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**Observations on Employment-Based Government Mandates,
With Particular Reference to Health Insurance**

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ABSTRACT

This paper provides several observations on the impact of employment-based government mandates on job characteristics, wages, and employment. Special attention is devoted to evaluating the effects of mandated health insurance because health care is the largest government mandate potentially on the horizon. In some situations, mandates may be useful to solve adverse selection problems, and to compel firms to internalize the social costs of production. Moreover, in a world with pre-existing distortions, mandates may reduce other inefficiencies. However, it is concluded that in many situations the optimal way for a government to assure that services are provided is probably not through employment-based mandates. In many situations, mandates are utilized because alternative schemes are politically infeasible. Nevertheless, since the labor supply curve is widely believed to be fairly inelastic, in the long run employers' costs of meeting government mandates are likely to be shifted to employees in the form of lower wages. Cost shifting to employees is expected to moderate the reduction in jobs due to government mandates.

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A government typically has three options to secure universal access to a good or service: it can provide the good or service directly, as in the case of public education, defense, and national parks; it can mandate that employers arrange for provision of the good or service for their workers and dependents, as in the case of workers' compensation insurance and certain pension safeguards; or it can mandate that individuals purchase the good or service themselves, as in the case of automobile insurance.¹ In addition, the government can alter market incentives to encourage individuals to purchase a good or service themselves, although there is no guarantee that every citizen will purchase the good or service. These approaches may have different implications for the efficiency and equity of a public program.

Employment-based mandates are widely used to accomplish social goals in the U.S. Examples of such mandates include: the recently-passed Family Leave Act, which requires firms to give leave to workers; WARN legislation, which requires employers to give workers advance notice of plant closings; workers' compensation insurance, which requires employers to provide insurance against work-related injuries and diseases; unemployment insurance, which requires employers to pay a tax for unemployment benefits; the Fair Labor Standards Act, which mandates a minimum wage and overtime payments; and ERISA, which, among other things, requires firms to provide pension benefits to all workers if they provide them to some. In addition, in several states the common law has imposed a quasi-mandate on firms that restricts their ability to fire workers at will, and Montana has passed a law requiring just cause to fire a worker. And perhaps most significantly, several recent

¹Some programs may be hybrids. For example, in the case of Social Security and unemployment insurance, the government requires employers and workers to pay a tax to cover workers' benefits, but the government directly provides the benefits.

proposals for universal health care, including the Clinton proposal, involve some form of an employment-based mandate.

In a textbook neoclassical economic model of the labor market, employment-based mandates can only reduce efficiency. If workers are fully informed, sufficiently mobile, and rational decision makers, then they will be willing to trade off wages for fringe benefits. In this model, as long as there are no other distortions in the economy, the optimal level of fringe benefits will result without government mandates. The necessary assumptions for this fortuitous result may not hold perfectly in the actual economy. For example, there are pre-existing distortions, such as progressive income taxation. In addition, workers and firms often lack perfect information over things like work hazards and job opportunities. In a more complete model of the labor market, there conceivably may be an efficiency role for mandates.²

Opponents of employment-based mandated benefits tend to ignore market failures that may be improved by government intervention. Supporters of employment-based mandates tend to ignore the distortions that mandates create, and overlook implementation problems. This paper provides several observations on the economic impact of employment-based mandates. The paper begins by reviewing possible rationales under which employment-based mandates may be an efficient mechanism. Next, the efficiency costs of mandates are considered. In short, mandates reduce efficiency because they restrict employers and employees' freedom of contract. Mandates may also adversely impact

²This point has been made several times before; for examples, see Ehrenberg (1986) and Mitchell (1990).

employment and wage levels. A detailed analysis of the possible employment and wage effects of the Clinton health care proposal is provided to illustrate these points. Then practical issues of mandates are considered, such as lack of compliance and implementation issues. Finally, the paper discusses the political economy of mandates.

The benefits of mandates must be weighed against their costs. The main conclusion of the paper is that, in most cases, employment-based mandates are probably not the best way to structure a program. Nevertheless, mandates have proved an attractive alternative to policy makers in the U.S. and elsewhere because alternative financing mechanisms have been politically infeasible, largely because they would involve new taxes. The costs of mandates are hidden, which makes them politically feasible. Although mandates are probably not the best way to structure many policies, evidence suggests that the employment loss due to most mandates is modest because labor supply is relatively insensitive to the wage rate. As a consequence, the burden of employer mandates is typically shifted to workers in the long run.

I. Possible Efficiency Rationales for Employment-based Mandates

A. Adverse Selection

Some economists have tried to justify employment-based mandates on the basis of "adverse selection."³ Adverse selection is a problem that has been of concern in the insurance industry for a long time. In the context of insurance, adverse selection means that if a firm offers a certain policy that is pitched for the average person, a

³See, for example, Levine (1991).

disproportionate share of the "bad risks" will come forward to take up the policy.

To see how adverse selection might be relevant in the labor market, consider the case of a firm deciding whether to announce a policy that it will never fire workers, thus giving them life-time jobs. In some industries, such a personnel policy may be desirable to firms because workers will then not fear losing their job if they develop a new, labor-saving technology. A no-firing rule may encourage workers to develop new technologies, which helps the firm and its shareholders. But workers who have a high propensity to be fired -- bad workers -- will find this personnel policy particularly attractive. Thus, a company that voluntarily chooses to provide life-time jobs as a condition of employment will attract a disproportionate number of bad workers. If the firm cannot detect the bad workers in advance of hiring them, the firm will have a workforce composed largely of bad workers, which is likely to defeat the firm's original goal of encouraging workers to develop new technology. Although a no-firing rule may be beneficial to this firm (and for other firms like it), the firm will not find it beneficial to provide a no-firing clause if it is the only firm in the industry to do so. But if all firms in the industry offer no-firing clauses, then the bad workers will not all flock to one firm, and productivity may rise because job security encourages innovation and loyalty. Several observers have commented that Japanese companies have been successful in part because of their commitment to life-time jobs, which is encouraged by government policy.

The no-firing rule is a stylized example, but there are other situations where, because of adverse selection, certain benefits that all firms would like to provide to workers are not provided because it is not profitable for any firm to offer the benefit individually. In this

situation, total welfare may be higher if all firms are required to provide the benefit.

