

GAO

United States General Accounting Office

Report to the Chairman, Subcommittee
on Oversight, Committee on Ways and
Means, House of Representatives

July 1990

PENSION PLAN TERMINATIONS

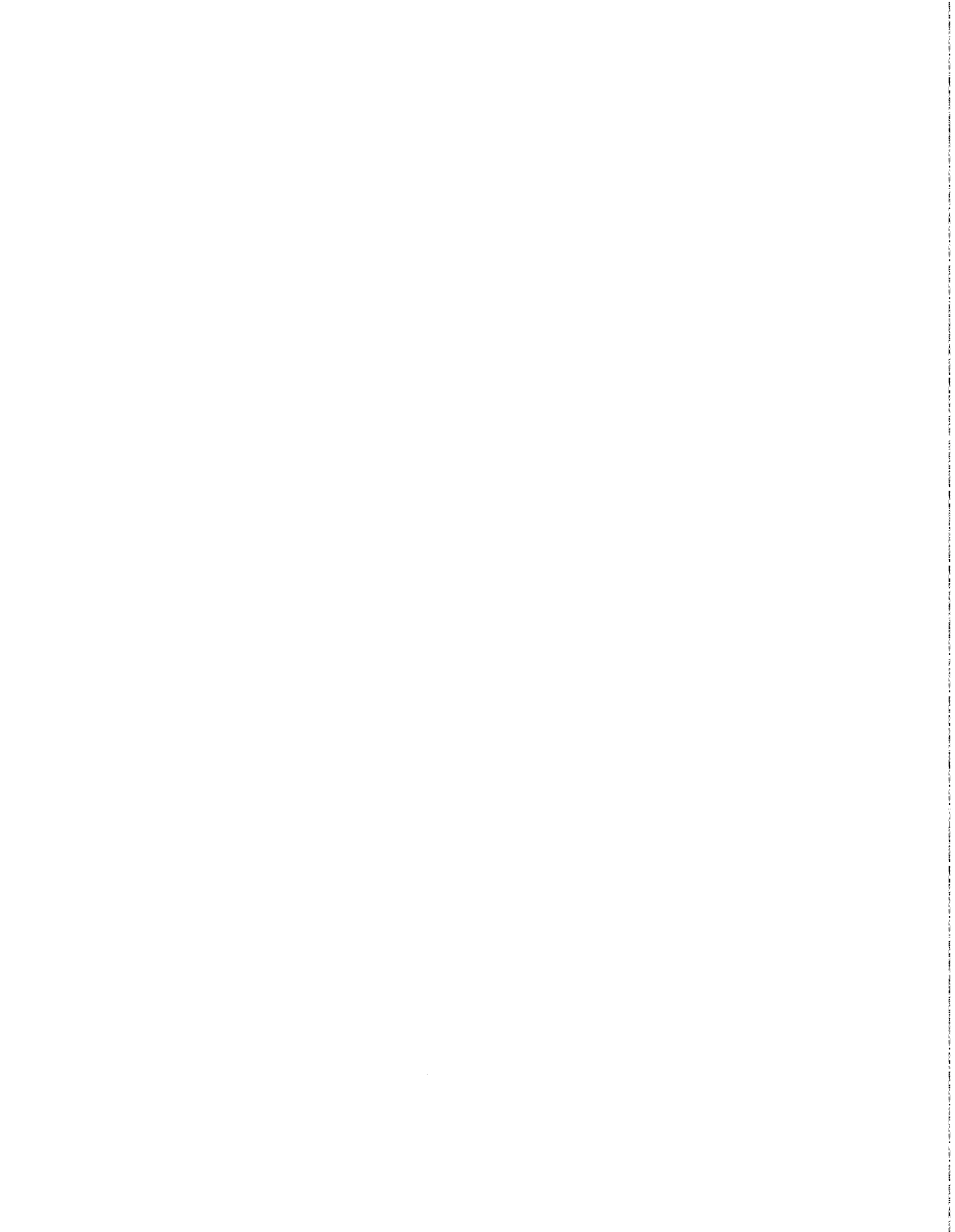
Effectiveness of Excise Tax in Recovering Tax Benefits in Asset Reversions



RELEASED

RESTRICTED - Not to be released outside the
General Accounting Office unless specifically
approved by the House of Representatives.

