

The Tax Code, Health Insurance Coverage, and Utilization  
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**The simulation results reported in Figures 1 and 2 and Tables 2-5 in this draft are taken from previous research. All of them will be updated for the final draft.<sup>†</sup>**

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<sup>†</sup> The source for those estimates is: Figure 1 (Burman, Furman, Leiserson, and Williams 2007); Figure 2 (see note to figure); Tables 2-5 (Burman, Uccello, Wheaton, and Kobes 2003).

## **I. Introduction**

About 47 million Americans under age 65, including 9 million children, lack health insurance. They are less likely to obtain preventive care when healthy and they receive lower quality care when they get sick. Furthermore, the public ultimately shoulders the burden of paying for the medical treatment of those lacking insurance, either through higher taxes or higher health care costs.

The fact that people cannot afford or choose not to obtain health insurance is not necessarily a cause for public intervention in the health insurance market. One reason low-income people cannot afford health insurance is that they are poor. The best solution to that problem would be to increase incomes, not subsidize particular categories of spending.

There are numerous reasons, however, why health insurance costs more than it would in a perfect market. First, the very act of having insurance tends to increase utilization. People spend more when someone else is writing the check, but this causes insurance to be more expensive than it might be (a phenomenon known as moral hazard). Second, insurance tends to be most attractive to people who expect to benefit most from it—such as those with chronic conditions and people who plan to have children. Since insurers can only imperfectly match premiums to expected utilization, they have to assume that purchasers have higher costs than average. That means that healthy people get a relatively bad deal from insurance—unless they can align themselves with a large group with heterogeneous health status. (This feature of insurance is called adverse selection.) The existence of free (even if inadequate) emergency health care for those with low incomes serves as a deterrent for purchasing health insurance, both because the

free care provides a sort of safety net and because uncompensated care tends to raise the cost of care for those with insurance. Finally, healthy people—especially in the nongroup market—can only imperfectly insure against the costs of developing chronic illnesses, because premiums for nongroup health insurance tend to increase over time for sick people.

The government does, in fact, intervene heavily in the market for health insurance. Low-income households and especially low-income children, those deemed “medically needy,” military families and veterans, and the elderly all benefit from publicly provided insurance. Many other working-aged individuals and families receive substantial tax subsidies. Health insurance paid for by employers is a tax-free fringe benefit—exempt from both income and payroll taxes. In addition, self-employed individuals can deduct the cost of health insurance premiums from their taxable income. Those subsidies are worth as much as \$200 billion per year. The subsidies have worked in one sense: ESI covers more than two-thirds of workers and their families. Arguably, encouraging individuals to get insurance at work deals with the problem of adverse selection and also offers those who work for large firms a kind of renewable insurance (at least as long as they continue working and their employer continues offering insurance). However, the subsidy is poorly targeted. The value of a tax exclusion grows with income and is worth little or nothing to those with low incomes, even though they are the ones most likely to be deterred by the cost of insurance.

The tax subsidies also tend to exacerbate the moral hazard problem. Higher-income employees tend to value insurance very highly in part because of the tax benefits. As a result, they tend to acquire relatively generous coverage. To address this problem,

Congress enacted a provision in 2003 aimed at encouraging employees to purchase high-deductible health insurance, either directly or through their employers. Individuals with qualifying high-deductible health insurance can contribute pre-tax dollars in a health savings account (HSA), and withdrawals used to pay for medical care are also tax-free. Employer contributions to HSAs receive the same generous tax treatment as contributions to employer-sponsored insurance. This kind of turbocharged IRA is very valuable to higher-income (high tax bracket) employees, especially those who are healthier than average.

This paper summarizes the various tax subsidies for health insurance, examines the arguments for government intervention in the health insurance market, and focuses on the likely economic effects of the large subsidy for ESI. We analyze how the tax subsidies for employer-sponsored insurance are distributed and evaluate evidence on how the ESI exclusion affects health insurance spending and coverage.

This is a preliminary version of our research. The next draft will include simulation analysis based on our new health insurance policy simulation model.

## **II. Tax Subsidies for Health Insurance**

Because the tax system heavily subsidizes employer-sponsored insurance (ESI), most nonelderly Americans get their health insurance at work. Employer contributions to employee health insurance are treated as nontaxable fringe benefits and are not considered part of total compensation for income or payroll tax purposes. The tax subsidies for ESI reduced income and payroll tax receipts by as much as \$200 billion in fiscal year 2007.

Section 125 of the Internal Revenue Code allows employers to set up so-called cafeteria plans for administering certain employee benefits. A cafeteria plan allows employees to choose to receive part of their compensation either as cash wages or as one or more nontaxable fringe benefits, including health insurance. Flexible spending accounts (FSAs) are similar to cafeteria plans. They allow employees to set aside a fixed dollar amount of annual compensation to pay for out-of-pocket expenses for medical and dental services, prescription drugs and eyeglasses, and the employee's share of the cost of employer-sponsored health insurance. An FSA is financed through regular salary reductions. Any amount unspent at the end of the year is forfeited to the employer.<sup>1</sup> Employees pay no income or payroll taxes on the medical-related benefits paid through a cafeteria plan or FSA. As a result, employees with access to such plans may pay for all or most of their medical costs with pretax dollars.

Employers may purchase insurance for their employees or provide insurance themselves (i.e., self-insure—typically, in a plan managed by a third-party administrator). Section 105 of the Internal Revenue Code sets out nondiscrimination rules for benefits provided by self-insured plans. These rules aim to prevent highly compensated managers from providing generous tax-free benefits for themselves that are not available to the rank-and-file workers.<sup>2</sup> The Employee Retirement Income Security Act of 1974 (ERISA) exempts self-insured plans from state mandates and health insurance premium taxes that apply to third-party insurers.

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1. Treasury Notice 2005-86 allows employees a grace period of up to two and a half months beyond the end of the calendar year to submit charges for reimbursement under a health FSA if the employer permits.

2. In contrast, no nondiscrimination rules apply to the provisions of commercially purchased health insurance. The Tax Reform Act of 1986 included a new Section 89, which established nondiscrimination rules for employee health and welfare benefits, but the new restrictions raised a firestorm of protest among business interests and others and were repealed in 1989.

The Consolidated Omnibus Budget Reconciliation Act of 1985 (COBRA) amended ERISA to require employers with 20 or more employees who provide health insurance (whether self-insured or not) to allow participants and other beneficiaries (i.e., family members) to purchase continuing coverage for at least 18 months after it would otherwise cease for any reason, including termination, death, or divorce. Employers can charge covered employees their premium cost plus 2 percent for continuation of coverage. Workers who become disabled may retain coverage beyond the 18-month period by paying a premium up to 150 percent of the employer's average cost.

The Trade Adjustment Assistance Reform Act of 2003 created a 65-percent refundable tax credit for health insurance purchased by workers certified by the Department of Labor as having lost their jobs due to foreign competition. Workers covered by a pension taken over by the Pension Benefit Guaranty Corporation also qualify.

Most individuals who purchase their own insurance directly, whether through COBRA or not, cannot deduct the cost. However, individuals may deduct the portion of premiums they pay for health insurance plus other medical expenses that exceed 7.5 percent of adjusted gross income (AGI).<sup>3</sup> In addition, the self-employed may deduct their health insurance premiums from income tax (though not payroll tax) if they do not have access to ESI.

The Health Insurance Portability and Accountability Act of 1996 (HIPAA) established a four-year pilot program to make Medical Savings Accounts (MSAs) available to a limited number of people who are self-employed or work for small firms.