Adverse selection is likely to be a problem for employers' provision of health care benefits. For example, as part of their health package firms can offer generous drug rehabilitation programs that reduce drug abuse, increase worker productivity, and improve the morale of workers. Workers may even be willing to take somewhat lower pay in exchange for such a benefit. But if other firms do not offer this policy, any firm that voluntarily offers such a policy is likely to find a high number of drug-users among its job applicants. If those applicants are not screened out in advance, they may lower the firms' productivity and poison morale. As a consequence, individual firms have little incentive to provide these benefits. Indeed, individual firms have an incentive to test workers for drug use to avoid hiring them. There is a strong element of a prisoners dilemma here: firms must use up resources to test for drug use, but the drug-users just end up working for other firms, so aggregate labor market efficiency is not improved.⁴

In principle, a government mandate is capable of solving the adverse selection problem by compelling every firm in the industry to provide a benefit. This may be grounds for a government mandate, and solving adverse selection may be one of the functions that government does best. But the gains of alleviating adverse selection must be weighed against the cost of the policy. In particular, some firms may not profit from having a drug rehabilitation policy. For example, in some industries drug use probably does not reduce work productivity.

⁴Of course, if there is a match component, and drug use has different effects on productivity in different jobs, efficiency can be improved by testing.

It should also be pointed out that in some industries private coalitions of firms or workers have managed to overcome adverse selection on their own, without government involvement. For example, the American Association of University Professors (AAUP) has established rules and procedures regarding tenure; these rules essentially govern life-time jobs for tenured professors.

Finally, there are other alternatives to employment-based government mandates for solving adverse selection. For example, broad individual mandates or public provision (e.g., drug rehabilitation centers) may also solve adverse selection. Although individual mandates are not plausible for certain employment benefits, like firing rules, they are feasible for others, like drug rehabilitation. The costs and benefits of individual versus employment-based mandates versus public provision must also be weighed. The case for employment-based mandates seems to me to be strongest in situations where a program cannot be structured without involving working conditions, such as firing rules or workplace safety. Moreover, the case for employment-based mandates over individual mandates would be stronger if employers have some unique advantage in implementing a program. For example, employers may be especially adept at detecting false injury claims (e.g., someone was not really injured at work) or at identifying and correcting hazardous working conditions.

B. Imperfect Information and Irrationality

The most obvious case to be made for mandating a certain benefit is that workers do not bargain for a particular benefit that they would desire because they have imperfect

information. For example, in some industries workers are likely to underestimate the risks they face at work because employers have an incentive to understate the true level of risks. In other situations, it is not possible to know the health consequences of certain risks with the current state of medical knowledge and long latency periods for some illnesses. Given systematic misinformation, workers will fail to request compensating payments for the risk of work-related disabilities. As a consequence, firms in dangerous industries will overproduce compared to the first-best level because they fail to account for the total social costs of their production. Mandates like workers' compensation insurance and OSHA may be justified in this situation.

Workers' compensation insurance is especially appealing because workers can be compensated for their injuries after the injury or illness has occurred. Moreover, workers' compensation is highly experience rated in the U.S., which causes firms to internalize the costs of accidents that occur as a byproduct of production. On the other hand, workers' compensation insurance introduces a set of distortions of its own (see Butler and Worrall (1983) and Krueger (1990)). For example, workers have an incentive to claim benefits for injuries that might not be work-related, or to take fewer precautions on the job.

In principle, OSHA works by restricting the use of hazardous technologies. These restrictions may also create several distortions which must be weighed against the benefit of fewer industrial accidents. For example, by regulating the technology that firms can use, OSHA may not achieve the goal of reducing accidents at the least possible cost. (See Robert Smith (1976) for a critical evaluation of OSHA.)

Another issue is whether workers rationally use the information they do have.

Psychologists have consistently found that individuals overweight outcomes that are merely probable in comparison to equally preferred outcomes that are obtained with certainty (see Kahneman and Tversky (1979)). This phenomenon may be relevant for the purchase of insurance coverage for catastrophic events. Fuchs (1976) and others note that individuals often prefer health insurance programs that offer limited coverage with a low or zero deductible and copayment over comparable policies that offer higher maximum coverage and higher deductibles and copayments. If employers have efficiencies in providing insurance because they can reduce adverse selection and lower transaction costs by purchasing coverage for a large unit, then trades that would take place under rational decision making may not take place if individuals are irrational. In addition to the preferred tax treatment of employer-provided health insurance, a tendency toward irrational evaluation of probabilities may explain why individuals tend to overinsure against predictable, small losses, and underinsure against unpredictable, catastrophic losses.

Finally, it should be stressed that the knowledge and decision-making processes of the "marginal worker" are most relevant for labor market outcomes like wages. Firms in an industry will set wages equal to the amount necessary to hire the profit maximizing number of workers. If the industry cannot attract enough workers at a certain wage, wages will be bid up to attract a sufficient quantity of workers. The workers who are most mobile therefore determine the equilibrium wage, provided firms cannot pay workers doing the same job differently. As a consequence, if the workers who are on the margin of working or not working in an industry are well-informed and rational decision makers, then the "right" wage premiums for working conditions and fringe benefits will surface even if the

average worker is misinformed or irrational.

C. Externalities

Some employment conditions involve externalities, meaning that the costs and benefits of a particular action may accrue to more than just the parties involved. For example, suppose a hazardous chemical is used improperly at work. Any individual worker can take the time to investigate whether the use of the chemical is hazardous, and then use that information to improve working conditions (or demand a compensating wage premium). The information that is learned will benefit not only the worker who invested the time and resources to learn about the chemical, but his or her coworkers who also use the chemical as well. Unfortunately, an individual worker does not have an incentive to take the benefits that accrue to the coworkers into account in making a decision to investigate working conditions. When externalities are involved, the independent actions of individuals will lead to a suboptimal allocation of resources. It is possible that, by mandating employers to fully disclose information about work hazards, the government can improve the operation of the labor market. More generally, mandates could improve distortions created by externalities.⁵

It is also worth noting that, in some situations, society inadvertently creates externalities through charitable programs. For example, the fact that society is often

⁵On the other hand, in some situations firms have an incentive to solve informational externality problems themselves. Firms have incentives to provide clear information, use their bargaining power to obtain quantity discounts, and help educate workers with regard to their benefit choices, because by doing so the firm makes working conditions more desirable, at a lower cost than the value workers place on the benefit.

unwilling to deny some health care benefits to uninsured individuals when they become seriously ill creates an altruistic externality (see Pauly (1971)). The uncompensated cost of treating the uninsured is shifted to insured consumers, health care providers, or tax payers. Thus, an uninsured individual who obtains a job that provides health insurance reduces costs for others. But the benefit to society will not be reflected in the individual's personal calculation of costs and benefits of obtaining health insurance. As a result, the fraction of the work force that receives health insurance would tend to be less than optimal, and mandated health insurance could improve this distortion.

Finally, some activities and circumstances inherently produce externalities. For example, an individual who has an untreated contagious disease imposes a negative externality on the rest of society. Mandating that individuals have health insurance, which increases the probability contagious diseases will be treated, reduces the spread of disease to others and limits the negative externality.

