

MANDATED HEALTH INSURANCE, THE LOW WAGE EMPLOYEE, AND THE DISTRIBUTION OF INCOME

by

Dwight R. Lee and Ronald S. Warren

University of Georgia

January 1993

DWIGHT R. LEE

Professor Lee received his Ph.D. in economics from the University of California, San Diego in 1972. He has taught at the University of Colorado, Virginia Polytechnic Institute and State University, and George Mason University, and currently holds the Ramsey Chair in economics at the University of Georgia. Professor Lee's primary research interests have been in the areas of the proper economic role of government, public finance, and government regulation.

Professor Lee has published over 80 articles in professional journals, including several with James Buchanan, the 1986 Nobel Prize winner in Economics. He has also published a large number of editorials and articles aimed at the broader audience beyond the academic community. Professor Lee's editorials have appeared in numerous major newspapers, including *USA Today* and *The Wall Street Journal*. He has written seven books, including *Quicksilver Capital*, co-authored with Richard McKenzie and published by The Free Press. Professor Lee has given talks throughout the United States, and also in Europe, South America, and the former Soviet Union.

RONALD S. WARREN

Professor Warren received his Ph.D. in economics from the University of North Carolina at Chapel Hill in 1976. He was an economist at the U.S. Department of Labor from 1975 to 1977 and an Economic Policy Fellow at the Brookings Institution in 1981-1982. Professor Warren previously taught at the University of Virginia and is presently an Associate Professor at the University of Georgia. His research interests encompass labor economics and public finance. Professor Warren has published numerous articles in scholarly journals, including the American Economic Review, the Journal of Political Economy, and the International Economic Review. In addition, he has been the principal investigator on research contracts with the U.S. Department of Labor and the Army Research Institute, and served as a consultant to the National Commission on Employment and Unemployment Statistics and the National Commission for Employment Policy.

TABLE OF CONTENTS

Executive Summary	1
Introduction	1
How Extensive is the Problem?	2
Paying Workers Efficiently	4
Who are the Uninsured?	7
Harming Those You Intended to Help	10
Disemployment Effects of Mandated Health Insurance	12
Self Interest and the Political Demand for Mandated Health Insurance	14
Distributional Effects of Mandated Health Insurance	16
The Effect of Mandated Health Insurance on Tipped Employment	21
Summary	26
References	28

EXECUTIVE SUMMARY

Considerable political attention has been focussed recently on the claim that a large and growing segment of the U.S. population, particularly the "working poor," has inadequate access to health care. Among the many policies that have been advocated to remedy this situation, one of the most widely discussed is a proposal to require that private firms provide health insurance for all of their employees. The objective of ensuring adequate health care for everyone in society is admirable, and the proposal for mandatory, employer-provided insurance is well-intentioned. However, it is quite possible that federally-mandated but privately-financed health insurance would actually harm its intended beneficiaries.

Competition among firms for productive workers leads to combinations of salary and fringe benefits which provide maximum value to employees for a given amount of total compensation. Some components of these compensation packages, such as flexible hours and paid vacations, can be provided only by employers. Other types of fringe benefits -- like health insurance -- are most cheaply purchased by firms and then "resold" to employees in exchange for lower salaries. However, the compensation packages that emerge from labor market competition conform more closely to the preferences of employees than those which would result from a legislative mandate that some particular fringe benefit (such as health insurance) be provided by employers. Such a mandate would make workers now covered by employer-provided health insurance no better off; and many employees who are not presently covered would be made worse off by having to purchase the insurance with reductions in salary or fringe benefits which they value more highly.

Low-wage workers especially would be harmed by mandated health insurance. Some of those employees, likely to received reduced wages, could be forced to pay either for benefits now received free through Medicaid, or for uncompensated health care, or for coverage through a family member. Others, who earn the minimum wage and have few or no non-mandated fringe benefits, may become unemployed if the cost of their compensation package increases beyond their value to the firm. The harmful consequences of mandated health insurance are even more likely for tipped employees who, because of the incomplete credit for tip income against the minimum wage, are already relatively expensive from the standpoint of the firm. As a result, the compensation package for people who work for tips contains fewer fringe benefits against which mandated health insurance can be substituted. Therefore, tipped employees will face greater layoff risk than non-tipped workers if employers must provide health insurance, since the cost of their compensation package relative to those employees who do not work for tips will increase.

The substitution away from tipped employees toward non-tipped employees and physical capital which would be induced by mandated health insurance will likely have other noteworthy ramifications. Fixed service charges will become more common and

the overall level of customer service will decline because of increased reliance on selfservice and longer waiting times for customers. These inconveniences might be justified if the benefits of mandated health insurance for tipped employees were large and targeted primarily to the working poor. However, extensive research on the incidence of similar legal mandates, such as workers' compensation and the minimum wage, suggest that tipped employees (especially those with low incomes) presently not covered by employer-provided health insurance will bear most of the cost of mandated coverage.

MANDATED HEALTH INSURANCE, TIPPED EMPLOYMENT AND THE DISTRIBUTION OF INCOME

Introduction

The political constraint imposed by the large federal deficit and the public's resistance to new taxes has been a source of increasing frustration to politicians. Since it is more difficult to provide constituent benefits by expanding existing spending programs, or funding new ones, politicians find it ever more tempting to shift the cost of achieving political objectives to private firms. One way of accomplishing this is by mandating that private firms provide an increasing number of fringe benefits to their employees.

Of course, most private employers already provide numerous fringe benefits to their employees. The political sentiment is growing, however, for some fringe benefits to be expanded beyond the level which firms have made available voluntarily. While the list of mandated benefits that has been advocated is long, the greatest attention has been focussed on health insurance. Most employees are covered by health insurance provided by their employers, and many of those who are not covered by their own employer are covered by the health insurance provided by the employer of a family member. Yet many workers, particularly those who are young, who work part-time, or who work for small firms, are without employer-based health insurance. Furthermore, since many of those not covered with health insurance through their jobs are low-income employees, a significant percentage of them have not purchased individual health insurance. It is natural to believe that no one should be denied ready access to health care because of inadequate income, and to conclude that an effective way of expanding access to health care and helping the working poor is to mandate that all employers provide an acceptable level of health care insurance to all of their workers.

Unfortunately, the connection between legislation mandating noble objectives and the actual accomplishment of those objectives is far more tenuous than most people seem to realize. It is often the case that well-meaning legislation not only fails to achieve its stated purpose, but actually harms the very people it is supposed to help. This is particularly likely when the problem being considered is not as urgent as is represented by those who argue in favor of government solutions to the problem.

