institute of Technology, with financial backing from the Kaiser Family Foundation.³⁸ Both examined the potential effectiveness and revenue cost of a variety of proposed tax subsidies for the purchase of health insurance. In addition, they also briefly discussed some of the key administrative issues presented by the proposals, and the Gruber study tried to illuminate the equity effects of the subsidies. The subsidies analyzed in both reports were similar to some of the proposals to create tax subsidies for the purchase of health insurance considered in the 106th Congress.³⁹ As a result, the studies' findings might be of use to the 107th Congress if it focuses on the desirability of various tax-based approaches to expanding health insurance coverage among nonelderly Americans.

Lewin Group and Gruber Studies

Lewin Group Analysis.

A 1999 study by the Lewin Group assessed the effectiveness and revenue cost of nine proposed tax subsidies for the purchase of health insurance. The proposals ranged from something as simple as a tax deduction for the purchase of non-group health insurance to something as complex as replacing the current tax subsidies for health insurance with individual insurance mandates and refundable tax credits for the

³⁷Sheils, Hogan, and Haught, *Health Insurance and Taxes: The Impact of Proposed Changes in Current Federal Policy*, 54 p.

³⁸Gruber, *Tax Subsidies for Health Insurance: Evaluating the Costs and Benefits*, 63 p.

³⁹For instance, H.R. 4113 from the 106th Congress would have established an income-limited refundable tax credit (capped at \$1,000 for individuals and \$2,000 for families) for the purchase of non-group health insurance by any taxpayer without employment-based health insurance and not covered under federal health insurance programs. Similarly, the Lewin Group evaluated the cost and effectiveness of a refundable tax credit (limited to \$500 for individuals and \$1,000 for families) for the purchase of non-group health insurance by individuals without employment-based health insurance and not covered by Medicare or Medicaid. And the base case in Gruber's analysis was an income-limited refundable tax credit for the purchase of non-group health insurance by all individuals without employment-based insurance coverage and not covered by Medicare that was limited to \$1,000 for single filers and \$2,000 for joint and head-of-household filers.

purchase of non-group health insurance. For each proposal, the Lewin Group employed a computerized model of the U.S. health care system (known as the Lewin Group Health Benefits Simulation Model) to estimate the number of persons who would be eligible for it, the change in the number of persons with health insurance in response to it, and its federal revenue cost in 2000. These estimates in turn were used to compute the percentage change in the uninsured population relative to 1997 – the most recent year for which figures on the uninsured population were available when the study was done – and the revenue cost per newly insured person.

The simulation model generated these estimates on the basis of several key assumptions. Two deserve mention here. One assumption addressed the sensitivity of consumers to changes in the after-tax price of health insurance – or the price elasticity of demand for health insurance. The proposed tax subsidies would lower the after-tax price of health insurance by varying amounts for eligible individuals, spurring an increase in health insurance coverage among these individuals. The magnitude of the increase depends on the price elasticity of demand. The study used an elasticity of -0.2, which meant that a 1.0 % decrease in the after-tax price of insurance triggered a 0.2% rise in coverage nation-wide. There is some disagreement among health economists over the actual price elasticity of demand for health insurance; various analysts have derived estimates ranging from 0.0 to -2.7.⁴⁰

Another important assumption concerned the number of individuals who would claim the proposed tax subsidies. For subsidies that supplemented (rather than supplanted) current federal tax subsidies for health insurance, the study assumed that every eligible individual currently covered by non-group insurance would claim the subsidies, whether a deduction or refundable tax credit. The rate at which a tax subsidy is claimed or taken up matters because its revenue cost and efficacy depend in part on how many individuals actually claim it. However, if the early response to the tax deduction for health insurance purchased by the self-employed is any indication, the initial take-up rate is likely to be significantly below 100%.⁴¹

⁴⁰The coefficient for the price elasticity used in the Lewin Group study came from a 1998 analysis by the same organization that analyzed the effect of changes in employee contributions to employer health insurance on the number of workers and dependents purchasing employer-provided health insurance. Other studies have come up with different estimates of the price elasticity of demand for health insurance, but in doing so they employed different estimation methods, for the most part. For a discussion of these studies, see Gruber and Poterba, “Fundamental Tax Reform and Employer-Provided Health Insurance,” pp. 159-162.