111-960





United States
General Accounting Office
Washington, D.C. 20548

Human Resources Division

B-237807

July 13, 1990

The Honorable J.J. Pickle
Chairman, Subcommittee on Oversight
Committee on Ways and Means
House of Representatives

Dear Mr. Chairman:

On April 12, 1989, you asked us to evaluate the 15-percent excise tax levied on employers who recover excess pension assets by terminating overfunded pension plans—called asset reversions. Recognizing that normal corporate income taxation may not offset tax-subsidized gains (tax benefits) generated through reversions, the Congress imposed a 10-percent excise tax on reversions in 1986 and increased it to 15 percent in 1988. However, you expressed concern about the adequacy of the current excise tax in recovering the tax benefit portion of reversions that arises from preferential tax treatment.

We agreed to estimate the excise tax rates that would offset the amount of the tax preference for a sample of reversions. In November 1989, we issued an interim report on our preliminary estimates for a sample of 18 terminations for reversion that occurred in 1988.¹ In this study, we examine the effectiveness of the excise tax rate in recovering tax benefits for 55 selected asset reversions. This review expands on the results we previously reported and reports similar findings.

Background

To encourage savings for retirement, tax policy favors defined benefit and other pension plans. A defined benefit plan promises to pay a certain benefit, based on a specified formula, to each participant at retirement. Consequently, such plans prefund to assure that adequate resources are available when participants retire.²

Although employer contributions to tax-qualified plans are tax deductible, the essence of the tax preference stems from permitting investment earnings from pension trusts to accumulate tax free. The favorable treatment granted to the accumulated earnings in qualified pension

¹ Pension Plan Terminations: Recapturing Tax Benefits Contained in Asset Reversions (GAO HRD-90-51BR, Nov. 22, 1989).

² In contrast to defined benefit plans, the pension benefits from defined contribution plans are based on the amount of money accumulated in the participant's individual account, not on a predetermined formula.

plans affects the federal revenue base more than any other tax preference. It resulted in a loss that the Office of Management and Budget reported to be \$47 billion for fiscal year 1991.

Many assumptions are used in funding pension plans, including estimates of rates of return on plan assets and, in most cases, assumptions about salary increases. Often, plan sponsors use conservative assumptions about investment earnings in estimating the contributions necessary to meet the plan's projected liability. Conservative assumptions about earnings increase the amount required to prefund the liability. When stock and bond markets rally, plans that have been generously funded according to conservative rates of return can experience a dramatic growth in assets. A sponsor might then terminate the plan and set aside money to cover a liability limited to the benefit each participant had earned to date, instead of the long-term liability for which it prefunded. The excess amount or "surplus" realized can be considerable.

One requirement for a pension plan to qualify under the Internal Revenue Code is that sponsors intend to maintain the plan permanently. However, federal law permits sponsors to terminate their pension plans, pay each participant only the benefits that have accrued up to the termination date, and keep all residual assets. Some employers voluntarily terminate their overfunded defined benefit pension plans and use the excess funds for nonpension purposes. Since 1980, it is estimated that reversions by employers in this way have amounted to over \$20 billion.¹

Results in Brief

Among our 55 sample cases, the current 15-percent excise tax was not high enough to offset the tax benefit portion of pension asset reversions. Our analysis assumed that the companies in our sample paid historic maximum statutory tax rates. We estimated that the excise tax rate required to recapture tax benefits exceeded 15 percent in all 55 cases. The precise excise tax rate needed to offset tax benefits varied widely. According to our analysis, the excise tax rates necessary to fully offset pension tax benefits ranged from 17 to 59 percent (see app. I).

These offsetting excise tax rates were very sensitive to variations in the way different types of income were taxed. Plans that primarily obtained

¹In making our assessment, we did not consider whether employers used some portion of the reversion amount to partially fund successor plans. Although this may be a relevant policy issue, considerations of this nature were outside the purview of this effort.

their investment income from sources normally subject to the maximum statutory tax rate, such as interest from corporate bonds, had the highest offsetting tax rates. Conversely, plans that mainly derived their income from sources normally subject to the lower capital gains tax rate, such as stock price appreciation, had the lowest offsetting tax rates.