This paper argues that legislation mandating that all employers provide their employees with health insurance is unlikely to increase health-care coverage, is certain to harm employees in general, and will not help the working or nonworking poor by altering the distribution of income in their favor. Furthermore, workers employed in businesses that offer flexible hours and part-time employment opportunities (e.g., restaurants and other service businesses where much of the compensation takes the form of tips), and especially employees with the lowest incomes, are particularly likely to be harmed by mandated health insurance.

How Extensive is the Problem?

As the problem of health insurance coverage has typically been presented, it is easy to conclude that the federal government simply has to do something to address this problem. Even if one recognizes that most government solutions rely on rather blunt instruments (e.g., broad mandates) and are also subject to special-interest manipulation, if a problem is serious enough, even a poor solution may be better than no solution at all. With widely reported, and unquestionably accepted, claims that 35 to 37 million Americans are without any form of bealth insurance, most people seem to believe that 14 percent of the population cannot afford access to such a basic need as health care. Surely, assert the advocates, this situation cries out for government action designed to help the poor obtain adequate health care insurance.

Upon closer scrutiny, however, the gap in health insurance coverage and access to health care is not nearly as large as the pundits and politicians would have us believe. First, it is not the case that those who have no health insurance (either through employers, private purchases, or government programs) receive little or no health care. According to a recent study, the value of the medical treatment received by uninsured

-2-



Americans is, on average, two-thirds that received by insured Americans.¹ Some of the health care received by the uninsured takes the form of uncompensated care, but most is paid for by those who receive it and reflects a choice to self-insure. Since those persons most likely to be uninsured are young adults aged 18 to 34 (a relatively healthy age), the fact that the uninsured receive somewhat less medical care than the insured reflects to a large extent a lower demand for health care. Furthermore, it is not entirely surprising that people in this age cohort are more likely to self-insure than those who are older.²

The assertion that 37 million Americans have no health insurance, even if entirely accurate, provides an exaggerated picture of the problem. Membership in the population of the uninsured is constantly changing as many people, for a variety of reasons, are temporarily without health insurance coverage. It may be true that at any one time 37 million people are uninsured, but that gives us no information on the number who, because they are chronically uninsured, constitute the real problem. In a recent study, it was found that of those who were not covered by health insurance at the beginning of a 32-month period (beginning in June 1983), only 27.4 percent remained without health insurance during the entire period. Also, of those who had health insurance coverage at the beginning of the period, over three-fourths retained uninterrupted coverage throughout the entire period.³ Making use of the data from this study, along with estimates on the percentage of those who are voluntarily uninsured, the Joint Economic Committee of Congress recently estimated that at most only 6.5 percent, and

¹See Mark Pauly, et al. "A Plan for 'Responsible National Health Insurance'," Health Affairs, 10 (Spring 1991), p. 24.

²For information on health insurance coverage by age, see Madeleine Smith, *Health Insurance Coverage: Characteristics of the Insured and Uninsured Populations*, Washington, D.C.: Library of Congress, Congressional Research Service, August 19, 1991.

³See Alan C. Monheit and Claudia L. Schur, "The Dynamics of Health Insurance Loss: A Tale of Two Cohorts," *Inquiry*, 25 (Fall 1988), p. 318.

possibly as few as 2.1 percent, of the population is chronically and involuntarily uncovered by health insurance.⁴

While the headlines claiming that 14 percent of the population lack health insurance greatly overstate the magnitude of the problem, some will still see it as unacceptable that as many as 6.5 percent of Americans are chronically uncovered by health insurance because of insufficient income. But would a federal mandate that employers provide health insurance for all of their employees be an effective solution to the problem? Would a policy of mandated health insurance improve the well-being of low-income employees who are without health insurance by transferring real income from the wealthy to the poor? In order to address these questions, it is useful to begin by examining the economic motivations behind the widespread provision of health insurance, and fringe benefits in general, by employers.

Paying Workers Efficiently

In order to remain financially viable, each employer, in competition with other employers, has to secure a productive work force while keeping employee compensation as low as possible. This requires tailoring a compensation package that provides as much value as possible to employees for a given cost. If workers could purchase everything they wanted in the general marketplace as cheaply as they can from their employer, then compensation packages would consist entirely of money. But many things that employees value (such as flexible hours and paid vacations) can be provided only by their employer, and others (such as health insurance) can be provided by their employer at lower cost than the individual worker can purchase them in the marketplace. Only by "selling" such benefits to their employees, *i.e.*, getting them to agree to substitute fringe benefits for money wages, are employers able to provide their workers with the most attractive compensation package for a given amount of total compensation.

⁴See Douglas Koopman, et al. "Who are the Uninsured?" Health Care Briefing Paper No. 1, Republican Staff, Joint Economic Committee of Congress, Washington, D.C., October 30, 1991.

For example, suppose that a firm is paying each of its employees \$2,500 per month with no fringe benefits. Assume also that each of a firm's workers places a value of \$250 a month on a fringe benefit package which contains a family health insurance policy, a safer and more attractive work environment, and three weeks paid annual leave, with the firm able to provide this benefit package at a monthly cost of \$200 per worker. Obviously, the firm would be able to increase the value each worker realizes from its compensation package by \$50 per month, without increasing its employee cost, by providing the fringe benefit package and reducing the employee's monthly salary to \$2,300. Of course, the employer might also provide the fringe benefit package and reduce the salary by more than \$200 (but less than \$250). This would allow costs, and prices, to be reduced in the competition for customers while still increasing the firm's ability to attract productive employees. But regardless of how the gains are distributed, efficiency requires that fringe benefits be substituted for monetary payment as long as the additional benefits are worth more to workers than they have to pay in terms of sacrificed income.

It is clearly the case that the most efficient fringe benefit package will vary from situation to situation. Younger employees typically value flexible hours and on-the-job training opportunities more than older workers with family responsibilities, who will probably place more value on job security and health insurance. Not only will the best mix of fringe benefits vary from one employee to the next, but it will also vary from one employer to the next, and it is practically impossible for an employer to provide exactly the right compensation package for every worker. Yet competition between firms is constantly rewarding those which can tailor their fringe benefit package in ways that cost-effectively increase its value to their employees, and constantly punishing those that do not. Certainly, the compensation packages that emerge from marketplace competition conform more closely to the preferences of workers than the compensation

⁵The attempt by employers to fine tune their fringe benefit package as much as possible to the preferences of individual workers explains the increasing popularity of "cafeteria" plans, in which employees have a menu of fringe benefits from which to choose.

packages that would result from broad government mandates that more of some particular fringe benefit (such as health insurance) be provided by employers.⁶

An important point that emerges from our discussion of the competitive pressures toward an efficient compensation package is that employees pay for the fringe benefits they receive with lower monetary salaries. If employers are required to increase the amount they spend on certain fringe benefits for their employees, there is no reason to believe that this will, in general, make those workers more valuable to the employer. Therefore, the employer faces no incentive to increase the total compensation paid to employees in response to mandated increases in fringe benefits and will be under no legal requirement to do so. So there is no reason to believe that workers will receive any more compensation as the result of a government mandate for expanded fringe benefits. Indeed, employers can be expected to reduce the monetary wages paid, or other non-mandated fringe benefits, by an amount approximately equal to the extra cost of providing the mandated benefits. Unfortunately, even if such an adjustment leads to an increase in the total compensation paid by employers, it can leave workers worse off. Given the competitive pressures for employers to provide a fringe-benefit package

⁶Interestingly, because of existing tax policy, market competition has resulted in employers spending too much, rather than too little, on fringe benefits for their employees. Monetary earnings are subject to taxation while most types of compensation that come in the form of fringe benefits are not. Therefore, employers and employees have an incentive to substitute fringe benefits for salary until the marginal value of the fringe benefits before taxes is equal to the marginal value of the sacrificed salary after taxes. This implies, of course, that fringe benefits are provided to the point where, at the margin, they are worth less to employees than the social cost of providing them.

