Current Taxation of Qualified Pension Plans: Has the Time Come?

The U.S. Treasury estimates that personal income tax receipts in fiscal year 1992 would have been \$51 billion higher without the special provisions accorded employer-sponsored pension plans. It is at best unclear that taxpayers are getting their money's worth from this large tax expenditure. Despite a myriad of legislative changes, all of which combine to increase the likelihood that persons covered by pension plans will actually receive benefits, the U.S. pension system is still a very erratic and unpredictable way to provide retirement income and it benefits a relatively privileged subset of the population. In view of other pressing demands on the federal budget, the time may have come to eliminate some or all of the tax preferences accorded compensation provided through qualified pension plans and introduce some form of current taxation.

The purpose of this paper is to reiterate the case for reassessing the current favorable treatment accorded qualified plans and to explore some possible approaches for introducing current taxation. Part I addresses the issue of revenue loss, considering the impact not only on the personal income tax but also on the payroll tax. Concluding that the revenues forgone are large no matter how they are measured, Part II explores what taxpayers are buying for their money. Qualified plans provide retirement income to a steadily declining and decidedly non-poor proportion of the population, and they do not appear to have increased national saving. In short, the favorable tax treatment of compensation received in the form of accrued pension benefits does not appear to be achieving high-priority social goals.

Given the large federal deficits and overwhelming demands on the federal budget, Part III explores mechanisms for taxing qualified plans in order to recoup some or all of the subsidy currently accorded pensions, and looks at the experience of other countries that have made changes in this area.

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I. The Current Tax Treatment of Qualified Plans

In the United States, a person's income has generally been viewed as the best measure of his ability to contribute to the cost of government. Tax experts have argued for a broad definition of income and indeed such a broad definition has been incorporated in the Internal Revenue Code. Treasury regulations specify that income includes compensation paid in forms other than money and the U.S. Supreme Court has confirmed that the Code definition "is broad enough to include in taxable income any economic or financial benefit conferred on the employee as compensation, whatever the form or mode by which it is effected." In actual practice, the economic benefit test has not been rigidly followed; certain forms of compensation have been accorded special treatment.

Qualified Plans and the Personal Income Tax

Under the personal income tax, employees are not taxed currently on the value of their accrued pension benefits; rather, they are allowed to defer taxes until benefits are received in retirement. This treatment is equivalent to an interest-free loan from the Treasury and significantly reduces the lifetime taxes of those employees who receive part of their compensation in wages and part in pensions as opposed to those who receive all their compensation in cash wages.

This favorable treatment costs the Treasury money; the estimated revenue loss for fiscal 1992 is \$51 billion. This number is the net of two figures: 1) the revenue that would be gained from the current taxation of annual pension contributions and pension fund earnings, and 2) the amount that would be lost from not taxing benefits in retirement, as is done currently. The \$51 billion includes the tax expenditure for private pensions, state and local plans, and the federal civilian retirement plans (Table 1); no estimate appears to be made for the military plan. Nevertheless, the exclusion of employer-sponsored pension plan contributions and earnings is the single largest tax expenditure, topping even the revenue loss arising from the deduction of mortgage interest on owner-occupied homes (Table 2).

Two lines of argument are sometimes employed to diminish the importance of these estimated revenue losses. The first, which contends that the treatment of pensions is consistent with that of saving

Table 1 Estimated Revenue Loss under the Personal Income Tax from Exclusion of Pension Contributions and Plan Earnings, Fiscal Years 1990 to 1992

Billions			
Plan	1990	1991	1992
Total	\$45.4	\$48.0	\$51.2
Private Plans	23.9	25.5	27.1
State and Local Plans	14.1	14.7	15.7
Federal Civilian Retirement Plans	7.4	7.8	8.4
Addendum:			
Revenue Loss as a Percent of			
Income Tax Receipts	9.7	9.8	9.7

Source: Author's estimate based on unpublished data from the U.S. Department of the Treasury, Office of Tax Analysis; U.S. Office of Management and Budget (1991, Section X, "Receipts, User Fees, and Other Collections," Part Three, p. 6 and Section XI, "Tax Expenditures," Part Three, p. 36).

under a consumption tax, is accurate but of little relevance. True, the United States has something of a hybrid system, but its commitment to the income tax was reaffirmed in the Tax Reform Act of 1986, and the Treasury itself, with the apparent concurrence of Congress, classifies the treatment of pensions as a deviation from both the "normal" tax structure and the so-called "reference law" baseline.

The second line of argument actually represents some confusion on the part of critics. The notion is that the current calculation does not properly account for the fact that the large pension accruals not taxed today will be taxed in the future. A generous interpretation of this concern is that the cash-flow calculation may not be the best measure of the revenue loss.

Indeed, the cash-flow approach, which is meaningful for permanent deductions and exclusions, does not properly account for tax concessions in those cases where tax payments are deferred. Its limitations for qualified pension plans can be seen clearly by considering a situation in which (1) annual contributions to private plans and pension fund earnings exactly equal benefit payments during the year, and (2) workers face the same marginal tax rate in retirement as they do during their working years. Under these assumptions the revenue loss would equal zero, according to the Treasury calculations of

¹ Commissioner vs. Smith, 324 U.S. 177, 181 (1945).

tax expenditures. Yet individuals covered by private plans would continue to enjoy the advantage of deferring taxes on employer contributions and investment income until after retirement.

A better estimate of the annual revenue loss resulting from the current deferral would be the difference between (1) the present discounted value of the revenue from current taxation of pensions as they accrue over the employee's working life, and (2) the present discounted value of the taxes collected when benefits are received by the employee after retirement. Such a calculation, which is reported in Table 3, suggests that the current treatment of pensions reduces tax revenues between \$40 billion and \$69 billion in present value terms. For instance, if the typical worker covered by a pension plan were 35, and if the earnings on accumulated contributions were 7 percent and the discount rate 7 percent, then the tax expenditure calculated for fiscal 1992 contributions on the present-value basis would be \$51.4 billion. This compares to the Treasury tax expenditure estimate calculated on a cash basis of \$51.2 billion for fiscal 1992.

It could be argued that the tax benefit for pension plan participants should be limited to the value of deferral, and the rate effect that results from the progressive tax structure ignored. Focusing solely on the revenue loss from deferral, the present-value

Table 2
Top Ten Tax Expenditures in the Income
Tax, Ranked By Revenue Loss, Fiscal Year
1992

1002	
Item	Billions
Net exclusion of pension contributions and plan	
earnings	\$51.2
Deductibility of mortgage interest on owner-	
occupied homes	40.5
Exclusion of employer contributions for medical	
insurance premiums and medical care	33.5
Step-up basis of capital gains at death	26.8
Accelerated depreciation	26.1
Deductibility of nonbusiness state and local	
taxes other than on owner-occupied homes	20.4
Exclusion of OASI benefits for retired workers	18.0
Deductibility of charitable contributions	16.8
Exclusion of interest on public purpose state	
and local debt	14.0
Deferral of capital gains on home sales	13.9

Source: U.S. Office of Management and Budget (1991, Section XI, "Tax Expenditures," Part Three, p. 40).

