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# THE ECONOMICS OF EMPLOYER VERSUS INDIVIDUAL MANDATES

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by Alan B. Krueger and Uwe E. Reinhardt

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**Prologue:** *America's belief in solving large problems through private/public collaboration has not guaranteed a solution to President Clinton's quest for universal health insurance coverage. The administration's proposed requirement that all employers provide their workers with health insurance coverage has been attacked by the small-business community and most Republicans as too regulatory for the American appetite. The administration's plan also would require that unemployed and self-employed persons be subjected to a coverage mandate. In this paper economists Alan Krueger and Uwe Reinhardt argue: "If policymakers wish all Americans to have portable health insurance coverage, they must mandate that coverage. . . . Absent a mandate, millions of American families would simply choose to remain uninsured." Krueger and Reinhardt, both of whom are professors of economics at Princeton University, discuss the financing of health care, explaining how most practitioners of their discipline view a mandate on employers to provide health insurance to their workers. Krueger is the Bendheim Professor of Economics and Public Affairs at Princeton's Woodrow Wilson School. He is coeditor of the *Journal of Economic Perspectives* and has published widely on labor market issues. He received his doctorate in economics from Harvard. Reinhardt is a well-known figure in health policy circles in the United States and abroad. A born teacher and a naturalized American, Reinhardt spent his early years in Germany, but he took his university training in Canada and at Yale University, from which he earned a doctorate in economics. Reinhardt has eclectic intellectual tastes. While a strong believer in markets, he also recognizes Canada's tax-financed health care system and Germany's social insurance scheme as approaches that provide their populations equitable protection against the uncertain nature of illness.*

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**Abstract:** This paper reviews the economic implications of employer and individual health insurance mandates. Although the cost of meeting an employer mandate is nominally paid by employers, in the long run much of the cost may be shifted backward to employees in the form of lower wages. We also compare the consequences of hypothetical employer and individual health insurance mandates for families with different income levels. Depending on their structure, an employer mandate may be more or less progressive than an individual mandate.

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Current efforts to reform the American health care system have two major objectives. First, all Americans are to have adequate health insurance coverage, a goal commonly defined as universal coverage. Second, the delivery of health care is to be rearranged to make it more efficient; that is, the appropriate health care, and only the appropriate care, is to be given to patients at the lowest feasible cost.

Both of these objectives are to be achieved by rearranging the way American health care is financed. When exasperated commentators lament that our current debate on health reform is “all about money,” they are literally correct, but they miss the mark. A restructuring of our vast health care delivery system cannot be achieved through direct government edict in this country. That restructuring will be sought as a natural response to the new financial incentives inherent in a rearranged flow of money.

That flow of money can be broken down into two major streams. First, money must be collected into one or several privately or publicly administered insurance funds. Second, money must be disbursed from those collective insurance funds to the providers of health care. The first facet is generally referred to as the *financing* of health care. The second embraces the issues of *reimbursement* and *cost control*.

This paper focuses on the financing of health care. We begin our discussion with some remarks on certain basic facts of life regarding health care financing—facts that are widely perceived as troublesome and often avoided. In the next section we explore in some depth the economist’s standard view of one highly controversial method of financing health care: a mandate upon employers to procure health insurance for their employees and their dependents. Next we present several simulations that compare the effects of a hypothetical employer mandate with a hypothetical individual mandate on U.S. households. Finally, we recommend a compromise between an employer and an individual mandate: premiums calculated as a flat percentage levy on the gross wages of the individual employee but collected at the nexus of the payroll.

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### Facts Of Life In Health Care Financing

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Politicians contemplating the reform of our health care system cannot run away from certain basic facts of life that are so obvious that they seem

regularly forgotten: (1) Every penny of financing for health care ultimately must be extracted from private households. Government and business are mere intermediaries in this flow. (2) If there is to be universal health insurance coverage, substantial additional transfers of funds must be made from households in the upper half of the nation's income distribution to households in the lower half. (3) To achieve truly universal health insurance coverage, households must be mandated to procure that coverage or employers must be mandated to procure it on behalf of households.

**Extracting money from households.** The transfer of money from private households to the providers of health care can be achieved by three distinct methods, which span the set of feasible approaches.

Under the first approach, individual households purchase individual insurance policies directly from private insurance carriers or seek individual coverage through group policies procured by some private association, possibly with the support of public subsidies. Less than 10 percent of the nonelderly U.S. population currently procures private health insurance this way, so far without any public subsidy whatsoever.<sup>1</sup> In fact, nowhere in the world is this the predominant mode of health care financing.

Under the second approach, government taxes private households and funnels these taxes to an insurance fund. This approach is favored in Canada and in many European countries. But even in the United States more than 42 percent of all national health spending now follows this route, covering some sixty-three million Americans, or 25 percent of the population. This public system includes Medicare for the elderly, Medicaid for the poor, the purely socialized health systems of the Department of Veterans Affairs, and sundry delivery systems of the Public Health Service.

Finally, under the third approach, private and public employers procure insurance coverage from private or public insurance carriers. This employment-based approach is the backbone of the social insurance systems of Europe, Latin America, and Asia, where the employer's participation in health care financing has long been mandatory. In the United States about 71 percent of the nonelderly population obtains insurance coverage by this indirect route, although not so far on a mandatory basis nor in a way that makes the insurance portable (as it is under social insurance). Of course, when employers finance health care, they always recoup their outlays, dollar for dollar, either in the form of higher prices for consumption goods or through reductions in take-home pay to employees, or both. It follows that an outright mandate on business to act as this sort of pumping station indirectly imposes fiscal levies on private households as well. The empirical question, to be explored further in this paper, is which households are made to bear what share of the burden.