⁷Using evidence from state workers' compensation insurance, it has been estimated that 86.5 percent of the cost of mandated health insurance may be shifted to the worker, primarily in the form of lower money wages. See Jonathan Gruber and Alan B. Krueger, "The Incidence of Mandated Employer-provided Insurance: Leasons from Workers' Compensation Insurance," NBER Working Paper No. 3557, December 1990.

The downward adjustment in wages may not be instantaneous, taking place instead over time as monetary wages increase more slowly than they would otherwise have. The slowing of monetary wages in response to increasing fringe benefits certainly explains some of the often lamented leveling out of average monetary wages, in real terms, from 1973 to 1990. From 1960 to 1990, the value of fringe benefits, both voluntarily provided and mandated by the government, increased from 9 percent to 20 percent of salaries and wages, an increase that surely crowded out some growth in monetary compensation. See Richard B. McKenzie, "The Mandated-Benefit Mirage," Occasional Paper 97 (St. Louis: Center for Study of American Business, Washington University, November, 1991). To the extent that mandated fringe benefits increase temporarily the total compensation going to workers, employers can be expected to respond by either laying off some workers, or slowing the rate at which they hire new workers.

insurance, either from private or public sources. Obviously, some members of this age group are poor, and their lack of health coverage may best be explained by their low incomes. But it also has to be recognized that insufficient income cannot explain the lack of health insurance for a significant percentage of the young adults who are not covered. For example, of those 18- to 24-year-olds with incomes from 2 to 2.5 times the poverty level, 24.7 percent do not have health insurance. And of those in this same age bracket with incomes over 2.5 times the poverty level, 10.5 percent are without health insurance. Those who are young, and therefore suffer little from illness, have little demand for health care and are therefore less likely to purchase (through employment or otherwise) health insurance than are those who are older and therefore more prone to illness. Another relevant consideration here is that young adults under the age of 25 are less likely to have family responsibilities than are those in their late twenties and thirties who, not surprisingly, are far more likely to have health insurance.

Also, as one would expect, the poorer a person is, the less likely he or she is to purchase health insurance, either as an employee or as an individual. Of those with incomes below the poverty level, only 17.6 percent have employer-provided health insurance. Of those persons whose incomes are between 1.0 and 1.5 times the poverty level, 44.4 percent have employer-provided health insurance. When considering those with income 1.5 to 2.0 times the poverty level, we find that 61.6 percent have employer-provided health insurance. And 84.7 percent of those with incomes more than twice the poverty level have employer-provided health insurance. The poverty level have employer-provided health insurance. From a somewhat different perspective, of all workers between the ages of 18 and 65, the 28.8 percent who

See Koopman, et al., "Who Are the Uninsured?" op. cit., Table 1.

¹⁰ Ibid., Table 3.

¹¹ Ibid., Table 1.

earn less than \$10,000 per year comprise 52.3 percent of all non-elderly employees without health insurance.¹²

The type of employer, and employment, a worker chooses is also an important influence on whether that worker will have health insurance. Those who work for small businesses are less likely to have employment-related health insurance than are those who work for larger businesses. For example, only 56.5 percent of those who work for a business that employs less than 10 workers are covered with employment-related health insurance, as compared with 79.4 percent of those who work for a business that employs 10 to 25 employees; 84.9 percent of those who work for a business that employs 26 to 100 workers; 90.6 percent of those who work for a business that employs 101 to 500 employees; and 90.7 percent of those who work for a business that employs over 500 workers. When the percentages are broken out in terms of employers rather than employees, it is found that 90 percent of those firms that do not cover their employees with health insurance employ less than 10 employees. More generally, those who choose to work for small firms, who are low-wage or seasonal workers, or who work part-time, are the least likely to have health insurance as part of their compensation package.

We have depicted employees as choosing whether or not to work for employers which provide health insurance coverage. Some readers may object to this view by arguing that in many cases employees lack the opportunity to choose to work for a large firm which provides its employees with generous fringe benefits. Without denying that people are often quite constrained in their choice of employers, it remains the case that people make such choices in a way that improves their well-being as much as possible, given the constraints they face. It is also true that most people do have genuine

¹²See Dolores Martin and Douglas Koopman, "The Employment Effect of Pay or Play: Killing Jobs and Closing Businesses," *Health Care Briefing Paper No. 5*, Joint Economic Committee, Republican Staff, February 21, 1992.

¹³See Koopman, et al., op. cit., Table 2.

¹⁴See Health Insurance Association of America, "Critical Distinctions: How Firms that Offer Health Benefits Differ from Those that Do Not," Washington D.C., 1991.

employment choices (which, like all choices, can only be exercised at a cost) and, for a host of reasons, may prefer to work for a small firm or for one that offers part-time or seasonal work. The small firm may be closer to home, or offer more interesting work. Part-time or seasonal employment may provide the flexibility to pursue a hobby, spend more time with young children, or obtain more education. For many people, the advantages of working in small firms, or in part-time or seasonal jobs, outweigh the value of the health insurance they are forgoing.

Harming Those You Intended to Help

The case for having the government mandate that all employers provide health insurance to their employees is fundamentally an equity case for altering income distribution in favor of the poor. There is no efficiency case for requiring that firms provide more health insurance. As previously discussed, since fringe benefits are generally not subject to income tax, employer-provided health insurance is actually excessive from the perspective of economic efficiency. The problem is that, even with the tax-induced distortion in favor of excessive employer-provided health insurance, some workers do not receive health insurance on the job, and they tend to be low-wage employees. The hope of those advocating mandated health insurance is that by requiring all employers to provide health insurance to their workers, the real income of the working poor (the employees most likely not to have employer-provided health insurance) would be increased at the expense of profits that would otherwise accrue primarily to the relatively wealthy. In other words, mandated health insurance is seen as a means of reducing income inequality by transferring income from the top to the bottom of the income ladder.

