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Gaps In Employer Coverage: Lack Of Supply Or Lack Of Demand?
by Stephen H. Long and M. Susan Marquis

Abstract: According to data from the May 1988 Current Population Survey, 18 percent of workers are in firms that do not offer health insurance. The question explored here is whether the absence of insurance in these firms is related to lack of supply (that is, a failure of the firm to offer the benefit because the price it faces is too high or the benefit too low) or lack of demand (that is, employees in these firms would not purchase the insurance even if it were offered). Characteristics hypothesized to affect the supply of insurance by firms (size, rate of turnover, and union status) are found to distinguish whether or not firms offer insurance. The data show near-universal acceptance of group insurance among employees offered the opportunity to participate. Both of these factors suggest a failure of supply. However, employees in firms that do not offer insurance are young, low-wage earners who work part time. These are also characteristics of workers who do not purchase group insurance even when it is offered, suggesting that many of the workers who are not offered group insurance would not participate in a plan even if the supply failure were corrected. These findings have implications for the effectiveness of voluntary strategies to improve access, but they also raise concern over the fairness to workers of mandates requiring that they purchase coverage.

There is widespread agreement that the problem of uninsured Americans is a crisis that demands attention; however, there is no consensus about the solution. Most proposals involve the expansion of employment-based health insurance because about three-fourths of the uninsured are workers or their dependents. The proposals differ in the specific strategies they employ to expand insurance, however. The choice among strategies depends both on their effectiveness in extending insurance to all the uninsured and on their fairness to all parties, but particularly to the uninsured people they are trying to help.

One unresolved issue that affects the choice among strategies is whether the existing gaps in employment-based insurance are viewed as arising from a lack of supply—that is, a failure of employers to offer insurance—or a lack of demand to enroll on the part of employees. The choice among strategies also depends on whether economic incentives are viewed as sufficient to induce voluntary action by most firms and workers, or whether it is necessary to mandate their insurance decisions to achieve universal coverage.

Exhibit 1 uses these distinctions to classify the key strategies involved in improving access to health insurance.
Alternative Strategies For Reducing The Number Of Working Uninsured Americans

<table>
<thead>
<tr>
<th>Implicit assumption about source of uninsured problem</th>
<th>Employer's decision to offer and employee's decision to accept insurance</th>
<th>Voluntary</th>
<th>Mandatory</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of supply</td>
<td>Small-group market reform</td>
<td></td>
<td>Mandated employment-based insurance (especially with small-group market reform)</td>
</tr>
<tr>
<td></td>
<td>Tax credits for small businesses</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lack of demand</td>
<td>Individual income subsidies for health insurance premiums</td>
<td></td>
<td>Mandated employment-based insurance</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Mandated individual insurance purchase</td>
</tr>
</tbody>
</table>

several current national health reform proposals. First, consider the proposals that assume that the problem arises from a lack of supply that could be corrected by voluntary responses to economic incentives. Examples are the small-group market reform proposals and the strategy of offering tax credits to small businesses to subsidize their insurance outlays. These proposals strive to lower the price and increase the availability of insurance. They are based on the recognition that small employers usually must pay higher premiums than large businesses pay, that they may not be able to afford to offer health benefits, and that sometimes small groups that include someone who is very ill cannot find any coverage.

A second strategy, still based on the belief that economic incentives will induce the desired behavior, assumes the view that the failure is due to employees’ lack of demand for insurance. That is, whether or not they are actually offered employment-based coverage, if they were offered it at current prices they would choose not to enroll. This strategy provides individual income tax credits or deductions to lower the effective price of purchasing health insurance. An example of this approach is the recent expansion of the earned income credit to include health insurance premiums paid to cover dependent children.

It is also possible to embrace more than one strategy in a single proposal. For example, the Bush administration’s plan relied heavily on voluntary response to individual income tax incentives but also hoped to encourage lower-cost insurance products through the development of “health insurance networks.”