If one surveyed economists on the question of which of these three

approaches to financing health care makes the most sense from the viewpoint of economic theory, the winner undoubtedly would be the first approach, the one actually chosen by less than 10 percent of the American population. As a matter of principle, economists advocate arrangements under which consumers, producers, and politicians make decisions based on incentives that meet two criteria: (1) the incentives are distorted as little as possible by taxation, and (2) the parties involved are as aware of the incentives as they can possibly be. It follows from this principle that individual households should purchase their own health insurance using their after-tax income and that families with insufficient means to purchase coverage on their own be subsidized by highly visible, tax-financed public subsidies that reflect the general public's charitable sentiments.

**Subsidizing poor households.** Unfortunately, the public subsidies required to help poor households buy coverage would not be trivial. A typical health insurance policy now costs around \$2,200 for an individual and close to \$5,000 for a family of four or more, even if purchased at community-rated premiums established for large groups of insured people. As the distribution of family income in the United States indicates, possibly as many as 20 percent of American households—and certainly the bottom 15 percent—would have great difficulty absorbing such a premium in their relatively meager budget (Exhibit 1).

Just where one sets the threshold at which public assistance needs to be given is, of course, a purely subjective matter. It lies at the heart of our current debate on health policy. Commenting on Rep. Jim Cooper's (D-TN) well-known reform plan, for example, *The New York Times* recently opined in its lead editorial:

**Exhibit 1**  
**Percentage Of American Families In Income Categories, 1990**

Income category	Percent of families	Cumulative percent
Less than \$5,000	3.6%	3.6%
\$5,000-\$9,999	5.8	9.4
\$10,000-\$14,999	7.5	16.9
\$15,000-\$24,999	16.4	33.3
\$25,000-\$34,999	16.2	49.5
\$35,000-\$49,999	20.1	69.6
\$50,000-\$74,999	18.2	87.8
\$75,000-\$99,999	6.9	94.7
\$100,000 or more	5.3	100.0

**Source:** US. Bureau of the Census, *Current Population Reports*, Series P-60, no. 174 (1991); cited in J.R. Kearl, *Principles of Microeconomics* (1993). 609, Table 3.

**Note:** Median U.S. income is \$35,353.

He [Congressman Cooper] would provide subsidies for families earning twice the poverty-line income or less to buy insurance through cooperatives. But that could still mean a family earning \$30,000 would have to buy a \$5,000 policy on its own. Mr. Cooper calls that universal access; we call it merciless.<sup>2</sup>

*The New York Times's* notion of “merciful” health reform implies that the health insurance coverage of close to the entire bottom half of the U.S. income distribution be partially or fully subsidized by the upper half. The total flow of such subsidies could easily exceed \$100 billion, depending upon the generosity of the benefit package covered by the insurance, the degree of cost control imposed on providers, and the precise cutoff line for the subsidies. Of course, many such cross-subsidies are already being made by our current health system, albeit in a pattern that does not fit any known social ethic. These subsidies flow helter-skelter, in all directions.

The twenty-nine million low-income Americans enrolled in Medicaid evidently are beneficiaries of a top-to-bottom income redistribution. So are many low-income elderly Americans enrolled in both Medicare and Medicaid. But there are also many well-to-do elderly who extract from Medicare much more than they deposited in it during their work years and who now find themselves the happy recipients of billions of dollars in outright charity from below.<sup>3</sup> To these subsidized, well-to-do elderly should be added the lucky millions of high-income employees whose companies purchase for them health insurance out of pretax income. This is a tax shelter known to bestow the bulk of the implied “tax expenditure” on the upper-income groups. To families in low tax brackets, this tax shelter means only a handful of dollars; to families in the upper-income groups, it can mean \$2,000 tax savings toward the purchase of health insurance. According to estimates by Lewin-VHI, in 1991 fully 26 percent of the \$70 billion or so in taxes avoided through this shelter went to families earning \$75,000 or more, and only 6 percent to families earning \$20,000 or less.<sup>4</sup>

One of the common arguments against health reform is that this country simply cannot “afford” to subsidize with public funds further millions of uninsured low-income Americans. Those who make this argument, however, must somehow come to grips with the fact that for years Congress has funneled to the upper levels of the income distribution more funds in outright subsidies or tax expenditures than it would take to subsidize generously the insurance coverage of all low-income uninsured Americans. Thus, the proposition that we just cannot “afford” to fold all of the uninsured quickly into mainstream American health insurance is unconvincing. A more accurate statement would be that America’s middle and upper classes are not now willing to redistribute any more funds to lower-income groups, although the better-off have no objections to a myriad of hidden cross-

subsidies among themselves, or even from middle- to upper-income groups.

**The need to mandate health coverage.** If policymakers wish all Americans to have portable health insurance coverage, they must mandate that coverage. This is the third basic fact of life in health care reform. Absent a mandate, millions of American families would simply choose to remain uninsured, even if they could afford to buy insurance with some subsidies and some belt tightening. A strategy to remain uninsured is not completely reckless, because this nation already has a more or less universal catastrophic health insurance system: the hospital emergency rooms that are obligated to treat all comers, and the hospitals attached to these emergency rooms. Although this safety net is neither perfect nor comfortable, its existence is an open invitation to free riding in health care.