⁴¹In a 1993 study of the response of self-employed individuals to the creation of a partial tax deduction for their health insurance expenditures by the Tax Reform Act of 1986, economists Jonathan Gruber and James Poterba found that from 1986 to 1989, between 15% and 20% of the self-employed with incomes below \$20,000 and about 50% of those with incomes above \$50,000 claimed the deduction. From these response rates, they concluded that a lack of awareness of the presence of the subsidy undercut its effectiveness. See U.S. Congress, House Committee on Ways and Means, Subcommittee on Health, *Health Insurance Premium Deductions for the Self-Employed*, hearing, 104th Cong., 1st sess., Jan. 27, 1995 (Washington: GPO, 1996), pp. 42-43.

Several of the study's findings have implications for the potential effectiveness, cost, and design of tax subsidies for the purchase of health insurance by the uninsured and thus are worth highlighting:

Lewin Groups's Findings on Cost-Effectiveness.⁴²

- ! The most cost-effective subsidy was a refundable tax credit for the purchase of non-group insurance by taxpayers not covered by employment-based health insurance, Medicare, or Medicaid that was capped at \$500 for single persons and \$1,000 for families; the cost per newly insured person was \$1,246 (2000 dollars).
- ! The least cost-effective subsidy was one that scrapped existing tax subsidies for the purchase of health insurance – except for medical savings accounts – and replaced them with a fixed refundable tax credit of \$800 per adult and \$400 per child (capped at \$2,400 per family) for the purchase of health insurance by all taxpayers except those who are covered under Medicare or Medicaid; the cost per newly insured person was \$10,541 (2000 dollars).
- ! Refundable tax credits for the purchase of health insurance by low-income working and non-working individuals were more effective but more costly per newly insured person than an above-the-line tax deduction for the purchase of non-group health insurance by taxpayers who were not covered by employment-based insurance, Medicare, or Medicaid.

Lewin Group's Findings on Effectiveness.⁴³

- ! The most effective subsidy was a plan developed by the Heritage Foundation; among other things, it abolished all existing tax subsidies for health insurance, replaced them with a refundable tax credit for health insurance and medical care expenditures, and required all individuals to purchase a minimum level of health benefits and all employers to convert their health benefit plans to wages; it eliminated the uninsured population, which was assumed to total 43.3 million in 2000.
- ! The least effective subsidy was a 30% refundable tax credit for non-group health insurance purchased by taxpayers without access to employment-based health insurance and not covered under Medicare or Medicaid; the credit phased out for single persons with adjusted gross incomes between \$25,000 and \$35,000 and for married couples with adjusted gross incomes between \$40,000 and \$50,000; it led to a reduction in the uninsured population of 1.5 million.

⁴²Cost-effectiveness in this context denotes the revenue cost per newly insured person.

⁴³Effectiveness in this context refers to the total decrease in the uninsured population.

Lewin Group's Findings on Cost.

- ! The most costly subsidy was the Heritage Foundation plan; its net revenue cost was \$55.3 billion (2000 dollars).
- ! The least costly subsidy was the 30% refundable tax credit for the purchase of non-group health insurance by individuals without access to employment-based health insurance and not covered by Medicare or Medicaid; its net revenue cost was \$3.3 billion (2000 dollars).

Gruber Analysis.

The Gruber study covered similar terrain: the potential effects of alternative tax subsidies for health insurance on the number of uninsured and their federal revenue cost. Like the Lewin Group study, many of the tax subsidies it evaluated were modeled after legislative proposals considered in the 106th Congress. And the Gruber study also employed a computerized model of the U.S. health care system to analyze these effects. But the Gruber study went beyond the Lewin Group study in that it addressed two important issues raised by tax-based approaches to expanding health insurance coverage that were either not included or treated marginally in the Lewin Group study: the extent to which different income groups benefitted from the proposed subsidies, and the impact of the subsidies on the market for group health insurance. The Gruber analysis also differed in its approach (but not in its basic methodology). It simulated the effects of a “base case” along a number of dimensions, including the federal revenue cost, the size of the uninsured population, the number of individuals with employment-based health insurance, and the distribution of the net cost of the subsidy among major income groups.⁴⁴ Gruber then simulated the effects of other proposed tax subsidies (e.g., a non-refundable tax credit for the purchase of non-group insurance and an above-the-line tax deduction for the same purpose) on the same variables and compared the results to those for the base case. The insights for policy making lay in the differences between the base case and each of the alternatives.