For a number of reasons, however, mandated health insurance is not an effective means of altering the distribution of income in favor of the poor. Indeed, those workers who do not have employment-related health insurance, including low-income employees, are more likely to be harmed than helped by mandated health insurance.

In assessing the distributional effects of mandated health insurance, the most important consideration to keep in mind is that, to a large extent, workers pay for employer-provided health insurance through lower monetary compensation or reductions in other fringe benefits. As discussed previously, it is useful to think of employees as purchasing a package of fringe benefits from their employers by accepting less monetary compensation than they would receive in the absence of fringe benefits. And with employers competing against each other for productive workers, there is justification for the belief that the compensation packages that are offered in the marketplace reasonably reflect the preferences of employees. The employer who offers a compensation package providing workers with the most value for a given cost realizes a competitive advantage over those employers who do not.

This suggests that if the government mandates that an employer who is not now providing health insurance must do so in the future, adjustments would be made elsewhere in the compensation package. The adjustment that comes to mind most readily is a decrease, or reduction in the rate of increase, in monetary compensation. But the adjustment may be in the form of reductions in other fringe benefits that employees may consider to be of equal or greater value. For example, workers in retail stores are often allowed to purchase merchandise at a discount, and employees in restaurants often can eat at little or no cost. These fringe benefits could be restricted or eliminated. Flexibility in the hours worked is also a valuable benefit for many employees, and this flexibility could be reduced because fringe benefits such as health insurance represent a compensation cost that is independent of the number of hours the employee works. Therefore, mandating an increase in those benefits creates a strong incentive for employers to get more hours of work out of each worker, and makes it less attractive to hire part-time workers or to accommodate the flexible hours some employees value.¹⁵ Therefore, it is not clear that mandating health insurance for all

¹⁵For evidence that increases in fringe benefits cause employers to favor working existing employers longer hours rather than hiring new employees, see D. S. Hamermesh, "The Demand for Workers and Hours and the Effects of Job Security Policies: Theory and Evidence," in R. A. Hart, ed., *Employment, Unemployment and Labor Utilization*, (Boston: Unwin Hyman, 1988). It should be pointed out that current mandated health insurance proposals do allow exceptions in the case of workers who are employed less than some minimum number of hours. For example, the proposed Kennedy-Mitchell legislation would not require firms to provide health insurance to employees who work less than 17.5 hours per week. Of course, this would make it very difficult for a student, for example, to get a part-time job for 20 hours per week. Or what about the worker who

employees would improve the well-being of those employees not now covered, even if they value the health insurance that would be provided.

Of course, some low-wage employees may place little, if any, value on employer-provided health insurance. Many people who earn low salaries are fully covered through the health insurance of another family member. Mandating that these employees purchase redundant health insurance from their employers (which would be of no value to them) would clearly make them worse off. Low-wage workers who are eligible for publicly-provided health care would gain little benefit from employer-provided health insurance. For example, Summers argues that one justification for mandated health insurance is that it would eliminate the free ride that many receive because of "society's unwillingness or inability to deny health care completely to those in desperate need, even if they cannot pay." Summers points out that the Congressional Budget Office has estimated that these uninsured workers receive \$15 billion in health care each year for which they do not pay. This argument for mandated health insurance is at least an honest one, in that it makes no pretense that such a mandate would help the poor. Indeed, the argument clearly implies that such insurance would make the poor worse off by forcing them to pay for a benefit that they are currently receiving for free.

Disemployment Effects of Mandated Health Insurance

So far we have assumed that employers would respond to mandated health insurance by reducing other forms of compensation their employees receive; this is not always legally possible. Low-income employees -- those most likely to be earning the minimum wage -- are the least likely to be covered with employer-provided health insurance. A recent study concluded that 35 percent of those workers not covered with

wanted to alternate between 15 hours one week and 25 hours the next?

¹⁶See Lawrence H. Summers, "Some Simple Economics of Mandated Benefits," *American Economic Review*, 79 (May 1989), pp. 177-83.

health insurance were earning no more than the minimum wage.¹⁷ If these minimum wage employees are receiving some fringe benefits along with their monetary compensation, then a government requirement that they be provided with health insurance as part of their compensation could be at least partially offset with reductions in these other fringe benefits. But the poorest of the minimum-wage workers, those without fringe benefits in addition to their monetary wage, have nothing their employers could take away if health insurance is mandated. The cost of hiring these lowest paid of the minimum wage employees goes up by the full cost of the mandated health insurance, and therefore they are the most likely to lose their jobs because of such a mandate. Advocates of mandated health insurance most want to help these people because of their low income; yet these are precisely the workers *most* likely to be hurt by mandated health insurance.

Two recent studies have attempted to quantify the unemployment effects of mandating health insurance. Based on research estimating the employment reductions associated with workers' compensation, Gruber and Krueger conclude that every one percentage point increase in the cost of health insurance benefits will result in at least a 0.11 percent decline in employment. In other words, if 10 percent of a firm's employee compensation is being paid in health insurance benefits, and this percentage increases to 15 percent, its employment will decline by approximately 0.55 percent, or one employee out of 200. A more recent study by the Joint Economic Committee of Congress estimated that mandated health insurance legislation representative of the proposals currently under consideration would cause over 1.2 million job losses in the first year of implementation, with 521,000 of these jobs being lost in small businesses

¹⁷See Deborah Chollet, "Public Policy Options to Expand Health Insurance Coverage Among the Nonelderly Population," in *Government Mandating of Employee Benefits*, (Washington, D.C.: Employee Benefits Research Institute, 1987). It should be recognized that other studies have arrived at smaller, though still significant, percentages of uninsured workers earning no more than the minimum wage. For example, a 1990 study concluded that 19.4 percent of all uninsured workers in 1988 earned no more than the minimum wage. See Jonathan Gruber and Alan B. Krueger, 1990, *op. cit*.

¹⁸See Gruber and Krueger, op. cit.

employing fewer than 20 workers.¹⁹ And although no specific estimate of the incomes of those most likely to lose their jobs because of mandated health insurance was made in either of these studies, both recognized that the job losses would be concentrated among those earning the least.

Self Interest and the Political Demand for Mandated Health Insurance

We have assumed that the intention of those who are advocating mandated health insurance is to help those who are currently without such coverage, with the harm to the poor that would result being an unintended consequence. And it is probably true that most people who favor mandated health insurance genuinely believe that it would help low-income employees. However, many of those who are exerting organized political pressure in support of mandated health insurance are motivated by considerations less lofty than helping the poor. Those most likely to go to the considerable trouble to make an organized effort to lobby for particular legislation have an overriding interest that would be served by the legislation. For example, large companies already providing their workers with health insurance could realize competitive advantages from government mandates requiring their lower-cost business rivals to provide employees with the same health insurance coverage. In supporting mandated health care legislation, the president of American Airlines, R. L. Crandall, was quite explicit about the competitive advantage his company would realize from such legislation. According to Crandall:

At American, we spend about \$1,666 per employee per year -that's more than \$80 million this year alone -- on medical benefits for
active employees and dependents. And we are spending \$16 million a
year for medical benefits for retirees, a figure that will jump to
\$100 million-plus in less than a decade.