The simplest but also the most controversial form of such a mandate would be to bestow upon all Americans tax-financed health insurance, say, on the Medicare model or on the Canadian model. This approach is now said to be “off the table,” because the American public presumably does not like it. Although this may be the case, it takes effort to reconcile that perception with the fierce way America’s usually rather conservative elderly protect their government-financed, government-run Medicare program. So jealously is that public program guarded by the elderly that no politician dares touch it. Perhaps there is more latent support for such a system for the broader U.S. population than seems apparent, possibly because government programs are more stable and more reliable than private insurance over time. In part, of course, this loyalty to government-run insurance may simply show that the elderly know a good deal when they see one.

The only alternatives to mandated, government-financed health insurance for all are (1) a mandate on employers to provide adequate private coverage for all workers (the “employer mandate”), or (2) a mandate on households to procure adequate private insurance coverage, either through purchase of an individual insurance policy directly from a private carrier or through a group policy voluntarily made available by an employer or any other association of private individuals (the “individual mandate”).

Those who would mandate all employers to provide all employees with health insurance do not do so on the basis of economic principles or on the notion that the losers under a public policy should be fully and explicitly informed of their fate. More probably, these advocates advance the proposal simply as a political expedient. These experts, such as Alain Enthoven, Richard Kronick, and the Jackson Hole Group, can claim to be building upon the American tradition of financing health care through the workplace. There is something to that argument. But it is probable as well that these astute students of American health politics found it preferable to erect their health reform plan upon a financing scheme that camouflages

the true impact of health care financing. The political theory here seems to be that if the true impact were known to the body politic, health reform would be dead on arrival. A similarly pragmatic theory, one must suppose, lies at the heart of President Clinton's reliance on the employer mandate, whose basic structure, incidentally, seems to have been copied verbatim from the dicta of the Jackson Hole Group.

Those who propose the individual mandate as a means to universal coverage can claim to be inspired by sound economic principles and a vision of democracy that would like to see all income transfers among economic classes made highly visible. Unfortunately, that very visibility is likely to create a political barrier to universal coverage. On the one hand, citizens who would be summoned to the cashier's window would be more likely to object if they were taxed explicitly. On the other hand, if low-income American households were required to pay directly for their health insurance coverage, they probably would be much more vocal in their quest for government subsidies than they would be if they were made to pay for their own health insurance coverage implicitly, through gradual reductions in pay raises over time—which is the chief mechanism by which an employer mandate would most likely be financed in the longer run.

The individual mandate triggers the added problem of confronting low-income families with relatively high losses in incremental disposable income as earned income rises. For example, suppose insurance for families at or below the official poverty line were fully subsidized by the government and that subsidy were completely phased out at 200 percent of the poverty level. Then a family of four would lose a subsidy of about \$5,000 (the typical health insurance premium for such a family) as its income rose from about \$14,000 per year to about \$28,000 a year. This melting away of the subsidy is equivalent to a marginal income tax rate for the loss of health insurance subsidies alone of about 35 percent ( $\$5,000/(\$28,000-\$14,000)$ ). Added to federal income taxes, Social Security taxes, and the phaseout of the earned income credit, the individual mandate thus would present millions of low-income American families with total marginal tax rates in excess of 75 percent. Such high marginal tax rates may well make unemployment and welfare an attractive alternative to working. It would be the antithesis to supply-side economics.

Finally, those who espouse the individual mandate and a speedy move toward universal health insurance coverage must be willing to countenance a sizable transfer of vouchers to low-income families—on the order of at least \$50 billion to \$80 billion a year—if universal coverage were to be realized within the next few years. On the other hand, if transfers of this magnitude are not contemplated in connection with an individual mandate, then one implicitly countenances a lengthy and possibly permanent

postponement of universal coverage.

In what follows, we explore in greater depth the economic theory of employer mandates. Economists find this theory so plausible that they rarely seek to explain it to noneconomists, who, alas, typically find the theory quite implausible. As we point out, this divergence of perception appears to stem mainly from the length of the time period contemplated. Business people of the so-called real world tend to posit short time frames in predicting their reactions to changes in public policy. In the process they tend to abstract unduly from longer-run effects. Economists, on the other hand, tend to conduct their inquiries with a method they call “comparative statics,” that is, an examination of the changes a public policy stimulus—such as the imposition of an employer mandate—has triggered in a market after the market has fully adjusted to the new policy, over the longer run. Economists tend to abstract unduly from the short-run dynamics by which markets actually move from one steady state to the next. The confusion surrounding the debate on employer mandates, and the apparent divide between economists and noneconomists over the issue, is a result of these predilections on the part of both camps.

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### The Economic Theory Of Employer Mandates

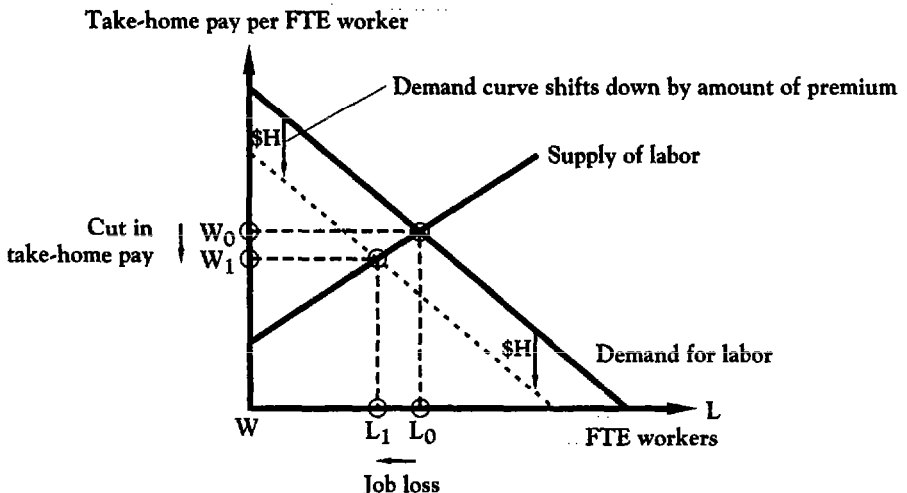
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The economic theory of employer mandates is best understood if one imagines a highly competitive labor market in which workers of a given level of skill sell some of their time in return for wages. Exhibit 2 is a very