We also conducted two sensitivity analyses on the offsetting excise tax rates assuming the current statutory tax provisions and historic industry-wide average tax rates. The sensitivity analyses yielded similar results.¹

Objective, Scope, and Methodology

Based on agreements with your representatives, this report provides information on the excise tax rates needed to offset tax benefits embedded in a sample of asset reversions. In conducting our analysis, we reviewed 55 cases from the universe of 202 pension plans with reversions for \$1 million or more that terminated or announced their intent to terminate in 1988.² Using simulated investment portfolios, we calculated an offsetting excise tax rate for each case. For the purpose of this study, the offsetting excise tax is the rate that equated the reversion's after-tax value with the balance that would have existed had the surplus assets been invested the same way and taxed.

Several recent legislative proposals, in pursuit of policy objectives such as protecting workers' retirement income, have sought to prohibit or restrict asset reversions, or to use the reversion excise tax to deter reversions more effectively. In this review, however, we consider only the excise tax rate's effectiveness at recovering pension-related tax benefits.

The excise tax rate required to offset or recapture pension tax benefits depends on an employer's income tax liabilities, which in turn are based on marginal tax rates.³ However, we did not know the actual tax rates paid by plan sponsors. Therefore, our estimates used the maximum statutory tax rate that prevailed from 1975 to 1986, when the plans in our sample accumulated their excess pension assets.

¹ Further detail on our sensitivity analysis is furnished in app II.

² Because of the limited number of cases, our results are not representative of the universe of plans with asset reversions.

³ The marginal tax rate is the additional tax generated from earning an additional dollar.

To test the sensitivity of our results to different income tax conditions, we repeated our analysis using the following two tax scenarios:

1. A fixed tax rate of 34 percent. This prospective analysis uses the current maximum statutory tax rate in conjunction with the present tax treatment on capital gains and dividends. These estimates may better reflect the excise taxes necessary for plans that develop excess assets under current statutory tax stipulations.
2. Historic average tax rates. This approach uses estimated industry-wide average tax rates for each year of the period we analyzed. Average tax rates are lower than the statutory rates because they take into account the use of tax credits and deferrals. These rates may better reflect the tax position of firms and also give us a lower bound on our estimates.

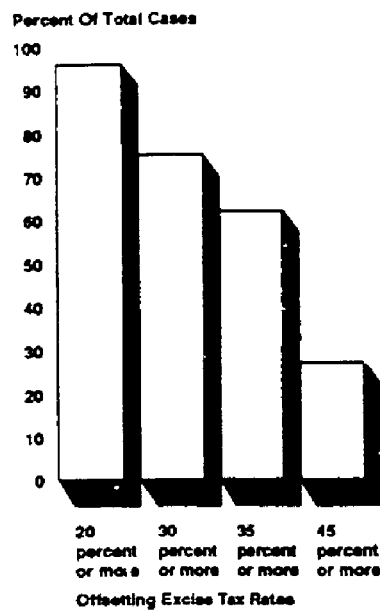
Our review was done in accordance with generally accepted government auditing standards. As requested by your office, we did not obtain written comments on this report, but we did discuss our methodology with officials from the Pension Benefit Guaranty Corporation (PBGC) and the Departments of Labor and Treasury. A more detailed discussion of our methodology is provided in appendix II.

Current Excise Tax Rate Not High Enough to Offset Tax Benefits

According to our analysis, the 15-percent excise tax failed to fully recapture tax benefits from any asset reversions in our sample (see fig. 1). Offsetting excise taxes are estimated using circumstances that are particular to each plan and employer. We estimated that the excise tax rate sufficient to offset tax benefits ranged from 17 to 59 percent. Among our 55 cases, the excise tax rate needed to recover pension tax benefits (1) averaged about 37 percent, (2) had a median rate of 39 percent, and (3) equaled or exceeded

- 20 percent in 53 cases (96 percent),
- 30 percent in 41 cases (75 percent),
- 35 percent in 34 cases (62 percent), and
- 45 percent in 15 cases (27 percent).

Figure 1: Offsetting Excise Tax Rates Associated With Historic Statutory Tax Rates



Plan Asset Allocation Influenced Offsetting Excise Tax Rates

The tax liability on corporate profits varied depending on the origin of the income. As a result, the excise tax rates necessary to offset tax benefits were very sensitive to the types of investment instruments that were held in the pension trust. Plans that obtain much of their income from sources that receive the least favorable treatment under the tax code tend to have the highest offsetting tax rates. For example, the reversion cases with the two highest offsetting excise tax rates (55 and 59 percent respectively) on average received about 80 percent of their investment income from interest-bearing vehicles, such as corporate bonds, that are subject to full taxation (with no exclusions).