D. Lack of Fully Compensating Wage Differentials

If the labor market operates smoothly, then one would expect wages to adjust in response to the level of fringe benefits firms offer. Firms that offer more desirable benefits will be able to offer lower wages, other things (e.g., worker skills) being equal. If imperfect information or barriers to mobility are important features of labor markets, then compensating wage payments may not surface. The case for government mandates is stronger if the actions of individuals and firms fail to produce compensating wage payments for workers who take jobs that offer less generous benefits. Notably, the empirical

literature on compensating wage payments has provided little systematic support for the view that wages adjust to fully compensate workers for working fringe benefits and working conditions.⁶

Smith and Ehrenberg (1983), Leibowitz (1983) and Monheit, Hagan, Berk and Farley (1985) fail to find that workers who receive more generous health insurance benefits also receive lower wage payments as a result. Economists have also had great difficulty establishing a tradeoff between other benefits and pay. In fact, with the major exception of work-related fatalities, the labor economics literature has not found consistent evidence of compensating wage differentials for work amenities (see Brown (1981) and Smith, (1979)).

One of the difficulties in interpreting this literature, however, is that due to data shortcomings studies of compensating wage differentials have only been able to hold constant a limited number of worker characteristics. There is nothing in the theory of compensating differentials to suggest, for example, that lawyers should receive less generous fringe benefits than manual laborers because of their higher wage. Indeed, if fringe benefits are a "normal good," one would expect higher-paid workers to take some of their compensation in the form of better working conditions and fringe benefits. Nevertheless, the past literature on compensating differentials should challenge researchers to search for additional evidence before assuming that employee valuation of fringe benefits will be reflected in the incidence of those benefits.

E. Pre-existing Distortions

⁶See Rosen (1986) for a dissenting view.

The labor market should not be considered in isolation. A wide network of government policies impacts the labor market. Similarly, other markets may fail (e.g., because of adverse selection the market for private health insurance may be less than perfect) causing distortions that could be rectified by labor market policy. Government intervention in the labor market may help to improve distortions created elsewhere, and sometimes these interventions may involve steps in a counter-intuitive direction.

For example, consider the effect of welfare benefits. Employees who receive low-enough wages may qualify for a range of support, including Food Stamps, Aid to Families with Dependent Children, subsidized housing, and the Earned Income Tax Credit. Paying for this support imposes a burden on the rest of society, which could be expected to distort work effort and other behaviors. A mandate that transfers income to low-wage workers (e.g., a minimum wage if the elasticity of labor demand is less than 1) may be worth more to society than the cost of meeting that mandate to employers because, by meeting the mandate the firm reduces transfer payments that its low-wage workers would otherwise receive, and thus eases the burden of poor support imposed on the rest of society.⁷

To take another example, progressive income taxation reduces the incentive for individuals to invest in education because part of the return to that investment is taxed away. In this situation, it is possible that government-mandated on-the-job training will lead society to be closer to the production possibility frontier. One way to think about this issue is that there is a third party to any training arrangement between the worker and the firm; the third party is the government. The government receives some of the return to

⁷This example is in Freeman (1993).

investments in human capital, so firms and individuals have an incentive to invest less than the optimal amount. By mandating training, the government can rectify this distortion caused by progressive taxation. However, mandated training may create other distortions, and there may be more efficient ways of increasing training (e.g., scholarships and public schools).

Many government policies create pre-existing distortions. Although one could argue that eliminating these policies will rid the economy of the pre-existing distortions, for many policies it is not realistic to imagine that the government program will be done away with. Instead, additional government programs could conceivably lead to a better outcome given these constraints. Likewise, failures in markets outside the labor market may be improved as a result of government intervention in the labor market. For example, due to adverse selection the private market for insurance may fail, causing a "second best" solution. As a general rule, if we start from a "second best" position because of pre-existing distortions, then government mandates could possibly improve the operation of the economy.

II. Efficiency Cost of Mandates

The case typically made against mandated benefits is that they cause employers and employees to lose their freedom to contract. The argument is that, presumably employees and employers know what is best for them, and they will strike bargains that lead to the greatest mutual gain. For example, a working mother may benefit from child care services and choose to take a job with lower pay because of this fringe benefit, while a childless worker does not directly benefit from child care benefits and would not be willing to take a

job that pays a lower wage but offers child care services. If the labor market works smoothly, workers can sort into the jobs that offer the bundles of wage and nonwage characteristics that best meets their desires. Similarly, firms can chose to offer the bundles of benefits and wages that give them a competitive advantage. A mandate that requires all firms to offer child care services would prevent workers and firms from attaining a gain from sorting into jobs that offer the best match for their circumstances.⁸

The sorting of workers into jobs that are a good fit for them is a powerful and simple argument against mandates. However, as discussed previously, adverse selection, imperfect information, externalities, and other distortions may not lead the market to provide the optimal mix of employment and wage benefits. In my view, unless a compelling case can be made that the market fails, there is good reason to allow freedom of contract for employment benefits because of the flexibility and independence that it affords.

The efficiency loss due to mandates will depend on how much workers value the benefit that is mandated.⁹ For example, if employers are mandated to provide health insurance to their employees, and the dollar value employees implicitly place on health insurance is exactly equal to the employers' cost of providing the health insurance, then in equilibrium workers wages will decline by the full amount of the benefit, and there will be no efficiency loss. In this situation, employment will be unaffected by a mandate. Summers (1989) argues for the efficiency of employment-based mandates on the grounds

⁸Notice that individual mandates also restrict freedom of contract.

⁹See Summers (1989), Danzon (1989), and Sheiner (1993) for theoretical discussions of employment effects of employment-based mandates.

that labor supply will shift out in response to mandates, cushioning their negative effect on employment.¹⁰

At the opposite extreme, if employees place no weight on health insurance benefits (e.g., perhaps because they expect to be in good health) then wages will not adjust in direct response to the mandate. In this case, the mandate is like an employment tax on the firm, which will tend to reduce employment and wages. The incidence of this tax, and the size of the efficiency loss, will depend on the elasticities of demand for and supply of labor. If labor supply is insensitive to the generosity of compensation, as is widely believed, then wages will fall and employment losses will be blunted.

A final case to consider is if the health insurance mandate is structured in such a way as to provide coverage to nonworkers at no out-of-pocket cost. In this situation, regardless of how much workers prize health insurance, they will place no value on the insurance that employers are mandated to provide because they would receive the same benefit whether or not they worked. The analysis of a mandated benefit here is just like the analysis of an employment tax.