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Exhibit 2  
Impact Of Employer Mandate In An Uninsured Industry

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simplified analytic rendering of such a market, as it would be presented to first-year students in an introductory economics course. Although this graph may evoke unpleasant memories of college days, practical readers from the so-called real world may find it worthwhile to invest some time in mastering this analytic apparatus. First, it provides clues to the mystery of why there are so many varying estimates of the “job loss” associated with an employer mandate. Second, it also can help to explain why the magnitude of the employment effect can sometimes be predicted simply by the political allegiance of the academic or the think tank making the estimate.

The vertical axis in Exhibit 2 represents  $W$ , the annual wage paid to workers in this market. The horizontal axis represents the total number of full-time-equivalent workers (FTEs) per year offered or sought in this market. We assume initially that the firms here do not offer their employees any fringe benefits at all, so that total debits also represent employees’ total take-home pay. Although that assumption is not realistic, no major insights are lost by making it, and much ease of graphic exposition is gained.

It seems plausible to assume that the market’s demand for labor is downward-sloping to the right—that more FTEs will be hired by the industry as total annual wage per FTE falls. The precise shape and position of this demand curve depends primarily on two factors. First, other things being equal, the easier employers in this market find it to substitute labor-saving capital for labor in the production of output, the flatter (the more wage-sensitive or “wage-elastic”) will be the demand curve for labor.<sup>5</sup> Second, the more price-sensitive is consumers’ demand for the products produced by the employers hiring labor in this market, the flatter (the more wage-sensitive) will be the employers’ demand curve for labor.

Similarly, it seems plausible to posit an upward slope for the supply of labor to this market. The higher the wage offered by employers in this industry, the more likely will individuals seek gainful employment in it. The flatter the curve is (the more wage-sensitive), the easier it is to find roughly equally lucrative employment elsewhere in the economy, or the more attractive it is simply to stay out of the labor force altogether, perhaps because good unemployment benefits or welfare support is available.

Suppose the solid demand and supply curves shown in Exhibit 2 represented the behavior of employers and potential employees in this market prior to the imposition of an employer mandate. Given the demand and supply curves depicting that behavior, that market would settle down at a market-clearing wage of  $W_0$ , at which  $L_0$ FTEs would be employed. Economists call this situation “equilibrium.”

Now suppose government mandated all employers in the economy to purchase for their employees a comprehensive health insurance policy. Suppose further that this insurance cost  $\$H$  per FTE per year. To keep

matters simple, let us assume that the employer are mandated to “pay” 100 percent of the premium. Finally, let us assume that the workers supplying labor to this market do not value this mandated fringe benefit as something inherent in the job, perhaps because they would be granted an equally good, tax-financed package free of charge if they were unemployed.

On these assumptions, how would such a mandate alter the market-clearing equilibrium in the labor market modeled in Exhibit 2 in the long run, after the market had ample time to adjust fully to the mandate? As illustrated, the demand curve in this market would eventually shift down vertically by precisely the magnitude of the health insurance premium,  $\$H$ . This downward shift implies that employers’ reaction to the mandate would be an attempt simply to cut the take-home pay per FTE by exactly  $\$H$ , so that at any given level of employment ( $L$ ), total compensation, including the premium  $\$H$ , would be what total compensation had been at that employment level prior to the mandate.

Some workers employed prior to the mandate would not take this attempted wage cut lying down. As many as  $L_0 - L_1$  of them would exit this labor market and possibly quit working altogether. That is what is meant in the media and in Congress by the so-called employment effect or job loss effect. As a result of this job loss effect, the new market-clearing take-home wage actually would not fall from the original  $W_0$  by the entire amount of the premium, that is, by the full  $\$H$ . Instead, it would fall only to  $W_1$ , by an amount smaller than the premium  $\$H$ . The explanation for this phenomenon is that part of the premium shock would be absorbed by a reduction in employment rather than a cut in take-home wages.<sup>6</sup>

Noneconomists, and particularly business people from the so-called real world, usually do not believe the story implied by Exhibit 2. Few business people would admit that in the face of an employer mandate costing, say,  $\$3,000$  per employee they would even attempt to cut their workers’ wages by that amount. Most of them would argue that a good portion of the cost would simply be absorbed by the owners in the form of lower profits or by workers who would be laid off, and many of them would argue that they would simply close their business. Economists should have sympathy for these tales from the real world, but they should not concede too easily.

First, it is not clear how many firms would actually close if all of them were saddled with exactly the same additional cost per employee. This is an important point. More often than not, the stories of business closings presented to policymakers by concerned business people seem to spring from an imagined scenario in which one firm in the market is saddled with the additional labor cost of an employer mandate, while all other firms in the market remain unscathed. But if all firms in the market were made to bear the same additional labor costs, the bulk of them probably would

adjust in the short run through a combination of higher prices for their output, lower wages for their employees, and lower profits for the owners, and for the most part they could get away with it because all firms would be pursuing these policies in unison.