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3. The threshold is 10 percent for taxpayers subject to the individual alternative minimum tax.

The Medicare Prescription Drug Improvement and Modernization Act of 2003 renamed MSAs Health Savings Accounts (HSAs) and made them available to workers regardless of firm size. The Tax Relief and Health Care Act of 2006 modified the rules on annual contributions that could be made to an HSA. To qualify, individuals must be under age 65 and covered by a high-deductible health insurance plan, either offered at work or purchased in the nongroup market. The annual deductible must be at least \$1,100 for single coverage and \$2,200 for family coverage. The out-of-pocket maximums are limited to \$5,500 and \$11,000 annually for single and family coverage, respectively. The individual may contribute up to \$2,850 for single coverage and \$5,650 for family coverage each year into the HSA, regardless of the deductible.<sup>4</sup> Employer contributions to an employee's HSA up to those limits minus any employee contribution are excluded from taxable income for both income and payroll tax purposes—just as contributions to ESI are. Individuals' contributions to an HSA are deductible for income tax purposes.<sup>5</sup> Individuals age 55 to 64 may make additional “catch-up” contributions of up to \$800 in 2007.<sup>6</sup> Balances in an HSA may be withdrawn to pay for qualifying medical expenses without penalty; nonmedical withdrawals are subject to income tax, and withdrawals made before age 65 are subject to an additional 10 percent penalty. Unspent balances in an HSA accumulate tax-free.

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4. All of the thresholds are indexed for inflation.

5. If the individual contributions are made through a cafeteria plan, they are also excluded from income for payroll tax purposes.

6. The catch-up contribution limit phases up to \$1,000 by 2009. The concept of a catch-up contribution was implemented for individual retirement accounts and defined contribution plans in the Economic Growth and Taxpayer Relief and Reconciliation Act of 2001 based on the logic that women had to make additional contributions to catch up for the time spent out of the labor force. This is a dubious justification for a provision that mostly benefits men, and its application to HSAs is truly puzzling since their ostensible purpose is to offset unusually high medical expenses, not provide another retirement savings vehicle.

HIPAA requires insurers to offer insurance to terminated employees who have exhausted their COBRA coverage, but insurers can and do charge much higher rates for HIPAA customers. For example, CareFirst (Blue Cross–Blue Shield) charges a markup of about 80 percent for HIPAA coverage in Virginia compared with otherwise identical underwritten policies (<http://www.carefirst.com>, October 8, 2006).

These supplemental tax subsidies for health insurance are small compared with the exclusion for employment-based health insurance. They reduced income tax revenues by an estimated \$13 billion in fiscal year 2007. In contrast, the employer exclusion reduced income tax revenues by between \$106 and \$141 billion in the same year.<sup>7</sup> Including payroll taxes, the total revenue loss could exceed \$200 billion per year.<sup>8</sup>

### **III. Health Insurance Market Failure**

In most cases, markets work well with minimal interference from government. But economists back to Adam Smith have understood that there are circumstances in which the magic of the marketplace breaks down. Almost every one of those circumstances applies in the markets for health care and health insurance. That doesn't mean that we

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7. The official government estimates are done for Congress by the Joint Committee of Taxation (JCT) and for the administration by Treasury's Office of Tax Analysis (OTA). Their estimates for the deduction for medical expenses and for health insurance premiums of the self-employed are similar, but their estimates for the exclusion from income tax of ESI diverge markedly. OTA estimates that the latter provision will reduce revenues by \$141 billion in fiscal year 2007; JCT estimates a \$106 billion revenue loss. The JCT estimates are smaller because they assume that, absent the tax exclusion, individuals who itemize deductions would be able to deduct the part of their health insurance premiums that, combined with other medical expenditures, exceeds 7.5 percent of AGI. OTA does not account for this offsetting deduction because it would logically require an increase in the tax expenditure estimate for the itemized deduction for health expenditures. Note that tax expenditure estimates differ from revenue estimates because, by convention, they do not take into account most behavioral responses or interactions with other tax expenditures. See Office of Management and Budget (2007) and JCT (2007).

8. Payroll tax revenue losses are more than half of the income tax revenue cost. (See Burman et al. 2003). Thus, conservatively, the payroll tax expenditure would be at least \$70 billion, based on Treasury numbers, or \$53 billion, based on JCT's estimates. This yields a range of \$159 to \$211 billion or more for the combined revenue loss.

shouldn't try to unleash market forces to control costs. It does mean, however, that an unregulated insurance market would fail to provide insurance for many millions of Americans, including those who are most vulnerable. If there is a role for government in any market, there is a role here.

#### A. Adverse Selection

The Achilles' heel of the health insurance market is adverse selection. When one buys the typical product, the seller knows how much it will cost to supply it. The seller offers it for cost plus a modest profit and consumers purchase it if it is worth the price.

For health insurance, the situation is completely different. Most people would like to have insurance if they can get it at a reasonable price because it protects them from a major financial risk. But, because of adverse selection, those who most value health insurance will have trouble finding affordable insurance in the nongroup market.

Insurers have imperfect information about the health status of their customers. The voluntary nature of health insurance complicates the market further. The people who choose to buy insurance will tend to be those who expect to have the highest health care costs. An insurer that offered insurance to all comers (something that most states do not require insurers to do) would have to charge higher premiums to account for the greater likelihood of attracting high-cost enrollees. The higher premiums, in turn, would further dissuade healthy people from buying insurance. As the health status of the pool of covered people eroded, premiums would get higher and higher, making it even less attractive to relatively healthy people. In the extreme, this "death spiral" could cause the insurance market to self-destruct altogether (Rothschild and Stiglitz 1976).

In fact, it doesn't work out this way because insurers are not passive in this process. They profit most if they can attract a healthier-than-average customer base. Newhouse (1996) documented how insurers exclude preexisting conditions and use other methods to attract the healthiest individuals. The consequence is that the nongroup health insurance market, ironically, works best for healthy people. If you are sick and need health insurance and you don't get it at work or through a public program, you are out of luck.

One might think that purchasing insurance when healthy and maintaining continuous coverage would guarantee affordable insurance when the insured person becomes ill, but it doesn't work that way in practice, despite the guarantee of renewability. Indeed, were this true, it would reduce the incentive to "free ride" since buying insurance while healthy would include a valuable "option" for affordable health insurance in the future, even if one's health deteriorated.

The problem is the way insurers set premiums in the nongroup market. Those who purchase a nongroup policy are included in a pool with other policyholders who purchase the same product at the same time. The original premium is low because underwriting guarantees that the original pool is healthier than average. Future premiums depend on the experience of people in the group. Eventually, some people in the group become ill and the premiums start to rise. Healthy people in the group discover that they can pay a lower premium if they buy into a new, healthier group. (Sometimes their own insurer will offer them a lower premium for a new policy.) As healthy people drop out of the group, premiums start to rise very fast for those who have no other alternative—like a person who has developed diabetes. The consequence is that those who get sick either end up

paying very high premiums or find insurance unaffordable and drop coverage altogether (Hall 2000).

Marquis and Buntin (2006) report evidence that, in California, those who enroll in nongroup health insurance when healthy and later contract a chronic illness pay significantly more than new subscribers who are healthy. Even those who remain healthy pay more than new subscribers, although the additional premium is smaller. However, those who develop health problems pay less than new enrollees with chronic conditions. The authors conclude that there is more pooling of risks in the nongroup market than is commonly thought.