In contrast, plans that derive substantial portions of their income from sources that receive the most favorable treatment under the tax code tend to have the lowest offsetting excise tax rates. For example, the

reversion cases with the two lowest offsetting excise tax rates (17 percent) on average received about 45 percent of their investment income from dividends and the sale of corporate stocks and bonds.⁷

Two other factors also influenced the precise excise tax rates required to offset tax benefits:

1. The rate of return excess assets earned. The share of asset reversions that comprise tax benefits increases proportionally with increases to the rate of return on excess pension assets. As a result, plans that realized higher rates of return typically had higher offsetting excise tax rates.
2. The amount of time excess assets were tax-sheltered in the pension trust. Plans that held excess assets the longest and thereby continued generating tax benefits the longest accumulated more tax benefits through reversions. Therefore, plans that retained excess assets longest generally needed relatively higher excise tax rates to offset tax benefits.

Conclusion

The asset reversion phenomenon has generated considerable discussion among policymakers and pension experts. Tax policy favors defined benefit and other pension plans to encourage employers to provide retirement income security for workers. The special tax treatment associated with pension plans causes significant federal revenue losses. When reversions occur, there may be no commensurate gain in income security for workers.

No fixed-rate excise tax will precisely recapture tax benefits from all reversions. A single-rate tax is not responsive to the underlying variables that give rise to tax benefits. Two of these factors—asset allocation and rates of return—fluctuate often. Thus, no single tax rate will recapture all tax benefits and only tax benefits from every reversion.

A schedule of rates is likely to recover tax benefits more accurately than a fixed tax. A schedule or "rough justice" table of excise taxes would take into account the factors that affect offsetting excise taxes. This would require employers to select a rate that best approximates their particular circumstances.

⁷For the purposes of this analysis, we assume that all capital gains realized before 1986 were long-term gains and thus were taxed at a rate of 28 percent.

⁸These factors are discussed in Richard A. Ippolito, Pensions, Economics and Public Policy, Dow Jones-Irwin, 1986.

Matters for Consideration

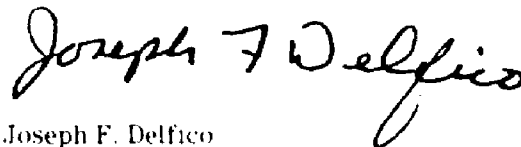
If the Congress decides to change the excise tax rate with respect to offsetting the tax benefit portion of asset reversions, it should consider one of two options:

1. Direct the Department of the Treasury to develop a schedule of reversion excise tax rates that considers (a) rates of return, (b) how long the excess assets were maintained in the pension trust, and (c) plan asset allocation. These underlying assumptions might require periodic adjustments to reflect changes in market conditions. Employers would have the choice of accepting the excise tax rate required under "rough justice" tables or—by reconstructing their financial investment and tax history—demonstrating that a different rate is more appropriate.

2. Raise the current fixed rate. For our sample, an excise tax rate of 39 percent (the median rate) would fully offset or exceed tax benefits in the majority of cases.

Unless you publicly announce its contents earlier, we plan no further distribution of this report for 5 days. At that time, we will send copies of the report to other interested congressional committees and, as discussed with your staff, to others who request them. If you have any questions concerning the report, please call me on (202) 275-6193. Other major contributors are listed in appendix III.

Sincerely yours,



Joseph F. Delfico
Director, Income Security Issues

Contents

Letter		1
Appendix I		10
Offsetting Excise Tax Rates for 55 Reversion Cases		
Appendix II		12
Objective, Scope, and Methodology		
	Income Tax Advantages Examined	12
	Excise Tax Rate	13
	Sensitivity Analysis	15
Appendix III		18
Major Contributors to This Report		
Figures		
	Figure I: Offsetting Excise Tax Rates Associated With Historic Statutory Tax Rates	5
	Figure II.1: Offsetting Excise Tax Rates Associated With the Current Tax Code	16
	Figure II.2: Offsetting Excise Tax Rates Associated With Average Tax Rates	17