Economists are convinced, however, that in the longer run more and more of the cost of the employer mandate would likely be shifted backward to employees, not through outright and irritating wage cuts, but through smaller real (inflation-adjusted) increases in wages than would have been warranted by long-run productivity gains. In other words, in the longer run the cost of the employer mandate most likely will be shifted backward to employees in a gradual manner that many of them may not even notice.

So much for the economic theory of employer mandates. Even at this rudimentary level, it becomes obvious why the empirical estimates of the employment effects attributed to the president's employer mandate range all over the map: The magnitude of that effect depends crucially on the assumed shape of the labor demand and supply curves—on the assumed wage-sensitivity (wage-elasticity) of these curves. To gain some insight into this proposition, the reader may wish to retrace Exhibit 2 with the same demand curve, but with a much steeper (wage-insensitive) supply curve that cuts the demand curve at the original equilibrium point. A wage-insensitive (wage-inelastic) supply curve signifies that most workers in this market would keep on working even after a large cut in take-home pay, simply because working elsewhere or not working at all would remain relatively unattractive. If that assumption is made, it will be seen that the same employer mandate will cause a relatively larger cut in take-home pay but a much more modest job loss, even if the labor supply curve did not shift outward.

On the other hand, suppose the supply of labor in this market were very wage-sensitive (wage-elastic). Here the reader would retrace Exhibit 2 but impose on it a very flat supply curve. It would be found that, in this case, the same employer mandate would cause only a relatively modest cut in take-home pay but a rather large cut in employment. Workers would quickly become disillusioned and quit this labor market (and perhaps quit working altogether), as employers tried to cut their take-home pay. At the extreme, if these employees were paid the minimum wage, not a penny of the premium  $\$H$  could be shifted backward.<sup>7</sup> The entire effect of the mandate would show up in unemployment or increased total compensation per FTE (and, therefore, increased product prices).

Similarly, if one retraced Exhibit 2, leaving the supply curve as it is but positing a very flat (wage-sensitive) initial labor demand curve (perhaps one close to being horizontal), then one would discover that the mandate would cause a relatively large cut in both take-home wages and employ-

ment, relative to the premandate equilibrium. Employers hiring in this labor market would not tolerate any significant increase in total compensation per FTE. Instead, they might simply cut back drastically on production (some might even shut down) or switch to labor-saving capital. In that situation, postmandate take-home pay would have declined by virtually the entire amount  $\$H$ ; the cost of the mandate would have been fully shifted backward to employees.

Finally, if the demand for labor were extremely wage-insensitive (very steep), then the wage and employment cuts caused by an employer mandate would be relatively small. In this case, employers could not easily substitute labor-saving capital for labor, or they would lose relatively little sales volume if they raised the prices of their output, or both.

The important public policy insight one gains from exercising the model in this way is that the estimated wage and job effects attributed to an employer mandate are powerfully driven by the wage-sensitivity posited for both the labor demand and the labor supply curves in U.S. labor markets. Unfortunately, the available empirical literature has yielded wide ranges for these wage-sensitivities, which permits analysts to pick and choose, within limits, among the available estimates. In the process, assumptions drive conclusions.

The preceding model also helps to nail down precisely what economists might mean by “backward” or “forward” shifting of employer mandates. Economists assume, correctly in most cases, that when employers bargain with workers or their union representatives, the “price” employers have in mind is always total compensation, which one might define as all of the debits employers must make to the payroll expense account per year and per FTE. Strictly in terms of accounting, at any market-clearing equilibrium “price” for labor it must therefore be tautologically true that take-home pay equals total compensation minus the cost (to the employer) of all fringe benefits (mandated or voluntary). In an accounting sense, then, it is always tautologically true that, at any point in time, 100 percent of the cost of fringe benefits is shifted “backward” to employees in the form of lower take-home pay. That is not quite the definition of cost shifting that economists have in mind when they discuss the incidence of a new fringe benefit mandated on employers. Here economists start with the premandate equilibrium wage and employment levels and inquire whether, at the new postmandate equilibrium, employees’ take-home pay has decreased by the full cost of the mandated benefit or by less.

Several other analytic observations should be made about employer mandates before we leave this topic. First, the labor supply curves of individual industries are much more wage-sensitive than is the labor supply curve for the economy as a whole. This is nothing but common sense,

elegantly put. When Industry A cuts wages and other industries do not, then workers in A will quickly migrate to other industries. The labor supply curve of that industry is relatively flat. On the other hand, when wages fall in every industry in the economy, then there is really no place for workers to go but the unemployment line. It follows that the entire economy's labor supply curve will be much steeper—much more wage-inelastic. The practical implication is that one should never assess the effect of an employer mandate by imagining one single firm, as is so often done in the media or in testimony before Congress. An employer mandate imposed upon only one firm in a town and not on that firm's competitors could easily cause that one firm to shut down. But to reason thus is to succumb to the famous *fallacy of composition*, that is, the fact that what is true for a single part of a system may not be true for the system as a whole.