III. Estimated Employment and Wage Effects of the Clinton Health Care Proposal

An important theme of this paper is that the distortions caused by an employment-based mandate must be weighed against any possible gains associated with labor market

¹⁰Tim Besley has pointed out to me that this feature is not unique to employment-based mandates. Specifically, the government could finance a program through some other means, but restrict benefits to those who work. In this way, the positive labor supply effects could be accomplished without an employment-based mandate.

imperfections and pre-existing distortions. And the efficiency costs of an employment-based mandate must be compared to the costs and benefits of other means of assuring universal access, such as individual mandates. Such a comparison will require a tremendous amount of data, and rely on several untested assumptions. Most observers agree that health insurance reform in the U.S. is a priority, and that universal coverage is desirable. A key question is, "Should universal coverage be achieved through a firm-based mandate or through other means?" To illustrate the efficiency costs of an employment mandate, several calculations are presented below to gauge the possible employment loss associated with the Clinton proposal for an employment-based health insurance mandate.

Key features of the Clinton health care mandate reportedly include the following: Employers will be required to pay a large portion of the health insurance premiums for their employees. Premiums will be based on four family situations (single with no children, single with children, married with no children, married with children), and there will be community rating within these classifications. For each employee, employer contributions are 80% of the average cost of premiums for workers in that family status in the region.¹¹ Employees can choose among health plans that provide at least a minimum package of benefits. Employees are responsible for covering the rest of their premium costs. Total employer contributions are capped at 7.9% of each firm's payroll. Small firms (under 50 employees) with low average wages will have a lower caps, ranging between 3.5% and 7.9%. Workers in families earning under 150% of the poverty level will also receive

¹¹More precisely, the employers payments will be 80% of the average premium for the family status divided by the average number of workers per families of that type.

subsidies for their contributions. Revenues from other sources will be used to finance the subsidies to small employers and low-income employees.

Conceptually, one could think of the Clinton Health Care Reform bill as a payroll tax on firms that do not presently offer health insurance, or that offer health insurance that is below the minimum standard. In the long run it shouldn't matter whether the nominal burden is paid by firms or workers, so for purposes of this analysis assume it is all paid by firms. From the outset, it should be stressed that there is considerable uncertainty in the economics profession as to how a health care mandate would affect employment. This uncertainty arises because there is uncertainty regarding the proper theoretical framework for modelling the labor market, and because there is considerable uncertainty over the magnitude of the relevant behavioral parameters in any model. The theoretical approach to modelling employment taken in this paper adheres to a standard neoclassical economic model. The analysis is strictly partial equilibrium, but the results give a flavor for the magnitude of employment losses from the Clinton proposal.

To simplify the analysis, one can separately consider the effect of the mandate on two sectors: one sector composed of firms that do not offer insurance initially, and the other sector composed of firms that do offer insurance. Figure 1A illustrates the employment effects for the sector where health insurance is not presently provided. In the figure the wage is shown on the vertical axis, and employment is on the horizontal axis. Because the cost of hiring a worker at any given wage is higher due to the health insurance requirement, the demand curve shifts in, from D to D' . The wage falls for these workers, and employment falls as well. Notice that the more inelastic (i.e., steeper) the supply curve, the

larger the wage decrease and the smaller the employment decline.¹² Some of the workers who are no longer demanded in this sector may find employment in the other sector, but I consider a worse case scenario where these workers remain in the same sector.

For firms that already offer insurance that is more generous than the minimum benefit, the mandate causes the demand curve to shift out, from D to D' (see Figure 1B). This occurs because many of these firms will have lower health care costs after the reform than before because they currently subsidize family benefits of their workers, and because some of their premiums go to cover uninsured individuals. As a result, employment and wages will rise in this sector. In this case, if the demand curve is relatively more inelastic, wages will rise more and employment will grow less.

How big are the two sectors? How much of an employment change should one expect? Table 1 gives estimates of the number of employed workers in each sector. The estimates are derived from the March 1992 Current Population Survey (CPS), and pertain strictly to non-self-employed workers.¹³ In 1992, there were 111.4 million wage and salary workers.¹⁴ Some 101 million of these workers are legally covered by the

¹²Mathematically, the wage and employment changes from a health care mandate are given by: $dW/dC = -e^d/(e^d - e^s)$ and $dL/L = [(dC+dW)/W] e^d$, where dW is the change in the wage, dC is health insurance costs, L is employment, dL is the change in employment, e^d is the elasticity of demand for labor, and e^s is the elasticity of labor supply.

¹³The reason for deleting the self-employed from consideration is that there is a strong presumption that the self-employed will offset the health care mandate by taking lower cash income. The only issue for the self-employed is whether some will leave the labor force because they are unhappy with the mix of benefits.

¹⁴According to the Economic Report of the President, 1993 (p. 394), in 1992 there were 108.4 million wage and salary workers, excluding agricultural and private household workers. From the CPS we estimate that 2.76% of wage and salary workers are in agricultural or private household jobs.

employment mandate in the Clinton proposal.¹⁵ An estimated 40 million covered workers currently do not receive health insurance coverage from their own employer. This sector will have its employment demand curve shift in.

Table 1 also presents estimates of the average premium for insured and uninsured workers (combined employer and employee payments). The estimates are based on the draft of the Clinton proposal released in October 1993. Of course, any forecast of what average premiums will be if the Clinton proposal is passed will necessarily involve considerable uncertainty. The estimates used here take account of workers' family status in each sector, payroll caps, firm subsidies based on firm size and average earnings, and worker subsidies based on family income. The results indicate that, after accounting for these factors, average premiums in the currently-uninsured sector will be \$1,426. The subsidies keep the premium relatively low in this sector. In the currently-insured sector premiums will change because: (1) the portion of premiums that pertain to uncompensated care will decline; (2) there will be a decline in costs for workers whose spouses work but don't receive health insurance coverage from their own employer; and (3) some current plans will not meet the minimum standard, and benefits there will rise. The net effect of these changes is that the average premium will fall by 13.9% in this sector. With these assumptions, total premiums would be \$31 billion more than are currently paid.

Table 2 summarizes characteristics of workers who are covered by the health care

¹⁵Coverage was determined from the provisions of the Clinton draft proposal. Specifically, workers who usually worked 10 or fewer hours per week, were age 18 or younger, or were unmarried, full-time students, age 23 or younger were deemed ineligible for the employment mandate.

employment mandate, broken down by whether they currently receive health insurance from their own employer. Fifty-four percent of workers in the uninsured sector are women, compared to 42% in the insured sector. Uninsured workers are also more likely to be minorities, employed in the retail and construction industries, and employed in service jobs. The average work week of uninsured workers is 36.8 hours, compared to 42.1 hours for insured workers. It is also noteworthy that 57% of those who are not insured by their own employer receive health insurance from another source, mostly commonly from their spouse's employer.