Abbreviations

IRS	Internal Revenue Service
PBGC	Pension Benefit Guaranty Corporation

BLANK PAGE

Appendix I

Offsetting Excise Tax Rates for 55 Reversion Cases

Excess assets (thousands)	Offsetting excise tax rate (percent) assuming		
	Historic statutory tax rates	Historic average tax rates	Current statutory tax rates
1,000	26	20	20
1,000	54	45	44
1,000	41	25	32
1,000	49	35	36
1,000	20	18	28
1,000	41	34	40
1,004	33	24	25
1,000	20	19	22
1,000	17	10	37
1,000	1	28	31
1,000	30	24	31
1,000	73	70	27
1,000	48	31	37
1,000	30	28	24
1,500	38	23	37
1,500	45	29	40
1,500	11	1	13
1,500	37	19	29
1,500	44	32	38
1,500	26	2	17
1,500	30	33	32
1,500	26	13	20
2,000	28	28	30
2,000	24		17
2,000	14	23	27
2,000	55	35	44
2,000	46	10	37
3,000	17	5	14
3,000	48	41	41
3,000	30	28	28
3,000	47	45	40
3,000	21	13	19
3,000	36	26	31
3,500	43	34	33
3,500	59	44	49
3,960	46	28	38
4,045	41	25	34
\$4,186	28	20	25

(continued)

Appendix I
 Offsetting Excise Tax Rates
 for 55 Reversion Cases

Excess assets (thousands)	Offsetting excise tax rate (percent) assuming		
	Historic statutory tax rates	Historic average tax rates	Current statutory tax rate
\$ 4 344	41	23	
4 400	29	19	
4 600	45	26	
5 000	41	31	
5 976	43	29	
8 000	39	21	
9 607	32	26	
10 103	49	40	
12 560	44	26	
12 850	42	26	
13 361	37	22	
13 900	44	23	
22 500	50	39	
26 100	31	22	
29 577	30	10	
40 529	35	19	
\$119 845	26	21	

Less than 1 percent

Objective, Scope, and Methodology

The Chairman of the Subcommittee on Oversight, House Committee on Ways and Means, expressed concern about whether the current excise tax rate is sufficient to recapture the portion of asset reversions that results from tax benefits. At the Chairman's request, we examined recent reversions to assess the effectiveness of the 15-percent excise tax in recapturing the financial gains that resulted from the tax-free accumulation of pension fund earnings.

We examined empirical financial performance data from the universe of pension plan reversions for \$1 million dollars or more in which the plans terminated or announced their intention to terminate in 1988. From this universe of 202 plans, we randomly selected 145 reversion cases. We excluded 35 plans with fewer than 100 participants, because their Form 5500 reports did not require the level of detail needed for our study.¹ We eliminated the other plans because the Form 5500 information was not available. Sufficient data were available on 55 plans to conduct this analysis. Our results are not representative of the universe of plans with asset reversions because the study is based on a limited sample. Consequently, we did not perform tests of statistical significance.

We designed a simulation model to calculate the offsetting excise tax for individual reversion cases. For the purposes of this study, the offsetting excise tax rate is the rate that would have left employers no better off financially than if the surplus assets had earned the pension fund's pretax rate of return in a nonpension fund. Our model generated an alternative investment scenario that differed from the actual experience of the pension trust only in the imposition of tax liabilities it would have incurred had it paid taxes each year. For each reversion case, we calculated the balance that would have existed were the same flow of excess funds treated as identical taxable corporate investments.

Income Tax Advantages Examined

In a manner comparable to an individual retirement account, the tax treatment of pension trusts permits employers who terminate for reversions to augment their after-tax rate of return. The effect of the tax advantage for pension trusts on the rate of return can be separated into two distinct components, a compounding effect and a tax rate effect.

¹Qualified defined benefit pension plans are required to provide annual reports—called Form 5500—on financial performance to the IRS.

Appendix 1
Objective, Scope, and Methodology

1. The compounding effect is the addition to the after-tax rate of return that exists because the investment return earned on pension contributions is permitted to accumulate without being eroded by taxes. Conversely, the investment return earned on regular corporate reserves is taxed each year. Therefore, the taxed portion can not contribute to the return on future investment earnings.

2. The tax rate effect is realized when a sponsor's tax rate at the time of the reversion is lower than its tax rate at the time the deductions for contributions were taken. The tax advantage from having deferred income tax liabilities is inversely related to marginal tax rates. Therefore, decreases in marginal tax rates cause increases in the tax advantages on tax-deferred income. The decrease in marginal income tax rates from 46 to 34 percent could have added about 22 percent to the after-tax return of each reversion case.