#### B. Moral Hazard

Insurance gives individuals an incentive to overconsume health care because they only have to pay a fraction of the cost (deductible and coinsurance). They will demand medical procedures until the marginal benefit equals their out-of-pocket expense.<sup>9</sup> Individuals who are fully insured may consume care until its marginal benefit is nil. To counteract this tendency, insurers rely on managed care schemes designed to limit unnecessary medical expenditures.

It is unclear, however, how much of the cost of medical care is due to this moral hazard that arises from the low net-of-insurance price of insured care. Newhouse (1992) argues that the lion's share of growth of health expenditures is attributable to advances in medical technology, not moral hazard. He concludes that overzealous efforts to limit

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<sup>9</sup> The marginal benefit is net of non-pecuniary costs, such as pain and discomfort, and other costs, such as lost time from work.

moral hazard could do more harm than good if they reduce the incentive for medical innovation.

### C. Imperfect Information

Medical care is a unique commodity—when people become sick, they’ll do almost anything to get well. And because there often is a lack of information on the effectiveness of various therapies, physicians attempting to provide the best care possible may prescribe tests or treatments regardless of whether there is evidence that they will lead to improved health. Aside from any moral or ethical objections, this lack of information renders cost-benefit analysis nearly impossible for the physician or patient and decisions are often made with little regard for cost (Aaron 1991). This may be a virtue for the ill, but from an economic perspective it becomes a vice.

### D. Free Riders

So-called free riders create another classic market failure. Because hospitals generally do not turn away very sick people who need care, the incentive to purchase insurance is diminished, especially for people who have little wealth to protect. So a small part of the health cost incurred by insured people and taxpayers is the cost of providing care for other individuals who did not provide for their own insurance—that is, who choose to “free-ride” (Olson 1982).

### E. Incomplete Markets

Finally, a necessary condition for economic efficiency is the existence of complete markets—against not only current, but also future, risks. But, as noted, it is virtually impossible in the nongroup market to insure fully against future illness.

Inability to renew on favorable terms may also arise in the employer market because premiums are underwritten. A large employer group partially solves this problem by continually refreshing the pool with healthy members who participate in the group for reasons largely unrelated to health status. Small employers, however, may be even more vulnerable to poor health outcomes than individuals in the non-group market.

#### **IV. Economic Effects of the ESI Exclusion**

The ideal policy would balance all of these competing market failures to maximize social welfare, but that is a challenge. For example, mandating health insurance coverage would eliminate adverse selection (although not the incentive for insurers to try to attract the healthiest people), but without other restrictions, it would maximize moral hazard. There may also be noneconomic social objectives, such as offsetting income disparities or helping those with poor health status that complicate the social planner's problem still further.

By far the largest subsidy is the ESI exclusion, so we focus on that.<sup>10</sup> The tax subsidy for ESI has produced mixed results. Although it has undoubtedly allowed millions of Americans to get insurance, it is a flawed subsidy mechanism. On one hand, excluding employer contributions toward health insurance is administratively quite simple. Employers do not need to measure and allocate premiums to include in employees' income.

On the other hand, the ESI exclusion is an upside-down subsidy. The largest subsidies go to high-income taxpayers who would be most likely to obtain insurance

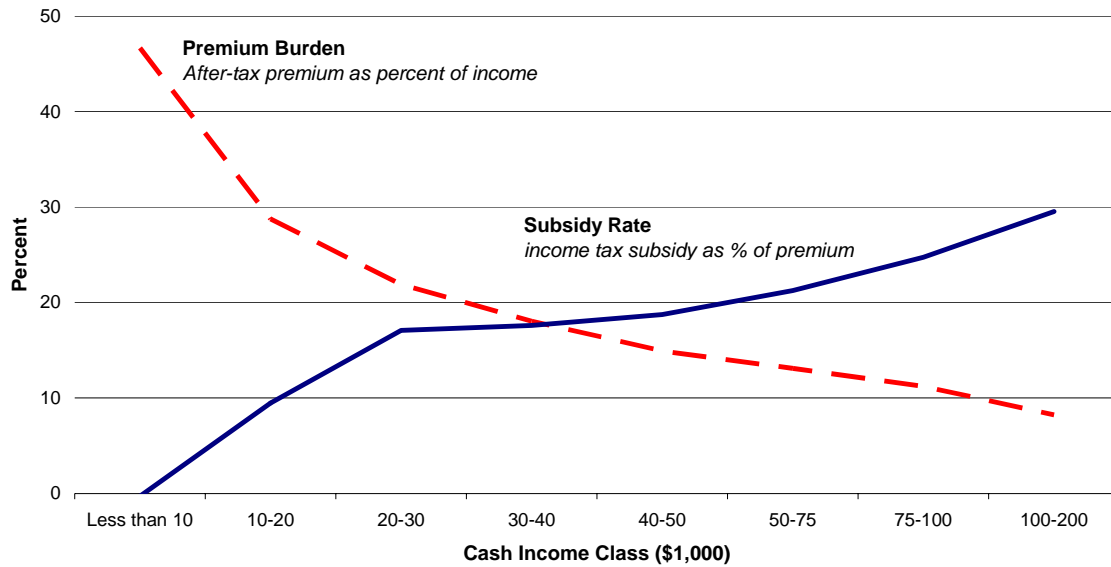
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<sup>10</sup> Another significant tax subsidy, health savings accounts, is the focus of Chapters 9 and 10 in this volume.

under almost any system. Those with low incomes get little or nothing. The subsidy for ESI depends on the marginal income tax rate, which increases with income. Taxpayers in the highest income tax bracket (35 percent) save 35 cents in income taxes for every dollar of earnings received in the form of health insurance. The roughly 30 percent of low-income households in the zero tax bracket, in contrast, receive no income tax benefit. (They might save payroll taxes, but that is a mixed blessing since their reduced payroll contributions to Social Security produce a commensurate drop in retirement benefits.) The result is a system in which households that face the highest premium burden as a share of income receive the smallest subsidy rate (Figure 1).

In addition, the perverse skew in the tax subsidy undermines one of its key purposes: it is ineffective at encouraging the young and healthy to participate in employer groups or to work for employers who offer ESI. Since young workers tend to have lower incomes than their older counterparts, they have the least tax incentive to participate in employer health insurance. They are also most likely to be able to get inexpensive insurance outside of work. Thus, the tax incentive may do little to stem adverse selection by age within the employer group.

**Figure 1. An Upside Down Subsidy:  
Projected Tax Subsidy Rate Versus Premium Burden  
for Families with ESI, by Income, 2009**



Note: Subsidy includes income tax and Medicare payroll tax savings. See Burman et al (2007) for discussion.

There are also advantages and disadvantages to tying health insurance to employment. The main advantage of subsidizing ESI is that employment is a natural way to pool health insurance risks since people choose employment for many reasons other than their expected use of health care. Employment pooling works best for large firms. Cutler (1994) found evidence of large year-to-year variation in average health expenditures in small groups, which creates a substantial risk of large premium increases in small firms. But Pauly and Herring (1999) claim that even relatively small groups can effectively pool most risks.

Another advantage with large groups is that administrative and marketing costs are lower (Monheit, Nichols, and Selden 1995). Collecting premiums as a part of payroll processing is less expensive than direct billing. Collecting insurance premiums, either explicitly or implicitly as a part of payroll processing, may also be an especially effective way to encourage participation because individuals like to break up large expenses into

small, automatically collected pieces (Thaler 1992). Also, participation rates are higher if the choice workers face is framed in terms of opting out rather than opting into an insurance plan. Large groups also have bargaining power to lower costs when dealing with insurers and providers. And, to the extent that workers can count on long-term employment with an established firm, ESI may provide more protection against premium increases than does the individual market.

