Fringe Benefits: Was Ben Franklin Right?

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Benjamin Franklin once said, “Our Constitution is in actual operation; everything appears to promise that it will last; but in this world nothing is certain but death and taxes;” Recent tax policy suggests that Ben may have been only half right. Employers in the private sector contributed over $112 billion for employee pensions, profit-sharing, and group insurance in 1981. If federal income taxes had been collected on this amount, tax revenue would have increased by approximately $34 billion. Instead, Social Security tax revenues were lowered by an additional $14 billion (Long and Scott 1984, p. 191). Therefore, taxing fringes could have raised federal revenues by $48 billion, had no change in total employee compensation resulted from broadening the tax base. With these kinds of figures, it is no surprise that fringe benefits and their tax status have been under great scrutiny in recent years.

Favorable tax treatment of employee benefits is almost as old as the income tax itself (Munnell 1984, p. 46). These benefits came from contributions made by employers who could write them off as expenses. The benefits were also tax free to the employee because they were looked upon as gratuities more than wage compensation, but this also meant that they could be discontinued at the whim of the employer. However, the status of fringe benefits has greatly changed since the early part of this century. No longer considered gratuities but rather a necessity in labor contracts, fringe benefits have become a significant part of the labor scene, and their effects on government revenue have become significant as well.

Why Do We Have Fringe Benefits?

A benefit paid “in-kind” is worth no more (and probably less) to the employee than the retail price of similar items. So why are these benefits given to employees? There are many reasons why fringe benefits are paid.

First, the fringe may contribute to the productive output of the firm, as in the case of a company car that enables a traveling sales representative to increase sales. Second, the employer may be able to provide the fringe benefit at a cost less than the price of the good in the retail market. A third reason is tax avoidance. The current tax treatment of fringe benefits creates substantial incentives for firms and workers to change the mix of fringe benefits and wages that would be chosen in a world with no taxes. When a fringe benefit is taxed at a value greater than that actually placed on it by workers, the workers are motivated to substitute away from the benefit despite the real advantages that come about by employer supply (Katz and Mankiw March 1985, p. 38). The opposite is true when benefits are taxed at a value below that which the workers value. Fourth, fringe benefits are supplied in order to keep labor turnover costs down. Olivia Mitchell has done empirical studies with a recent Quality of Employment Survey. In her work she concluded that mobility is lower for workers with fringe benefits. A male worker with a pension plan is 10 percent less likely to quit than his counterpart without a pension. She also concluded that females are less responsive to the loss of fringe benefits than are males (Mitchell 1982, p. 291). Higher wages reduce a worker’s quit probability, but this effect is cut in half when fringe benefits are considered. Studies which ignore fringe benefits as a deterrent to quits overstate the effects of wages. A fifth reason for providing fringe benefits is their preferential treatment under corporate tax laws. The Revenue Act of
1943 allows payments by employers to pension funds and insurance benefits to be deductible from the employer's gross income for tax purposes (Woodbury 1983, p. 167).

As Table 1 shows, fringe benefits have increased from 12.6 to 28.5 percent of total worker compensation from 1950 to 1983. Part of this growth has come from additional paid holidays, which are then included in the income and payroll tax base. Some of the increase is due to factors beyond employer control, such as Social Security contributions and additional unemployment compensation. The main area of concern, however, is the growth of benefits and the resulting shrinkage of the tax base due to "agreed-upon" benefits. These benefits allow workers to skirt payroll and income taxes until retirement and perhaps beyond. The major fringe benefits in this area are pensions, health insurance, and life insurance.

The rapid growth of fringe benefits coupled with the recent controversy over the federal deficit and the problems of the Social Security Fund have led many economists to argue that fringe benefits should be taxed. However, politically this has proven very difficult to achieve since recipients of fringe benefits do not want them taxed. On the other hand, those who are self-employed or otherwise unable to receive fringe benefits and tax breaks have been forced to pick up the slack with increased marginal tax rates that have been implemented to maintain government revenues. A question arises, however; if these people ever did get the support of Congress to tax fringe benefits, how would it be done?