Yet Continental [Airlines] doesn't provide any medical benefits for retirees at all, and its active employees pay for most of their own health

¹⁹See Martin and Koopman, op. cit.

insurance. As a result, Continental's unit cost advantage vs. American's is enormous -- and worse yet, it is growing!²⁰

Some companies support federally mandated health insurance as a means of lowering their own health insurance costs. Several legislative proposals in Congress would require that private firms either provide their own health insurance or pay a federal tax for each employee to support publicly-funded health care. If such a "play-or-pay" plan is enacted, many companies would be able to reduce their health insurance costs by canceling their present programs and paying the additional payroll tax. For example, Chrysler Corporation Chairman Lee Iacocca said that his company would drop its health insurance program if a federal health insurance payroll tax were less than the company's current health insurance cost. Chrysler estimates that it now spends nearly 17 percent of its total compensation on health care coverage.²¹

More generally, the Chamber of Commerce reported that employers' medical costs averaged 9.9 percent of payrolls in 1990, with the average among manufacturing firms at 11.6 percent. In contrast, the health insurance proposals under congressional consideration are likely to set the payroll tax at 7 to 9 percent of payroll. An Urban Institute study estimated that, under current play-or-pay proposals (for which operational details are yet to be developed), 35 percent of all employees presently covered by employer-based health insurance would be shifted to a federally-financed plan.

Of course, the actual effects on the working poor of legislation mandating health insurance would be independent of the motivations behind such legislation. Whether it is the desire for compassionate public policy or for crass private advantage that pressures the federal government to mandate employer-provided health insurance makes no difference to the low-income worker who loses a job because of the mandate.

²⁰See page 226 of Richard B. McKenzie, *The American Job Machine*, (New York: Universe Books, A Cato Institute Book, 1988).

²¹See "Labor Letter", The Wall Street Journal, January 21, 1992, p. 1.

Distributional Effects of Mandated Health Insurance

In the previous section, we considered several reasons for believing that mandated health insurance would not benefit, and could harm, those low-income workers who are commonly seen as the ones with the most to gain from mandated health insurance. It is quite possible, of course, that many low-income employees could be made worse off by mandated health insurance, but that enough others would benefit that on balance low-income workers as a group would be made better off. While it is difficult to reach definitive conclusions about the net benefits from a proposal when some are harmed and some are helped, if a proposal that interferes with market efficiency does help the poorer members of society it must do so by altering the distribution of income in favor of the poor. Is there any reason for believing that mandated health insurance will have the effect of transferring income from the rich to the poor?

Since we have not in the past mandated that employers provide health insurance to their employees, there exists no direct evidence of the effect such a mandate would have on the distribution of income. However, there are other mandated benefits that employers have been required to provide which have the stated purpose of helping the poor and which are intended to affect income distribution. The best example is the minimum wage, which currently establishes a floor of \$4.25 per hour for most employees. The purpose of the minimum wage is to require that the lowest-paid workers are paid more than they might otherwise receive. The expectation is that the poor will earn more at the expense of imposing lower profits and higher prices on those who are typically wealthier than minimum-wage employees.

Yet, just as with mandated health insurance, the minimum wage is a benefit that is largely paid for by employees. Many low-wage employees receive non-monetary benefits such as on-the-job training, flexible hours, and merchandise discounts which are often of significant value to low-wage employees. When, because of increases in the minimum wage, employers are required to increase the amount they pay workers, they respond by reducing the value of the fringe benefit package they offer those employees.

For example, an examination of the 1967 increase in the minimum wage concluded that although workers gained \$0.34 per hour in money wages, they lost

on-the-job training benefits worth \$0.41 per hour (assuming that the lost training was completely recaptured after a four-year lag).²² Two economists examined the on-the-job training effects of minimum-wage legislation and concluded that the long-run incomes of low-skilled employees were reduced by the minimum wage.²³ Another study found that retail establishments in New York responded to minimum wage increases by requiring that workers do the same work in less time.²⁴ In yet another study, restaurants were found to reduce shift premiums by 3.6 percent, severance pay by 6.9 percent, and sick pay by 3.4 percent for every one percent increase in the minimum wage.²⁵

Of course, not all low-wage employees receive much in the way of fringe benefits, and there is little for employers to take away from these workers if firms are required to pay them a higher monetary wage. So an increase in the minimum wage, as in the case of a mandate to provide all employees with health insurance, leaves employers no choices other than paying more to their lowest-paid workers or laying them off. Therefore, those employees who are the primary object of concern for those who see the minimum wage as a way of helping the working poor (those who are the lowest paid of minimum wage workers because they receive little in the way of fringe benefits) are the ones most likely to lose their jobs as a result of an increase in the minimum wage.

²²See Masanori Hashimoto, "Minimum Wage Effects on Training on the Job," *American Economic Review*, 72 (December 1982), pp. 1070-87. Also, see Masanori Hashimoto, *Minimum Wages and On-the-Job Training*, (Washington, D.C.: American Enterprise Institute, 1981).

²³See Linda Leighton and Jacob Mincer, "Effects of Minimum Wages on Human Capital Formation," in Simon Rottenburg, ed., *The Economics of Legal Minimum Wages*, (Washington, D.C.: American Enterprise Institute, 1981), pp. 155-73.

²⁴See Belton M. Fleisher, *Minimum Wage Regulation in Retail Trade*, (Washington, D.C.: American Enterprise Institute, 1981).

²⁵See William T. Alpert, *The Minimum Wage in the Restaurant Industry*, (New York: Praeger Publishers, 1986), Table 7.3, p. 74. These estimates give the effects on various fringe benefits of a small (e.g., one percent) change in the minimum wage. They cannot, of course, be extrapolated to provide sensible estimates of the effects of large, discrete changes in the minimum wage of the sort (e.g., 27 percent) which took effect in April 1991.

So, although there is no direct evidence on the distributional impact of mandated health insurance, there is a substantial body of literature on the distributional consequences of an increase in the minimum wage. And, as we have argued, unless increases in the minimum wage alter the income distribution in favor of the poor, there is no reason to believe that mandated health insurance will either. In the discussion that follows, we review the evidence on the effect of an increase in the minimum wage on the distribution of income.

