# Living with Defined Contribution Pensions

# Remaking Responsibility for Retirement

Edited by Olivia S. Mitchell and Sylvester J. Schieber

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10 9 8 7 6 5 4 3 2 1

Published by University of Pennsylvania Press Philadelphia, Pennsylvania 19104-4011

Library of Congress Cataloging-in-Publication Data

Living with defined contribution pensions: remaking responsibility for retirement / edited by Olivia S. Mitchell and Sylvester J. Schieber.

p. cm.
"Pension Research Council publications."
Includes bibliographical references and index.
ISBN 0-8122-3439-1 (cloth: alk. paper)

1. Defined contribution plans — United States. 2. Old age pensions — United States — Finance. 3. Pension trusts — United States — Finance. I. Mitchell, Olivia S. II. Schieber, Sylvester J. HD7105.45.U6L58 1998 331.25'2'0973 — dc21 98-13584

# Chapter 8

# Trends in Retirement Income Plan Administrative Expenses

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The purpose of this analysis is to examine changes in the costs of administering U.S. retirement income plans since the enactment of the Employee Retirement Income Security Act (ERISA). For the purposes of this study, pension administrative costs are defined as all expenditures not for the direct provision of benefits for the members of the retirement income plan: these include in-house administrative costs, consultant fees, and Pension Benefit Guaranty Corporation (PBGC) premiums. The figures do not include investment expenses or one-time costs to conform to changes in regulations.

Our analysis compares the administrative cost of typical defined benefit and defined contribution plans. The defined contribution plans are those created under section 401(k) of the IRS code. The defined benefit plans are standard single-employer qualified plans. An earlier analysis for the Pension Benefit Guaranty Corporation compared administrative costs from 1981 through 1990 (Hay Huggins 1990). The current analysis

examines pension plans from 1981 through 1996.

The chapter begins with a description of the methods and assumptions used in this study. All dollar values are presented in 1996 dollars. Inflation and wage trends are those used by the Social Security Trustees. Assumptions on the units of effort and unit cost were developed by Hay based on consultant experience. We then describe the major changes in environment that have affected the cost of administration of retirement income plans since ERISA. Most of the changes resulted from innovations in the law governing qualified plans. However, a Supreme Court decision mandating unisex benefits and changes in accounting rules also increased the cost of administering retirement income plans. I then collect findings. Appendix Tables 1 and 2 summarize the assumptions used in this study.

## Methodology and Assumptions

The approach is to examine costs for four typical retirement income plan populations. Four plan types were developed by the Academy of Actuaries (Committee on Pension Actuarial Principles and Practices 1985) in an earlier study prepared for the Financial Accounting Standards Board. Three pension plan specifications were used directly, with 75,500, and 10,000 active lives. In addition, plans of 15 lives were investigated. Since proration of the 15 lives in the smallest case would have resulted in fractional lives in each cell, the 15 lives were assigned to cells to achieve the same overall distribution.

Cost comparisons were conducted for 1981 forward. The baseline cost for 1981 was determined by examining the units and costs of services required to administer the plan in that year. Units and costs of additional services were assigned to each change in the environment. Our consultants estimated the unit costs and number of services based on their past experience and discussions with clients. Initial salaries, consultant fees, and changes in consultant fees are derived from professional experience of Hay Group consultants. Changes in salaries and inflation were based on economic experience published by the Social Security Trustees report.<sup>2</sup> PBGC base premiums do not include any risk-related premium: the basic annual PBGC premium is \$19 per participant per year. Many pension plans also pay an additional premium because the plan is underfunded according to criteria established by the federal government.

The tables below give results for defined benefit plans with 15, 75, 500, and 10,000 active employees. Findings are also reported for 15 and 10,000 life defined contribution plans (I do not indicate results for 75 and 500 life defined contribution plans). As noted above, the reader should also note that the study does not include one-time costs related to implementation of law changes.

The administrative costs reported here are computed for a plan sponsor that has only one well-funded retirement plan that covers all the employees of the sponsor; costs will be significantly greater for more complex situations. For example, costs will be much higher for a sponsor who offers a wide range of defined benefit and defined contribution plans to employees across different divisions or in different countries.

# **Changes in the Pension Regulatory Environment**

It has been argued in previous studies that pensions in general, and defined benefit plans in particular, have become increasingly costly to administer over time. One reason this may be so is that there have been numerous regulatory changes over time, driving up plan administration

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costs. The major impacts of the many changes in defined benefit plans are described below. The year shown for each law is the year that law was enacted. In many cases, the impact in cost was spread over several years after enactment.