Table 3 Alternative Estimates of Cost to Treasury of Favorable Tax Provisions for Employer Pension Plans,^a Fiscal Year 1992

Billions				
Rate of Return on Plan Assets	Aver	age Age of	Covered W	/orker
(percent)	30	35	40	45
		Estim	ate A ^b	
7	\$56.5	\$51.4	\$45.9	\$40.0
8	62.4	56.1	49.4	42.4
9	68.9	61.1	53.2	45.0
		Estim	ate B ^c	
7	52.3	47.2	41.8	35.9
8	56.9	50.8	44.4	37.6
9	61.6	54.5	47.1	39.5

^aIncludes private pension plans, federal civilian retirement plans, and state and local retirement systems.

estimate of the tax expenditure becomes \$47.2 billion for the 35-year-old individual and an assumed interest rate of 7 percent. Thus, the revenue loss associated with the favorable treatment of pension contributions and earnings under the personal income tax is substantial regardless of how it is measured.

Qualified Plans and the Payroll Tax

Like the income tax, Social Security payroll taxes are theoretically applicable to a broad definition of wages that includes noncash as well as cash payments. However, employer contributions to qualified pension plans are also excluded by statute from the payroll tax base.

These exclusions have never been considered "tax expenditures," because the Treasury and the Congressional Budget Office assume that, with Social Security payments tied to the level of contributions, the reduction in contributions will eventually be reflected in lower retirement and disability benefits. Future benefits are reduced less than proportionately, however (Chen 1981). This occurs because the weighted benefit formula replaces a smaller percentage of wages at higher earnings levels than at lower ones. Since a substantial portion of the decline in the payroll tax base, caused by the growth in pensions, occurs at higher earnings levels, benefit payments are

^bTax rate is 23 percent in working years and 17.5 percent during retirement.

^cTax rate is 23 percent during working years and retirement. Source: Author's estimates

Table 4 Immediate Revenue Loss under the Payroll Tax from Exclusion of Pension Contributions and Plan Earnings, Fiscal Year 1992

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Plan	Revenue Loss
Total	\$38.6
Private Plans	20.5
State and Local Plans	11.9
Federal Civilian Retirement Plans	6.3
Addendum:	
Revenue Loss as a Percent of Payroll	
Tax Receipts	12.2

Note: Items may not sum to total because of rounding. Source: Author's estimate based on unpublished data from U.S. Department of the Treasury, Office of Tax Analysis; Social Security Administration (1989, Table 4.B1); Social Security Administration (1991, Tables 1 and 22).

not reduced significantly. Thus, the exclusion of pension accruals from the tax base not only causes the short-run loss of revenues, but also raises the long-run costs of the program.

The short-run revenue effect is substantial. Table 4 summarizes the immediate revenue loss from reducing the payroll tax base, without considering the effect on future benefit commitments. This calculation differs from that performed for the income tax in two respects. First, employer contributions to pension plans escape tax completely, since no payroll tax is levied on pension benefits in retirement. Second, revenue loss occurs on both the employee's and the employer's side of the transaction, since neither party is required to pay taxes on exempt employer contributions.2 For 1992, the estimated revenue loss from excluding pension fund accruals from the payroll tax base amounts to nearly \$39 billion.

Eventually benefit reductions occur as a result of the exclusions from the tax base, so the long-run cost to the system is less than that implied by the shortrun revenue loss. Nevertheless, the long-run costs are substantial. If all pension accruals, that is, contributions plus fund earnings, were included in the tax base, the system could be financed over the next 75 years with an annual payroll tax of 11.8 percent instead of 12.4 percent, as scheduled under current law.3 This rate reduction would particularly benefit low-income individuals who generally are not covered by pensions and therefore would experience no

change in their tax base. Thus, it is apparent that the exclusion of pension accruals has a large impact on both personal income tax and payroll tax revenues.

Equity Considerations

In addition to requiring higher income and payroll tax rates, exclusion of pension contributions and earnings from the tax base creates problems of horizontal equity. Deferring taxes on a major component of compensation means that two people who are equally well off in an economic sense pay different amounts of tax over their lifetimes. The favorable tax provisions also have an adverse effect on the distribution of income. As will be discussed later, less than

Pension coverage tends to be concentrated among the higher-paid.

one-half of the private work force is covered by a pension plan, and pension coverage tends to be concentrated among the higher-paid. Moreover, the value of exclusion or deferral increases with taxpayers' marginal rates. Hence the higher-income groups profit from the favorable tax provisions, yet all taxpayers must pay higher rates to compensate.

This discrepancy could be overlooked if the incentives substantially improved the lot of those who would not have saved on their own, or increased aggregate saving. As this study considers the evidence, the favorable tax provisions achieve neither of these objectives; the following section lays out the arguments.

² The ability to avoid payroll tax payments provides an incentive for the employer to offer a dollar of benefits rather than a dollar of wages. This factor, which becomes increasingly important as the payroll tax rate rises, is generally overlooked in discussions of the reasons for the growth of employee benefits.

Although the statutory rate is 12.4 percent, under the current economic and actuarial assumptions the long-run cost projections show the trust fund running a deficit of 1.08 percent of payroll over the 75-year period. Thus, the savings from expanding the payroll tax base to include pension contributions and earnings would probably be used to reduce the projected deficit rather than reduce the tax rate.

II. What Do Tax Expenditures for Qualified Plans Buy Us?

Advocates of government support for qualified plans claim that these plans provide a secure retirement for individuals who otherwise would not have saved on their own and that pensions increase national saving.

The Coverage Issue

The goal of federal tax policy since 1942 has been to encourage, through favorable tax provisions, the use of tax-qualified pension and profit-sharing plans to ensure greater retirement security for all employees, not just highly paid executives. In other words, the strategy is to secure retirement benefits for the rank and file by providing tax incentives that will induce higher-paid employees to support the establishment of plans providing broad coverage.