In contrast to the voluntary strategies, many proposals entail greatly expanded regulation to assure that the formerly uninsured get covered. One mandatory approach requires all employers to offer health insurance to employees and their dependents. If such mandates left room for a voluntary employee decision to enroll, then they would be based solely on the view that being uninsured reflects a failure of supply. But most mandate propos-
als also require employees to enroll in a plan, suggesting that being uninsured may also reflect a lack of demand. Moreover, most mandate proposals include some form of small-group market reform or a residual public plan, further suggesting that advocates of mandates subscribe to both hypotheses. Current examples include the well-known “play-or-pay” proposals, which, in contrast to a strict mandate, limit the burden on employment groups with low wages. Another mandatory strategy requires that individuals be insured, accompanied by tax subsidies for reasons of fairness. This is based on the view that the uninsured do not demand insurance.

A possible advantage of the voluntary approaches is that on grounds of fairness it can be assumed that those who participate in purchasing insurance have done so willingly and therefore must have been made better off by their purchase. On the other hand, the mandatory strategies are more likely to meet the access goal, since there is substantial concern about whether economic incentives alone will suffice. Moreover, by assuring that the risk is spread across both healthy and unhealthy individuals, mandates may result in a product that is more affordable for high-risk individuals. But if the currently uninsured do not demand insurance, then mandates may impose burdens on unwilling workers.

The purpose of this DataWatch is to investigate whether the reason some employees go without health insurance is due to a lack of supply or a lack of demand, using data from the May 1988 Current Population Survey (CPS) Employee Benefits Supplement. These data allow us to distinguish between uninsured employees who are not offered group insurance and those who turn down an employer-sponsored plan.

### Offers Of Employment-Based Health Insurance

Over three-quarters of all workers ages eighteen to sixty-four are offered health insurance by their employer (Exhibit 2). Among those offered insurance, 87 percent (66 percent of all workers) participate in the plan. Eleven percent of those eligible for an employer group plan turn it down because they have other coverage, generally through their spouse’s employer. Only about 2 percent of employees eligible to participate turn down an employer offer and remain uninsured.

About one-quarter of workers do not have access to employer-sponsored health insurance through their own employer. About 6 percent of workers are employed in firms that offer health insurance to employees but are not eligible themselves. Full-time employment is a common requirement for eligibility, and over half (54 percent) of ineligible employees work fewer than thirty-five hours per week. Another 14 percent of those ineligible for their employer’s health benefit plan have been with the firm for fewer than

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</tr>
</tbody>
</table>

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Three months; this, we expect, reflects waiting period requirements.\footnote{Three months; this, we expect, reflects waiting period requirements.}

Eighteen percent of workers are in firms that do not offer insurance. This is the group of workers that we wish to examine more closely to determine whether they would elect group coverage if their employer offered it—that is, is this gap a failure of supply or a failure of demand?

### Firms That Do Not Offer Insurance Benefits

**Hypotheses.** We first examine characteristics of firms that are hypothesized to influence the decision to supply insurance, to see whether there is a distinction between firms that do and do not offer insurance. Firm size is the first of these characteristics. Small firms that wish to offer insurance face higher premiums than large firms, and the high price may be a barrier preventing some small employers from offering insurance. Small firms are often less profitable than larger firms, and this too may be a factor in the ability of some small firms to offer insurance.

There are several reasons that firms experiencing high turnover may be less likely to offer insurance than other firms. The firm itself benefits from a healthy employee population; providing health insurance is a way for a firm to invest in the future health of its workers. If there is a lot of turnover among the workers, the returns from this investment are smaller, which may affect the decision to offer insurance.\footnote{A second reason is that frequent job turnover may raise the administrative cost of providing insurance and so deter some firms from offering insurance.} A second reason is that frequent job turnover may raise the administrative cost of providing insurance and so deter some firms from offering insurance. We also hypothesize that unionization affects the likelihood that the firm will offer insurance. Unions have historically obtained health benefits for their members and are in a stronger
position than an individual employee to negotiate benefits.