Second, what has been illustrated above for an industry that does not offer its employees any health insurance also can help us understand what an employer mandate would do for an industry that already does offer employees health insurance voluntarily. In a nutshell, if the cost of the mandate to employers were identical to the cost already booked by them for the voluntary program, then the mandate would have no impact on that industry. On the other hand, as President Clinton claims, an employer mandate might substantially reduce the cost of health insurance per FTE for firms that now provide health insurance. This reduction is to be achieved through general cost controls on the entire health sector and through the elimination of the cost shift by which insured firms now pay for the health care of uninsured Americans. But within the pool of firms that now do insure their employees there would be a redistribution of costs through the mechanism of community-rated premiums, which would redistribute health insurance costs from firms with relatively older or sicker employees to firms with a relatively younger and healthier work force.

For firms or industries experiencing major reductions in health insurance cost per FTE, the demand curve for labor should shift up. If one traced that effect in a diagram such as Exhibit 2, one would see both take-home pay and employment rise as a result of these labor-cost reductions. Some analysts now commenting on the president's health plan have, indeed, factored these positive job and wage effects into their estimates of the overall employment gains or losses associated with the proposed employer mandate. Others have excluded that effect. Their assumption seems to be that the president's cost-control program would in all likelihood fail or that, in any event, the premiums paid by industries now insuring their workers probably would not fall significantly. Whatever the rationale or motive for such inclusions and exclusions in particular studies, we have here yet another source of uncertainty that drives the high variance of job loss

estimates attributed to the president's or any other employer mandate.

**Empirical evidence.** A relatively small number of studies have examined the effects of employment-based government mandates on wages and employment.<sup>8</sup> Most support a conclusion that the incidence of an employment-based mandate falls mainly on employees. In other words, wages tend to decline in response to increased mandated benefits by almost the full cost of the benefit. The reduction in wages tends to lessen any adverse effect on employment.

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### **Distributional Effects Of Mandates: A Simulation**

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A key issue is how the burden of paying for an employer or an individual mandate falls across families with different income levels. To examine the distributional effects, we construct a hypothetical employer mandate and an individual mandate and evaluate how they affect the family income distribution. Because our goal here is to illustrate the general distributional features of employer and individual mandates, we have constructed hypothetical mandates that are easy to model with available data, rather than ones that closely correspond to particular reform proposals,

The employer mandate that we examine is similar to the financing scheme used for Social Security. We assume that employers and employees contribute a combined total of 9.8 percent of each employee's earnings toward health benefits, subject to maximum earnings of \$55,000. The maximum is set at the worker level, rather than an average firm level or a family level. We assume that the employment-based mandate only applies to workers over age eighteen, who work more than ten hours per week, and who are not full-time students. We assume that the incidence of the employment-based mandate falls entirely on workers.

The hypothetical individual mandate works as follows. Families are required to purchase health insurance. We use four family types to determine insurance premiums (single individuals, single-parent families, married couples without children, and married couples with children). We use the Clinton administration's estimates of the cost of these insurance policies.<sup>9</sup> Families that have income below the poverty level receive a voucher that covers 80 percent of the cost of their insurance; they are responsible for contributing the remaining 20 percent. To pay for the vouchers, we add a 9 percent surcharge to the premium contributions for families above the poverty level. We have set the parameters of the individual and employer mandates so that they raise the same level of revenue. The average contribution per family with each of these plans is \$3,570.

For our estimates of the distributional impact of hypothetical employer and individual mandates, we base our calculations on the March 1993

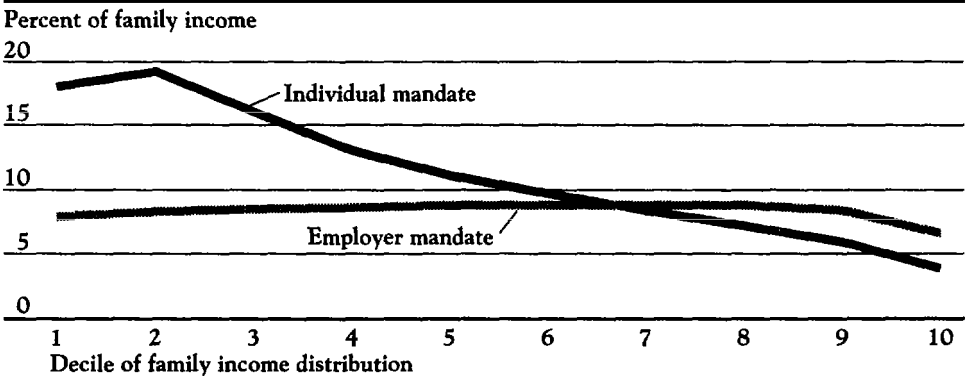
Current Population Survey. Family income and labor earnings are for calendar year 1992. The sample consists of working families whose members are under age sixty-five. From these data we calculate the net benefit (benefit minus contribution), average contribution divided by average family income, and average net benefit divided by average family income.

There are several ways to measure the progressivity of the mandates. Premium contributions relative to income provide one indication of the “tax” burden faced by each income class. But since premium contributions are used to provide health benefits, one should take into account the value of benefits as well.<sup>10</sup> If we value the benefits at the estimated cost of providing them, then the net benefit relative to income provides a broader measure of the progressivity of the entire program. Exhibits 3 and 4 illustrate the distributional effects of the programs.

Perhaps surprisingly, the results of this simulation reveal the employer mandate to be more progressive than the individual mandate for these hypothetical plans. For example, the bottom decile of the family income distribution would contribute 8 percent of family income (\$612) under the employer mandate, and 18 percent of family income (\$1,602) under the individual mandate. The main reason for this disparity is that low-income families tend to have low labor earnings and thus make relatively low contributions under the employer mandate. With an individual mandate, low-income families that are not in poverty will pay a substantial share of their income toward health care benefits. On the other hand, under the assumed plans high-income families pay substantially more for benefits under the employer mandate than under the individual mandate.