#### Tax Equity and Fiscal Responsibility Act of 1982

Determined the effect of the reduced limits on benefits and contributions for individuals. This calculation was particularly onerous for an employer with both a defined benefit and a defined contribution plan. The top-heavy rules affected all plans because of the need for at least a nominal amendment. However, small plans with highly compensated participants had to change their plans substantially.

#### Deficit Reduction Act of 1984

Mandated further changes in the benefit and contribution limits. Administrative costs were increased because of the need to notify older employees of distribution.

#### Retirement Equity Act of 1984

 Required preretirement survivor annuities and spousal notification, which increased the cost of administration and benefits. Reducing the age and service requirements increased the cost of benefits and required amendments.

# Single Employer Pension Plan Amendments Act of 1986

· Mandated increase in Pension Benefit Guaranty Corporation premium.

#### Tax Reform Act of 1986 (major changes)

- Required minimum coverage tests and general nondiscrimination tests, resulting in substantial administrative costs and redesign for controlled-group situations.
- Required definition of "highly compensated employee," which increased record keeping.
- Required minimum vesting standards and present value of benefit rules, leading to changes in most plans. This change increased benefits as well as administrative costs.
- Called for new integration rules, which required review and probably revision of most integrated plans and resulted in substantial costs for

the analysis and possible increases in benefits cost for the resulting plan changes.

#### Age Discrimination in Employment Act of 1986

 Increased administrative and benefits costs by requiring that credit be given after Normal Retirement Age.

#### Omnibus Budget Reconciliation Act of 1987

- Increased administrative costs to conform to Omnibus Budget Relations Act requirements.
- Increased PBGC premium.

#### Technical and Miscellaneous Revenue Act of 1987

No major change for most plans.

### Omnibus Budget Reconciliation Act of 1989

 No major change except for plans that had used a three-year valuation cycle. The incidence of funding was changed for many plans, but there was no direct effect on the ultimate cost.

#### Omnibus Budget Reconciliation Act of 1990

No major change for ongoing plans. The excise tax on asset reversions was increased and employers were permitted a one-time transfer of "excess" assets to a retiree health account.

### Unemployment Compensation Amendments of 1992

 Required sponsor to withhold 20 percent of any distribution that was not rolled over to a qualified plans. The sponsor was required to provide a written explanation of the distribution options.

### Omnibus Budget Reconciliation Act of 1995

· Reduced limit on compensation considered for benefits to \$150,000.

### Uniformed Services Employment and Reemployment Rights Act of 1994

· Required sponsors to credit certain military service.

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Retirement Protection Act of 1994 (General Agreement of Tariffs and Trades) (major changes that affected administration)

- · Changed cash out rules.
- · Required standard mortality table for some purposes.
- · Set up special funding rules for underfunded plans.
- · Added plan liquidity requirements.

Financial Accounting Standards Board Statements 87 and 88

Added administrative costs to provide additional valuation.

Manhart, Norris - Decisions of the Supreme Court

 Led to administrative cost of modifying plan and actuarial equivalent factors.

### **Findings**

Administrative pension expenses by year computed for each of the plans in the study are given in Tables 1 and 2. The results, shown in 1996 dollars and as a percent of payroll, include all in-house administrative and consultant costs as well as basic PBGC premiums, but exclude investment expenses. In 1996, current costs for defined benefit plans ranged from 3.10 percent of pay, or \$9,300, for the smallest plan in the study to 0.23 percent of pay, or \$680,000, for the largest plan. Costs for defined contribution plans ranged from 1.44 percent of payroll, or \$4,300, for the smallest plan to 0.16 percent of payroll, or \$490,000, for the largest plan.

The cost of 3.1 percent of payroll for the small employer defined benefit plan compared to 1.4 percent for the defined contribution plan is particularly significant when we consider that benefit costs for a typical small employer plan total around 5 percent of payroll. As a result, small employers rarely even consider offering a defined benefit plan when installing a retirement income plan. On the other hand, since administrative costs for large plans are relatively small, it is unlikely that the extra defined benefit plan administrative costs, by themselves, would cause a large employer to replace a defined benefit plan with a defined contribution plan.

