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Introduction

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The Tax Treatment of Fringe Benefits

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Introduction

Issues in the Tax Treatment of Fringe Benefits

In the United States, a significant proportion of retirement income and health insurance benefits are provided through private pension and health insurance plans to which employers contribute voluntarily. In 1987, 31 percent of all retirement benefits came from private pension plans, and roughly two-thirds of all expenditures on health and medical care were private.¹ This private approach to providing retirement income and health care differs markedly from many other western nations, where far greater proportions of retirement income and health care are provided by public programs.

The private provision of pension and health benefits in the U.S. has been stimulated and encouraged by the tax system.² Whereas wage income is taxed under the federal personal income tax, employer contributions to pensions and health insurance plans are excluded from taxable income.³ An accumulating body of empirical research has suggested that this favorable tax treatment of fringe benefits has created an effective incentive to substitute fringe benefits for wages, and that much of the growth of private pension and health insurance plans can be attributed to that favorable tax treatment (see below for a discussion of this research).

The favorable tax treatment of employer contributions to voluntary fringe benefit plans in the United States has been under attack since at least 1973, when Martin Feldstein argued that the exclusion of health insurance contributions from taxable income distorts the incentive to demand health insurance and leads to overuse of the health care system. One aspect of Feldstein's argument was that the tax-favored status of health insurance is responsible for the rising cost of medical care. That

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is, since the tax system creates an incentive to buy more health insurance, and since health insurance coverage leads to greater use of the health care system, the tax-favored status of health insurance drives up both the demand for health care and the cost of health care (Feldstein 1973; Vogel 1980). Another aspect of Feldstein's argument was that tax subsidies for health insurance are inefficient: the government could provide the same amount of health care directly, finance the health care through lump-sum taxes, and have revenue left over that could be returned to taxpayers or used to buy other public goods or services.

Somewhat different arguments have been made against continuing the tax-favored status of private pensions in the United States. Alicia Munnell has been a vocal proponent of taxing pension contributions, arguing that the tax-favored treatment of pensions has resulted in erosion of the income and payroll tax bases and a more regressive tax system (Munnell 1984, 1985). As the growth of pension contributions has slowed (Woodbury and Huang 1988), this argument has lost some of its force. But more recently, Munnell (1988, 1989) has generally criticized the private pension system in the U.S. on the grounds that it covers too small a proportion of households, reduces mobility of the workforce, and provides benefits whose real purchasing power is vulnerable to inflation. Her arguments suggest that a smaller private pension system would be desirable, and taxing employer contributions to private pensions is clearly one possible way of reducing the importance of the private pension system in the United States.

Existing Research and the Need for Further Work

Although fringe benefits have been the subject of a growing body of literature, a limited number of studies have examined the influence of favorable tax treatment of benefits on benefit levels or on the mix of total compensation—those that do being Alpert (1983), Atrostic (1983), Hamermesh and Woodbury (1990), Holmer (1984), Leibowitz (1983), Long and Scott (1982), Rice (1966a, 1966b), Sloan and Adamache (1986), Taylor and Wilensky (1983), Turner (1987), Vroman and An-

derson (1984), Woodbury (1983), and Woodbury and Huang (1988). Some additional studies (Goldstein and Pauly 1976; Mumy and Manson 1985) have attempted to draw inferences about the effects of taxes on benefits, but have done so without including explicit tax measures.

The studies that include explicit tax measures take essentially one of two empirical approaches. The first approach is to regress (for an individual or a group) a measure of the *level* of employer contributions to all fringe benefits (*FB*), or pension benefits (*PB*), or health insurance benefits (*HB*) on a measure of the marginal tax rate facing the group (or individual) and a vector of control variables:

$$FB = a_0 + a_1t + a_2x_2 + \dots + a_mx_m + e_f \quad (1.1)$$

$$PB = b_0 + b_1t + b_2x_2 + \dots + b_mx_m + e_p \quad (1.2)$$

$$HB = c_0 + c_1t + c_2x_2 + \dots + c_mx_m + e_h, \quad (1.3)$$

where t is the marginal tax rate facing the group or individual, the x_i represent $(m-1)$ control variables, the a_i , b_i , and c_i are coefficients, and the e_i are normally distributed error terms. This procedure or some variant of it is followed by Atrostic (1983), Leibowitz (1983), Rice (1966a, 1966b), Sloan and Adamache (1986), Taylor and Wilensky (1983), and Vroman and Anderson (1984).

The alternative approach is to use as a dependent variable in equations like (1.1), (1.2), and (1.3) not the *level* of benefits per worker, but the *share* of total compensation received by workers as fringe benefits, pension benefits, or contributions to health insurance. Usually these shares are constructed in the following way:

$$FB/TC = FB/(FB + WS) \quad (1.4)$$

$$PB/TC = PB/(PB + WS) \quad (1.5)$$

$$HB/TC = HB/(HB + WS), \quad (1.6)$$

where TC refers to total compensation per worker, and WS is wage and salary payments per worker. This approach or some variant of it is taken by Alpert (1983), Hamermesh and Woodbury (1990), Long and Scott (1982), Sloan and Adamache (1986), Turner (1987), Woodbury (1983),

and Woodbury and Huang (1988). One possible advantage of this latter approach is that it can be shown to have an explicit link to well-known consumer theoretic models (Woodbury 1983).