The individual and employer mandates look quite similar if the compari-

**Exhibit 3**  
**Distributional Effects Of Employer And Individual Mandates, By Percentage Of Family Income Paid In Insurance Premiums**



Source: Authors' calculations; see text for details.

Exhibit 4

Distributional Effects Of Employer And Individual Mandates, Net Benefit As Percentage Of Family Income

Percent of family income

35

30

25

20

15

10

5

0

-5

Employer mandate

Individual mandate

1

2

3

4

5

6

7

8

9

10

Decile of family income distribution

Source: Authors' calculations; see text for details.

son is made just for families above or for families below the poverty level. Under the assumed employer mandate, families in poverty contribute an average of \$587 toward their health benefits, compared with \$691 under the individual mandate. These results are more similar than the decile-level analysis because several of the bottom-decile families are not in poverty (for example, many of those composed of single persons).

To show that an individual mandate could be made more progressive than an employer mandate, we constructed a second hypothetical individual mandate. In this scenario we assume that families below the poverty level receive a subsidy that covers 100 percent of their health insurance costs. This subsidy is gradually phased out for families earning up to 250 percent of the poverty level.<sup>11</sup> Families earning over this amount pay their full premium costs. To pay for the subsidies to low-income families, families earning above 250 percent of the poverty level are required to pay a surcharge ranging from 1 percent of income for families with income under \$70,000 to 5 percent of income for families with income exceeding \$100,000. It turns out that this hypothetical individual mandate is more progressive than the employer mandate described above. For example, bottom-decile families would contribute only 2 percent of family income



toward health insurance, and families in the second to the bottom decile would contribute 7 percent. Families in the top 10 percent of the income distribution would contribute 8 percent of income toward their own health insurance and for subsidies for the poor. By contrast, our hypothetical employer mandate would average 8 percent of income for the two bottom deciles, and 6.7 percent for the top decile of the income distribution.

The Clinton proposal for an employer mandate, and the various proposals for an individual mandate, no doubt would have distributional effects different from the hypothetical plans we have sketched here. The Clinton proposal differs from our hypothetical employer mandate in two important respects: (1) the cap is set at the average firm level, rather than the worker level; and (2) employer contributions are capped at 80 percent of the weighted average premium level for families of its workers' type in the region. Both of these features serve to make the Clinton proposal less progressive than our hypothetical employer mandate.

Any workable individual mandate will differ from the first plan we have sketched because the voucher will likely be phased out over a certain income range. Our first hypothetical plan would give a substantial voucher to families just under the poverty threshold, but no assistance to families just above the threshold. This feature obviously would encourage families earning just above the poverty threshold to cut back on their labor supply to qualify for a voucher. A common approach to this problem is to gradually reduce the value of the voucher as family income rises. But if the voucher were smoothly phased out to avoid labor supply disincentives, it will have to be offered to a much higher segment of the income distribution, similar to proposed negative income tax plans. This feature would raise the cost of an individual mandate while making it more progressive.

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### Concluding Observations

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The main conclusion we draw from these simulations is that the distributional consequences of an employer mandate are not necessarily worse than those of an individual mandate, or vice versa. The question therefore arises whether this particular reform feature deserves the center stage that it now occupies, and whether reform should be allowed to stumble over a deadlock on this particular issue. Is there a pragmatic compromise on the matter?

Although American policymakers seem reluctant to look abroad for insights on American health policy, it really is instructive to examine how other nations finance their health systems. Unbeknownst apparently to many American politicians and business executives, who claim that health spending makes American business uncompetitive in world markets, many other nations also finance their health care chiefly through the workplace.

That approach lies at the very heart of the social insurance systems that are so popular the world over. All of these nations, however, have avoided two major pitfalls of the current U.S. employment-based system. First, they do not tie an insured family's health insurance to a particular job in a particular company in a way that makes the family lose that coverage with that particular job. Second, these insurance schemes do not levy flat insurance premiums per individual or household, an approach that necessitates the cumbersome system of subsidies now built into the president's scheme. Instead, these nations extract at the nexus of the payroll merely a flat percentage of the individual worker's gross pay. By so doing, these nations have effectively fudged the politically charged dichotomy of "individual" versus "employer" mandates, for their approach could be interpreted as either of the two.

Germany was the first to use that approach; it was introduced there by Chancellor Bismarck in the late nineteenth century.<sup>12</sup> Since that time the approach has been copied with minor variations by many nations in Europe, Asia (including Japan), and Latin America. This approach should not be dismissed as easily as it has been in our health reform debate simply because it may look to some people like a payroll tax.

Indeed, none of the nations using payroll-based financing of health care call these levies *payroll taxes*. In Germany, for example, the levy has always been called the *Beitragssatz*, which literally means *contribution rate*, as distinct from *Steuern*, the German word for taxes. In France, the levy is called *Cotisation Sociale*, which also means *contribution rate* and once again is distinct from *impôt*, the French word for *tax*. These nations are neither stupid, nor sloppy or cynical in their use of language. Instead, they appreciate the significant economic, administrative, and political differences between such contribution rates and genuine taxes. Furthermore, these nations do not let these payroll-based levies flow into the general government budget, there to be pitted against any other program and possibly to be diverted to other programs. Rather, the levies flow into special, autonomous, and often semiprivate trust funds established solely to finance the function for which the levy is made. In their national accounts, these funds are not shown as an integral part of the government sector. They are shown separately as part of the social budget.