There are three important facts about the structure of household income that reduce the effectiveness of minimum wage legislation as an anti-poverty policy. First, minimum wage employees are not typically members of poor households, so a substantial part of the increased earnings generated by an increase in the minimum wage will accrue to individuals who are not poor.

For example, Smith and Vavrichek present evidence that approximately 70 percent of the workers earning the minimum wage were members of families with incomes in excess of 150 percent of the relevant poverty threshold computed by the Bureau of the Census.²⁶ Fewer than one-fifth of these minimum-wage employees had family incomes below the appropriate poverty level.

Second, of those who are poor, wages are a small portion of their total income. Johnson and Browning report that more than 86 percent of the income of the lowest decile in income distribution derives from sources such as public assistance payments, food stamps, housing allowances, and social security income.²⁷ Consequently, increasing the minimum wage would have only a very modest effect on the total income of the poorest individuals in society. Finally, among those individuals who do work and earn no more than the minimum wage, fewer than one-fifth worked full time, year-round. Specifically, among those minimum wage workers who did hold full time, year-round jobs, only 3 percent were poor. Furthermore, of the few poor, full time, year-round

²⁶Ralph E. Smith and Bruce Vavrichek, "The Minimum Wage: Its Relation to Incomes and Poverty," *Monthly Labor Review*, 10 (June 1987), pp. 24-30.

²⁷William R. Johnson and Edgar K. Browning, "The Distributional and Efficiency Effects of Increasing the Minimum Wage: A Simulation," *American Economic Review*, 73 (March 1983), pp. 204-211.

employees, 38 percent were either self-employed or worked for no pay (unpaid family members working in a family business, for example), so their earnings would not be affected by an increase in the minimum wage. Therefore, even if unemployment effects and minimum-wage-induced reductions in fringe benefits are ignored, of all full time, year-round workers whose earnings are affected directly by the minimum wage, fewer than 2 percent had family incomes below the poverty line.²⁸

While there are several alternative ways to illustrate the ineffectiveness of minimum wage increases as a means of reducing poverty, simulations performed by Burkhauser and Finegan²⁹ and Johnson and Browning³⁰ are perhaps the most revealing. In order to demonstrate this ineffectiveness in a setting most likely to result in a redistribution of income toward the working poor, Burkhauser and Finegan assume that increases in the minimum wage have no effect on employment or hours worked per employee, and they ignore effects on inflation, personal income taxes, and the eligibility for and size of transfer payments. The authors then simulate an increase in the minimum wage from the 1984 statutory value of \$3.35 per hour to \$4.16 per hour.³¹ Under the assumptions of their model, Burkhauser and Finegan estimate that wage costs to employers would rise by approximately \$7 billion, or roughly 0.4 percent of the total wage bill. However, only 11 percent of this wage gain goes to employees who are poor. In fact, about as much of the increase in wage incomes accrues to individuals whose families have incomes at least 3 times the poverty threshold as goes to workers in households with incomes less than twice the relevant poverty level.

Johnson and Browning present the results of a similar simulation analysis, but incorporate several institutional details which on balance tend to diminish further the

²⁸ See Smith and Vavrichek, op. cit.

²⁹Richard V. Burkhauser and T. Aldrich Finegan, "The Minimum Wage and the Poor: The End of a Relationship," *Journal of Policy Analysis and Management*, 8 (Winter 1989), pp. 53-71.

³⁰ Johnson and Browning, op. cit.

³¹This was the target value for the minimum wage in legislation proposed in 1987 by Senator Edward Kennedy (D-MA) and Representative Augustus Hawkins (D-CA). Under legislation which became fully effective on April 1, 1991, the minimum wage is \$4.25 per hour.

already meager redistributional value of an increase in the minimum wage. Specifically, Johnson and Browning take into account the fact that the higher wage income produced by minimum wage increases results in lower transfer income received, and higher taxes paid, by low-income households. In particular, the gain in *net* (after-tax, after-transfer) income is reduced by an amount that is proportional to a household's effective marginal tax rate. Johnson and Browning find that in 1976, when the minimum wage was \$2.30 per hour, the earnings of employees making less than \$2.80 per hour accounted for only 11 percent of the net income of the poorest quintile of all households. As a consequence, a 22 percent increase in the minimum wage, assuming (as do Burkhauser and Finegan) that there is no reduction in employment, raises the incomes of the poorest households by less than one percent. A similar finding is reported by Bonilla, who estimates that 85 percent of the recent increase in the minimum wage (from \$3.35 to \$4.25) for a single parent with one child working part-time in California accrues to the federal and state governments because of increased tax collections and reduced transfer payments.³²

The evidence overwhelmingly supports the view that increasing the minimum wage is not an effective way of redistributing income to the poor. And for the same reasons that increasing the minimum wage does little, if anything, to help the poor, mandated health insurance would also be an ineffective way of helping the poor. First, most of the benefits of mandated health insurance would go to those who are not poor. And, just as the poor receive most of their income from non-employment sources, so do most of the poor obtain coverage by health insurance or access to health care from sources other than employers. Finally, as with increases in the minimum wage, employees would bear the cost of mandated health insurance with reductions in other forms of compensation or increased risk of unemployment. This latter cost will be especially high for the lowest-paid workers, who have relatively little salary or fringe benefits to exchange for the mandated health insurance.

³²Carlos E. Bonilla, Higher Wages, Greater Poverty: Trapping Americans in Poverty, (Washington, D.C.: The Employment Policies Institute, 1992), p. 18.

The Effect of Mandated Health Insurance on Tipped Employment

We have argued above that the distributional effects of mandated health insurance are quite similar to the effects on the income distribution of an increase in the minimum wage. Even under assumptions that are most favorable to finding that such legislation redistributes income toward the poor, the evidence suggests that mandated health insurance would at best be an ineffective and poorly targeted anti-poverty program; in more realistic circumstances, many of the working poor would actually be harmed by loss of employment or by the withdrawal of more valuable fringe benefits.

An examination of the effect of mandated health insurance on the income and employment of individuals who work for tips is complicated by at least two important issues. First, the Census Bureau's Current Population Survey -- the source of much of the data on the effect of the minimum wage on individual and household incomes -does not collect information explicitly on the number of persons who are engaged in tipped employment or on the amount of tips they earn.³³ Most of the data relevant to tipped employment come from the Bureau of Labor Statistics' Industry Wage Surveys, which provide information about the characteristics of jobs (including occupational titles, fringe benefits, and monetary compensation), rather than the traits of individuals and their families. Nevertheless, some inferences about the characteristics of tipped employees can be made with information that is available on the characteristics of persons in occupations, such as waitress and bartender, whose incomes are substantially derived from tips. Second, the Fair Labor Standards Act (FLSA) allows employers to take a credit for tips received by employees of up to 50 percent towards the minimum wage that must be paid. This feature of the law has several implications for wages and employment in tipped occupations that are of interest in determining the effects of mandatory health insurance.