For each proposed tax subsidy, Gruber’s simulation model estimated the revenue cost to the federal government, how many individuals would become insured, how the benefits would be distributed among income groups, and how many individuals with employment-based health insurance would drop or lose it in response to the subsidy.⁴⁵ In estimating these effects, he made assumptions about a number of key behavioral variables, including the extent to which those who were uninsured used the subsidies to purchase non-group coverage, the extent to which those covered by non-group health insurance claimed the proposed subsidies, and the extent to which firms reacted

⁴⁴The base case involved a refundable tax credit for the purchase of non-group health insurance by individuals not covered by Medicare or employment-based health insurance. The credit was limited to \$1,000 for single filers and \$2,000 for joint filers and head-of-household filers, and it phased out for single filers with adjusted gross incomes between \$45,000 and \$60,000 and for joint and head-of-household filers with adjusted gross incomes between \$75,000 and \$100,000.

⁴⁵Gruber, *Tax Subsidies for Health Insurance: Evaluating the Costs and Benefits*, p. 9

to the subsidies by dropping or cutting health benefits for employees. Like the Lewin Group study, the results of Gruber's analysis hinged on the sensitivity of the demand for health insurance coverage to declines in its after-tax price. Gruber used a higher price elasticity than the Lewin Group study: -0.53 compared to -0.2. This was a significant difference in that a 1% fall in the after-tax price of health insurance stimulated an increase in insurance coverage among the uninsured that was 2.6 times greater than the increase in the Lewin Group's analysis. In assessing the validity of Gruber's assumed price elasticity, it should be kept in mind that it was closer to the middle of the range of available elasticity estimates than the one used in the Lewin Group study.

Like the Lewin Group study, several results of the Gruber analysis are worth mentioning because of what they imply about the effectiveness, cost, and design of tax subsidies for the purchase of health insurance by the uninsured:

Gruber's Findings on Cost-Effectiveness.

- ! The most cost-effective subsidy was a refundable tax credit for the purchase of non-group health insurance by individuals not covered by Medicare or employment-based health insurance; it was limited to \$500 for single filers and \$1,000 for joint filers and head-of-household filers and phased out for single filers with adjusted gross incomes between \$45,000 and \$60,000 and for joint and head-of-household filers with adjusted gross incomes between \$75,000 and \$100,000; the cost per newly insured person was \$2,239 (1999 dollars).
- ! The least cost-effective subsidy was the refundable tax credit for all out-of-pocket health insurance expenditures by individuals not covered by Medicare; the cost per newly insured person was \$5,003 (1999 dollars).

Gruber's Findings on Effectiveness.

- ! The most effective tax subsidy was a refundable tax credit for all out-of-pocket health insurance expenditures by individuals not covered by Medicare that was limited to \$1,000 for single filers and \$2,000 for joint filers and head-of-household filers; it reduced the uninsured population by 12.4 million.
- ! Running a close second in effectiveness was a refundable tax credit for the purchase of non-group health insurance by individuals not covered by Medicare or employment-based health insurance; the credit was limited to \$2,000 for single filers and \$4,000 for joint and head-of-household filers and paid directly to insurers when premium payments were due; it reduced the uninsured population by 12.1 million.
- ! The least effective subsidy was an above-the-line tax deduction for the purchase of non-group health insurance by individuals not covered by Medicare or employment-based insurance; it lowered the uninsured population by 0.25 million.

Gruber's Findings on Cost.

- ! The most costly subsidy was a refundable tax credit for all out-of-pocket health insurance expenditures by individuals not covered by Medicare that was limited to \$1,000 for single filers and \$2,000 for joint filers and head-of-household filers; its net revenue cost was \$62.2 billion (1999 dollars).
- ! The least costly subsidy was the above-the-line tax deduction, which carried a net revenue cost of \$0.9 billion (1999 dollars).

Gruber's Findings on Vertical Equity.