**Valuing Fringe Benefits**

Most people would probably consider a person's income to be the best way to measure ability to help share the cost of government. Most tax specialists rely on the definition of income provided by Robert Haig and Henry Simons: "Income is the money value of the

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**Table 1**

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<th>Wage and Nonwage Compensation from 1950 to 1983</th>
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<td>(In billions of dollars)</td>
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<tr>
<td>Total Compensation</td>
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<td>Wages and Salaries</td>
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<tr>
<td>(As a Percent of Total Compensation)</td>
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<tr>
<td>Nonwage Compensation</td>
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<tr>
<td>Legally Required (a)</td>
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<td>Agreed-upon (b)</td>
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<tr>
<td>Wages for Time</td>
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<td>Not Worked</td>
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(a) OASDHI (Social Security), Unemployment Compensation, Worker's Compensation
(b) Government Pensions, Private Pensions, Profit Sharing, Group Health, Group Life, Other

Source: Munnell 1984, p. 40. (Statistics from the U.S. Chamber of Commerce).
net increase to an individual's power to consume during a period. This is equal to the amount actually consumed during the period plus net additions to wealth" (Rosen 1985, p. 336). Defining income in this broad manner insures that taxpayers with equal economic resources are assessed equal amounts of taxes and those with different capabilities are assessed different amounts.

When valuing these benefits for tax purposes, should their fair market price be used, or the amount of reduction in cash wages that an employee would accept to get the benefits? The latter alternative is a subjective method, which would lead to varying values of identical benefits. John Nolan correctly stated, "The accretion to wealth is the same for all employees regardless of the individual's marginal utility for the particular type of economic benefit. The tax system should provide an objective standard for quantifying income to provide equity among taxpayers" (Nolan 1977, p. 361). Employees receiving identical benefits should, in principle, be taxed on the same basis. Two employees, each receiving in-kind housing should not have different tax consequences because one cares less about the quality of housing. The employee receives the housing because, for various reasons, the employer provides such housing with no option to the employee to take cash instead.

By including fringe benefits as part of the income, and valuing them at market prices, some problems occur. What about an airline flight attendant who rides on a "seat-available" basis? Should the attendant be taxed at the market price for a ticket on the flight? The employer, in the short term, incurs no additional cost as the flight will be flown whether the attendant rides in the empty seat or not. How else can an empty airline seat be valued? The fair market value standard, while objective, is not self-executing. Market value may be determined in urban areas for parking, but in rural areas, where parking is free, the value must be considered zero. All fringe benefits must then have a value of zero unless they represent a cost the employee otherwise would have incurred to obtain the fringe benefit (Nolan 1977, p. 362). Employer costs cannot be used to measure benefit in the free parking situation as the costs have occurred to provide assistance for the business and employee benefit is incidental. Therefore any fringe benefit falling into the category of "appropriate" or "helpful" for the employer's business should be excluded from the worker's income. These benefits, along with other miscellaneous benefits which accumulate no substantial amount, are often called de minimis benefits. Currently, these de minimis items are not taxed, but the reason for this status comes from more than just valuation problems. If the benefits are so small, they are probably excused just to ease the administrative nightmare that would be involved in taxing them.

The Welfare Costs of Fringe Benefits

People on the street would be puzzled by the welfare loss of fringe benefits. "How can you lose welfare? Labor gets a bunch of extras on top of wages!" Yet it is true that fringe benefits, economically speaking, create net welfare losses, as is the case with other forms of subsidy. Viewing this situation from the tax side, fringe benefits are tax loopholes that lower relative prices, and, as a result, substitution will be induced from wages to fringe benefits which will lead to a greater welfare cost as shown in Figure 1.

The horizontal axis measures the quantity of fringe benefits, all treated as having a price of $1.00. Let \( D_1(\cdot) \) be the demand curve for the deductible and excluded items for all taxpayers in the 15 percent marginal tax bracket, and \( D_2(\cdot) \) be the demand curve for taxpayers in the 28 percent marginal tax bracket. If no deductions or exclusions were allowed, at a price of $1 per unit, \( Q \) would be consumed by taxpayers in the 15 percent bracket, and \( Q^* \) by those in the 28 percent group. With deductions and exclusions permitted (fringe benefits), however, and assuming that the ad-
ditional output can be provided at a constant cost, the effective price of the subsidized items would fall in proportion to the taxpayers' effective marginal tax brackets, in this case by 15 percent and 28 percent. At the lower prices, Q, and Q** respectively are consumed. For the 15 percent group the welfare cost, or the excess of costs (QADQ,) over the benefits (QABQ), is shown by the triangle BAD. Similarly, the welfare cost for taxpayers in the 28 percent marginal tax bracket is triangle KLM, (Q*KLQ** - Q*KMQ**) (Browning 1979, 202). In this constant cost situation, the welfare lost can be figured as WL = \( \frac{1}{2}(hP, Q, t^2) \) where h is the elasticity of demand, P, is the original price ($1.00), Q, is the original quantity (either Q or Q*) and t is the marginal tax rate.