But ESI has drawbacks as well. It is an imperfect pooling mechanism. In a small firm, if one person gets sick, average costs can jump. Also, ESI provides limited renewability at best. People can lose their jobs or employers can decide to drop coverage—for example, because of unacceptably large premium increases. Although no better mechanism for pooling or renewability currently exists in the individual market, such a mechanism might have arisen were it not for the large tax subsidy for ESI. For example, if professional associations, unions, or religious institutions were subsidized, they might also offer group health insurance policies to their members, much as they do with life insurance (Pauly and Herring 2001).

The subsidy for ESI amplifies the advantage of large firms over small ones as payers for health insurance. To see why, imagine a world without a tax exclusion for ESI. Many large firms might still offer health insurance even without a tax subsidy because of their advantages in pooling and lower administrative costs. Few, if any, small firms would. Now, after a tax exclusion is introduced, taxes fall for employees of firms that offer health insurance, but not for employees of other firms. Firms that do not offer health insurance now would face pressure from their employees to offer this valuable tax-free fringe benefit, and many would do so, but their compensation costs would increase

relative to the large firms because, for a given package or benefits, health insurance is more expensive for small firms. The higher benefit costs place smaller firms at a competitive disadvantage. Effectively, the tax exclusion for ESI is a differential labor subsidy that is most valuable to large firms. It distorts the allocation of labor in favor of large firms and reduces production efficiency because workers who might be more productive at small firms are induced to shift to large firms by the tax subsidy.

The subsidy for ESI also creates other inefficiencies. It gives employers an incentive to outsource low-income and younger workers (who would not value the insurance as much) and distorts decisions about work and retirement (Congressional Budget Office 1994).

For all its imperfections, however, ESI covered almost 70 percent of American workers in 2006 (Table 1). Not surprisingly, higher-income workers are much more likely to be covered by ESI than those with lower incomes. About 45 percent of workers with incomes under \$20,000 were covered by ESI, compared with 86 percent of workers with incomes over \$40,000. Full-time, full-year workers were much more likely to get ESI than part-time or part-year workers. And workers at large firms were much more likely to be covered by ESI than those working for small firms. Nonetheless, more than half of employees at small firms (fewer than 25 employees) were covered by their own or

**Table 1. Primary Source of Health Insurance for Workers Age 18 to 64, by Demographic Category, 2006**

	Workers (millions)	Percent Distribution by Coverage Type				Uninsured
		Private		Public		
		Employer	Individual	Medicaid	Other	
Total—Workers	147.1	69.8	5.7	4.6	1.1	18.8
<b>Age</b>						
18–34	53.7	59.0	6.7	7.0	1.0	26.3
35–54	71.7	75.4	4.7	3.5	0.9	15.5
55–64	21.7	77.6	6.4	2.6	2.3	11.1
<b>Worker's Annual Income</b>						
<\$20,000	41.3	45.2	8.1	19.4	1.7	34.6
\$20,000–\$39,999	46.7	70.5	4.9	3.8	1.1	19.7
\$40,000+	59.1	86.3	4.6	1.3	0.8	7.0
<b>Family Poverty Level</b>						
<100%	12.8	20.8	9.4	18.5	1.4	49.8
100–199%	23.3	41.6	7.0	9.7	1.5	40.2
200–299%	24.3	66.2	5.9	3.9	1.5	22.5
300–399%	20.5	79.0	5.4	2.1	1.0	12.5
400%+	66.2	87.6	4.5	1.2	0.9	5.8
<b>Work Status</b>						
Full-time/Full-year	104.0	76.1	4.3	2.8	0.8	16.0
Full-time/Part-year	18.6	55.0	6.2	8.7	1.5	28.7
Part-time/Full-year	12.9	57.2	11.2	7.4	1.5	22.3
Part-time/Part-year	11.6	50.5	10.9	12.0	2.9	23.6
<b>Business Size (# Workers)</b>						
Self-employed	13.5	47.9	18.9	4.1	1.5	27.6
<25	29.6	51.8	7.8	6.3	1.2	33.0
25–99	17.8	68.3	4.7	4.9	1.1	21.1
100–499	17.3	75.0	3.3	4.4	0.7	16.6
500–999	6.6	79.2	2.7	4.8	0.6	12.7
1,000+	41.0	78.1	3.3	4.5	1.0	13.0
Public sector	21.0	86.9	2.5	2.9	1.6	6.2

Source: *Health Coverage in America: 2006 Data Update*. October 2007. The Kaiser Commission on Medicaid and the Uninsured. Available at: <http://www.kff.org/uninsured/7451.cfm>.

their spouse's ESI. More than 30 percent were covered by their own employer (not shown in table). This raises important concerns about policies that would cause more small employers to stop offering coverage.

### **Who Benefits from the Current Tax Exclusion?**

As noted, the current tax exclusion for employment-based health insurance benefits some workers more than others. Clearly, the exclusion does not benefit uninsured workers or workers who purchase their insurance through the individual market. Even among workers with employer-sponsored coverage, the benefits of the tax exclusion vary widely. Individuals in low tax brackets—mostly low-income people—get little or no benefit from the tax exclusion. Those with more generous coverage, such as family coverage or insurance with low deductibles, benefit more because the premiums for their health insurance policies are higher. These also tend to be higher-income families.

#### **A. Employment-based Coverage**

The subsidy for ESI most benefits those with high incomes, for several reasons. First, because the subsidy is provided in the form of an exclusion from income, it is most valuable to those who face high marginal tax rates. Second, those with low incomes are much less likely to be in jobs that offer health insurance than people with higher incomes. Third, lower income people who do get health insurance at work tend to get less generous coverage than those with higher incomes do and their employers tend to pay a smaller share of the premium.

1. The value of the tax exclusion increases with income

Earning compensation in the form of health insurance rather than wages produces indirect tax benefits. It can reduce both income tax and payroll tax liability. For example, people in the 10-percent federal income tax bracket save \$100 in income taxes for every \$1,000 of wages that are converted to employer contributions toward health insurance premiums. They save another \$76.50 in Social Security and Medicare payroll taxes. In most states, they also pay less state income tax. Thus, the combined value of income and payroll tax exclusions can reduce the overall cost of health insurance by 25 percent or more for middle-income families.

The value of the tax exclusion increases sharply with income because income tax rates rise with income. About 31 percent of households were in the zero tax bracket in 2007.<sup>13</sup> They did not save anything in federal income taxes from reducing their taxable wages.<sup>14</sup> Another 45 percent were in the 10- or 15-percent brackets. The income tax exclusion is worth 15 cents on the dollar or less to those households. Only one-quarter of taxpayers were in the 25-percent or higher tax bracket.

Thus, the lowest-income taxpayers receive no benefit from the income tax exclusion. They receive a small benefit from the exclusion of Medicare payroll taxes.<sup>15</sup>

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<sup>13</sup> See <http://www.taxpolicycenter.org/t07-0086>.

<sup>14</sup> Some people in the zero bracket who receive ESI may benefit from the exclusion of employer-sponsored health insurance from taxable income. Some people's incomes are below the filing threshold simply *because* their health insurance premiums are excluded from income. For example, an individual earning \$8,950 in 2008 has no taxable income. (See <http://www.taxpolicycenter.org/taxfacts/displayafact.cfm?Docid=474>.) However, if her employer stopped contributing \$2,000 toward health insurance and instead increased her wages by that amount, he or she would have positive taxable income and owe \$200 in tax on it. Note, though, that few people at this income level receive ESI (see Table 1). There are also families in the 10-percent tax bracket who would receive no benefit from the tax exclusion because nonrefundable tax credits such as the dependent care tax credit, education credits, and the nonrefundable portion of the child tax credit offset all of their income tax liability.