Contrary to the popular belief that Social Security fully replaces the income of the low-paid worker, almost everyone needs supplementary benefits in order to avoid a decline in living standards after retirement. The misconception about Social Security arises from calculating replacement rates using the analytical construct of a hypothetical person retiring at age 65 with a history of low earnings and a nonemployed spouse; this exercise shows Social Security replacing nearly 100 percent of preretirement earnings. In contrast, data from the New Beneficiary Survey indicate that the actual replacement rate for couples in the lowest quartile was 58 percent.4

Despite the near universal need for supplementary pension income, the most recent data on pension coverage (March 1989 Current Population Survey) showed that only 39 percent of full-time private wage and salary workers were covered by either a defined benefit or defined contribution plan (Woods 1989). Another 7 percent were covered by employer-sponsored pre-tax plans, such as 401(k)s or 403(b)s. These kinds of plans are not necessarily employer-financed, however, nor do they necessarily provide retirement income since they frequently allow lump-sum payments. Nevertheless, the sum of those covered by pre-tax plans and traditional plans equals only 46 percent of private full-time workers. The inclusion of government workers increases this ratio to 52 percent, since they have a much greater chance of being covered by a traditional employer-sponsored plan than their counterparts in the private sector.

Pension coverage and pension benefit payments

also tend to be concentrated among higher-paid employees. The incidence of pension coverage increases markedly as earnings levels rise. For example, in 1988 only 30 percent of nonagricultural wage and salary workers earning under \$20,000 were covered by a plan, compared with 73 percent of those with earnings over \$50,000 (EBRI 1989). On the benefit side, pensions are a much more important source of income for the wealthiest elderly than for the rest of the population aged 65 and older. In 1988, pensions accounted for only 3 percent of total income and retirement benefits for the poorest quintile compared to 19 percent of income and 49 percent of retirement benefits for the wealthiest (Table 5). Some of this pattern can be explained by the relatively greater importance of Social Security benefits in the lower quintiles; the program is designed specifically to replace a higher proportion of the wages of lowerincome individuals. Nevertheless, lower-income people still need supplementary income, in addition to their Social Security benefits, in order to maintain their pre-retirement standard of living, and they received almost no help from the private pension system.

Additionally, the percentage of covered full-time workers has been declining during the 1980s, after decades of expansion. Table 6 shows that, for private workers, this percentage fell from 50 percent in 1979 to 46 percent in 1988. Moreover, the decline in coverage under traditional plans has probably shown a more dramatic decrease given the rapid expansion of 401(k) plans over this period.⁵ Coverage for all workers has exhibited approximately the same decline, since the coverage and relative size of the government work force remained stable over this period.

⁵ Between May 1983 and May 1988, the availability of 401(k) arrangements increased threefold; the proportion of nonagricultural wage and salary workers offered 401(k) plans increased from

8 to 27 percent (EBRI 1989).

⁴ Replacement rates are designed to compare retirement earnings with preretirement earnings. Fox (1982) reported a replacement rate for married couples of 56 percent using the highest three out of the previous ten years of earnings as the denominator. This figure represented a recent standard of living not unduly influenced by career-high or career-low earnings years. Grad (1990b) reports two different replacement rates, one using the average of the five years of highest earnings over the career as the denominator, and the other using the average of the five years of earnings just prior to retirement as the denominator. These rates, 39 and 77 percent, respectively, represent the spectrum of possible rates, since the highest five years of earnings could have occurred 20 years before retirement, while earnings just prior to retirement are often lower than average. Thus, to obtain a figure closer to the ideal, these two rates were averaged.

Table 5 Pensions as a Percentage of Total Income and Retirement Benefits for Households Aged 65 or Older by Income Quintile, 1988

	Pensions ^a as a Percent of				
Income Quintile	Total Income	Retirement Benefits ^b			
Lowest	2.5	3.0			
Second	6.2	7.4			
Middle	13.7	18.3			
Fourth	20.0	31.3			
Highest	19.0	49.1			
Total	16.6	30.0			

"Income from pensions includes payments from government employee pensions and private pensions.

^bRetirement benefits include Social Security and Railroad Retirement payments as well as private and government pensions.

Source: Social Security Administration, Office of Research and Statistics, unpublished tabulation from the March 1989 Current Population

When the decline in coverage first appeared in the early 1980s, it was attributed to the poor economic conditions and high unemployment associated with the 1982 recession, and largely dismissed. Observers thought that coverage losses were due solely to temporary layoffs and that coverage would rebound with economic growth. During the 1980s, however, the proportion of employees working for firms that are large and unionized, which are key determinants of pension coverage, suffered a permanent decline. These declines have not been offset by increases in coverage in the service industries. The inevitable conclusion is that because of the influence of industry structure on pension coverage, the percentage of the work force covered by supplementary plans in the United States will not increase noticeably in the foreseeable future.

In short, less than one-half of the population is covered by a supplementary employer-sponsored plan, coverage tends to be concentrated among the higher-paid, and the percentage of even the fulltime work force covered by a traditional pension plan is declining. Thus, the tax incentives do not appear to be meeting the goal of providing supplementary retirement income to those who would not save on their own, and are unlikely to do so in the future.

The Saving Issue

Though it appears that widespread provision of retirement income through private pension plans has not been achieved, the favorable treatment of compensation provided through qualified plans might still be justified if it promoted national capital formation. In other words, do those people who are covered by pension plans end up with substantially more saving than they would have had in the absence of favorable tax provisions?

Many people have cited the rapid increase in pension fund assets as evidence of the positive impact of pensions on national saving. Indeed, pension reserves have experienced extraordinary growth; from the end of 1945 to the end of 1990, private pension assets increased from \$5 billion to almost \$2 trillion, while government pension reserves grew from \$5 billion to \$1 trillion. Proponents of pension plans imply that this buildup of reserves represents a net increase in national saving. The life-cycle model, however, predicts that in an ideal world exhibiting perfect labor and capital markets, no taxes, and no uncertainty, people would simply substitute the increase in their expected pension benefits for their own saving.

On the other hand, the favorable tax provisions associated with qualified plans would be expected to increase saving. This conclusion, however, depends

Percentage of Full-Time Workers Aged 16 or Older Covered by an Employer-Financed Pension Plan, 1972, 1979, 1983, and 1988

	Percent Covered				
Plan	1972	1979	1983	1988	
Total	n.a.	56	n.a.	52	
Private	48	50	48	46	
Public	n.a.	84	n.a.	83	
Addendum:					
Coverage Status Under Private	e Plans				
Basic pension only				33	
Both pension and pretax pla	ans			6	
Pretax savings plan only				7	

n.a. = not available.

Source: Woods (1989, p. 17); Beller (1981, p. 3); Social Security Administration, unpublished tabulation of public employee coverage from March 1989 Current Population Survey.

crucially on the extent to which the tax preferences influence saving decisions at the margin and the sensitivity of individuals to changes in the rate of return caused by the tax preferences. In the United States, pension contributions and benefits tend to be relatively small. According to the Social Security Administration, the median annual private pension benefit for married couples age 65 and older was only \$4,374 (Grad 1990a, p. 73). Hence, it is highly likely that desired saving exceeds pension saving for most middle-income and high-income people, and thus they experience no change in their rate of return at the margin.