Browning estimated that in 1971 the welfare loss of fringe benefits was $998,300,000! (Browning 1979, p. 202). Even this welfare cost may be understated, however, due to the fact that Browning's study did not take into account state and other taxes which also allow the same deductions. The absence of fringe benefits could lead to higher Medicare and related costs and would diminish this amount.

**Determination of Utility of Fringe Benefits**

Yet another determinant to be considered is the level of utility a person may receive from fringe benefits or cash wages. If workers are paid with wages only, they will spend a certain fraction of this amount to purchase benefits even if they are not preferentially taxed. These purchases might include life insurance, medical insurance, and dental insurance. These can be purchased either through the employer or from private sources. Any benefit which a worker purchases will not be transferable. The worker can use wages to buy benefits, but not vice versa. This is

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**Figure 1**

**The Welfare Loss from Fringe Benefits**

[Diagram of the welfare loss from fringe benefits with labels and coordinates]

realistic to assume since most benefits cannot be sold. Again, assuming that workers are paid only wages, they will buy benefits as long as the marginal rate of substitution of wages for benefits is greater than one \((MRS_{wb} > 1)\). This will continue until the point where the marginal rate of substitution equals one \((MRS_{wb} = 1)\). The curves \(g_1\), \(g_2\), and \(g_3\) in Figure 2 are indifference curves. Each of them intersects the curved line OA where its slope is -1. If the worker is given wages alone, or any combination of wages and benefits lying along line segment WB, exchanges of wages and benefits can be made by moving along WB in a downward direction only (Halperin and Tzur 1985, p. 67). Given an endowment of wages and benefits on line EB, the optimal strategy would be to keep the present endowment since any movement down EB would reduce utility.

Indeed, although fringe benefits may be tax free, after point E, a person would rather have cash and pay the tax on it than receive additional benefits. This may occur in spite of real advantages of employer-supplied benefits. At the same time, utility levels may vary when leisure is figured into the market picture.

An employer does not know a worker’s utility function and, therefore, cannot determine the optimal amount of benefits to pay the worker. One way the employer can deal with this problem is to let the worker choose the level of benefits by offering a cafeteria plan.

**The Cafeteria Plan of Fringe Benefits**

The “cafeteria” or flexible benefit plan permits an employee to select fringe benefits from a package of employer-provided benefits. Employer contributions to a cafeteria plan are excluded from taxable income if the employee chooses nontaxable benefits. Employees have a choice of alternative benefits; cash must also be offered as an alternative to nontaxable benefits on a dollar for dollar basis (Adamache and Sloan 1985, p. 60). Therefore, cafeteria plans which offer nontaxable benefits effectively permit the employee to purchase benefits with before tax dollars. By choosing benefits under the plan, the employee is using before tax dollars to maximize utility. The effects of a cafeteria plan are shown in Figure 3.

Suppose at first the employer does not offer the worker a cafeteria plan or any other

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**Figure 2**

**Fringe Benefit Indifference Curves**

![Figure 2](image_url)

Source: Halperin and Tzur 1985, p. 68.

**Figure 3**

**Cafeteria Plan Effects on Worker Utility**

![Figure 3](image_url)

benefits, and that the wage is \(w^*\). Given the analysis mentioned earlier, the worker will move downward along line \(w^*B\), which has a slope of \(-1\), until the tangency point with \(g\). Now suppose the employer offers the worker a cafeteria plan where the maximum amount of benefits offered under the plan is \(b_e\). The new budget line for the worker is the kinked line \(w^*AC\) which has a slope of \(-(1-t)\) for segment \(w^*A\), and \(-1\) for segment \(AC\) (Halperin and Tzur 1985, p. 74). The worker's maximum \(g\) is now \(g_e\). Since \(g_e\) is higher than \(g_2\), the employer is now in a position to negotiate the amount of additional work effort required. The cafeteria plan is really the first step in a two step process. In the first step, the employer allows the worker to choose benefits under the plan. The second step is the requirement of additional work from the employee. In one possible scenario, the employer will be unable to get any extra work from the employee. Since the plan is virtually costless, however, the employer will not reduce expected profits by offering it. In a more usual case, expectations are that both parties will share the advantages of the plan (Halperin and Tzur 1985, p. 75). The work effort will increase, but not enough to offset the additional utility or well being obtained from the plan.