Results. As hypothesized, firm size is an important factor in whether the employer offers health benefits (Exhibit 3). Sixty percent of those in firms of ten or fewer people have an employer that does not offer insurance as a benefit, whereas fewer than 10 percent of workers in firms of 100 or more persons are in firms not offering this benefit. The importance of firm size in access to insurance is highlighted when we focus on the 18 percent of workers employed by firms that do not offer health benefits (Exhibit 4). Over half of these are in firms employing fewer than ten persons, and almost 70 percent work for firms employing fewer than twenty-five people.

Seasonality is one component of job turnover, and workers in industries with greater seasonal employment—such as agriculture, construction, and retail trade—have less access to insurance (Exhibit 5). Over half of employees in the agriculture sector and one-third of employees in retail trade, business services, and construction work for firms that do not offer insurance as a benefit, whereas fewer than 10 percent of employees in transportation, manufacturing, and government are employed in such firms.

A more direct measure of the effect of turnover on firms’ offer of insurance comes from comparing employment changes in the previous sixteen months among workers in firms that do not offer insurance with workers in firms that do make such offers. Almost half (45 percent) of workers in firms not offering insurance had at least one employment turnover in the previous sixteen months, and almost one-quarter (23 percent) had more than one change. In contrast, only 23 percent of employees in firms offering insurance experienced one or more employment changes in the previous sixteen months, and only 10 percent had more than one change.

Unionization is also an important factor in access to insurance. In firms

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**Exhibit 3**

<table>
<thead>
<tr>
<th>Percent of workers not offered insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fewer than 10 workers</td>
</tr>
<tr>
<td>10–24 workers</td>
</tr>
<tr>
<td>25–49 workers</td>
</tr>
<tr>
<td>50–99 workers</td>
</tr>
<tr>
<td>100–249 workers</td>
</tr>
<tr>
<td>250 or more workers</td>
</tr>
</tbody>
</table>

not offering insurance, only 10 percent of workers are covered by a union contract; in firms that offer insurance, almost one-quarter of workers are part of a union.¹² Even when we control for firm size and industry, union status is a statistically significant factor accounting for differences in the offer of insurance.

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**Exhibit 4**
Distribution Of Employees Not Offered Insurance Among Different Firm Sizes, 1988

<table>
<thead>
<tr>
<th>Percent distribution of workers not offered insurance</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
</tr>
<tr>
<td>0</td>
</tr>
</tbody>
</table>

- Fewer than 10 workers: 52%
- 10–24 workers: 17%
- 25–49 workers: 9%
- 50–99 workers: 4%
- 100–249 workers: 4%
- 250 or more workers: 14%


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**Exhibit 5**
Employees In Firms Not Offering Health Insurance, By Industry, 1988

- Agriculture: 56%
- Construction: 34%
- Business/repair: 34%
- Retail: 32%
- Personal/professional service: 18%
- Wholesale: 12%
- Financial/insurance: 11%
- Transportation: 9%
- Manufacturing: 8%
- Public administration: 3%

Employees In Firms Not Offering Insurance

Hypotheses. Because we found near-universal acceptance of group insurance among employees offered the opportunity to participate, one might conclude that existing gaps in employer-sponsored insurance are not the result of a lack of demand by workers but a problem of supply, especially for workers in small firms. However, the picture becomes more complicated when we examine characteristics hypothesized to affect workers’ demand for insurance and contrast those who accept their employer’s offer, those who turn down the offer, and those whose employers do not offer insurance.

The demand factors that we examine include ability to pay for insurance and the price of insurance to the employee. We measure ability to pay by the worker’s wage and the hours of work. We do not have a direct measure of the price of insurance; instead we study two proxy measures. The first proxy is the employee’s age. Younger workers use fewer health care services than older workers. As a result, the expected benefits from a given policy are less for younger workers, and so the effective price per unit of insurance is higher. Thus, we hypothesize lower demand among younger workers.