³³Alpert, op. cit., p. 8. For example, the question in the monthly Current Population Survey on usual weekly earnings explicitly instructs the respondent to "[I]nclude any overtime pay, commissions, or tips usually received."

Because the structure of compensation in tipped occupations is so heavily influenced by the existence of the tip credit toward the minimum wage, a brief history of this credit and a discussion of its most important economic effects is merited.³⁴ Although the FLSA establishing a federal minimum wage was enacted in 1938, coverage of employees in most tipped occupations was minimal until 1966, when restaurants with more than \$250,000 per year of gross sales were brought under the Act. Changes in legislation, industry structure, and the overall price level led to gradual increases in coverage, so that by 1978 approximately seventy percent of restaurant workers were covered by the FLSA.

An important feature of the 1966 amendments which extended FLSA coverage to formerly uncovered tipped employees in the restaurant industry was the institution of a partial credit toward the legislated minimum wage of tips received by tipped employees for services they provide to customers. An employee who regularly received more than \$20 per month in tips was defined by the 1966 amendments as a tipped employee. The employer could then take credit for those tips up to 50 percent of the minimum cash wage that employers must pay under the FLSA. In addition, the fair market value of meals and uniforms customarily furnished to the employee could be charged against the minimum wage requirement. Further amendments to the FLSA enacted in 1974 permitted the tip credit only to the extent that the tipped employee retained the tips directly or through a pooling arrangement with other employees.

Amendments enacted in 1977 raised the level of tips necessary to define a tipped employee to \$30 per month, and reduced the maximum tip credit to 40 percent of the legal minimum wage, effective January 1980, when the minimum wage was raised to \$3.10.35 Finally, under legislation passed in 1989, the minimum wage was increased in two stages and the tip credit was raised to 50 percent. Thus, effective April 1, 1991, the legal minimum is \$4.25, and the minimum cash wage that employers must pay from

³⁴See Alpert, op. cit., for a more detailed analysis of the tip credit against the minimum wage.

³⁵Effective January 1, 1980, the minimum wage was raised to \$3.35 per hour, but the tip credit remained at 40 percent so that the minimum hourly cash wage was \$2.01.

their own pockets is \$2.13 per hour. So, if an employees' hourly tip earnings (averaged over the week) when added to \$2.13 do not equal \$4.25, then the employer is responsible for paying the balance.

The provision of the FLSA that only partial credit (currently 50 percent) is given for tip income toward the legal minimum wage has the practical effect of raising the effective minimum wage on tipped employment. This effect arises because, as a first approximation, cash wages plus tips for a given tipped occupation must be equal to the wage that would be paid in that occupation if a service charge were collected from the customer in lieu of a tip.³⁶ Viewed from this perspective, therefore, a tip is just as much a cost to the employer as a cash wage payment would be in a world in which service charges were uniformly imposed. With only a partial credit received against the legal minimum wage for tip income, however, an implicit "tax" is levied on the use of tipped labor. If the effective minimum wage under the existing partial-credit regime is above the market-clearing wage for the affected occupation, then earnings in the tipped job will rise relative to comparable non-tipped employment.³⁷

As an example, suppose that the market-clearing wage is \$5.00 per hour, and the employee earns \$4.00 per hour in tips. The employer would like to pay \$1.00 per hour towards the employee's wage and count *all* of the \$4.00 per hour of tip income in reaching the desired total wage of \$5.00 per hour. However, since the FLSA allows only a 50 percent credit for tip income toward the \$4.25 per hour minimum wage, the employer must pay \$2.13 per hour in direct cash wages. Therefore, the employee effectively earns \$6.13 per hour (\$4.00 + \$2.13), which exceeds the \$5.00 per hour market-clearing wage. The extra money comes from the customer's pocket through higher prices (for labor costs above market-clearing wages) and tip income.

³⁶The equality between total compensation (cash wages plus tips) in tipped occupations and the wage paid in a similarly skilled non-tipped job is only approximate, since allowance should be made for the possibility of a premium being demanded by workers in tipped employment for the uncertainty of tip earnings.

³⁷Of course, if the effective minimum wage (inclusive of the tip credit) is at or below the market-clearing wage, then the partial-credit provision for tips under the FLSA is neutral with respect to tipped employment.

In this setting, the introduction of mandatory health insurance, which imposes additional compensation costs for both tipped and non-tipped labor, further exacerbates the pressure to reduce tipped employment and encourages the use of labor-saving technologies (e.g., restaurant buffets) and fixed service charges.

Customer tips contribute significantly to the earnings of individuals in several occupations in the restaurant and lodging (hotel and motel) industries.³⁸ For example, in 1988 tips accounted for between one-half and two-thirds of the total earnings (employer-paid wages plus tips) of waiters and waitresses employed by hotels and motels. Tips also typically contributed between one-third and one-half of the cash earnings of bellpersons, about one-third of the total earnings of public bartenders, and one-fifth of the cash earnings of waiters' and waitresses' assistants (busboys and busgirls).

The individuals who are employed in these tipped occupations are typically young, female, part-time employees, and not heads of households. For example, Alpert³⁹ reports that in 1976, 32 percent of all employees in the restaurant industry were under age 19, and over half of its work force was less than 25 years old. About two-thirds of all restaurant workers were women, but only 20 percent were heads of households that contained other members. Moreover, fewer than one-fourth were in full-time, year-round jobs. Since these data refer to both tipped and non-tipped occupations, and therefore include cooks, cashiers, janitors, and managers, we would argue that they understate the extent to which tipped employment is dominated by teens, women, part-time employees, and non-household heads.

These descriptions of the typical tipped employee are strikingly similar to the characteristics possessed by minimum wage workers. For example, Haugen and

³⁸U.S. Department of Labor, *Industry Wage Survey: Hotels and Motels, June-July 1988*, Bulletin 2335 (August 1989). Alpert, *op. cit.*, p. 50 reports that about 37 percent of restaurant workers directly provide customer service and thus are eligible to earn tips. Excluded from tipped occupations in the restaurant industry are cooks, kitchen helpers, cashiers, janitors, and managers.

³⁹ Alpert, op. cit., pp. 29-30.

Mellor⁴⁰ state that "[T]he typical minimum wage worker is young, female, and works part-time." About one-third of these employees were teenagers and another 22 percent were aged 20 to 24. Sixty-five percent of low-wage workers were women, and two-thirds of them usually worked part-time. Only 14 percent of those earning the minimum wage or less were either husbands with spouse present or persons (mostly women) who maintained their own families without a spouse present. Wives comprised about one-fifth of all minimum wage workers, and the remainder (approximately two-thirds of the total) consisted of unmarried members of households containing other wage earners.