**Fringe Benefit Effects on Labor Mobility**

In addition to the Mitchell analysis mentioned earlier, firm-attachment analysis needs to look at three benefit characteristics that also affect labor mobility: vesting, benefit formulas, and retirement eligibility. Vesting refers to the attachment of irrevocable rights to later pension benefits. Once vested, a worker can leave a firm and still collect pension benefits at the eligible retirement age. Generally, a worker becomes vested after working a specified number of years for one firm. If the worker should leave the firm before that time, and is not vested, accumulated pension credits are nullified. One would instinctively think that the quit rate of workers would fall as they approach vesting (due to pension loss), and then rise after vesting because the threat of pension loss is gone. Quits among younger workers would probably increase, due to stringent vesting requirements as the discounted expected value of pension benefits is very low for workers who must wait many years for vested status.

The size of pension benefits will depend on a firm's pension formula. A common formula takes the form \(B = k \cdot Y \cdot E\), where \(B\) is the monthly retirement benefit, \(k\) is a constant, \(Y\) refers to years of service, and \(E\) is monthly earnings (Schiller and Weiss 1979, p. 370). Higher benefit levels (\(B\)) should increase quits among those eligible for retirement and reduce quits for other workers, *ceteris paribus*.

The third important structural feature of pension plans is the age and years of service at which a worker becomes eligible for early or normal retirement. At normal retirement, a worker can leave work and start to receive a full pension benefit. In most companies, the worker must leave at normal retirement eligibility, since it is the time at which retirement is mandatory. Most companies also define a status called early retirement, at which a worker becomes eligible for benefits at some point before the normal retirement age. The early retirement benefit is lower than the normal one, however, because accumulated years of service are fewer and companies often actuarially reduce the benefit to take account of the longer expected life span over which it will be received. A reduction in retirement age clearly increases both the probability of pension receipt and the period over which it will be received, and thus should restrain quits by younger workers and encourage quits among older workers (Schiller and Weiss 1979, p. 370). Schiller's and Weiss's analysis does not take into account Social Security benefits. These benefits would help encourage a higher quit rate among older workers as well, especially if vested or qualified for early retirement.

**Effects of Ronald Reagan's Tax Cut**

A key feature of the Economic Recovery
and Tax Act of 1981 (ERTA) was a 25 percent reduction in the federal personal income tax phased in over three years. By reducing marginal tax rates, ERTA has reduced the incentive employees have to demand compensation in nonwage form. Browning found in her studies that marginal tax rates will affect the level of fringe benefits people will take in place of cash wage compensation (Browning 1979, p. 205). The tax cut also increased disposable income directly by reducing the tax burden, and perhaps indirectly as well, by stimulating aggregate economic activity. Killard Adamache did a regression analysis which revealed that, by holding marginal tax rates constant, higher income reduces contributions to life and health insurance plans slightly, but increases contributions to private pension plans markedly. He found that the employer contributions were quite responsive to changes in marginal tax rates. He claimed that ERTA legislation reduced demand for life and health insurance by five percent through 1985 from what the levels would have been without ERTA’s tax reductions (Adamache and Sloan 1985, p. 53). The actual effects of the Reagan cuts and the 1987 tax reform measures are not currently available, but it is obvious that the potential effects are significant. The results will depend to a large extent on the rate of income growth through this decade.

Conclusions

The levels of fringe benefits have grown tremendously in the past couple of decades. While these benefits are nice for workers, the loss of tax revenue has added to the budget crisis in Washington, and burdened society with higher marginal tax rates (and welfare costs) to make up for lost revenue. Therefore fringe benefits should be counted as income, except for those that are defined as “appropriate” or “helpful.”

One must, however, be a political realist. The deficit problem will need to get much more severe before the tax status of fringe benefits is significantly changed. The present situation will probably continue for many years to come, and poor Ben Franklin will have only been correct on one of life’s certainties.

Note

1 The QES was conducted by the Michigan Survey Research Center. It looked at employment characteristics of 530 men and 252 women who were interviewed between 1973 and 1977.

REFERENCES


