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Subsidies to employee health insurance premiums and the health insurance market

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Abstract

One approach to covering the uninsured that is frequently advocated by policy-makers is subsidizing the employee portion of employer-provided health insurance premiums. But, since the vast majority of those offered employer-provided health insurance already take it up, such an approach is only appealing if there is a very high takeup elasticity among those who are offered and uninsured. Moreover, if plan choice decisions are price elastic, then such subsidies can at the same time increase health care costs by inducing selection of more expensive plans. We study an excellent example of such subsidies: the introduction of pre-tax premiums for postal employees in 1994, and then for the remaining federal employees in 2000. We do so using a census of personnel records for all federal employees from 1991 through 2002. We find that there is a very small elasticity of insurance takeup with respect to its after-tax price, and a modest elasticity of plan choice. Our results suggest that the federal government did little to improve insurance coverage, but much to increase health care expenditures, through this policy change.

JEL classification: H8, I1

Keywords: Uninsured; After-tax price; Health care expenditures

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1. Introduction

The number of uninsured persons in the United States has risen steadily over the past two decades. Forty-five million Americans, or 16% of the non-elderly population, are without health insurance coverage (Center on Budget and Policy Priorities, 2002). This is despite significant expansions in the public insurance safety net over the past 15 years, particularly for children. Thus, many have advocated an alternative approach to increasing insurance coverage: subsidizing individuals to take advantage of their existing employer-provided insurance options.

The appeal of this approach is motivated by two facts. First, roughly one-quarter of the uninsured are individuals who are offered health insurance through their job or the job of a family member, but do not take it up. These are individuals who have access to the employer-provided insurance system, and for whom employers are already paying a sizeable share of their insurance costs. Thus, it seems that these are the “low hanging fruit” of the uninsured population, the cheapest group to bring into the ranks of the insured. Second, the decline in insurance coverage over the past two decades has been almost exclusively through reduced takeup of insurance among those offered, not reduced offering. So, premium subsidies are motivated as a means of offsetting this pernicious time trend.

But such subsidies will only be effective if the decision to take up employer-provided insurance conditional on offering is very price elastic. A small number of studies suggest that this is not the case, finding that takeup decisions are not very sensitive to employee premiums. But this existing literature generally suffers from the problem that employee premiums are a choice variable of the firm, and they might therefore respond to employee tastes for insurance, potentially biasing any estimated takeup elasticities. What is required to estimate elasticities is exogenous variation in the price of insurance that is independent of employee tastes.

In this paper, we study such an exogenous price change, through tax subsidization of the employee share of premiums for federal workers in the Federal Employee Health Benefit Program (FEHBP). Roughly one-half of all employees in the U.S. pay their insurance premiums on a pre-tax basis (Gruber and McKnight, 2002). But, until 1994, employee premium payments were made on a post-tax basis by virtually all federal employees insured through the Federal Employee Health Benefit Program. Then, in 1994, employees of the postal service, who represent roughly one-third of all federal workers, were given the right to pay their insurance premiums on a pre-tax basis. The remaining federal employees were given this right in October 2000 (for the 2001 plan year open enrollment).

These changes provide an excellent laboratory for learning about the impact of premium subsidies on insurance takeup. The changes introduced a sizeable reduction in the after-tax price of FEHBP insurance for postal workers in 1994, and then for all remaining federal workers in 2000. Moreover, the reduction varies by income group (due to the differential tax benefits of tax-shielded premium payments) and states (due to differential state income tax rates). Thus, there is extensive variation across otherwise identical workers in the after-tax size of employee premiums.

We use this laboratory to ask two questions about the impact of premium subsidies on the market for employer-provided health insurance. First, can premium subsidies effectively increase the takeup of employer-provided health insurance? Second, how do premium sub-