Even for those individuals for whom pension saving is marginal, the effect of the higher after-tax return may be relatively small. Although economists agree on the direction of response to higher returns, they have not reached a consensus on the magnitude of this response. An average of extreme estimates (Boskin 1978; Howrey and Hymans 1978) would indicate that a 10 percent increase in returns (say from 7 to 7.7 percent) would increase the private saving rate by 2 percent (say from 9.8 to 10.0 percent). At today's levels, even if pension saving exceeded desired saving for all people covered by qualified plans, the effect of the tax preferences on the after-tax return to saving through pensions would be expected to increase national saving by roughly \$12 billion.

Some other nontax factors, however, might lead one to think that saving through pension plans might produce more capital accumulation than a procedure whereby each person saved directly. The illiquidity of pension rights makes them less than perfect substitutes for private saving, with the result that people might reduce their other saving by less than one dollar for each dollar of pension accumulation. Similarly, retirement provisions accompanying qualified plans may stimulate saving by encouraging workers to retire early and therefore to save more during their working years than they would have otherwise. Moreover, uncertainty about whether they will ultimately receive a pension benefit might cause people to be cautious about cutting back on their own saving. Conversely, because an inflationary environment hinders an accurate assessment of unindexed pension benefits, workers could just as easily overestimate future real benefits and reduce their own saving by more than their pension asset accumulation. Similarly, because pension benefits are paid as annuities that pool risk, total saving might be less than if workers had saved individually for their own retirement and had to plan for extreme contingencies.

Since it is impossible to determine a priori whether the growth in private pension plans has fostered a net increase in saving or merely a shift in the composition of assets, a final assessment must rest on empirical evidence. If plans are fully funded, which is a relatively safe assumption these days, the

Once the shift in personal saving and the revenue losses have been taken into account, the favorable tax provisions do not appear to have stimulated national saving to any great degree.

key determinant of saving is the extent to which individuals reduce their own saving in response to promised pension benefits. The bulk of the evidence supports the prediction of the life-cycle model that individuals reduce their own saving in anticipation of future pension benefits (Munnell and Yohn 1992). The majority of the studies, however, did not use a very reliable measure of expected benefits and most of the studies focused on older men for whom retirement was the primary saving motive; little progress has been made in assessing the impact of pensions on the saving of the entire population. All that can be reasonably said is that some offsetting behavior occurs, and it is less than dollar for dollar.

For purposes of illustration, however, assume that the offset is in the range of 65 to 70 cents, an estimate consistent with the results of most of the accepted studies. Given this offset, if annual pension saving were \$150 billion, individuals would reduce their own saving by roughly \$100 billion, implying a net increase of \$50 billion to private saving. With a revenue loss estimate from the preferential treatment of qualified pensions of approximately \$50 billion, the most reasonable conclusion is that the increase in private saving may well have been completely offset

 $^{^6}$ The contribution figure underlying the Treasury's tax expenditure estimate for 1992 is \$144 billion.

by a comparable increase in the federal deficit, leaving national saving unchanged.7

Thus, neither of the basic justifications for the preferential tax treatment of private pensions is supported by current evidence. Broad provision of private retirement income across income classes has not been achieved, given the pattern of pension coverage and distribution of benefits. Furthermore, once the shift in personal saving and the revenue losses have been taken into account, the favorable tax provisions do not appear to have stimulated national saving to any great degree. Thus, eliminating or reducing the tax concessions merits serious consideration.

III. Taxing Qualified Plans

It is important to clarify one point before beginning the discussion of possible options for taxing compensation in the form of deferred pension benefits. An income tax unquestionably favors consumption over saving relative to a consumption tax. An income tax reduces the rate at which individuals can trade off present consumption Cp for future consumption C_E, because the interest earnings on savings are reduced by the tax and less is gained by postponing consumption.8 It is also true that the current treatment of saving through qualified plans is

⁷ A slightly different issue is what would happen to saving if the preferential treatment of pensions was eliminated. Under one extreme scenario, pensions are relatively unaffected by the changes in the tax provisions, so pension and other personal saving remains more or less unchanged. The Treasury, however, receives \$50 billion and uses this money to reduce the federal deficit, so national saving is increased by \$50 billion. At the other extreme, pensions exist only because of the tax preferences and therefore would disappear once the preferences were removed. In this event, pension saving would decline by \$150 billion and other personal saving would increase by \$100 billion, implying a net reduction in personal saving of \$50 billion. If the decision were made to return the \$50 billion earned from the elimination of the tax preference to taxpayers by lowering rates, then the deficit would remain unchanged and the net impact would be a \$50 billion reduction in national saving.

Without any tax, consumers can consume their entire income Cp = Y, or they can save it, earn interest equal to iY, and enjoy future consumption C_F of Y(1 + i). Thus, the rate at which they can trade off present for future consumption (CP/CF), in the absence of taxation, is Y/[Y(1 + i)] or 1/(1 + i). With a consumption tax, present consumption becomes (1 - t)C and future consumption becomes (1 - i)(1 + i)C, but the ratio of the two remains unchanged at 1/(1 + i). With an income tax, present consumption equals (1 - i)Y, but maximum possible future consumption becomes (1 - t)Y + (1 - t)i(1 - t)Y, so that the trade-off becomes 1/[1 + i(1 - t)].

consistent with the treatment accorded saving under a consumption tax.9

The conclusion does not automatically follow, however, that the present treatment should remain unchanged. While, in the writer's view, a welldesigned consumption tax, with a nice progressive rate structure and bequests included in the tax base, would be a perfectly acceptable alternative to the present personal income tax, little is gained from the piecemeal exclusion from the income tax base of saving through qualified plans. This treatment costs a lot in forgone revenues, creates horizontal inequities, and does not increase saving.

The alternative is to move more towards a comprehensive income tax—thereby continuing the trend established by the Tax Reform Act of 1986-and devise a mechanism for including in a person's tax base the change in the present discounted value of future retirement benefits. This somewhat elusive concept can be fairly well approximated by the sum of contributions to pension funds and earnings on pension fund assets. The major strategic question is whether the tax should be levied on the individual's share of these financial flows or imposed at the fund level.

The practical difficulties associated with allocating contributions and pension fund earnings to employees are substantial. First, these amounts would fluctuate widely from one year to the next depending on the performance of the stock market, introducing substantial volatility into the individual employee's annual tax payments. Second, unless contributions and earnings were attributed only to those whose pensions were vested, some individuals might be taxed on benefits that they might never collect. Third, some individuals would have difficulty finding the funds to pay tax on income they have not received.