Excise Tax Rate Calculated

To compute the offsetting excise tax, our model compared the net value of asset reversion with a corresponding value generated from the simulated investments. Our assessment required (1) appraising the initial funding surplus, (2) calculating annual growth rates, and (3) simulating tax effects.

Overfunding on a Termination Basis

To appraise the initial funding surplus, we computed the plan termination funding position. This is the difference between pension assets and benefit liabilities—the cost to purchase annuities or provide lump sum payments to workers and retirees covered by the pension plan. A pension plan is overfunded on a termination basis when plan assets exceed these benefit liabilities.

Because the interest rates that pension plan administrators use to estimate benefit liabilities can vary widely from plan to plan, we adjusted benefits reported on the Form 5500 using interest rates used by the Pension Benefit Guaranty Corporation. Because PBGC's rates are based on annuity purchase prices, they provide a conservative estimate of plans' funding status.² These adjusted estimates of benefit liabilities then were compared with the plan asset data reported on the Form 5500 to determine the plans' funding positions.

²PBGC administers the insurance program that guarantees, within certain limits, benefits not funded when plans terminate. The interest rates we used are the same that PBGC uses to determine whether a terminated plan's assets are sufficient to cover guaranteed benefits.

Asset Allocation and Earnings Growth Rates

The assumptions underlying the comparative investment scenario are based on the pension trust's investment experience. The rates of return in the alternative investment funds are equivalent to the annual rates of growth realized by the pension trusts.

Because the tax treatment of income varied depending upon its origin, we differentiated between various sources of plan income. Our analysis assumed that the sources of income—such as dividends and interest payments—were symmetrical between the pension trust and the simulated portfolio. For example, if interest constituted 20 percent of income from pension trust investments during a plan year, we assumed that 20 percent of the investment return gained from the simulation also was attributable to interest for that year.

Several points regarding the simulated investment portfolios and rates of return need clarification:

1. Our excise tax rate calculations are based on the actual rates of return realized by the sample of pension plans. Some pension analysts consider the high returns that prevailed during that time period—1975 to 1988—an aberration. Had we substituted lower rates of return to generate our calculations, the offsetting excise tax rates would have been lower.
2. The portfolio management practices of a pension trust typically differ from the investment practices of taxable investment funds. The factors involved in portfolio management decisions include the investor's ability to bear risk, current income needs, and tax consequences. For example, pension trusts are primarily growth-oriented and stress long-term price appreciation and capital preservation. In addition, due to the trusts' tax-exempt status, investment managers tilt the asset mix towards the least tax-advantaged assets, such as corporate bonds.

In contrast, corporate investment trusts are primarily income oriented and stress current dividend and interest return. Accordingly, because earnings on corporate reserves are exposed to taxation, investors weight the portfolio with the most tax-advantaged assets, such as real estate, preferred stock, and municipal bonds.

Our analysis may have overstated the tax liabilities that employers would have incurred from an alternate investment of excess pension assets, because we assumed that they would not have altered their portfolio strategy.

Sensitivity Analysis

Future Reversions Under the Current Tax Code

Although this report does not speculate on future corporate tax rates, rather than increasing tax rates, current revenue-enhancement efforts focus on closing loopholes, eliminating deductions, and limiting credits. Some pension plans that have become overfunded since 1988 may terminate for reversions while the corporate tax rate is at its current level. To give some perspective on excise tax rates that would be necessary to offset future reversions occurring under today's tax environment, we estimated offsetting tax rates by using the current maximum statutory tax rate of 34 percent and the present tax treatment on corporate income from dividends and capital gains.

Under the current statutory tax rate, rarely did the 15-percent excise tax rate offset tax benefits—it did so in only 2 cases (see fig. II.1). For all 55 cases, the offsetting excise tax rates averaged about 31 percent. The excise tax rate needed to recover tax benefits equaled or exceeded

- 20 percent in 50 cases (90 percent),
- 30 percent in 33 cases (60 percent), and
- 35 percent in 22 cases (40 percent).