Because the demographic features of tipped employees and minimum wage employees are almost identical, the previous analysis of the effect of mandated health insurance on the incomes of the low-wage workers can be applied to an analysis of the impact of such a mandate on the economic well-being of individuals working in tipped occupations. Most persons who work for tips purchase substantially fewer fringe benefits in general than other employees.41 There are a number of explanations for this phenomenon: firms which employ tipped labor are typically smaller than the representative enterprise, and are unable to exploit the scale economies required for the cost-effective provision of fringe benefits such as health insurance; most tipped employees have relatively low hourly earnings and face low marginal income tax rates, thus making the implicit "price" of untaxed fringe benefits relatively high; because of the partial tip credit, the effective minimum wage is higher for tipped employees so the compensation package will contain fewer non-wage benefits, including health insurance; and, most importantly, the majority of tipped employees are members of households in which they can obtain health insurance from policies purchased by working spouses or parents.

As with increases in the minimum wage, the introduction of mandated health insurance may have unintended harmful consequences for the intended beneficiaries.

⁴⁰Steven E. Haugen and Earl F. Mellor, "Estimating the Number of Minimum Wage Workers," *Monthly Labor Review*, 113 (January 1990), pp. 70-74.

⁴¹Alpert, op. cit., p. 45.

This is particularly likely for tipped employees who are subject to a higher effective minimum wage because of the existence of only a 50 percent credit against the minimum wage for the tip income. Since tipped labor is already relatively costly from the standpoint of the employer, such workers receive fewer employer-provided non-wage benefits against which health insurance can be substituted. As a result, people who work for tips are at greater risk of being terminated if health insurance must be provided by employers. In such a scenario, firms operating at the margin would have an incentive to substitute toward non-tipped employees (who can be hired at a lower effective minimum wage) and institute service charges or reduce customer service by increasing self-service or waiting time.

Summary

Considerable political attention has centered on the claim that a large and growing segment of the U.S. population, and especially the "working poor," has inadequate access to health care. Among the many ideas that have been advanced to address this issue, some of the most widely discussed and frequently heralded are proposals mandating that private firms provide health insurance for all of their employees.

While the objective of ensuring adequate health care to everyone in society is well-intended, there is the real possibility that federally mandated, but privately financed, health insurance will fail to achieve its stated goals and perhaps even harm its intended beneficiaries. This is especially likely for tipped employees who, because of the incomplete credit for tip income against the legal minimum wage, are relatively expensive from the standpoint of the employer. Because of this, the compensation package for people who work for tips contains fewer fringe benefits against which mandated health insurance can be substituted. As a result, tipped employees face greater layoff risk than non-tipped workers if employers must provide health insurance, since the cost of their compensation package relative to those employees who do not work for tips will increase.

REFERENCES

Alpert, William T., The Minimum Wage in the Restaurant Industry (New York: Praeger Publishers, 1986).

Bonilla, Carlos E., Higher Wages, Greater Poverty: Trapping Americans in Poverty (Washington, D.C.: The Employment Policies Institute, 1992).

Burkhauser, Richard V. and T. Aldrich Finegan, "The Minimum Wage and the Poor: The End of a Relationship," Journal of Policy Analysis and Management, 8 (Winter 1989), pp. 53-71.

Chollet, Deborah, "Public Policy Options to Expand Health Insurance Coverage Among the Nonelderly Population," in *Government Mandating of Employee Benefits* (Washington, D.C.: Employee Benefits Research Institute, 1987).

Fleisher, Belton M., Minimum Wage Regulation in Retail Trade (Washington, D.C.: American Enterprise Institute, 1981).

Gruber, Jonathan and Alan B. Krueger, "The Incidence of Mandated Employer-provided Insurance: Lessons from Workers' Compensation Insurance," *National Bureau of Economic Research Working Paper* No. 3557 (December 1990).

Hamermesh, Daniel S., "The Demand for Workers and Hours and the Effects of Job Security Policies: Theory and Evidence," in R.A. Hart, ed., *Employment, Unemployment and Labor Utilization* (Boston: Unwin Hyman, 1988).

Hashimoto, Masanori, Minimum Wages and On-the-Job Training (Washington, D.C.: American Enterprise Institute, 1981).

Hashimoto, Masanori," Minimum Wage Effects on Training on the Job," American Economic Review, 72 (December 1982), pp. 1070-87.

Haugen, Steven E. and Earl F. Mellor, "Estimating the Number of Minimum Wage Workers," Monthly Labor Review, 113 (January 1990), pp. 70-74.

Health Insurance Association of America, "Critical Distinctions: How Firms that Offer Health Benefits Differ from Those That Do Not," Washington, D.C., 1991.

Johnson, William R. and Edgar K. Browning, "The Distributional and Efficiency Effects of Increasing the Minimum Wage: A Simulation," American Economic Review, 73 (March 1983), pp. 204-211.

Koopman, Douglas, et al., "Who are the Uninsured?" Health Care Briefing Paper No. 1, Republican Staff, Joint Economic Committee of Congress, Washington, D.C., October 30, 1991.

Labor Letter, The Wall Street Journal, January 21, 1992, p. 1.

Leighton, Linda and Jacob Mincer, "Effects of Minimum Wages on Human Capital Formation," in Simon Rottenburg, ed., *The Economics of Legal Minimum Wages* (Washington, D.C.: American Enterprise Institute, 1981).

Martin, Dolores and Douglas Koopman, "The Employment Effect of Pay or Play: Killing Jobs and Closing Businesses," *Health Care Briefing Paper No. 5*, Republican Staff, Joint Economic Committee of Congress, February 21, 1992.

McKenzie, Richard B., *The American Job Machine* (New York: Universe Books, A Cato Institute Book, 1988).

McKenzie, Richard B., "The Mandated-Benefit Mirage," Occasional Paper 97 (St. Louis: Center for the Study of American Business, Washington University, November 1991).

Monheit, Alan C. and Claudia L. Schur, "The Dynamics of Health Insurance Loss: A Tale of Two Cohorts," *Inquiry* 25 (Fall 1988).

Pauly, Mark, et al., "A Plan for 'Responsible National Health Insurance'," Health Affairs 10 (Spring 1991).

Smith, Madeleine, Health Insurance Coverage: Characteristics of the Insured and Uninsured Populations (Washington, D.C.: Library of Congress, Congressional Research Service, August 19, 1991).

Smith, Ralph E. and Bruce Vavrichek, "The Minimum Wage: Its Relation to Incomes and Poverty," Monthly Labor Review, 10 (June 1987), pp. 24-30.

Summers Lawrence, "Some Simple Economics of Mandated Benefits," American Economic Review, 79 (May 1989), pp. 177-83.

U.S. Department of Labor, Industry Wage Survey: Hotels and Motels, June-July 1988, Bulletin 2335 (August 1989).