Despite these difficulties with allocating individual accruals, the Treasury Department, during the Ford Administration, outlined an approach that involved allocating annual pension fund earnings to those individuals with vested pension rights (U.S. Department of the Treasury 1977). Essentially, the plan retained the deductibility of employer contributions and the taxation of benefits after retirement,

⁹ An individual can either receive compensation (P) in cash, pay income on that amount and enjoy current consumption of (1 - t)P, or save P through a qualified plan, earn interest of iP and enjoy future consumption of (1 - t)(1 + i)P. Thus, the trade-off through qualified pension plans between current and future consumption is 1/(1 + i), the same ratio that individuals face under a consumption tax.

and introduced the taxation of pension fund earnings on a current basis. ¹⁰ Otherwise the earnings would be included in the income of the employer. Given some simplifying assumptions, this plan can be shown to be equivalent to taxing employees currently on pension contributions and plan earnings. ¹¹ To date, however, no movement has been made in the United States toward implementing current taxation of pension accruals. Efforts to limit the revenue loss associated with qualified plans have been directed at contribution and benefits limits on both defined contribution and defined benefit plans.

Foreign Experience

In contrast to the U.S. experience, three countries—Sweden, Australia, and New Zealand—have recently instituted major reforms in the taxation of pensions. Although the rationale for reform and the specifics of the new taxation differ among the three nations, the common development is that in each situation the decision has been made to levy the tax at the fund rather than the individual level.

Sweden. Until 1991, Sweden taxed pensions as the United States currently does. That is, contributions and earnings were tax exempt and benefits were taxed when received in retirement. The tax reform of 1991 was designed to redistribute the tax burden without changing the total burden, and move the entire system to a consumption-tax system through expanded use of value-added and indirect taxes. On the income tax side, however, movement was towards an even purer income tax through base-broadening measures. The reforms included a major provision to tax annual earnings on pension funds, in order to capture some of the revenue that was lost because of deferral and to improve equity in the treatment of different forms of saving.

Under the new system contributions remain tax exempt and fund income is taxed, but at a lower rate than other capital income (10 or 15 percent, depending on the type of plan, versus 30 percent under the federal personal and corporate income taxes) to provide some incentive in favor of pension saving. Benefits continue to be taxed as ordinary income when received. Thus, Sweden has adopted an approach to taxing pensions analogous to the plan laid out by the U.S. Treasury in the late 1970s.

Most people, however, do not pay any national income tax on benefits. Throughout the 1980s personal income taxes have been constantly changing toward fewer brackets and lower marginal rates.

Currently, due to the high standard deduction, roughly 85 percent of the population pays no national income tax, while the other 15 percent is subject to a marginal rate of 20 percent on labor income. ¹² As a result, taxation of benefits has been significantly reduced over the last decade.

Australia. Prior to reform, Australia's system paralleled that in the United States. Contributions and fund earnings were untaxed and benefits were taxed when paid out. The government played little role in encouraging private provision of retirement income until 1983 when the political wing of organized labor was elected into government and developed a Retirement Income Policy. This policy was designed to maintain tax concessions in order to encourage private pension provision, to expand coverage to traditionally excluded groups, and to promote annuities over lump-sum distributions. Until 1988 the tax treatment of pensions remained largely unchanged;¹³ reforms were aimed at meeting other goals. The reforms of 1988 included important provisions related to pensions: the tax on benefits was shifted to the time when contributions occur, thus aligning the treatment of pensions more closely with other forms of saving and recouping some of the revenue loss of deferral.

Under the new system, contributions are taxed at 15 percent, levied on the fund. Fund income and realized capital gains are taxable at a flat rate of 15 percent, after expenses and after adjusting capital gains for inflation. As an offset to this tax, the funds can claim credit for dividends received from Austra-

¹⁰ The plan also extended the deductibility to employee contributions, which are not deductible under current law.

1/[1 + (1 - t)i].
1/2 Most taxpayers are subject to municipal income taxes which average 31 percent, however, and special rules apply to retired people with low pensions so that a minimum pension is tax exempt (Swedish Ministry of Finance 1991).

13 See Commonwealth of Australia (1988) and Larum (1990) for a more complete discussion of the reforms. The discussion has been simplified here and concerns only plans similar to private plans in the United States. Lump-sum pension plans are also prevalent in Australia and are subject to slightly different regulations. Some changes were made in the tax treatment of lump-sum distributions between 1983 and 1988, but the most significant pension tax changes occurred in the reforms of 1988.

¹¹ Assume that contributions, earnings, and benefits were all taxed at the same rate. Then current taxation of contributions and pension fund earnings would mean that the amount available for future consumption would be (1-t)P+(1-t)i(1-t)P or (1-t)P[1+(1-t)i]. Similarly, allowing a deduction for contributions but taxing earnings currently and benefits after retirement would mean that [P+iP(1-t)](1-t), or (1-t)P[1+(1-t)i], would be available for future consumption. Thus, in both cases, the trade-off of present for future consumption would be at the rate 1/(1-t)i

lian companies. Taxes on benefits have been reduced by 15 points as an offset to the contribution tax. As a transitional measure, the government allowed reductions in gross benefits to yield the same after-tax benefit. Few companies with defined benefit plans

Countries already undertaking reforms provide some examples and guidelines for the United States.

actually reduced their benefits; instead they accepted the additional costs. Australia has moved towards an income-tax approach to pensions, but has retained some subsidy for private plans.

New Zealand. New Zealand, at the end of 1987, made the boldest reforms to pension taxation of any country. Historically, contributions and fund income of pension schemes were untaxed and benefits were taxed on receipt. Beginning in 1984, with the election of the Labor Party, many tax reforms have been implemented. It was not until 1987 that pensions were tackled, at which time the government decided that the revenue costs of preferential treatment for pensions had become too large and that the benefits of these concessions were not fairly distributed. The 1987 changes were also designed to achieve tax neutrality between all forms of saving and among all types of capital income. 14

Contributions are now subject to a 33 percent tax, which originally was to be paid by the employer. After much public discussion, however, the government decided to levy the tax on the fund. Fund income is taxed at 33 percent, and benefits go untaxed. To ease the transition between the old and new tax regimes, pension plans were allowed to negotiate benefit reductions and essentially provide the same after-tax benefit to retirees. Thus, New Zealand has adopted a pure income-tax approach to pensions and eliminated all tax subsidies for these plans.

It is apparent that a great deal of action has been taken in recent years to change the tax treatment of pensions. Countries undertaking reforms have done so to improve equity in the treatment of various forms of saving and to recoup some revenue loss. They have also chosen to impose the taxes principally at the fund level. Although some uncertainty exists over whether the changes will remain in force, and some complaints are heard from the pension industries, these countries provide some examples and guidelines for the United States.

A Proposal for the United States

In order to crystallize the debate, it is probably useful to put forth a specific proposal for the taxation of pension accruals in the United States. One obvious option is an annual tax on pension contributions and pension fund earnings, which for administrative and other reasons would be paid at the fund level. That is, the employer would make a deductible contribution to pension plans just as under current law, but then the trustees of the plan would transfer to the U.S. Treasury the stated percent of annual contributions and plan earnings. Although a variety of rates are possible, some argument exists for using one of the marginal rates in the current personal income tax structure—probably 15 percent. Benefits could then be withdrawn tax free. The assumption, of course, is that benefits would probably end up 15 percent lower than they would have been without the current taxation.