The employment effects of a mandate depend critically on the magnitude of the labor supply and demand elasticities in each sector. There is a consensus among labor economists that labor supply is relatively inelastic, especially for male workers. For example, Pencavel's survey of male labor supply studies concludes, "The vast proportion of that work -- both that based on the static model and that based on the life-cycle model -- indicates that the elasticities of hours of work with respect to wages are very small." Even for low-income and female workers, estimated labor supply elasticities tend to be small. For example, the median estimated uncompensated-own wage elasticity from studies based on the Negative Income Tax experiments is under .12 for wives, for husbands, and for single, female household heads.¹⁶ In the future, I would expect that women's labor supply behavior will even more closely resemble men's. One reason why the labor supply elasticity may truly be low is that economic theory predicts that income and substitution effects have opposing effects on the labor supply elasticity. I initially assume a value of .1

¹⁶This is based on Killingsworth (1983), Table 6.2.

for the labor supply elasticity in each sector.¹⁷

In his recent book, Hamermesh (1993) concludes that the aggregate employment demand elasticity is probably "bracketed by -.15 and -.75." Past estimates tend to be sensitive to the data set, industry, and estimation technique. There are no separate estimates of the elasticity of demand for labor in the insured and uninsured sector that I am aware of. One could plausibly argue that the elasticity of demand for labor is higher in the sector that offers insurance than in the one that does not, because the insured sector is over-represented by firms in traded goods industries, which also face competition from abroad. Demand for workers in the uninsured sector would be more like the low-wage sector more generally. Moreover, studies of the impact of the minimum wage on employment find elasticities around 0 to -.3 for teenagers, whereas studies of employment demand in manufacturing find a wide range of estimates, but they are centered near -.5. I initially assume the elasticity of demand for labor is -.5 in the insured sector, and -.25 in the uninsured sector. Under these assumptions, the net employment loss associated with the Clinton mandate would be 212,000 jobs. Employment in the uninsured sector will decline by 280,000, whereas employment in the currently-insured sector will rise by 68,000. Under the assumed elasticities, most of the cost of meeting the mandate will be shifted to workers in the form of lower wages. Studies of other mandates (e.g., workers' compensation

¹⁷Although one may expect that labor supply is less responsive to the wage in the insured sector, if wages rise in the insured sector I suspect workers will be willing to move to that sector from the uncovered sector or from non-employment, even if this mobility requires some additional training. Furthermore, one could argue that to some extent the two sectors are already noncompeting, and that there are some workers in the uncovered sector who are equally skilled as workers in the covered sector, even though their compensation differs.

insurance) tend to bear out this forecast (see Gruber and Krueger (1992)).¹⁸ Annual wages in the uninsured sector will fall by some \$1,019 per year under these assumptions, whereas annual wages will rise by \$345 in the insured sector.

Table 3 reports results in which the assumed values of the elasticity of demand and supply in each sector are varied. Specifically, I vary the employment demand elasticity between .25 and .75, and the labor supply elasticity between .1 and .2. Although the results do not change much if the elasticity of demand is varied, the predicted employment decline is very sensitive to the elasticity of supply in the insured sector. If that elasticity is set to .2 instead of .1, then the predicted net employment decline is 491,000 jobs.¹⁹ Overall, the forecasts tend to fall in the 200,000-500,000 range for the parameters reported in the table. Under the elasticities that strike me as most plausible, the employment loss from the Clinton health care mandate would be near the bottom of the range -- but one has to admit a wide range of uncertainty here.

Is this a large or a small change in employment? Although the loss of some 200,000 jobs is surely something to be lamented, this is under 0.2 percent of the workforce. The predicted job loss in this model is on the same order of magnitude as monthly blips in the employment series. Moreover, since turnover tends to be very high in the uninsured sector, the burden of the job loss will be spread out over many workers. A decline of

¹⁸Also, in an analysis of a sharp natural social experiment, Holmlund (1983) uses time-series data on payroll taxes in Sweden to examine wage growth in a period when the payroll tax increased from 14 percent to 40 percent. He estimates that roughly 50 percent of the employer payroll tax was shifted to wages in the short-run.

¹⁹If we set the elasticity of demand at -1 and the elasticity of supply to .2 in both sectors, then the forecasted job loss is 517,000.

200,000 full-time jobs averages out to just 3.4 hours less work per worker per year. Why is the estimated employment change this small? The main reason is that, given a low elasticity of supply, most of the cost of meeting a mandate will be shifted to workers. If the elasticities of supply and demand are .1 and .25, respectively, then the conventional economic model predicts that 71% of the health care costs will be shifted to employees in the form of lower wages. In addition, the sector that currently offers health insurance will have lower employment costs after reform, and should thus expand. Finally, firms whose employment costs rise because of the mandate will not totally be at a competitive disadvantage because many of their competitors' who did not offer insurance will also see their employment costs rise.

Lastly, it should be stressed that the estimated employment changes are relative to the current level of health care costs. If, as expected, the Clinton proposal reduces the rate of growth of health care costs relative to what it otherwise would be, then the baseline level of employment would be even lower if wages do not perfectly adjust to reflect health care benefits.

Additional Employment Effects

A. Supply Effects

Because under the Clinton plan health insurance will be provided to nonworkers as well, there may be supply effects as well as demand effects, depending on how generously benefits are provided to nonworkers. Revenue from sin taxes and possibly other taxes will be used to provide health insurance for nonworkers. If benefits are provided to

nonworkers, the supply curve of labor will shift in because leisure becomes more attractive.²⁰ This is illustrated in Figure 2 for the aggregate labor market. For example, older workers will be encouraged to retire early because of subsidized benefits for nonworkers, and because of community rating. Some observers have also argued that this shift in of the labor supply curve may be important for woman. However, a comparison of female labor force participation between Canada and the U.S., before and after Canada adopted universal health insurance, suggests that female labor force participation rose in Canada relative to the U.S. (see Card and Riddell (1993)).

The current availability of Medicaid for poor nonworkers, and the low elasticity of labor supply, make it unlikely that the supply shift will be significant for workers other than early retirees. Gruber and Madrian (1993) find that continuing health insurance coverage induces early retirement. Labor Secretary Reich has stated that 350,000 to 600,000 workers would opt to retire early following health care reform.²¹ Clearly, this is something to closely monitor.

B. Minimum Wage Constraint

Workers who are paid the minimum wage, or near the minimum wage, obviously cannot have their wages adjusted to fully offset the compensation increased caused by a health care mandate. Because wage offsets are a major reason why large employment

²⁰On the other hand, some workers who are "locked" out of the labor force because they would lose Medicaid by working may join the workforce under the Clinton plan, thereby causing the labor supply curve to shift out.

²¹See Daily Labor Report, October 7, 1993, p. AA-2.

losses from a mandate are not predicted, this is a potentially important issue. How much should we expect the minimum wage constraint to affect employment? The following calculations suggest that the minimum wage constraint could be expected to reduce employment due to a health care mandate, but not by an overwhelming amount.