<sup>15</sup> They would also save on Social Security payroll taxes, but that saving comes at the expense of lost benefits at retirement, a significant factor for low-income workers as discussed below. Very low income

The exact amount depends on whether workers or employers ultimately pay the employer's portion of payroll taxes. Most economists believe that workers pay the tax in the form of lower wages. To see why, suppose that an employer is willing to pay \$20,000 to a particular worker before considering taxes. If the employer has to pay payroll taxes at a rate of 7.65 percent, the employee now costs more than he or she is worth to the employer. Either the employee will not be hired, or compensation would have to decline to \$18,579 or less to make the employee attractive to the employer. (Payroll tax on \$18,579 is \$1,421, so the total after-tax cost of the employee is \$20,000.) Thus, at least in the long run, employees are likely to pay the cost of the employer portion of payroll taxes in the form of lower wages. The exception to this rule would be situations where compensation is not set freely in a competitive labor market. An obvious example would be workers earning the minimum wage whose employers are prevented by statute from passing along payroll taxes (or most other labor expenses) in the form of lower wages.

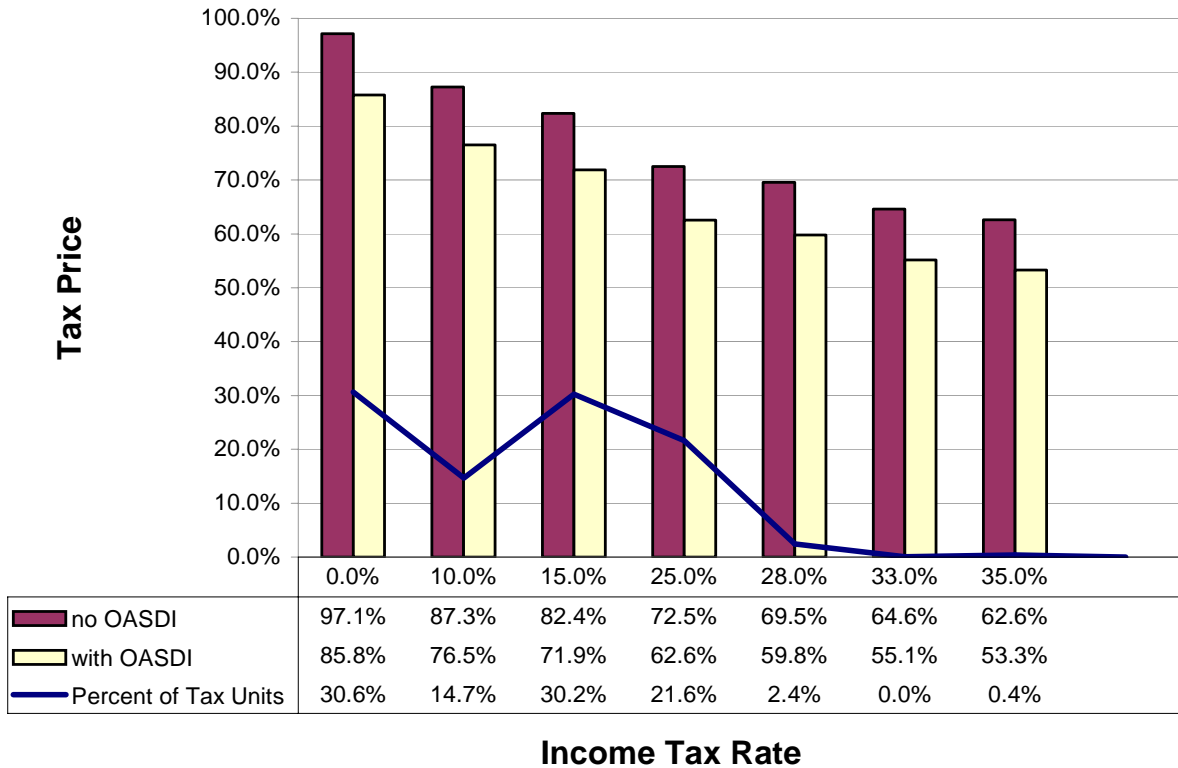
Because the health insurance tax incentive is delivered in the form of an exclusion from income, it provides little benefit to low-income workers. Figure 2 shows that the subsidy created by the exclusion from income and Medicare payroll taxes was worth about three cents on the dollar to the roughly 31 percent of workers who were in the zero tax bracket in 2007. That is, the after-tax "price" of the portion of health insurance provided by employers was 97.1 percent of the pre-tax price for employees in the zero bracket. Many of these workers earn the minimum wage, so their employers cannot pass through payroll taxes in the form of lower wages. Workers in this situation would face a tax price of 1, meaning that taxes have no direct effect on their cost of health insurance.

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workers may also save unemployment insurance taxes, but those also come at the expense of lost potential benefits.

**Figure 2.**

**Tax Price of Health Insurance by Income Tax Bracket, 2007**



Note: Chart shows after-tax price for health insurance assuming that entire premium is paid out of before tax income. The first bar includes the effect of income and Medicare payroll tax. The second includes the effect of Social Security (OASDI) payroll taxes. The formula for the tax price is  $(1-\tau-\tau_p)/(1+\tau_p)$ , where  $\tau$  is the marginal income tax rate and  $\tau_p$  is the payroll tax rate (1.45% for Medicare taxes for the first bar, or 7.65% for Medicare and Social Security taxes for the second bar). (See Gruber 2001.) The 0% bracket includes non-filers; 25% bracket includes those subject to the 26% AMT rate; 28% bracket includes both regular tax and AMT filers. The tax price does not consider implicit taxes and subsidies caused by income related phase-outs or phase-ins. For number of tax units by bracket, see T07-0086, available at <http://www.taxpolicycenter.org/t07-0086>. [This needs to be updated for nonelderly households and for current law as of end of 2007 (with AMT patch).]

In fact, the situation can be even worse for low-income workers because of the refundable earned income tax credit and child tax credit. These credits phase in with earnings over a range of income, so a reduction in earnings can actually *increase* taxes (reduce refunds). A very low-income family with two children and earnings below about \$12,000 loses \$40 of earned income credits for every \$100 of lost salary. So their marginal tax price of employer contributions to health insurance would be \$1.40, assuming it reduces wages, much more than the \$1 tax price of “unsubsidized” nongroup insurance. This situation is likely to be exceedingly rare (for example, because of the recently increased federal minimum wage and the rare occurrence of ESI among those with very low wages), but it does illustrate how mismatched the tax exclusion is to the needs of low-income workers.

Employees in the 10-percent bracket pay a tax price of 87.3 percent, while those in the 15-percent bracket pay a tax price of 82.4 percent and those in the 25-percent tax bracket face a tax price of 72.5 percent. The 0.4 percent of taxpayers in the highest 35 percent tax bracket face a tax price of 62.6 percent. Put differently, the subsidy rate is almost 13 times bigger for the richest 0.4 percent of taxpayers than it is for the poorest 31 percent.