These two approaches and the studies based on them share an important weakness, correction of which could improve both our basic understanding of benefit provision and our predictions about how policy changes would affect benefit provision. Essentially, no study has considered that different benefits have different costs, and that cost differences between benefits may vary over time, by size of firm, and by region. As a result, no study to date has been able to estimate a tradeoff between any *pair* of fringe benefits (for example, between pensions and health insurance). The implication is that no study to date has estimated the effect of a change in tax policy that is specific to just one benefit (a tax cap on health insurance contributions, for example) on the amount of some other benefit provided by the employer.⁴ Neither has existing work shown whether the impact of taxing both pensions and health insurance would have a different impact on the provision of pensions than on the provision of health insurance.

The same weakness implies that existing studies may have obtained biased estimates of tax effects on fringe benefits as a whole (or on a single specific benefit). In effect, as will be shown in chapter 2, the existing studies have made questionable simplifying assumptions about the rate at which the employer is willing to trade pensions for health insurance. This leads to an omitted variables bias that could, in principle, lead to mistaken inferences about the relation between taxes and fringe benefits.

Another weakness shared by most previous studies is that they have had difficulty separating income effects from tax (or price-substitution) effects on the provision of nonwage benefits. In some studies, income effects are ignored, and in most studies where they are distinguished, collinearity between income and marginal tax rates has frustrated the effort to distinguish income from substitution effects. In this monograph, we use both a pooled time-series of cross sections, and a cross section of establishments, in an attempt to obtain improved and robust estimates of income and substitution effects.

In summary, the need for further work is clear. Both because of the scarcity of studies on the effect of taxes on the mix of total compensation, and because of certain weaknesses in the studies that do exist, this area of research remains in an early stage. No study to date has examined how taxing pension contributions would affect the private provision of pensions. Also, even though some studies have examined how taxing health insurance contributions might influence private health insurance (Taylor and Wilensky 1983; Phelps 1984–85; Adamache and Sloan 1985), the existing studies have not taken account of the presence of pensions in the compensation package. Doing so could be important for at least two reasons. First, the relationship of substitutability or complementarity between pensions and health insurance could imply that taxing health contributions would have a significant impact on the provision of pensions by employers. Second, if a tax cap on health insurance did affect pension provision, then it would be important to take account of that effect in determining the revenue effects of taxing health contributions. Failure to do so could lead to either an under- or overestimate of the revenues to be raised by taxing health insurance contributions.

Plan of the Monograph

It is not our intent to offer a comprehensive treatment of the economics of fringe benefits in this monograph.⁵ Rather, we have two goals that are more specific and more modest. The first is to obtain estimates of tradeoffs among wages, pensions, and health insurance that are an improvement over existing estimates. In particular, we have tried to produce convincing estimates of the degree to which pensions (individually) and health insurance (individually) are substitutes for wages, and of whether pensions and health insurance are substitutes, complements, or unrelated. Such estimates have not been obtained before in a general framework that considers wages, pensions, and health insurance all at once.

Chapter 2 offers a detailed treatment of the model of fringe benefit

provision that we use to estimate tradeoffs among wages, pensions, and health insurance. The result of that chapter is an econometric specification that allows us to estimate substitution (or tax) effects and income effects on the provision of fringe benefits. In chapter 3, we describe the data used to estimate the model and report the results of estimation. We use two separate data sets to estimate our model. The first is a pooled time-series of cross sections (1969–1982) from the National Income and Product Accounts “other labor income” series. The second is a cross section of establishments from the 1977 Survey of Employer Expenditures for Employee Compensation.

Our second main goal is to use the estimates we produce to simulate the effects of various policy changes on the provision of fringe benefits. In chapter 4, we simulate how three major changes in tax policy would affect the voluntary provision by employers of pensions and health benefits. The changes simulated are: (a) the 1986 tax reform, which substantially lowered the marginal tax rates on earnings faced by many households; (b) treating employer contributions to health insurance as taxable income (we simulate both a policy of taxing all contributions to health insurance and a policy of taxing only contributions in excess of \$1,125 per year); and (c) treating all employer contributions to both pensions and health insurance as taxable income.

Chapter 5 offers a summary of the model, our empirical findings, and our simulations. We also develop the implications of our findings for public policy in chapter 5.

NOTES

¹ These figures were computed from data in tables 3.A3 and 3.A4 of the *Social Security Bulletin Annual Statistical Supplement*, 1989. Roughly half of all private expenditures on health care were made through employer-provided health insurance. See Kasper, Rossiter, and Wilson (1987); and U.S. Department of Commerce, Bureau of Economic Analysis (1986) and *Survey of Current Business* (various July issues), table 6.13.

² Congressional Budget Office (1987) and Atrostic and Burman (1988) raise and provide excellent discussions of the policy issues surrounding the tax treatment of pensions and other fringe benefits. Mitchell (1988) offers a concise introduction.

³ On the development of the tax code as it bears on pensions and health insurance in the United States, see Korczak (1984, Chap. 2) and Chollet (1984, Chap. 4). See Organization for Economic

Cooperation and Development (1988) for a discussion of the tax treatment of fringe benefits in OECD member countries.

Although neither pension nor health-insurance contributions are taxable to workers at the time they are made, pension benefits are taxable when they are received in retirement. Accordingly, pensions are often referred to as tax-deferred benefits, whereas health insurance, which is never taxed, is referred to as a tax-exempt benefit. See Korczak (1984, pp. 3–10) for a discussion.

⁴ Taylor and Wilensky (1983), Phelps (1984–85), and Adamache and Sloan (1985) offer estimates of the revenue effects of taxing health benefits; however, because they consider only tradeoffs between health benefits and wages, these studies are open to the criticism that they overstate the revenue gains of taxing health contributions.

⁵ See Hart (1984) and Hart, Bell, Frees, Kawasaki, and Woodbury (1988) for broader views of the economics of newwages.