The second proxy measure of price is employee turnover. Turnover not only increases the cost to employers, it also increases the cost to employees. With a change in employment, the employee may have to meet a new deductible or preexisting conditions may be excluded. Therefore, the effective price per unit of insurance is higher with frequent turnover, and insurance becomes less attractive.

Results. The majority of workers in firms that do not offer insurance are low-wage earners (Exhibit 6). Two-thirds of them earn an hourly wage of less than $7 per hour, and 41 percent earn less than $5 per hour. The wage profile of those who turn down their employer’s offer—especially those who do so for reasons other than their coverage under a spouse’s employer group—is quite similar: 61 percent earn less than $7 per hour, and 33 percent earn less than $5 per hour. In contrast, only 21 percent of workers who enroll in their own employer plan are low-wage earners.

Many who work in firms not offering insurance and many who do not enroll in their employer plan are part-time workers. Among the former, 36 percent work fewer than thirty-five hours per week; among the latter, 30 percent work fewer than thirty-five hours. Part-time employment is much less common for workers enrolled in their group plan; only 10 percent of them work fewer than thirty-five hours per week.

Because of low earnings from the combination of low wages and part-time employment, those workers not enrolling in their employer plan may lack the resources to purchase group coverage. The similar earnings and hours profile of employees in firms that do not offer insurance suggests that
these workers too might not be able to pay for insurance even if offered it. As a result, they may not demand that their employer offer coverage.

Other economic characteristics that are the proxy measures for the price of insurance also distinguish employees in firms not offering insurance and those who turn down the employer plan from workers who take the employer plan. Over one-quarter (26 percent) of workers in firms not offering insurance are under age twenty-five, as are about one-third (32 percent) of workers turning down insurance for reasons other than having insurance through a spouse’s employer. In contrast, only 10 percent of workers enrolling in their own group plan are under age twenty-five.

Almost one-quarter of employees in firms that do not offer insurance and one-quarter of employees who turn down their employer plan for reasons other than coverage under another group plan experienced at least two employment turnovers in the preceding sixteen months (Exhibit 7). Among those who participate in their own employer group plan, however, less than 10 percent had two employment changes.

We also used multivariate methods to compare employees who work in firms that do not offer insurance with those who turn down an employer offer and those who enroll in a group plan. Our model relates the probability of enrolling in an employer plan if offered the opportunity to do so with the employee’s wage, hours worked, age, number of employment turnovers, sex, family status, eligibility for group coverage from another family member, and firm size. \(^1\) Each of these characteristics is statistically significant in explaining the decision to accept or reject an employer offer of insurance. The predicted probability of participating in an employer
group plan if offered the opportunity for those who currently do not have the option to do so was .75, which is quite close to the predicted probability of .71 for those who have the opportunity to enroll in a plan but turn it down. In contrast, the predicted probability of enrollment is .91 for those who do enroll in an employer plan. This result indicates a similarity in the economic and demographic profiles of persons in firms not offering insurance and those who turn down an offer.

This similarity between employees in firms that do not offer insurance and employees who turn down their employer plan for reasons other than spousal coverage suggests that lack of demand for insurance by their workers may be a factor in the employer’s decision not to offer health benefits. Thus, existing gaps in employment-based insurance may not only be a supply problem connected with the small-group market; lack of demand may also play a role. In fact, when we examine firms of any size, those that do not offer insurance have an employee population that earns low wages, works part time, is young, and experiences a lot of turnover—all characteristics of lower insurance demand (Exhibit 8). In firms of any size that do not offer insurance, roughly two-thirds of workers earn less than $7 per hour, whereas roughly one-third of workers are low-wage earners in any size firm that offers insurance. Controlling for firm size, workers in firms not offering insurance are two to three times as likely to work part time as those in firms that offer insurance (24-39 percent versus 11-14 percent, respectively). About 2.5 percent of workers in firms of all sizes that do not offer insurance are under age twenty-five, but firms that do offer insurance have only 15 percent young workers. And finally, there is roughly twice the likelihood of turnover among employees in any size firm that does not offer insurance as there is among employees in firms that do offer insurance.
Exhibit 8
Characteristics Of Employees, By Whether Firm Offers Insurance And By Firm Size