- ! The subsidy with the highest share of its benefits going to low-income households was a refundable tax credit for the purchase of non-group health insurance by individuals not covered by Medicare or employment-based health insurance; the credit was limited to \$1,000 for single filers and \$2,000 for joint filers and head-of-household filers and phased out for single filers with adjusted gross incomes between \$18,000 and \$25,000 and for joint and head-of-household filers with adjusted gross incomes between \$30,000 and \$50,000; the share of its net revenue cost received by households with incomes below 200% of the federal poverty level in 1999 was 69%.
- ! The subsidy with the lowest share of its benefits going to low-income households was a non-refundable tax credit for the purchase of non-group health insurance by individuals not covered by Medicare or employment-based health insurance; the credit was limited to \$1,000 for single filers and \$2,000 for joint filers and head-of-household filers; the share of its net revenue cost received by households with incomes below 200% of the federal poverty level in 1999 was 22%.
- ! On the whole, refundable tax credits for the purchase of non-group health insurance by individuals not covered by Medicare or employment-based health insurance were of much greater benefit to low-income households than either a non-refundable tax credit or a tax deduction of the same design.

Gruber's Findings on Employment-Based Health Insurance Coverage.

- ! Only one subsidy resulted in an increase (6.6%) in the number of individuals covered by employment-based health insurance: the refundable tax credit for out-of-pocket health insurance expenditures by all individuals not covered by Medicare.
- ! The subsidy that triggered the smallest decline (-0.9%) in the number of individuals covered by employment-based insurance was the tax deduction for the purchase of non-group health insurance.
- ! Two subsidies led to the largest decline (-9.6%) in the number of individuals covered by employment-based insurance: (1) a refundable tax credit for the purchase of non-group health insurance by individuals not covered by

Medicare or employment-based health insurance that was limited to \$2,000 for single filers and \$4,000 for joint filers and head-of-household filers and phased out for single filers with adjusted gross incomes between \$45,000 and \$60,000 and for joint and head-of-household filers with adjusted gross incomes between \$75,000 and \$100,000; (2) the same credit with no mismatches between the timing of health insurance premium payments and the timing of subsidy transfers to recipients with minimal household savings.

Gruber's Findings on Key Administrative Issues.

- ! Avoiding mismatches between the timing of health insurance premium payments and the timing of subsidy transfers to eligible individuals with minimal household savings had a significant impact on the efficacy of the base case, which was a refundable tax credit for the purchase of non-group health insurance by individuals not covered by Medicare or employment-based health insurance that was limited to \$1,000 for single filers and \$2,000 for joint and head-of-household filers and phased out for single filers with adjusted gross incomes between \$45,000 and \$60,000 and for joint and head-of-household filers with adjusted gross incomes between \$75,000 and \$100,000; the reduction in the uninsured population was 37% greater when the base case was simulated on the assumption that there were no such mismatches.

Implications of the Gruber and Lewin Group Studies for the Potential Cost and Effectiveness of Proposed Tax Subsidies for Health Insurance for the Uninsured

The results of both studies highlighted above have important implications for the ability of tax policy to achieve substantial reductions in the uninsured population. Specifically, they make clear that the effectiveness, net revenue cost, and equity effects of tax subsidies for this purpose depend critically on their design. And the results suggest that certain issues are critical to the design of cost-effective tax subsidies for health insurance for the uninsured. Those issues are framed below as questions:

- ! **Is the subsidy a tax deduction or a tax credit?** This is a key issue because many uninsured individuals reside in low-income households, and, assuming the head of such a household has a tax liability, a tax credit for the purchase of health insurance is more valuable than a tax deduction for the same purpose. Gruber has estimated that 90% of uninsured taxpayers with tax liabilities belong to the 15% income tax bracket, and that 50% of uninsured taxpayers have no federal income tax liability.
- ! **If the subsidy is a tax credit, is it refundable?** Non-refundable tax credits are valuable only if a taxpayer has a tax liability against which it can be claimed, whereas refundable tax credits are valuable to all taxpayers because they can be claimed regardless of whether or not someone has a tax liability. Gruber has estimated that half of uninsured taxpayers have no tax liability against which a tax credit for the purchase of health insurance could be claimed.