It will be noted from Table 1 that administrative costs for the smallest defined benefit plans are higher than for defined contribution plans. This has been true over time, mainly because of the high fixed expenses associated with a defined benefit plan (such as the need for an actuarial

TABLE 1 Annual Administrative Costs in 1996 Dollars

		Defined benefit employees (\$)			Defined contributio employees (\$)	
Year	15	75	500	10,000	15	10,000
1981	\$2,920	10,423	33,927	233,231	2,057	257,109
1982	2,992	10,666	34,571	233,659	2,113	262,121
1983	3,160	11,253	36,275	241,185	2,231	277,490
1984	3,486	11,822	38,217	249,602	2,351	291,351
1985	3,937	13,077	42,880	315,678	2,591	332,078
1986	4,614	15,005	51,006	433,530	2,768	351,783
1987	4,827	15,643	58,890	447,278	3,309	376,772
1988	7,942	19,849	69,967	578,769	3,456	389,737
1989	7,617	21,874	75,853	637,201	3,785	442,998
1990	7,899	22,561	77,722	638,473	3,935	456,897
1991	8,234	23,605	81,583	678,720	4,071	467,282
1992	8,422	24,019	82,863	683,921	4,119	474,090
1993	8,492	24,182	83,114	678,232	4,158	476,041
1994	9,128	25,511	85,911	688,187	4,217	482,351
1995	9,226	25,754	86,477	686,606	4,268	487,796
1996	9,299	25,926	86,810	683,258	4,308	491,868

Source: Author's computations using Hay Group data.

valuation). However, the cumulative effect of the changes in the regulatory environment has been to increase the cost of a defined benefit plan from around 140 percent of the defined contribution plan cost in 1981 to more than 210 percent in 1996.

In 1980, administrative costs for the 10,000 life defined benefit plan were actually lower than those of the defined contribution plan. During the 1980s, however, defined benefit plan costs grew much more rapidly than defined contribution plan costs; indeed, they grew to exceed defined contribution plan costs after 1985. By 1996, the defined benefit administrative costs for the 10,000 life case were almost 40 percent greater than the costs of a defined contribution plan.

Costs of administration of pension plans increased steadily over the 16 years of the study. The increase was partly due to wages and consulting fees increasing more rapidly than inflation. The largest increase, however, was attributable to changes in the regulatory requirements for pension plans. And these regulatory increases were substantially greater for defined benefit plans than for defined contribution plans. Thus the largest increase in cost for defined benefit plans, both absolutely and relative to defined contribution plans, occurred in the late 1980s as plans absorbed the impact of TRA-1986 and REA-1984. The defined benefit

TABLE 2 Annual Administrative Costs as Percentage of Payroll

		Defined benefit employees (%)			Defined contribution employees (%)	
Year	15	75	500	10,000	15	10,000
1981	1.11	0.64	0.26	0.09	0.79	0.10
1982	1.14	0.65	0.26	0.09	0.80	0.10
1983	1.18	0.67	0.27	0.09	0.83	0.10
1984	1.25	0.68	0.27	0.09	0.84	0.10
1985	1.40	0.75	0.31	0.11	0.92	0.12
1986	1.59	0.83	0.35	0.15	0.95	0.12
1987	1.64	0.85	0.40	0.15	1.13	0.13
1988	2.38	1.07	0.47	0.20	1.17	0.13
1989	2.59	1.19	0.51	0.22	1.28	0.15
1990	2.69	1.23	0.53	0.22	1.34	0.16
1991	2.83	1.30	0.56	0.23	1.40	0.16
1992	2.83	1.29	0.56	0.23	1.38	0.16
1993	2.89	1.32	0.57	0.23	1.42	0.16
1994	3.08	1.38	0.58	0.23	1.42	0.16
1995	3.09	1.38	0.58	0.23	1.43	0.16
1996	3.10	1.38	0.58	0.23	1.44	0.16

Source: Author's computations using Hay Group data.

cost also increased substantially as PBGC premiums increased as provided in SEPPAA-1986 and OBRA-1987.

Figures 1 and 2 compare plan administrative expenses for the 15 and 10,000 life cases across plan type. Though we do not estimate administrative costs for defined contribution plans for 75 and 500 lives, it is likely that the two middle plans do as well since the end point plans have substantially higher defined benefit plan costs.

Figure 3 shows the trend in cost for all four defined benefit cases expressed as a percentage of payroll. The 15 life defined benefit plan costs increased from 1.1 to 3.1 percent of payroll between 1981 and 1996. The costs for the 10,000 life case doubled, but the cost at the end of the period was only 0.2 percent of payroll. The cost for the defined contribution plans in 1996 ranged from 1.4 percent for the smallest plans to 0.2 percent of payroll for the largest plans.