<table>
<thead>
<tr>
<th>Firm does not offer insurance</th>
<th>Number of employees</th>
<th>10-24</th>
<th>25-49</th>
<th>50-99</th>
<th>100 or more</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earning under $7 an hour</td>
<td>72%</td>
<td>68%</td>
<td>69%</td>
<td>68%</td>
<td>63%</td>
</tr>
<tr>
<td>Working fewer than 35 hours per week</td>
<td>39%</td>
<td>33%</td>
<td>25%</td>
<td>24%</td>
<td>37%</td>
</tr>
<tr>
<td>Age 25 or younger</td>
<td>24%</td>
<td>25%</td>
<td>27%</td>
<td>24%</td>
<td>31%</td>
</tr>
<tr>
<td>Two or more employment changes in past 16 months</td>
<td>25%</td>
<td>22%</td>
<td>24%</td>
<td>16%</td>
<td>25%</td>
</tr>
<tr>
<td>Firm offers insurance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Earning under $7 an hour</td>
<td>37%</td>
<td>34%</td>
<td>36%</td>
<td>36%</td>
<td>26%</td>
</tr>
<tr>
<td>Working fewer than 35 hours per week</td>
<td>14%</td>
<td>12%</td>
<td>13%</td>
<td>13%</td>
<td>11%</td>
</tr>
<tr>
<td>Age 25 or younger</td>
<td>15%</td>
<td>15%</td>
<td>16%</td>
<td>15%</td>
<td>12%</td>
</tr>
<tr>
<td>Two or more employment changes in past 16 months</td>
<td>12%</td>
<td>12%</td>
<td>13%</td>
<td>11%</td>
<td>10%</td>
</tr>
</tbody>
</table>


Policy Implications

Most uninsured employees work for firms that do not offer them insurance: This apparent lack of opportunity is concentrated in small groups; 69 percent of workers in firms that do not offer insurance are in firms of fewer than twenty-five employees. This suggests that strategies to make insurance more affordable to small business might fill some of the gaps. Nonetheless, even if all small firms voluntarily responded to lower prices, the 31 percent who work for larger firms that do not offer insurance would remain without an offer of employer-sponsored insurance.

Because the problem of uninsured workers resides primarily in firms that do not offer insurance, it first appears that the gaps stem from a supply failure and that policy should encourage these employers to offer insurance. Results of several recent pilot projects offering subsidized health insurance to small, uninsured businesses, however, suggest that even with substantial subsidies, few additional firms purchase coverage. Moreover, the closer look provided by this DataWatch reveals that a large fraction of employees in firms that do not offer insurance might not participate in an employer plan; even if offered the opportunity to do so. They tend to be part-time, low-wage workers who may be unwilling or unable to pay their share of the cost. In 1990, for the average firm, this share was about 15 percent of the individual premium, or roughly $22 per month.

Over half (56 percent) of the workers in firms that do not offer insurance...
earn less than $5 per hour or work fewer than thirty-five hours per week. Even when eligible for an employer-sponsored health plan, these low-wage or part-time workers are significantly less likely than other workers to participate. Participation among eligible workers who work part time or earn less than $5 per hour is only 59 percent. In contrast, among full-time workers who earn more than $5 per hour, 91 percent take an employer plan if they are eligible to participate. Tax credits or other subsidies may stimulate some additional purchase of insurance, although the average employer already provides a large subsidy that many low-wage workers turn down.

