Who Really Pays for Health Insurance?
The Incidence of Employer-Provided Health Insurance with Sticky Nominal Wages

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This paper addresses two seeming paradoxes in the realm of employer-provided health insurance: First, businesses consistently claim that they bear the burden of the insurance they provide for employees, despite theory and empirical evidence indicating that workers bear the full incidence. Second, benefit generosity and the percentage of premiums paid by employers have decreased in recent decades, despite the preferential tax treatment of employer-paid benefits relative to wages—trends unexplained by the standard incidence model. This paper offers a revised incidence model based on nominal wage rigidity, in an attempt to explain these paradoxes. The model predicts that when the nominal wage constraint binds, some of the burden of increasing insurance premiums will fall on firms, particularly small companies with low-wage employees. In response, firms will reduce employment, decrease benefit generosity, and require larger employee premium contributions. Using Current Population Survey data from 2000–2001, I find evidence for this kind of wage rigidity and its associated impact on the employment and premium contributions of low-wage insured workers during a period of rapid premium growth.

Keywords: employer-provided health insurance, wage stickiness, premium contributions

JEL classification: I11, J32

Introduction

“As far as employers are concerned, we see no end in sight... Employers will be increasing not only cost sharing in the premium paid each month but in every possible way, with either a co-payment or co-insurance.”

—Helen Darling, former Benefits Manager for Xerox Corporation

“Many small companies have no choice but to eat the premium increases.”

—Bill Lindsay, CEO of Benefit Management & Design Inc.

The standard economic view of employer-provided benefits is that firms only nominally pay for health insurance, pensions, and the like, while the actual costs are born by employees through lower wages. In short, the incidence falls fully on workers. Summers (1989) outlines the standard theory of employer-provided health insurance: Mandated benefits cause shifts in both the supply and demand of labor, leading to an equilibrium wage that absorbs most, if
not all, of the cost of an insurance benefit. Empirical work on equalizing wage differentials for benefit mandates supports this prediction (Gruber and Krueger, 1991; Gruber, 1994).

Most non-economists, however, believe that firms bear the cost of these benefits. The traditional model fails to explain the claims by businesses, especially small ones, that they cannot “afford” health insurance for employees as premiums grow rapidly. Most of the attention this topic has received in the literature has taken the form of editorial commentary rather than a formal model (Krueger and Reinhardt, 1994; Pauly, 1997). Furthermore, the standard model does not explain the trends of growing employee contributions to insurance premiums and decreasing benefit generosity. These phenomena are difficult to reconcile with the preferential tax treatment received by employer-provided benefits, as any compensation shifted away from insurance towards wages increases costs to the firm without affecting labor supply. While several papers have examined these trends (e.g. Dranove, Spier and Baker, 2000; Gruber and McKnight, 2003), none has made an explicit connection between these apparent violations of the classical incidence model and the more general skepticism of non-economists regarding who really pays for health insurance.

This paper explores the following assumption about wage stickiness in an attempt to reconcile the views of economists and non-economists: Workers do not like to see their wages go down. In practice, this assumption means that nominal wage cuts are costly to firms. Two possible sources of this cost are increased shirking by disgruntled employees and increased turnover. However, this paper does not attempt to document why wages are sticky, or why other forms of compensation—such as the employee premium contribution—may not exhibit the same rigidity, although research indicates that perceptions of fairness play an important role (Kahneman, Knetsch and Thaler, 1986). Rather, the focus of the paper is exploring the implications of these constraints. Nonetheless, research on nominal wage stickiness offers support for the validity of this key assumption (Kahn, 1997; Card and Hyslop, 1997). The model in this paper considers a firm that pays its employees a combination of cash wages and health insurance. Over time, the cost of insurance increases, and the firm must adjust its compensation and output accordingly.

The basic structure of the paper is this: Section 1 presents a graphical and analytical version of the base case, a two-period production model in which the firm maximizes profit by setting wage and quantity. Section 2 adds a third variable to the firm’s control, the employee premium contribution, and also considers the impact of the federal tax subsidy for employer insurance costs. Section 3 presents empirical tests of the model. Section 4 concludes.

1. The Basic Model

Before examining a formal model, consider a diagram (Figure 1) that summarizes the paper’s main concepts. In Period 0, labor supply is upward-sloping for all values of the wage above the current wage, but workers refuse to supply any labor if their wage falls. In Period 1, the real cost of health insurance has gone up, leading to a dollar-for-dollar leftward shift in the labor demand curve. Labor supply shifts too, taking account of the increased value of insurance benefits, but retaining the workers’ unwillingness to work for less than the