To ensure equity, the Internal Revenue Service would need to make adjustments at the beneficiary level in the form of a rebate for individuals below the taxable threshold or a larger levy for high-rate taxpayers, so that these groups are not unduly disfavored or favored relative to current law. Even then, this plan is still less than perfect; it continues to provide some advantage to high-income taxpayers, whose pension fund earnings are taxed at only 15 percent, less than their marginal rate on wage income.

Even this skeleton of a plan raises some serious issues. The first is that, of the approximately 45 million people participating in employer-sponsored plans, roughly 2.5 million are covered by federal plans and nearly 10 million by state and local plans. Constitutional and practical problems arise in an attempt to tax the contributions and earnings of state and local plans.

As the debate regarding the mandatory extension of coverage of Social Security to state and local

¹⁴ New Zealand Ministry of Finance (1988) and Lucas and Bransford (1990) provide more detail on these changes. These reforms also included provisions affecting the taxation of life insurance, which is discussed more fully in New Zealand Ministry of Finance (1988).

employees revealed, the federal government is constrained by the Tenth Amendment from intruding into basic state government functions or infringing on the powers reserved for the states. States would certainly resist the federal government coming in and scooping up 15 percent of state and local pension contributions and pension fund earnings. Mechanisms would have to be devised to work around constitutional constraints. One possibility would be to enact an alternative tax whereby contributions and earnings would be attributed to individual employees and taxed at a rate greater than 15 percent if the tax were not paid at the fund level.

A serious practical problem also grows out of the constitutional arrangements between the states and the federal government. Unlike private plans whose funding behavior is controlled by the Employee Retirement Income Security Act of 1974 (ERISA), state and local plans are not subject to federal funding standards. Thus, the states and localities would be free to respond to the strong incentive to reduce contributions and pension fund earnings by cutting back on their funding efforts. 15 Such an outcome would clearly be undesirable. Thus, an effort to tax pension accruals for state and local employees would have to be accompanied by federal legislation to regulate funding of government plans. Enacting such legislation would not be easy, however, as demonstrated by state and local opposition to efforts in the early 1980s to extend federal reporting, disclosure, and funding standards to public plans.

Presumably similar difficulties should not arise in the case of the federal pension plans. Although the federal retirement plans are not covered by ERISA, Congress should have no problem extending the proposed tax provisions to the plans sponsored by the federal government. The only reason to raise the issue is that Congress, in recent years, has failed to adopt for federal plans some constraints that it has placed on plans sponsored by private employers. Specifically, the modified section 415 funding limits in the Tax Reform Act of 1986 do not apply to employees of tax-exempt organizations or government employees, including members of Congress (Schieber 1990). 16 Thus, care would have to be taken to ensure that federal plans were treated in the same manner as private plans if the taxation of pensions were shifted to a current basis.

Another major issue is the question of transition from the current to the proposed tax scheme. The problem is that the existing assets in the pension funds represent pension accruals for which no tax has been paid, so that immediately discontinuing the tax on pension benefits would mean that some beneficiaries would escape taxation under the income tax entirely. On the other hand, retaining income taxation for those benefits where contributions and earnings have not been subject to tax and exempting from tax those benefits for which accruals had been taxed currently would unnecessarily complicate the tax law.

An ingenious solution has been suggested by David Callund, a British economist (Callund 1989; MacLeod and Callund 1989). He suggests a one-time assessment on all existing pension assets equal to the tax applied to current accruals, which in this case is 15 percent. To compensate for the reduction in assets, the government would also reduce pension liabilities by announcing that all pensions in force would henceforth be paid net of this 15 percent tax. As mentioned previously, rebates or surcharges would be applied to benefit payments so that retirees would receive the same after-tax benefits as they would have under the current system.

Such a one-time assessment would not only ease the transition by allowing the new tax rules to apply immediately to all benefits, it would also eliminate a peculiarity of the current system whereby the government is essentially prefunding its future tax receipts. That is, current pension plans really consist of two separate funds: one fund that accumulates assets to pay future net-of-tax pension benefits, and another fund that accumulates assets to pay future federal income taxes. The government, like the private sector, implicitly employs the services of plan sponsors and investment advisors to manage and invest the assets in its portion of the pension fund. The government has no need to prefund its tax receipts, and

¹⁵ In reality, state and local contributions cannot drop to zero. If they do, the deferred compensation of state and local employees becomes subject to taxation under section 457 of the Internal Revenue Code.

¹⁶ ERISA for the first time set dollar restrictions for contributions to both defined benefit and defined contribution plans. The original 1974 funding limits were \$75,000 for a defined benefit plan and \$25,000 for a defined contribution plan, both amounts to be adjusted annually in line with changes in the consumer price index. By 1982, these limits had risen to \$136,425 and \$45,475, respectively. In response to perceived excesses of the pension deferral provisions and the need for revenue, the Tax Equity and Fiscal Responsibility Act of 1982 reduced the limits to \$90,000 and \$30,000, and froze further indexing until 1986. Legislation in 1984 extended the freeze until 1988, thereby significantly lowering the real dollar funding limits on employer pensions. The Tax Reform Act of 1986 introduced significant cuts to the maximum fundable benefits for workers retiring before age 65, and to the contribution limits for defined benefit plans (Schieber 1990, pp. 52–55).

would lose nothing by discontinuing this practice.

The one-time assessment would produce a large pile of one-time revenues for the Treasury—15 percent of \$3 trillion is \$450 billion—and the implications are intriguing in terms of their impact on federal government finances. Of course, the Treasury would gain the money only in a cash-flow sense and would be no better off in present value terms, since it would not receive the tax payments on future benefits as it would have under existing law. Nevertheless, these accelerated payments could be used to reduce the \$3 trillion of outstanding federal debt, lowering annual federal interest payments by roughly \$35 billion. On the other hand, if the assessment were used for current consumption, the transaction would have a detrimental effect on national saving and capital accumulation.

The case for current taxation of qualified plans does not depend, however, on the acceptability of the proposed transition scheme. Taxing pension accruals is consistent with a comprehensive income tax and deviating from this approach can be justified only if it produces substantial benefits. Thus, the proposal to tax pension contributions and pension fund earnings at the base income tax rate—that is, 15 percent—is not a radical proposal. The revenues from such a tax would vary with the performance of the stock market, but the levy would have produced roughly \$55 billion in revenue in 1990, the last year for which data are available (Table 7). If these funds were used either to reduce the federal government deficit or to invest in infrastructure or education, they would increase the resources available for future generations.