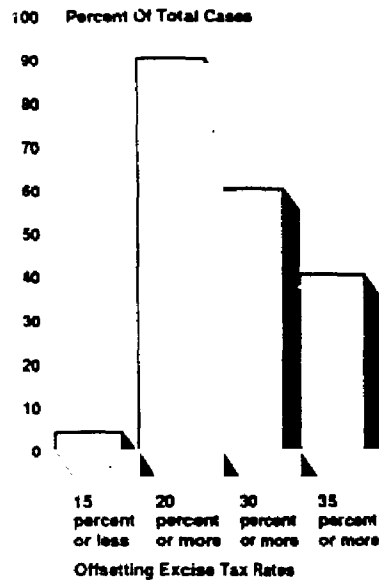
Historic Average Tax Rates

Recognizing that income tax payments vary by the availability of tax credits and deferrals, we calculated the offsetting excise tax rates using industry-average tax rate. These rates may better reflect the actual year-to-year historic tax position of firms in our sample.¹ We used estimates of average corporate tax rates realized by firms in industries similar to those in our sample to approximate the annual tax position of individual companies in our sample. These industry-wide averages are an approximation of the effect of lower marginal taxes on firms in our sample.

Under the industry-average tax rates scenario, the 15-percent excise tax failed to offset tax benefits in the majority of our 55 cases (see fig. II.2). The 15-percent excise tax fully offset tax benefits in only 10 cases. The offsetting excise tax rates averaged about 24 percent. Among the

¹Forrest D. Marovelli, *Effective Corporate Tax Rates 1978-1987*, Tax Analysts, Arlington, Va.

Figure II.1: Offsetting Excise Tax Rates Associated With the Current Tax Code



55 cases, the excise tax rate needed to recover tax benefits equaled or exceeded

- 20 percent in 40 cases (73 percent),
- 30 percent in 14 cases (25 percent), and
- 35 percent in 8 cases (15 percent).

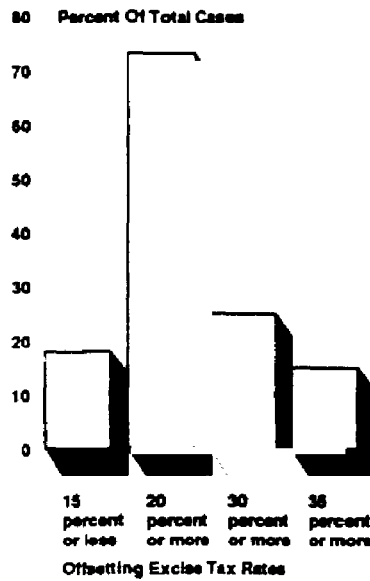
All things being equal, estimated historic average income tax rates resulted in lower offsetting excise tax rates than the other scenarios. On average, using the lower tax rates reduced the offsetting excise tax rate about 35 percent relative to the analysis that used historic statutory rates.

Tax on Retained Earnings

We did not incorporate the special tax assessed to corporate reserves when they accumulate beyond specified limits—termed the accumulated earnings tax. This penalty surtax is intended to discourage stockholders from using corporations to avoid personal tax on dividends by retaining earnings in the corporation rather than distributing these

Appendix II
Objective, Scope, and Methodology

Figure II.2: Offsetting Excise Tax Rates
Associated With Average Tax Rates



earnings as dividends. In estimating offsetting excise tax rates, only regular corporate income taxes were assessed on our alternative investment scenario.

We obtained information for this report from PBGC, the Departments of Labor and the Treasury, and private pension plan administrators.

Major Contributors to This Report

Human Resources
Division,
Washington, D.C.

Donald C. Snyder, Assistant Director (202) 535-8358
Wayne B. Upshaw, Project Manager
Sheila R. Nicholson, Evaluator
Virginia T. Douglas, Writer-Editor
Lorelei L. Pelzer, Typist

Office of the Chief
Economist

Timothy J. Carr, Economist

San Francisco
Regional Office

Kerry G. Dunn, Evaluator
Stephen D. Secrist, Evaluator

Dallas Regional Office

Richard B. Smith, Evaluator

Requests for copies of GAO reports should be sent to:

GAO General Accounting Office
Post Office Box 6015
Bethesda, Maryland 20877
Telephone 202-275-6241

The first five copies of each report are free. Additional copies are \$09 each.

There is a 25% discount on orders for 100 or more copies mailed to a single address.

Orders must be prepaid by cash or by check or money order made payable to the Superintendent of Documents.

**United States
General Accounting Office
Washington, D.C. 20548**

**Official Business
Penalty for Private Use \$300**

**First-Class Mail
Postage & Fees Paid
GAO
Permit No. G100**