The issue is a bit more complex in the case of Social Security taxes. If we include savings in Social Security taxes, the tax price faced by low-income workers would fall from 97.1 percent to 85.8 percent of premiums. Social Security benefits, however, are highly progressive, so reduced future benefits are likely to offset much or all of a low-income person’s payroll tax savings. Feldstein and Samwick (1992) estimate that the lifetime effective Social Security tax rate (including both payroll taxes and benefits) for

employees with low covered earnings was negative in 1990. That is, the present value of future benefits more than offsets the tax paid for people with very low earnings. If employees understand that their current taxes will produce a valuable future benefit, then it may be inappropriate to treat Social Security payroll contributions as a tax for lower-income people.<sup>16</sup> Thus, workers with low lifetime incomes may view the tax savings from health insurance as conveying no benefit at all since they sacrifice more than a dollar of retirement benefits for every tax dollar saved now.

The connection between Social Security benefits and taxes is weaker for higher-income people. For them, it might be more appropriate to treat Social Security payroll taxes as a pure tax. Under that assumption, someone in the 15-percent federal income tax bracket faces a tax price for health insurance of as little as 72 percent of premiums. In the 25-percent tax bracket, the price is under 63 percent. For very high-income taxpayers, the price can fall to about 53 percent, but most people in the 35-percent tax bracket are not subject to Social Security taxes on the margin, so the 63-percent tax price is more appropriate.<sup>17</sup>

## 2. Effective tax subsidy rates

The tax exclusion for ESI provides a subsidy for health insurance that varies both among individuals and firms. An individual gets no benefit from the tax exclusion if his or her employer does not offer health insurance. Even if the employer offers insurance,

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<sup>16</sup> Feldstein and Samwick (1992) point out that many individuals with low covered earnings were not in fact poor, but earned most of their income working for state and local governments that were exempt from the Social Security payroll tax.

<sup>17</sup> On the other hand, phantom taxes caused by the phase-out of the AMT exemption, itemized deductions, and other provisions can add as much as 7 percentage points to the effective tax rate for upper-middle- and upper-income taxpayers. (Leiserson 2006) However, since these taxes are obscured by the complexity of the tax law, it is unclear that they would affect most taxpayers' decisions.

the employee may not be eligible for it because he or she works part-time. The subsidy rate generally depends on the percentage of the health insurance premium that is paid for by the employer. However, most employers offer employees access to a flexible spending account, which allows employees to pay for their own share of premiums with pre-tax income.<sup>18</sup> Thus, the subsidy usually applies to the entire premium. For employees with access to ESI, the overall size of the subsidy is governed by the amount of the premiums, and the subsidy rate depends on their income and payroll tax rates.

Virtually all factors that lead to high subsidy rates on health insurance increase with income. The likelihood of having employer-sponsored insurance coverage increases dramatically with income (Table 2). Only 11 percent of families with incomes below \$10,000 have health insurance through their job, compared with over 80 percent of families with incomes above \$40,000. Lower-income families are less likely to work in jobs that offer health insurance coverage (Cooper and Schone 1997). Even if their employer offers it to full-time employees, low-income people are more likely to work either part-time or part-year, and therefore be ineligible for health coverage.

Like the subsidy rate, the value of the tax exclusion also increases dramatically with income. Among families with employer-sponsored health insurance, the premiums for those with incomes below \$20,000 average less than \$2,800. Average premiums more than double for families with incomes above \$75,000. Higher-income families average higher premiums because they are more likely to be covered by multiple policies and have family rather than self-only coverage. Indeed, the average family size for those with

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<sup>18</sup> 20 percent of small firms (3 to 199 workers) and 73 percent of large firms (200 or more workers) that offer health benefits offer flexible savings accounts. 60 percent of small firms and 92 percent of large firms allow employees to make pre-tax premium payments (through FSAs or Section 125 plans). Source: <http://www.kff.org/insurance/7672/upload/Summary-of-Findings-EHBS-2007.pdf> (Exhibit I).

incomes below \$20,000 is about 1.9, compared with 3.1 for those with incomes above \$75,000. In addition, lower-income families are more likely to have coverage for less than a full year, due to part-year employment.<sup>19</sup> The average employer premium share also increases with income, from 66 percent for families with incomes less than \$10,000 to 79 percent for families with incomes of \$200,000 or higher.

Finally, as discussed in the previous section, the benefit of any tax exclusion is greatest for high-income families because the income tax is progressive. That is, excluding a dollar of income from tax is worth much more to someone in the 35-percent tax bracket than to one in the 15-percent or 0-percent tax brackets.

Putting all these factors together, the picture is of a tax subsidy that overwhelmingly favors middle- and upper-income households. Families in the lowest-income group receive an average tax subsidy (including both income and payroll taxes) worth 9 percent of their premiums, compared with a subsidy of 33 percent of premiums for the highest-income group.<sup>20</sup> (See Table 2.) Consequently, while high-income families on average receive ESI worth three times as much as that received by low-income families, it only costs 2.3 times as much after tax savings are considered.

Assuming that health insurance premiums are paid instead of wages (so both the employer and employee share of premiums are ultimately paid by workers) then the after-tax cost of employment-based health insurance is a much larger share of income for low-

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<sup>19</sup> It is probably also true that higher-income people demand more generous health insurance coverage from their employers than their lower-income counterparts, just as higher-income people are more likely to drive a Lexus than a Chevy. Unfortunately, we are not aware of any evidence on the quality and comprehensiveness of health insurance plans offered by employers to employees at different income levels.

<sup>20</sup> The tax subsidy discussed herein reflects both the federal income tax and the payroll tax, and applies to premiums only. It does not consider any worker premiums that are paid on a pre-tax basis or other pre-tax contributions made to a flexible savings account, each of which will also favor higher-income workers relative to lower-income workers.

income workers than for high-income workers. For families with incomes below \$10,000 who receive health insurance through work, health insurance premiums represent about 37 percent of income after including the tax advantages. For those earning more than \$100,000, the average after-tax cost is less than 5 percent of income.

For low-income families, even a small tax break can be significant relative to their income. For low-income families who get health insurance coverage at work, the tax subsidy averages about 4 percent of income. By comparison, the subsidy represents less than 1 percent of income for the highest income families with ESI. However, because the likelihood of having ESI increases with income, the overall subsidy (including those without ESI) is roughly proportional to income for families with incomes between \$20,000 and \$100,000. The subsidy is a smaller share of income for families with very low and very high incomes for different reasons. Most lower-income families do not have health insurance and thus pay no premiums. But even sizable premiums are small compared with the high incomes of the affluent.

The bottom line is that the subsidy is not at all targeted to those who most need help paying for health insurance. Health insurance premiums are almost 30 percent of income for the poorest households, but their subsidy rate is less than 10 percent. (See Figure 1.) Those with incomes of \$100,000 to \$200,000 receive subsidies equal to almost 30 percent of premiums even though premiums would amount to less than 10 percent of their income without a subsidy.

#### B. Self-Employed Workers

Self-employed workers who purchase health insurance in the individual non-group market can deduct health insurance premiums from their taxes.

Overall, about 3 percent of families have a self-employed worker who purchased health insurance, with an average premium of \$3,300. (See Table 3.) Both the likelihood of having coverage and the premiums are much more evenly distributed across incomes among self-employed workers than among wage and salary workers. Indeed, 3 to 4 percent of families in every income group are covered by self-employed non-group insurance, with the sole exception of very high income households.

Like the tax exclusion for wage and salary workers, the deductibility of health insurance premiums for self-employed workers benefits higher-income workers more than lower-income workers. The deduction was worth 20 percent of premiums or less to self-employed workers with incomes below \$30,000, compared with a 30 percent subsidy rate for those with incomes greater than \$200,000.