IV. Conclusions

This article has attempted to argue that the time has come for the current taxation of compensation received in the form of deferred pension benefits. Such treatment is consistent with the broad definition of income envisioned under a comprehensive personal income tax and incorporated in the language of the Internal Revenue Code. Taxing pensions on a deferred basis can be justified only if pension plans provide rank and file employees with retirement benefits that they would not have accumulated on their own, or, failing that test, if they increase the saving of those who are covered so that national saving and capital accumulation are greater than they would have been otherwise.

The evidence does not support either of these

Table 7
Estimated Revenue from Current Taxation of Pension Contributions and Plan Earnings, 1980 to 1990

Billions

Year	Pension Fund Assets	Benefits	Contributions and Earnings	Tax Revenue
1980	\$916.1	\$74.6	\$223.6	\$33.5
1981	996.9	87.8	168.6	25.3
1982	1179.2	99.9	282.2	42.3
1983	1392.1	112.5	325.3	48.8
1984	1532.0	124.2	264.1	39.6
1985	1801.8	145.7	415.5	62.3
1986	2031.8	172.5	402.4	60.4
1987	2201.9	194.6	364.6	54.7
1988	2482.4	221.2	501.8	75.3
1989	2848.0	244.4	610.0	91.5
1990	2945.1	267.2	364.3	54.6

Note: Pension fund asset figures represent end-of-year reserves. Given that assets, = assets_{t-1} + contributions_t + earnings_t - benefits_t, contributions plus earnings are calculated using the following formula: contributions_t + earnings_t = assets_t - assets_{t-1} + benefits_t.

Source: Author's estimates based on Board of Governors of the Federal Reserve System (1991, pp. 19–24); U.S. Bureau of Economic Analysis (1986, Tables 2.1 and 6.13) and (1986 to 1990, Tables 2.1 and 6.13).

justifications. Pension benefits are a trivial source of income for retirees in the bottom two-fifths of the income distribution, and increase dramatically in importance as one moves up the income scale. The pattern is unlikely to change in the future, since coverage is also concentrated among higher-paid workers. Coverage rates are also declining and, given their dependence on industry structure, they will probably continue to decline in the future. In short, pensions benefit a relatively privileged minority of the population, while all taxpayers face higher rates to cover the preferences accorded qualified plans.

Advocates of tax preferences for pensions frequently raise the saving issue as a rationale for favorable tax treatment. The assets of pension plans, however, do not represent a net increment to national capital accumulation, but rather a shift in the composition of saving and capital accumulation. Empirical studies confirm that individuals reduce their own saving in response to contributions to employer-sponsored pension plans. Although the offset is less than dollar for dollar, the net increment from the less than complete offset must be compared to the revenue loss associated with the large tax expenditure accorded qualified plans.

Given that the revenue loss associated with qualified plans does not appear to be achieving major social goals, the taxation of benefit accruals should be shifted to a current basis. The specific proposal is to levy a tax of 15 percent on annual contributions and pension earnings at the fund level. The transition to the proposed system could be eased by a one-time assessment of 15 percent of existing pension fund assets, accompanied by an announcement that outstanding liabilities were also reduced by 15 percent. That is, plan sponsors would be allowed to pay out 85 percent of their promised benefits, and adjustments could be made on the personal income tax form for any tax rebate or additional surcharge required for beneficiaries at different income levels.

A host of issues remain to be explored and resolved should policymakers become seriously interested in introducing such a reform. Problems exist in extending such a tax to pension plans sponsored by

state and local governments, but excluding such plans would be inequitable. Questions also arise about whether to eliminate the preferences associated with other tax-deferred savings plans such as Individual Retirement Accounts (IRAs) and section 401(k) and 403(b) plans.

While the problems are serious, they could all be addressed and resolved. The experiences of Australia, New Zealand, and Sweden should be very useful in anticipating and circumventing administrative and other practical difficulties. In short, the United States has the ability to tax pensions on a current basis and the time has come to do it. The guid pro quo, however, is that once the government has reduced or eliminated the subsidy to qualified plans, it should reduce the mountain of regulation facing sponsors of these plans. For after all, the tax advantages are the major justification for regulation.

References

American Bar Association, Section of Taxation, Committee on Simplification. 1983. "Evaluation of the Proposed Model of Comprehensive Income Tax." In Michael J. McIntyre et al., eds., Readings in Federal Taxation, 2nd ed., pp. 246–68. Mineola, NY: The Foundation Press, Inc.

Beller, Daniel J. 1981. "Coverage Patterns of Full-Time Employees Under Private Retirement Plans." Social Security Bulletin, vol. 44,

no. 7 (July), pp. 3-11.

Board of Governors of the Federal Reserve System. 1991. "Balance Sheets for the U.S. Economy, 1945–1990," C.9 Release (March).

Boskin, Michael J. 1978. "Taxation, Saving, and the Rate of Interest." Journal of Political Economy, vol. 86, no. 2, part 2 (April), pp. S3-S27.

Brannon, Gerard M. 1987. "Why Not an Excise Tax on Fringe

Benefits?" Tax Notes (June 1), pp. 909–10. Callund, David. 1989. "Taxation and Pension Finances." Benefits & Compensation International (November), pp. 22-25.

Chen, Yung-Ping. 1981. "The Growth of Fringe Benefits: Implications for Social Security." Monthly Labor Review, vol. 104, no. 11 (November), pp. 3-10.

Commonwealth of Australia. 1988. Reform of the Taxation of Superannuation. Canberra: Australian Government Publishing Service.

Congressional Budget Office. 1987. Tax Policy for Pensions and Other Retirement Saving. A CBO Study (April). Washington, D.C.: Government Printing Office.

Dilnot, Andrew. 1991. "Taxation and Private Pensions: Costs and Consequences." Presented at a Conference on Private Pensions and Public Policy sponsored by the OECD, Paris (July 1-3).

Employee Benefit Research Institute. 1988. "The Tax Treatment of Pension and Capital Accumulation Plans." EBRI Issue Brief, no. 82 (September).

1989. "Pension Coverage and Benefit Entitlement: New Findings from 1988." EBRI Issue Brief, no. 94 (September).

1990. "Pension Fund Taxation: Examining the Issues." EBRI Issue Brief, no. 105 (August).

Fox, Alan. 1982. "Earnings Replacement Rates and Total Income:

Findings from the Retirement History Study." Social Security

Bulletin, vol. 45, no. 10 (October), pp. 3–23.
Frie, Robert R. and James G. Archer. 1967. "Taxation and Regulation of Pension Plans under the Internal Revenue Code." University of Illinois Law Forum (Winter), pp. 691-737.

General Accounting Office. 1992. Tax Policy: Effects of Changing the Tax Treatment of Fringe Benefits. Washington, D.C.: General Accounting Office (forthcoming).