As mentioned earlier, a reasonable expectation is that about 80% of the cost of financing the health care mandate will be shifted to workers. Employers' health care costs for minimum-wage workers are difficult to predict because of the payroll cap and firm subsidies. Minimum wage workers are over-represented in low-wage, small firms, so they are especially likely to be affected by the payroll caps. If we suppose that the typical low-wage employer's health care contributions equals 7.9% of earnings, then workers who earn between \$4.25 and \$4.52 per hour will be constrained by the minimum wage. From the CPS, I estimate that 4.93 million workers who will be covered by the employment mandate earn between the minimum wage and \$4.52, and 803,000 of these workers already receive health insurance. This leaves 4.13 million workers who are likely to be constrained by the minimum wage.²²

If we make the extreme assumption that there are no wage offsets at all for these workers, and assume an elasticity of demand of $-.3$, then there will be a loss of 98,000 more jobs as a result of the minimum wage constraint. This estimate should probably be regarded as an upper bound because workers earning \$4.50 per hour, say, could have slower wage growth -- or other fringe benefit reductions -- as a result of the health care

²²The 4.13 million low-wage workers who lack health insurance were already counted among the 40.3 million workers in the uninsured sector. This results in some double counting of the job loss, on the order of 20,000-40,000 jobs.

mandate, which would cushion employment losses.

Another reason for tempering forecasts of job loss caused by an employment-based mandate is that several studies indicate that recent minimum wage increases have not had an adverse effect on employment (see Katz and Krueger (1992), Card (1992), and Card and Krueger (1993)). This evidence has been cited by the Clinton Administration as support for the view that the health care mandate will not reduce employment. Even though I am a contributor to this literature, I am not sure it applies to a health care mandate. The reason for my skepticism is that the leading models that explain the findings of no or positive employment effects of a minimum wage rise involve monopsony and search models. A minimum wage increase makes work more rewarding, and may thus enable firms to fill vacancies and reduce turnover, whereas a health care mandate that extends to nonworkers as well does not have the advantageous supply-side effects of a minimum wage. Thus, in my calculations I have used a conventional model to predict the effects a health care mandate with a minimum wage constraint.

C. Distortions Created by Payroll Caps and Subsidies

Provisions of the Clinton plan are likely to create distortions that are of more significance than the employment losses forecasted above. First, the fact that employer contributions are capped as a percent of total salary in the firm gives firms an incentive to split up into smaller units, placing high-wage workers in one firm and low wage workers in another. To take an hypothetical example, consider a firm with 50 workers earning \$10,000 per year and 50 workers earning \$100,000 per year (see Table 4). Suppose the premium

cost of meeting the mandate is \$2,000 per worker for the firm. The firm's payments are capped at 7.9% of payroll. If the firm remains intact, its health care costs will be \$200,000, but if it splits into two firms -- one with high-wage workers and the other with low-wage workers -- its costs will be 139,500, producing a savings of 30% on its health care bill. The reason for this gain is that if the firm remains intact the high wage workers prevent the firm from benefiting from the payroll cap. Firms that have higher variability in the salaries of its workers will have a strong incentive to break into smaller units as a result of the firm-level payroll cap.²³ One can also envision a rise in staff-leasing arrangements to remove either low-wage or high-wage workers from a firm's payroll to benefit from the payroll cap.²⁴

Second, the current draft of the Clinton proposal dictates a lower payroll cap for small firms, as low as 3.5% depending on the average salary. The current draft of the legislation has a discrete jump in the cap once a firm exceeds 50 employees. Obviously, firms with 49 employees will resist hiring more workers because they will lose their subsidy. And firms with over 50 employees will have an incentive to shrink to 49 employees or split up into units of 49 or smaller to benefit from the lower cap. It should be noted that these incentives will remain even if the cap is smoothly increased to 7.9% as a firm reaches 50 employees. Essentially, a subsidy to small firms turns firms into

²³More generally, this result occurs because of Jensen's inequality, and the payroll cap creates a concave budget set.

²⁴Another effect is that firms considering hiring a new worker will behave differently if the new worker is high or low wage. A firm that is constrained by the payroll cap will not want to hire high-wage workers because they will relax the cap.

monopsonists, since the marginal cost of hiring a worker is greater than the worker's compensation. Similarly, the fact that subsidies are more generous for lower wage, small employers will give employers an even stronger incentive to resist wage increases.

Third, the small firm subsidy provides perverse organizational incentives. For example, company-owned McDonalds' stores would be considered big firms and not eligible for the small firm subsidy, while franchised McDonalds' stores would be considered small firms and eligible for the subsidy. Since there may be good economic reasons for the division of stores among company-owned and franchised outlets, this provision will upset that equilibrium. In a dynamic economy, these distortions could have a further negative effect on employment.

Fourth, since health care costs are a fixed cost, a mandate will give firms incentives to employ full-time workers over part-time workers. This incentive effect will be somewhat muted because the Clinton proposal pro-rates premiums for employees who work between 10 and 32 hours per week, and exempts employees who work under 10 hours per week. But employers will still have an incentive to use more overtime hours for full-time workers (since the marginal health insurance costs are zero). In addition, employers will have an incentive to employ very short-hours workers because those working under 10 hours per week are excluded. I also note that hours of work are notoriously poorly reported, by individuals and firms, so pro-rating of contributions for work hours will be difficult to implement.

As a result of these incentive effects, the Clinton mandate will raise less premium revenue than expected. In this situation, either the payroll cap will have to rise, or other

sources of revenues will be required. Moreover, the contortions that firms jump through to minimize their health care payments may reduce economic efficiency. Phasing out the small firm subsidy over time would help to alleviate some of these distortions.

All the perverse disincentive effects of the Clinton proposal discussed in this subsection come about because the financing of the plan is based on a firm level, rather than an individual level. This differs from Social Security, Unemployment Insurance, Workers' Compensation Insurance, and most other social insurance programs. If employer contributions were capped a 7.9% of each worker's earnings, up to some limit, then the perverse incentives for firms to shrink, resist wage increases, etc., would not arise. It should also be noted that a pure payroll tax mechanism with a constant individual cap still confers a subsidy to small employers because small employers tend to pay lower wages than large employers.

IV. Practical Observations on Mandates

There are several practical implications of mandates that should be considered. For one thing, mandates are not always followed. Unless there is a strong enforcement mechanism or stiff penalties, past experience suggests that many employers will not follow mandates. For example, Ashenfelter and Smith (1979) and subsequent studies have found that many covered employees are paid less than the minimum wage. The estimates of noncompliance range from 25% to 40% of covered employees who are paid the minimum or less. Similarly, Addison and Blackburn (1994) find extremely low compliance with the WARN law. Remarkably, they find no change in the percent of displaced workers who

report receiving advance notice after the law was passed.²⁵ De La Rica and Lemieux (1993) find that 12% of workers in Spain are employed by firms that do not contribute to their health insurance, even though it is mandated by law. Noncompliance in Spain tends to be higher in industries that have low health care insurance rates in the U.S. Although there is a tradition of high voluntary compliance with laws in the U.S., one should not overlook the possibility of noncompliance. Noncompliance should be of special concern for programs like the Family Leave Act, since workers may fear retaliation if they take advantage of the newly enacted law.