Even a combination of small-group market reforms and individual subsidies may prove insufficient to fill the current gap in employment-based insurance. Clearly, the various mandate proposals can assume that the gap will be filled. But what about their fairness? Mandates requiring the purchase of group insurance may place an unwanted financial burden on the currently uninsured, whose economic profile suggests that they are less likely than the average worker to participate in employer-sponsored plans.

This research was supported by separate awards from the Health Insurance Association of America and the Pension and Welfare Benefits Administration, U.S. Department of Labor. Any views expressed herein do not necessarily represent the views of the above sponsors or RAND. The authors are grateful to Ellen Harrison for computer programming.

NOTES

3. The President’s Comprehensive Health Reform Program (The White House, 6 February 1992).
4. See, for example, Rockefeller, “A Call for Action.”
6. Our estimates represent the circumstances of about ninety-nine million workers. The analysis is based on responses from 19,688 persons ages eighteen to sixty-four who were employed for wages or salaries and responded to questions about their employers’ offers in the May CPS questionnaire, and for whom we were able to find a matching record from the March 1988 CPS survey (88 percent of workers in the May sample). We restricted our analysis to the matched sample to obtain measures of individual characteristics available from the March survey; the distribution of characteristics of individuals in the matched sample did not differ from the full sample of employees in the May survey. We weighted observations to adjust for respondents who were unable to report whether their employer offered insurance (5 percent of employees in the matched sample). We assumed that these missing values come proportionally from those who are not offered group coverage, those who are ineligible for their group plan, and those
who turn down their group plan. We assumed that respondents unable to report whether they were offered the opportunity to purchase group coverage were not covered by a group plan, based on other research. G.L. Caffetata, "Knowledge of Their Health Insurance Coverage by the Elderly," Medical Care (September 1984): 835-847; and M.S. Marquis, “Consumers’ Knowledge about Their Health Insurance Coverage,” Health Care Financing Review (Fall 1983): 65-80. Our resulting estimate of employees covered by their own employer group plan is consistent with other estimates.

7. This underestimates ineligibles newly employed at their current firm. We classified as new employees only persons who were employed at the time of the May 1988 CPS but reported being out of the labor force, out of work, or self-employed at the March 1988 CPS. We could not identify persons who changed employers between March and May.

8. Turnover is also a proxy for price to the employee and so affects supply and demand.


10. These differences are due in part to differences among industries in firm size and union status. Controlling for these factors, however, industry type is still significantly related to the probability that insurance is offered.

11. We measure employment changes during calendar year 1987 from responses about the number of different employers in 1987. Workers in the May 1988 sample who did not have a job at the time of the March interview were attributed with one additional turnover; if these individuals held a job at any time in 1987, they were attributed with another turnover. This proxy measure counts employer changes in 1987 and labor force status changes in 1988. It underestimates turnover because it does not count as turnover entry into the labor force during 1987 nor changes in employer in 1988.

12. Some observers have pointed to sectoral shifts away from manufacturing, transportation, and government to trade and services and to decreasing unionization as explanations for the increase in the uninsured over the past decade. J.T. Black, “Comment on ‘The Employed Uninsured and the Role of Public Policy’,” Inquiry (Summer 1986): 209-2 12. However, our estimate shows that workers’ access to employer insurance has increased, compared with estimates from the late 1970s. A.C. Monheit et al., “The Employed Uninsured and the Role of Public Policy,” Inquiry (Winter 1985): 348-364.

13. This assumes a similar distribution of ages among the employees in each firm. In contrast, the cost of insurance to an employer group consisting primarily of young workers might be less than the cost to other groups, making the employer more willing to offer insurance and the employee more willing to purchase it. However, we do not have data on the average age of employees in each worker’s firm.

14. This and the following exhibits do not include the 6 percent of workers who are ineligible for employer-sponsored insurance but work in firms that offer this insurance to other employees.

15. Our model is a logistic regression. It was estimated using the choices of a random half of workers offered insurance by their employer; the remaining half of workers was withheld as a forecast sample. The predicted probabilities are predictions for the forecast group.