Goetz, Raymond. 1969. Tax Treatment of Pension Plans: Preferential or Normal? Washington, D.C.: American Enterprise Institute for Public Policy Research.

Grad, Susan. 1990a. Income of the Population 55 or Older, 1988. SSA Publication No. 13-11871 (June). Washington, D.C.: U.S. Department of Health and Human Services, Social Security Adminis-

New York, NY: Columbia University Press.

Howrey, Philip E. and Saul H. Hymans. 1978. "The Measurement and Determination of Loanable Funds Saving." Brookings Papers

on Economic Activity 3, pp. 655–85.

Kollmann, Geoffrey. 1985. "Social Security and Tax-Free Fringe Benefits: Background and Issues." Report No. 85-123 EPW (May 31). Washington, D.C.: Library of Congress, Congressional Research Service.

Korczyk, Sophie M. 1984. Retirement Security and Tax Policy. An EBRI-ERF Policy Study. Washington, D.C.: Employee Benefit

Research Institute Education and Research Fund.

Larum, John. 1990. "The Taxation of Superannuation in Australia." Presented at a Policy Forum on Assessing the Implications of Proposals for Pension Fund Taxation sponsored by the Employee Benefit Research Institute Education and Research Fund, Washington, D.C. (May 3).

Lucas, Ray and Roger Bransford. 1990. "Australia/New Zealand:

Case Studies, Lessons for the U.S.?" Presented at a Policy Forum on Assessing the Implications of Proposals for Pension Fund Taxation sponsored by the Employee Benefit Research Institute Education and Research Fund, Washington, D.C. (May 3).

MacLeod, John and David Callund. 1989. "Going Back to Basics."

Pensions World (October).

Manvel, Allen D. 1988. "Tax Preference Costs: Less, But Still Large." Tax Notes (June 20), pp. 1475–77.

McGill, Dan M. 1984. Fundamentals of Private Pensions. 5th ed.

Homewood, IL: Richard D. Irwin, Inc.

Munnell, Alicia H. 1982a. The Economics of Private Pensions. Washington, D.C.: The Brookings Institution.

1982b. "Is It Time to Start Taxing Social Security Benefits?"

New England Economic Review (May/June), pp. 18-27

. 1984. "Employee Benefits and the Tax Base." New England

Economic Review (January/February), pp. 39-55.

—. 1988. "Comment on William D. Andrews and David Bradford, 'Incentives to Save in a Hybrid Income Tax.'" In Henry J. Aaron, Harvey Galper, and Joseph A. Pechman, eds., Uneasy Compromise: Problems of a Hybrid Income-Consumption Tax. Washington, D.C.: The Brookings Institution.

. 1989. "It's Time to Tax Employee Benefits." New England

Economic Review (July/August), pp. 49-63.

Munnell, Alicia H. and Frederick O. Yohn. 1992. "What Is the Impact of Pensions on Saving?" In Zvi Bodie and Alicia H. Munnell, eds., Pensions and the Economy: Sources, Uses, and Limitations of Data. Philadelphia, PA: University of Pennsylvania Press for the Pension Research Council (forthcoming). Also available as Pension Research Council, Working Paper Series No. 90-3 (1990), and Federal Reserve Bank of Boston, Working Paper Series No. 91-5 (1991).

New York State Bar Association Tax Section's Committee on Employee Benefits. 1983. "Report and Recommendations on the Tax Treatment of Fringe Benefits." Tax Notes (January 3), pp.

3-12.

New Zealand Ministry of Finance. 1988. Consultative Document on Superannuation and Life Insurance, Volume 1 (March). Wellington, New Zealand: Ministry of Finance.

Pechman, Joseph A. 1980. What Should Be Taxed: Income or Expen-

diture? Washington, D.C.: The Brookings Institution. Schieber, Sylvester J. 1990. Benefits Bargain: Why We Should Not Tax Employee Benefits (May). Washington, D.C.: Association of Private Pension and Welfare Plans.

Shoven, John B. 1991. Return on Investment: Pensions Are How America Saves (September). Washington, D.C.: Association of Private Pension and Welfare Plans.

Simons, Henry. 1938. Personal Income Taxation: The Definition of

Income as a Problem of Fiscal Policy. Chicago, IL: University of Chicago Press.

Simonson, Kenneth D. 1984. "Fringe Benefits Should Be Taxed." Tax Notes (November 12), pp. 643-47.

Social Security Administration. 1989. Annual Statistical Supplement, 1989. Washington, D.C.: Government Printing Office.

1991. 1991 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Insurance Trust Funds. Washington, D.C.: Government Printing Office.

Stein, Norman P. 1991. "Qualified Plans and Tax Expenditures: A Reply to Professor Zelinsky's 'Classic Defense of the Status Quo.'" The American Journal of Tax Policy, vol. 9, no. 2 (forthcoming Fall), pp. 225-56.

Sunley, Emil M., Jr. 1977. "Employee Benefits and Transfer Payments." In Joseph A. Pechman, ed., Comprehensive Income Taxation, pp. 75-114. Washington, D.C.: The Brookings Institution.

Swedish Ministry of Finance. 1991. The Swedish Tax Reform of 1991 (April). Stockholm: Ministry of Finance.

Thorning, Margo. 1984. "Congressional Proposals for Fundamental Tax Reform." Tax Notes (July 30), pp. 494–500.
 U.S. Bureau of Economic Analysis. 1986. National Income and

Product Accounts for the United States, 1929-82. Washington, D.C.: Government Printing Office.

. 1986-1990. "National Income Accounts: Revised Esti-

mates." Survey of Current Business (July).

U.S. Congress, Joint Committee on Taxation. 1985. "Tax Reform Proposals: Pensions and Deferred Compensation" (August 5). Washington, D.C.: Government Printing Office.

U.S. Department of the Treasury. 1977. Blueprints for Basic Tax Reform. Washington, D.C.: Government Printing Office.

U.S. House of Representatives, Committee on Education and Labor. 1978. Pension Task Force Report on Public Employee Retirement Systems (March 15). Washington, D.C.: Government Printing Office.

U.S. Office of Management and Budget. 1991. Budget of the United States Government, Fiscal Year 1992. Washington, D.C.: Govern-

ment Printing Office.

Woods, John R. 1989. "Pension Coverage Among Private Wage and Salary Workers: Preliminary Findings From 1988 Survey of Employee Benefits." Social Security Bulletin, vol. 52, no. 10 (October), pp. 2-19.

Zelinsky, Edward A. 1988. "The Tax Treatment of Qualified Plans: A Classic Defense of the Status Quo." The North Carolina Law

Review, vol. 66, no. 2 (January), pp. 315-65.

. 1991. "Qualified Plans and Identifying Tax Expenditures: A Rejoinder to Professor Stein." The American Journal of Tax Policy, vol. 9, no. 2 (forthcoming Fall), pp. 257-82.