Because of noncompliance, mandated benefits may be far less successful at achieving their aims than anticipated by lawmakers. Certainly, the possibility of noncompliance suggests the importance of monitoring parties involved. Monitoring will require substantial resources. It should also be noted that, if compliance with mandates is low, the employment distortions that they create will also be smaller than anticipated.

Another feature of mandates is that "escape clauses" are rarely utilized in some programs. To take an example, the 1990 amendments to the Fair Labor Standards Act allowed firms to pay a subminimum wage to teenagers. Several studies have found that less than 2% of minimum-wage employers took advantage of the subminimum wage clause (see Katz and Krueger (1992), and Spriggs, et al. (1992)). One reason for this behavior is that firms are concerned about internal equity, and they do not want to pay workers performing the same work differently. But this finding suggests that minimum wage

²⁵One reason for the low compliance with WARN is that firms have many possible exemptions. In addition, enforcement involves the courts, which may not be worth workers' expense for the small rewards available.

mandates are less distressing to firms than commonly claimed.

Perhaps an even more remarkable example of a rarely used "escape clause" is that Hawaii's health insurance employer-mandate created a fund for "distressed employers." Employers who are in financial distress because of the mandate are able to apply for relief from a government fund. But only a tiny minority of employers have requested such assistance (OTA (1993)). One has the sense that employer behavior would be different on the mainland, but Hawaii's experience suggests that the health insurance mandate did not create an overwhelming burden on employers if so few requested assistance.

From a practical standpoint, there are two important reasons to phase in new mandates slowly over time. First, wages will have a chance to adjust to the mandate if it is known that the mandate will be imposed well in advance. Since wage adjustments are important for blunting employment losses, this will be an advantage. Second, employers will be able to adjust personnel policies in response to the mandate.

Another practical issue is how much of the nominal financing burden of a mandate should be born by employees, and how much by employers. The answer to this question typically given by economists is that in the long run it doesn't matter, because wages will adjust to offset whatever division there is between employer and employee costs. However, there are three practical considerations which make the division of the nominal burden of interest. First, because of the minimum wage constraint, wages cannot always adjust in the long run. Making employees bear a larger share of the nominal burden will then cushion

any employment losses due to this constraint.²⁶

Second, for a fixed tax rate, the amount of revenue collected will vary depending on the nominal burden. For example, suppose that a tax rate of 10% is set to finance a mandate, and workers earn \$300 per week. If the nominal burden of the tax is placed on employers, then wages would be expected to fall, and a reasonable expectation is that 80% of the burden will be shifted to workers in the form of lower wages. Thus wages could be expected to fall by around $.80 \times \$30 = \24 per week. As a result, in the long run the tax will be applied to a salary of \$276 per week. However, if the 10% tax is split evenly between workers and employers, then before-tax wages will fall by just \$9 per week. Since revenues are determined by multiplying the before-tax wage by the tax rate, at a fixed tax rate the amount of money collected will be higher if workers pay a larger share of the nominal burden. In this example, 5% less revenue will be collected if employers pay the full tax and the tax rate is constant at 10%.

A third reason for possibly preferring that workers shoulder a larger share of the nominal tax burden is that, in the long run, one would expect that workers will bear most of the cost of the tax, so the long run will arrive sooner if workers' share of the nominal burden is larger. If wages are downwardly rigid in the short run, then shifting a larger share of the nominal burden to workers will reduce job loss.

Finally, it should be stressed that if possible, there are often advantages to making mandated benefits "tradeable." For example, suppose firms are mandated to provide a

²⁶An alternative approach is to allow employers who provide health insurance to pay a subminimum wage, as is done in Washington, D.C. for laundry workers. With universal coverage, a credit towards the minimum wage could be allowed.

benefit that workers do not value, and that the benefit serves no other purpose. If provision of this benefit is costly to firms, then everyone could be made better off if firms were allowed to "buy off" workers instead of provide the mandate. This is just a special case of the Coase principle, which asserts that as long as property rights are tradeable and well established, then the initial allocation of property rights will not affect the efficiency of the market. A clear example of this principle has to do with employment at will (see Krueger (1991)). Until recently, the tradition in the U.S. has been that employers could fire workers at will. Firms owned the property right to the job. Workers and firms, of course, could write contracts to restrict this right, and unions typically negotiate just-cause firing standards. Legislation in Montana restricts employers' ability to fire at will, but allows the parties the authority to write limited contracts that allows the firm to fire the worker for any reason after a specified period. This legislation essentially shifts (part of) the property right to jobs to workers, but allows the parties to trade that right subsequently.

V. Political Economy of Mandates

Several factors explain the current political popularity of employment-based mandates in general, and of employment-based health insurance mandates in particular. First, the costs of mandates are hidden. Rather than directly raise revenue, the government can conceal the cost of mandates by having workers and firms bear them. The revenue needed to finance the mandate does not go through the government, so the government can avoid the appearance of raising new taxes. Mandates have gained increased currency in the U.S. because of concern over the high budget deficit and rising resistance to direct taxation.

These factors may explain the already high use of payroll taxation to finance social programs in the U.S.

Second, unlike the costs, the benefits of mandates are highly visible. It is clear to all that workers receive the benefit because it is mandated. But if the government uses market incentives (e.g., price subsidies or vouchers) to encourage consumption of some benefit, increased consumption may result but it is unlikely that politicians will receive credit for the greater access. Furthermore, many politicians are skeptical that altering market incentives will result in changed behavior; even though, as noted above, there is substantial noncompliance with mandates.

Third, mandated health insurance builds on an existing structure. And that existing structure creates lobby groups that want to preserve features of the current system. More than two-thirds of the uninsured are full-time, full-year workers or are in families that are headed by a full-time, full-year worker. Moreover, nearly 80 percent of those with medical insurance already obtain their insurance from an employer-sponsored plan.²⁷ Consequently, an employer mandate has the potential to extend health insurance coverage to a large number of uninsured individuals without radically restructuring the insurance industry.

Finally, it is often under-appreciated that a strong social insurance system (perhaps funded by mandates) may make other desirable policies more politically feasible. For example, a key political issue with the North American Free Trade Agreement (NAFTA) is that freer trade with Mexico will create some winners and some losers among U.S. workers.

²⁷These statistics are from Chollet (1987).

The winners will probably be made better off by more than the losers will be made worse off. But unless the losers are compensated, they have a legitimate reason to strongly oppose NAFTA. A strong safety network would cushion the losses of the losers, and make policies like NAFTA more likely to pass.