If the employer mandate proposed in the president's health plan were converted into one more closely resembling the social insurance approach, many of the distortive notch effects now in the president's plan would disappear.<sup>13</sup> This is so because neither the size of the firm nor the average payroll per employee for the firm would become parameters that determine the flow of subsidies. If these subsidies were pegged on the individual's gross pay, they could be targeted much more precisely onto truly poor house-

holds, either by tax credits or by means of progressive contribution rates. In effect, the firm-based parameters in the president's plan convert these subsidies into a scatter shot that wastes many public subsidy bullets on middle- and upper-income households.

Finally, and very importantly, the social insurance approach makes it easier to communicate to employees precisely what their health care costs them individually. While in other countries employers and employees often share the contribution rate fifty-fifty, in fact, the public discussions on them are always based on the total. When European workers learn that this total is X percent of their gross wages, they probably think of that X percent as their own money. Will American workers think likewise when they are told that their "company" pays 80 percent of their health insurance premium? Or will they continue to think of health care as an almost free lunch?

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## NOTES

1. According to data published by the Employee Benefit Research Institute (EBRI), in 1992 about 138 million nonelderly Americans obtained their health insurance coverage from their employer. Only about nineteen million nonelderly persons had "other private coverage," much of it probably purchased individually. About thirty-four million elderly Americans were insured primarily by Medicare (although many of them had private supplementary coverage or Medicaid coverage), and about twenty-six million low-income nonelderly Americans were covered by Medicaid. The Departments of Defense and Veterans Affairs covered seven million Americans. About 38.9 million Americans were classified as "uninsured." EBRI, *Sources of Health Insurance and Characteristics of the Uninsured* (Washington: EBRI, January 1994), 5, Table 1.
2. "Compromise on Health Care," *The New York Times*, 16 January 1994, 16.
3. S. Christensen, "The Subsidy Provided under Medicare to Current Enrollees," *Journal of Health Politics, Policy and Law* (Summer 1992): 255-27 1.
4. Cited in S.M. Butler, "A Policymaker's Guide to the Health Care Crisis, Part I: The Debate over Reform," *Heritage Talking Points* (Washington: The Heritage Foundation, 12 February 1992), 5.
5. Probably to enhance their mystique and, thus, their market appeal, economists prefer to use the word *elasticity* for *sensitivity*. The reader should adjust and suffer.
6. Exhibit 2 may not tell the full story. That diagram is based on the assumption that workers do not assign any value to the health insurance policy that is tied to the job. If employees attached positive value to job-related insurance, the employer mandate would serve to shift out the labor supply curve, which would mitigate the job loss effect.
7. In this case, the labor supply curve in this market would be perfectly horizontal at the minimum wage.
8. Space limitations preclude a more complete discussion of the literature. Some notable studies include: S. Dorsey and N. Walzer, "Workers' Compensation, Job Hazards, and Wages," *Industrial and Labor Relations Review* 36, no. 4 (1983): 642-654; J. Gruber and A. Krueger, "The Incidence of Mandated Employer-Provided Insurance: Lessons from Workers' Compensation Insurance," in *Tax Policy and the Economy*, vol. 5, ed. D. Bradford (Cambridge, Mass.: The MIT Press, 1991), 111-144; J. Gruber, "The Efficiency of a Group-Specific Mandated Benefit: Evidence from Health Insurance Benefits for Maternity," NBER Working Paper no. 4157 (Cambridge, Mass.: National Bureau

of Economic Research, 1992); and J. Gruber and M. Hanratty, "The Labor Market Effects of Introducing National Health Insurance: Evidence from Canada" (Mimeo, Princeton University, 1993). For labor supply and demand estimates, see M. Killingsworth, *Labor Supply* (Cambridge: Cambridge University Press, 1983); J. Pencavel, "Labor Supply of Men: A Survey," in *Handbook of Labor Economics*, vol. 1, ed. O. Ashenfelter and R. Layard (Amsterdam: North Holland, 1986), 3-102; D.S. Hamermesh, *Labor Demand* (Princeton, N.J.: Princeton University Press, 1993); and D. Card, "Unexpected Inflation, Real Wages, and Employment Determination in Union Contracts," *American Economic Review* 80 (1990): 660-688.

9. We assume that the cost will be \$1,932 for single individuals, \$3,893 for single-parent families, \$3,865 for married couples, and \$4,360 for married couples with children. Although several analysts have argued that these estimates are 10-15 percent too low, our goal here is just to illustrate the likely distributional effects of a hypothetical individual mandate.
10. L. Kaplow, "Should the Government's Allocation Branch Be Concerned about the Distortionary Cost of Taxation and Distributive Effects?" NBER Working Paper 45-66 (Cambridge, Mass.: National Bureau of Economic Research, December 1993).
11. We assume that families earning between the poverty level and 250 percent of the poverty level would contribute a share of their premium costs equal to the amount by which they exceed the poverty level divided by 1.5 times the poverty level. We selected the parameters to raise roughly the same revenue as the two previous mandates.
12. See U.E. Reinhardt, "Global Budgeting in German Health Care: Insights for Americans," *Domestic Affairs* (Winter 1993/94): 159-194.
13. See U.E. Reinhardt, "Reorganizing the Financial Flows in American Health Care," *Health Affairs* (Supplement 1993): 184. Mark Pauly makes a similar recommendation in this volume, although he would not interpret his proposal as "fudging" the issue.