- ! **If the subsidy is a refundable tax credit, what proportion of the cost of a typical non-group health insurance policy does it cover?** The results of the Gruber and Lewin Group studies indicate that a key factor shaping the effectiveness of a tax subsidy for the purchase of health insurance by the uninsured is the proportion of the cost of insurance covered by the subsidy. The greater the share of the cost met by the subsidy, the more effective it is likely to be. This is to be expected as many uninsured individuals live in low-income households, where spending on necessities such as food, clothing, and shelter accounts for a huge share of disposable income.
- ! **Is the subsidy targeted to low-income groups?** The Gruber analysis suggests that the efficacy and cost per newly insured person of tax subsidies for the purchase of health insurance by the uninsured depend in part on the extent to which they are targeted at low-income households. Targeting of this sort is typically accomplished by specifying an income range over which a subsidy is phased out.
- ! **Who is eligible for the subsidy?** Tax subsidies for the purchase of health insurance by the uninsured can be limited to individuals without access to Medicaid and employment-based insurance or to all uninsured individuals, including those who choose not to buy insurance offered by their employers because of the out-of-pocket cost. The results of both studies indicate that who is eligible has a significant effect on a proposed subsidy's total cost, cost per newly insured person, and effectiveness.
- ! **Does the subsidy address administrative issues it may raise?** Among other things, the results of Gruber's analysis imply that measures to ease liquidity or cash-flow constraints on the recipients of tax subsidies for the purchase of health insurance enhance their effectiveness. This raises the broader question of the administrative issues that could complicate the implementation of such tax subsidies. The key issues cited by many analysts include how to prevent mismatches between the payment of health insurance premiums and the transfer of subsidies to eligible individuals, how to define health plans that are eligible for the subsidy, how to verify that employers offer health insurance to employees, and whether a subsidy should be uniform for all eligible individuals or adjusted to reflect variations in premiums related to geographic location, age, and health status.

Conclusions

Steady increases in the number of uninsured Americans through much of the 1990s, despite sustained economic growth and falling unemployment rates, have instilled in many policymakers a renewed interest in finding ways to expand health insurance coverage. Recent Congresses have exhibited a preference for using tax policy to accomplish this goal. For example, numerous bills creating tax deductions, non-refundable tax credits, and refundable tax credits for the purchase of non-group health insurance by those without employment-based health insurance were introduced in the 106th Congress. Two of their main objectives were to make health

insurance more affordable for the uninsured and to inject greater equity into the tax treatment of health insurance. The proposals raised a number of interesting policy issues, including their likely efficiency and equity effects, the cost and difficulty of administering and complying with the proposed subsidies, and their likely effectiveness in shrinking the uninsured population.

Several conclusions related to these issues can be drawn from the material presented in this report. First, the cost, effectiveness, and equity and efficiency effects of tax subsidies for the purchase of health insurance by the uninsured hinge on their design. What is more, the critical design components are the type of tax incentive (i.e., above-the-line deduction, itemized deduction, non-refundable credit or refundable credit), the proportion of the cost of a typical non-group health insurance policy covered by the subsidy, who is eligible for the subsidy (e.g., all individuals or only low-income individuals or low-income workers), and administrative issues raised by the subsidy (e.g., mismatches between the payment of health insurance premiums and transfers of subsidy payments to eligible individuals with minimal savings).

Second, it is difficult to design a tax subsidy that delivers a substantial reduction in the number of uninsured individuals at a modest cost per newly insured person without profoundly altering the existing system of employment-based health insurance. In the studies by the Lewin Group and Gruber, the only proposed subsidy that led to universal coverage was the fundamental reform plan advocated by the Heritage Foundation, which required every person to purchase insurance in the non-group market and all employers to convert their health benefit plans to the equivalent in wages, repealed current tax subsidies for health insurance, and replaced them with a refundable tax credit for health insurance and medical expenditures. Under Gruber's base case – a refundable credit of \$1,000 for single persons and \$2,000 for families not covered by Medicare or employment-based health insurance with income limits on eligibility – the size of the uninsured population declined by only 10%; although this subsidy was more generous than many of the proposals considered in the 106th Congress, it still covered less than half the estimated cost of a non-group policy for a single adult.⁴⁶

Third, some proposed tax subsidies to expand insurance coverage entail challenging tradeoffs among the goals of improved equity, increased efficiency, superior efficacy, and administrative simplicity. For example, Gruber's analysis indicated that a non-refundable tax credit or an above-the-line tax deduction would be simpler to administer than a refundable tax credit of the same design, but the non-refundable credit and the deduction would spur smaller declines in the uninsured population, would be of greater benefit to high-income individuals than low-income individuals, and would cost more per newly insured individual.