VI. Conclusion

If one starts from the position that the labor market works according to the assumptions of the conventional neoclassical model, there are no good economic reasons to use employment-based mandates. This paper has reviewed reasons why the classical assumptions may fail, in which case employment-based mandates may be useful. The decision of whether to have an employment-based mandate must be made on a case-by-case basis, weighing the efficiency losses of mandates against the gains, as well as comparing employment-based mandates to other financing mechanisms. The strongest case for employment-based mandates seems to me to be in situations where the employer has some direct control over a behavior, and requiring the employer to bear some of the cost of the mandate can improve economic efficiency. An example of this situation is experience-rating in workers' compensation and unemployment insurance. In many other situations, employment-based mandates are unlikely to dominate alternative financing mechanisms.

George Stigler (1992) argued that, "all durable social institutions, including common and statute laws, must be efficient." He even went on to argue that, "lacking a cheaper way

of achieving domestic subsidy, our sugar program is efficient."²⁸ There may be a grain of truth to Stigler's view -- at least it is a useful antidote for those who assume everything the government does is evil. Employment-based mandates are widely used in the U.S. and elsewhere, and they have clearly been durable. Employment-based mandates thus pass the Stigler test. But the reason for the popularity of employment-based mandates probably lies more in their political feasibility than in their inherent efficiency. Other financing schemes are difficult to achieve because politicians resist raising new taxes. The better route for policy may be to remove the barriers that prevent alternative, more efficient mechanisms from being used, rather than use a "second best" solution.

There is no obvious efficiency reason why mandated health insurance should be tied to work. The historical reasons for work-related health insurance stem from responses to price and wage controls in the 1940s, union bargaining, and adverse selection problems (see Muntz (1967)). Price and wage controls are no longer an issue, and there are other ways the government can solve adverse selection that do not involve an employer mandate. Other solutions to failures in the health care market may be more efficient than an employment-based mandate. Nevertheless, my calculations of the employment and wage effects of an employment-based health care mandate indicate that the employment loss due to the mandate is not great, mainly because workers' labor supply decisions are relatively insensitive to wages. If this is correct, then an employment-based health insurance mandate may not be much more inefficient than other, probably politically infeasible, policies.

²⁸This point has also been made by Victor Fuchs (1972) in regards to national health insurance.

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Figure 1

A. Effect of Health Mandate on Uninsured

B. Effect of Health Mandate on Insured

Figure 2

**Effect of Health Mandate on Labor Market:
Demand and Supply Shifts**

Table 1
Two-Sector Model of Employment Effects of Clinton Health Care Mandate

	Uninsured	Insured	All
Number of Wage Wage and Salary Workers	50.1 m	61.3 m	111.4 m
Percent Covered by Employment Mandate	80.6%	99.1%	90.8 m
Number of Workers Covered by Mandate	40.3 m	60.8 m	101.1 m
Average Annual Earnings of Covered Workers	\$14,692	\$30,993	\$23,986
Current Health Insurance Premium	0	\$2,989	\$1,798
Forecasted Premium	\$1,426	\$2,575	\$2,117
Premium Change as Pct. of Average Earnings	9.71%	-1.34%	1.33%
Predicted Employment Change	-279,595	67,679	-211,916
Predicted Earnings Change	-\$1,019	\$345	-\$199

Notes: Figures are author's calculations based on March 1992 CPS. Employment is based on Economic Report of the President, 1993, and author's estimates of the number of private household and agricultural workers. Average annual earnings were converted from 1991 dollars to 1993 dollars assuming 3% wage growth per year. See text for a discussion of the predicted employment and earnings changes.

Table 2: Selected Characteristics of Workers Covered by Health Care Mandate, by Employer-provided Insurance Status

Characteristic	Uninsured	Insured
Average Age	34.4	40.0
Average Weekly Hours	36.8	42.1
Percent Insured	100.0%	57.0%
Percent Female	54.4%	41.9%
Percent White	82.9%	86.7%
Percent Black	13.2%	9.9%
<u>Selected Industries</u>		
Percent Retail	23.3%	10.6%
Percent Wholesale	3.5%	4.6%
Percent Manufacturing	11.5%	23.6%
Construction	7.5%	4.9%
<u>Selected Occupations</u>		
Managers	8.4%	15.3%
Professionals	8.9%	16.2%
Administrative Support	15.9%	17.9%
Sales	12.7%	9.5%
Service	17.6%	5.9%
Private Household	1.4%	0.02%

Notes: Figures are the percent of workers in each column that fall into the reported group. Insurance must be in own name to be considered insured. Based on author's calculations of the March 1992 CPS.

Table 3

Alternative Estimates of Employment and Wage Effects of Health Care Mandate

<u>Uninsured</u>		<u>Insured</u>		<u>Employment Change</u>			<u>Annual Wage Change</u>		
e_s	e_d	e_s	e_d	Uninsured	Insured	All	Uninsured	Insured	All
0.10	-0.50	0.10	-0.50	-326194	67679	-258515	-1188	345	-267
0.10	-0.25	0.10	-0.50	-279595	67679	-211916	-1019	345	-199
0.20	-0.50	0.10	-0.50	-559190	67679	-491511	-1019	345	-199
0.20	-0.25	0.10	-0.50	-434926	67679	-367247	-792	345	-109
0.10	-0.50	0.10	-0.75	-326194	71660	-254534	-1188	365	-254
0.10	-0.25	0.10	-0.75	-279595	71660	-207935	-1019	365	-187
0.20	-0.50	0.20	-0.50	-559190	116021	-443169	-1019	296	-187
0.20	-0.25	0.20	-0.50	-434926	116021	-318905	-792	296	-138

Note: e_s and e_d represent the assumed values of the elasticity of supply of labor, and demand for labor in each sector.

Table 4

Effect of Firm Payroll Cap on Incentive to Subdivide Hypothetical Firm

One Firm

50 employees @ \$10,000
 50 employees @ \$100,000

1. Total payroll	\$5.5 million
2. 7.9% of payroll	\$434,500
3. \$2,000 x 100 employees	\$200,000
4. Health care costs (Lesser of 3 and 2)	\$200,000

Two Firms

Firm A

(50 employees @ \$10,000)

1. Total payroll	\$500,000
2. 7.9% of payroll	\$39,500
3. \$2,000 x 50	\$100,000
4. Health care costs (Lesser of 3 and 2)	\$39,500

Firm B

(50 employees @ \$100,000)

1. Total payroll	\$5,000,000
2. 7.9% of payroll	\$395,000
3. \$2,000 x 50	\$100,000
4. Health care costs (Lesser of 3 and 2)	\$100,000

Bottom Line

Combined health care
 costs of Firm A and Firm B \$139,500

Savings from splitting up \$60,500