### C. Non-Group Coverage

Unless they are able to claim the self-employed tax deduction, families purchasing health insurance coverage through the individual market generally receive no tax subsidies for health insurance.<sup>21</sup> Typically, these families work for firms that do not offer coverage or they are not eligible for their employer's plan. They may, however, qualify for tax-subsidized HSAs if their insurance qualifies as a high-deductible health plan. (See Clemans-Cope, Chapter 9, for discussion.)

Overall, about 5 percent of families have health insurance through the individual market, at an average premium of about \$2,500 (in 1998). (See Table 4.) Families in the lowest income groups are slightly more likely to purchase individual insurance, because

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<sup>21</sup> As discussed earlier, a limited exception applies to taxpayers who spend more than 7.5 percent of AGI on health expenditures (including insurance), who may deduct the excess from their taxable income.

they are less likely to have access to employer-sponsored insurance. Premiums increase somewhat with income, because higher-income families are more likely to have family coverage and be older.

#### D. Aggregate Coverage and Tax Subsidies

About three-quarters of families have either employer-sponsored health insurance coverage or coverage through the individual market. The progressivity of the income tax results in lower-income families benefiting less relative to higher-income families from the tax exclusion for employer-sponsored coverage and the tax deductibility of individual market premiums for the self-employed. In addition, a higher share of lower-income workers obtain their insurance coverage through the individual market, which lacks tax subsidies altogether. As a result, among families with private health insurance coverage, tax subsidies amount to only 4 percent of premiums for the lowest-income families, assuming the full deduction for self-employed. (See Table 5.) Those with the highest incomes receive tax subsidies equivalent to nearly one-third of premiums.

### V. Overall Effects of ESI Exclusion on Health Insurance Coverage and Spending

Although far from ideal, the ESI exclusion almost surely allows many millions of Americans to get insurance at work. In a seminal study, Jonathan Gruber and Michael Lettau (2004) estimated an overall elasticity of employer's offering insurance with respect to the tax price of the median worker of -0.25—and twice as large for small firms. That means that a 20 percent increase in the tax price would reduce the number of employees offered insurance by 5 percent. For Gruber and Lettau's sample, eliminating the exclusion from income and payroll taxes would increase the tax price of the median

worker by 58 percent—from 0.63 to 1.0—implying a 15.5 percent reduction in offering, concentrated in small and medium sized firms.

The elasticity of spending was even larger—0.7—implying a 45 percent overall decline in spending on ESI were the tax benefits eliminated.

Critics of the current system like to point out that it stifles innovation in the insurance market, and that is almost surely true. If tens of millions of employees lost insurance at work (an implication of Gruber and Lettau's estimates), there would be a much larger potential market for nongroup insurance. Insurers would likely invent inexpensive new products that were attractive to healthy enrollees. And, as noted earlier, some alternative pooling mechanisms might arise to limit the ravages of adverse selection. The net effect, as Gruber and Lettau acknowledge, is that the overall change health insurance coverage from such a massive change might well be smaller than they estimate.

But it could also be substantially larger. As the authors note, virtually all large employers offered insurance in their sample. So their model cannot predict a change in offering rates among that group because there is no variation in the dependent variable. But such an unprecedented change might cause some large employers to stop offering—for example, employers with very heterogeneous work forces where many young, lower-paid workers were unwilling to sacrifice wages for health insurance. With a large tax subsidy, the highly compensated employees are willing to subsidize the less compensated ones because they gain more from the tax exclusion and the other advantages of the employer group to make it worth paying a disproportionate share of premiums. Without

the large tax subsidy, the balance would change dramatically. If some large employers drop coverage, the overall market response could be much larger.

Moreover, while the reduction in insurance spending might portend more effective cost containment, which would have a salutary effect on prices for health care and insurance (and help those who get little or no subsidy under the current system), some cost containment strategies could reduce coverage, especially among vulnerable groups. Most notably, if the predominant form of cost containment turned out to be high-deductible health insurance plans or less subsidization of low-income employees by those with higher incomes in the firm, workers with low incomes or high expected health costs might opt out. Using a simulation model of the value of coverage expansions to different populations, Glied (2003) finds that high-deductible health insurance plans may make some low-income uninsured worse off.

The bottom line is that, based on everything we know now, it is highly likely that eliminating the ESI exclusion would significantly increase the number of workers and their families who lack health insurance. It is possible that an invigorated free market could solve all its problems, despite the long list of market failures that would seem to make such an outcome impossible. But such an inference would have to rest on blind faith rather than economic evidence.

## **VI. Conclusions**

Although many markets would work best without government interference, the market for health insurance is probably not one of them. The market for health insurance is affected by almost every market failure imaginable. The main government intervention for working age Americans and their families is the exclusion from income and payroll

taxes of employer contributions for ESI, which reduces revenues by \$200 billion per year.

In one sense, it has clearly been a success. More than two-thirds of Americans under age 65 get their insurance at work. Large employers can offer insurance at relatively low cost, and almost all do. However, the employer group works less well for small firms. And the tax exclusion is poorly targeted. Low-income workers can face health insurance premiums equal to 30 percent of their incomes, but the income tax subsidy is worth little or nothing to them and they are disproportionately likely to lack insurance. High-income people, for whom insurance would be affordable and desirable even absent a subsidy, receive the largest share of the tax benefits. Also, the open-ended subsidy provides an incentive to get overly generous insurance with few controls on spending.

Eliminating the subsidy, without providing a better-targeted alternative, would surely reduce the number of people with health insurance. Estimates suggest that the number of firms offering insurance would decline by more than 15 percent, concentrated among small and medium-sized firms. The people most likely to lack insurance would be those with poor health status—for whom nongroup insurance is unavailable or unaffordable—and those with low incomes. While it is possible that the health insurance market would find new ways to pool insurance among those who no longer get it at work, it is also possible that some large firms would drop coverage if the after-tax cost of insurance increased dramatically.

There are many reasons to think that we could do better than the current system, but we could also make the situation worse. The next chapters consider various options to improve upon the current system.

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**Table 2.**  
**Tax Subsidies for Families with Employment-Based Health Insurance, by Income, 1998**

*(1) only income tax considered*

Income	Families with Coverage		Average Premium (\$)	Avg Employer Share of Premiums (%)	Average Subsidy (\$)	Tax Subsidy as a % of Premiums	Average After-Tax Premium (\$)	Tax Subsidy as a % of After-Tax Income		After-Tax Premium as a % of After-Tax Income
	Number	Percentage						Families with ESI	All Taxpayers	
1 to 9,999	427	11%	1,884	66%	-12	-1%	1,896	-0.2%	0.0%	34%
10,000 to 19,999	2,065	37%	2,725	68%	255	9%	2,470	1.8%	0.7%	17%
20,000 to 29,999	4,077	63%	3,215	73%	426	13%	2,790	2.0%	1.2%	13%
30,000 to 39,999	4,419	75%	3,685	75%	486	13%	3,199	1.7%	1.2%	11%
40,000 to 49,999	3,871	81%	4,315	76%	555	13%	3,761	1.5%	1.2%	10%
50,000 to 74,999	7,671	88%	5,008	76%	737	15%	4,272	1.4%	1.2%	8%
75,000 to 99,999	4,238	90%	5,810	78%	1,129	19%	4,681	1.6%	1.4%	7%
100,000 to 199,999	3,905	91%	6,173	78%	1,329	22%	4,844	1.3%	1.1%	5%
200,000 or More	832	82%	5,846	79%	1,665	28%	4,181	0.7%	0.6%	2%
All Incomes	31,505	70%	4,625	76%	760	16%	3,865	1.4%	1.0%	7%