Fourth, many recent proposals to extend tax subsidies for the purchase of non-group health insurance to the uninsured could disrupt the market for group health insurance, with potentially adverse consequences for social welfare. All but one of the tax subsidies evaluated by Gruber resulted in declines in the number of individuals covered by employment-based health insurance. And some analysts have pointed out

⁴⁶Gruber, *Tax Subsidies for Health Insurance: Evaluating the Costs and Benefits*, pp. 29-30.

that, in the presence of rising health care costs and the threat of liability for inadequate health care under managed care plans, some firms would be likely to discontinue or curtail their employee health benefits and raise their salaries and wages by comparable amounts, if new tax subsidies for the purchase of health insurance by the uninsured are enacted.⁴⁷ If this were to happen, some who are now covered by employment-based group insurance would end up uninsured or covered by non-group insurance plans that offer less desirable risk protection and benefits or the same benefits at a higher price. As was noted earlier, group insurance has important advantages over non-group insurance: lower premiums because of economies of scale in the administration of benefits, reduced scope for adverse selection, and less variation in premiums.

Fifth, in pondering whether to adopt tax subsidies for the purchase of health insurance by the uninsured, policymakers should be mindful that the subsidies may end up aggravating some of the economic problems they are intended to solve. Tax subsidies are equivalent in practice to price subsidies. Generally, a key advantage of price subsidies is that they preserve consumer choice in selecting the level of goods or services to be consumed and the firms that supply them. Such choice enables consumers to seek out goods and services that accommodate their needs, preferences, and budgets. And if consumer tastes vary considerably, allowing consumer choice can enhance social welfare.⁴⁸ However, price subsidies that recognize differences in consumer taste can end up exacerbating the market failures they are intended to remedy or ameliorate. Some of the proposed tax subsidies for the purchase of health insurance considered by the 106th Congress seemed to carry such a risk. To varying degrees, these proposals would have done little (or nothing) to curb adverse selection in the private health insurance market, offset inequities in the distribution of existing tax benefits for health insurance, discourage excessive consumption of health care, and strengthen the market for group health insurance.

Sixth, despite the research that has been done on tax subsidies to expand health insurance coverage, it remains uncertain how much of a reduction in the uninsured population any particular subsidy could stimulate. Tax deductions or credits lower the after-tax price of health insurance, so their efficacy clearly depends largely on the sensitivity of the demand for health insurance to price decreases. But considerable uncertainty surrounds this sensitivity among the uninsured. Some economists have noted that price subsidies may be less desirable than other kinds of government intervention in the market for health insurance (e.g., government provision of health insurance) if the price elasticity of demand is low, the target population differs widely its responsiveness to changes in the price of health insurance, or it is unknown how price-sensitive demand for health insurance coverage is among the target population.⁴⁹ Further research on the price sensitivity of health insurance coverage among the

⁴⁷Gail S. Keller, "Large Health Insurance Tax Credits Seen Destroying Employer-Provided Coverage," *Daily Report for Executives* (Washington: Bureau of National Affairs, June 9, 2000), p. G-1.

⁴⁸Poterba, "Government Intervention in the Markets for Education and Health Care: How and Why," p. 289.

⁴⁹*Ibid.*, p. 288.

uninsured is needed to clarify the prospects for success of proposed tax subsidies to expand this coverage.

Finally, making private health insurance more affordable for uninsured households through tax subsidies may reduce the uninsured population, but there is reason to think that such a step would be insufficient if the aim of policy is to achieve universal health insurance coverage. Even with the financial assistance provided by a generous tax subsidy, low-income individuals with chronic health problems or high risks of developing such problems may be unable to purchase adequate health insurance in the private market. In many states, insurance firms are permitted to refuse to cover such individuals, charge them rates significantly above the rates offered to healthy or low-risk persons, or deny coverage for certain pre-existing health conditions. Barriers such as these suggest that measures to require insurers to offer health insurance to anyone regardless of health status or to restrict the ability of insurers to discriminate on the basis of health status in pricing their policies may be needed in addition to price subsidies in order to achieve universal coverage. Gruber has argued that the complex policy issues raised by efforts to shrink the uninsured population mean that “tax policy can likely be most useful as one part of an overall strategy to address uninsurance in the U.S., as opposed to a solution in and of itself.”