*(2) income and payroll taxes*

Income	Families with Coverage		Average Premium (\$)	Avg Employer Share of Premiums (%)	Average Subsidy (\$)	Tax Subsidy as a % of Premiums	Average After-Tax Premium (\$)	Tax Subsidy as a % of After-Tax Income		After-Tax Premium as a % of After-Tax Income
	Number	Percentage						Families with ESI	All Taxpayers	
1 to 9,999	427	11%	1,884	66%	177	9%	1,707	3.8%	0.4%	37%
10,000 to 19,999	2,065	37%	2,725	68%	515	19%	2,210	4.3%	1.6%	19%
20,000 to 29,999	4,077	63%	3,215	73%	747	23%	2,468	4.1%	2.6%	14%
30,000 to 39,999	4,419	75%	3,685	75%	863	23%	2,822	3.5%	2.6%	11%
40,000 to 49,999	3,871	81%	4,315	76%	1,005	23%	3,311	3.2%	2.6%	11%
50,000 to 74,999	7,671	88%	5,008	76%	1,251	25%	3,758	2.9%	2.5%	9%
75,000 to 99,999	4,238	90%	5,810	78%	1,648	28%	4,162	2.7%	2.5%	7%
100,000 to 199,999	3,905	91%	6,173	78%	1,770	29%	4,404	1.9%	1.8%	5%
200,000 or More	832	82%	5,846	79%	1,926	33%	3,920	0.9%	0.7%	2%
All Incomes	31,505	70%	4,625	76%	1,188	26%	3,438	2.5%	1.8%	7%

Source: TRIM3 model, developed by the Urban Institute based on data from the 1999 March Current Population Survey. See appendix for premium information.

Note: The first panel calculates income tax subsidies; the second adds the avoided Social Security and Medicare payroll taxes including both the employer and employee shares.

**Table 3.**  
**Tax Subsidies for Self-Employed Families with Nongroup Insurance, by Income, 1998**

Income	Families with Coverage		Average Premium (\$)	Average Subsidy (\$)	Tax Subsidy as a % of Premiums	Average After-Tax Premium (\$)	Tax Subsidy as a % of After-Tax Income		After-Tax Premium as a % of After-Tax Income
	Number	Percentage					Families with Self	All Taxpayers	
1 to 9,999	136	4%	2,966	46	2%	2,920	1.2%	0.0%	75%
10,000 to 19,999	170	3%	2,513	191	8%	2,322	1.7%	0.1%	20%
20,000 to 29,999	188	3%	3,170	328	10%	2,842	1.8%	0.0%	15%
30,000 to 39,999	192	3%	3,303	448	14%	2,855	1.7%	0.1%	11%
40,000 to 49,999	160	3%	3,378	534	16%	2,844	1.6%	0.1%	9%
50,000 to 74,999	251	3%	3,549	689	19%	2,861	1.5%	0.0%	6%
75,000 to 99,999	135	3%	3,524	836	24%	2,688	1.4%	0.0%	4%
100,000 to 199,999	155	4%	3,819	1,080	28%	2,738	1.1%	0.0%	3%
200,000 or More	86	9%	4,043	1,536	38%	2,507	0.6%	0.1%	1%
All Incomes	1,473	3%	3,344	597	18%	2,746	1.2%	0.0%	5%

Source: TRIM3 model, developed by the Urban Institute based on data from the 1999 March Current Population Survey. See appendix for premium information.

Note: After-tax income is net of federal income and payroll taxes.

**Table 4.**  
**Premiums for Non-Self-Employed Families with Nongroup Coverage, by Income, 1998**

Income	Families with Coverage		Average Premium (\$)	Premium as a % of After-Tax Income
	Number	Percentage		
1 to 9,999	292	8%	2,201	54%
10,000 to 19,999	338	6%	2,244	18%
20,000 to 29,999	299	5%	2,184	11%
30,000 to 39,999	255	4%	2,820	11%
40,000 to 49,999	199	4%	2,726	8%
50,000 to 74,999	330	3%	2,829	6%
75,000 to 99,999	159	4%	2,911	5%
100,000 to 199,999	167	4%	2,950	3%
200,000 or More	62	6%	2,732	1%
All Incomes	2,101	5%	2,562	7%

Source: TRIM3 model, developed by the Urban Institute based on data from the 1999 March Current Population Survey. See appendix for premium information.

Note: Premiums for health insurance purchased on the nongroup market are not deductible for those who are not self-employed, thus there are no tax subsidies in this case.

**Table 5.**  
**Tax Subsidies under Current Law for All Families with Coverage, by Income, 1998**

*(1) only income tax considered*

Income	Families with Coverage		Average Premium (\$)	Average Subsidy (\$)	Tax Subsidy as a % of Premiums	Average After-Tax Premium (\$)	Tax Subsidy as a % of After-Tax Income		After-Tax Premium as a % of After-Tax Income
	Number	Percentage					Families with Covg	All Taxpayers	
1 to 9,999	836	23%	2,239	2	0%	2,237	0.0%	0.0%	44%
10,000 to 19,999	2,509	45%	2,713	222	8%	2,491	1.6%	0.7%	18%
20,000 to 29,999	4,476	69%	3,211	402	13%	2,808	1.9%	1.3%	13%
30,000 to 39,999	4,776	81%	3,696	468	13%	3,227	1.6%	1.3%	11%
40,000 to 49,999	4,123	86%	4,315	541	13%	3,774	1.4%	1.2%	10%
50,000 to 74,999	8,078	92%	4,991	724	15%	4,267	1.4%	1.3%	8%
75,000 to 99,999	4,421	95%	5,793	1,108	19%	4,686	1.5%	1.5%	7%
100,000 to 199,999	4,084	95%	6,164	1,313	21%	4,851	1.2%	1.2%	5%
200,000 or More	949	94%	5,674	1,600	28%	4,075	0.7%	0.6%	2%
All Incomes	34,252	76%	4,561	726	16%	3,835	1.3%	1.0%	7%

*(2) income and payroll taxes*

Income	Families with Coverage		Average Premium (\$)	Average Subsidy (\$)	Tax Subsidy as a % of Premiums	Average After-Tax Premium (\$)	Tax Subsidy as a % of After-Tax Income		After-Tax Premium as a % of After-Tax Income
	Number	Percentage					Families with Covg	All Taxpayers	
1 to 9,999	836	23%	2,239	94	4%	2,145	2.2%	0.5%	50%
10,000 to 19,999	2,509	45%	2,713	435	16%	2,278	3.6%	1.6%	19%
20,000 to 29,999	4,476	69%	3,211	696	22%	2,515	3.8%	2.7%	14%
30,000 to 39,999	4,776	81%	3,696	818	22%	2,878	3.3%	2.7%	12%
40,000 to 49,999	4,123	86%	4,315	964	22%	3,351	3.1%	2.6%	11%
50,000 to 74,999	8,078	92%	4,991	1,214	24%	3,777	2.8%	2.6%	9%
75,000 to 99,999	4,421	95%	5,793	1,605	28%	4,189	2.7%	2.5%	7%
100,000 to 199,999	4,084	95%	6,164	1,733	28%	4,431	1.9%	1.8%	5%
200,000 or More	949	94%	5,674	1,828	32%	3,847	0.8%	0.8%	2%
All Incomes	34,252	76%	4,561	1,119	25%	3,441	2.4%	1.8%	7%

Source: TRIM3 model, developed by the Urban Institute based on data from the 1999 March Current Population Survey. See appendix for premium information.

Note: The fully phased in current law provides 100% deductibility for self-employed premiums.