The time trend in relative level of administrative costs parallels that of the prevalence of defined benefit plans. Annual Hay/Huggins Benefits Report surveys (1980–82) showed that the percentage of employers providing a defined benefit plan dropped steadily from 90 percent prior to 1980 to 66 percent in 1992. The drop occurred over a period in which the relative cost for a small defined benefit plan increased from 142 percent

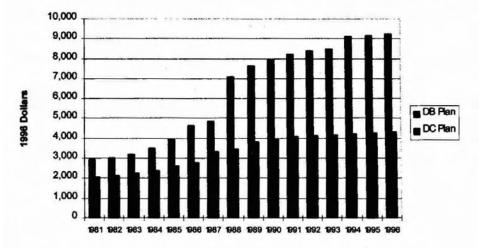


Figure 1. Administrative costs of 15 life retirement plans. Source: Author's computations using Hay Group data.

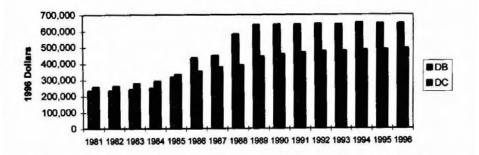


Figure 2. Administrative costs of 10,000 life retirement plans. Source: Author's computations using Hay Group data.

to 204 percent of the cost of a defined contribution plan. The relative cost for a large defined benefit plan grew from 91 percent to 136 percent of a defined contribution plan in that period. There was no significant drop in the prevalence of defined benefit plans between 1992 and 1996. During that period the relative cost of a small defined benefit plan grew to 216 percent of the defined contribution plan and the cost of a large defined benefit plan grew to 139 percent of the defined contribution plan.

Table 3 shows the details of the cost by category. Most of the admin-

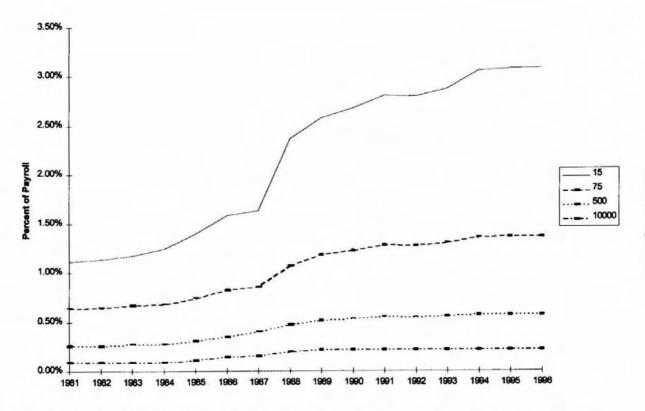


Figure 3. Administrative costs as percentage of payroll. Source: Author's computations using Hay Group data.

TABLE 3 Administrative Cost by Category (1996 Dollars)

	In house	Actuary	Attorney	Auditor	PBGC	Total
15 Life	DB					
1981	125	2,538	194	0	71	2,928
1996	477	7,996	465	0	304	9,242
75 Life	DB					
1981	833	8,291	973	0	357	10,454
1996	1,551	20,848	1,758	0	1,489	25,647
500 Lif	e DB					
1981	4,941	17,889	2,721	6,126	2,348	34,026
1996	7,993	47,501	5,306	14,287	9,872	84,959
10,000	Life DB					
1981	93,882	70,785	10,108	12,252	46,884	233,912
1996	135,151	258,471	30,502	25,092	197,087	646,304
15 Life	DC					
1981	360	3,586	224	0	0	4,170
1996	367	3,710	231	0	0	4,308
10,000	Life DC					
1981	96,329	144,224	5,055	12,252	0	257,860
1996	137,473	317,534	15,250	21,610	0	491,868

Source: Author's computations using Hay Group data.

istrative cost for small plans is attributable to consultant costs, which have increased because of the growing complexity of services required from consultants. While relatively more of the cost of the large plans is for inhouse services, costs for consulting services are still greater than for inhouse services. The actuarial column for the defined contribution plans includes the record-keeping function. The major reason for the cost increase for large defined benefit plans has been the rising Pension Benefit Guaranty Corporation premium that defined contribution plans do not pay. Defined benefit plan administrative expenses for large plans have therefore surpassed and now greatly exceed the cost of defined contribution plans.

### Conclusion

The cost of administering retirement plans has continuously increased since the enactment of ERISA in 1974. This is particularly true for defined benefit plans, where costs have tripled in constant dollars and

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doubled as a percentage of covered payroll between 1981 and 1996. While the costs of defined contribution plans have also risen, the increases have been less than for defined benefit plans.

Administrative costs of defined benefit plans, which were close to those defined contribution plans in 1981, are now more than double those of defined contribution plans for smaller employers. As a result, the great majority of small employers adopt defined contribution plans as the simplest and least expensive approach to provide tax-deferred retirement income. The almost exclusive adoption of defined contribution plans by small employers today will have a ripple effect in the future as small employers grow and become part of the medium to large employer universe of the future.

The author acknowledges invaluable assistance from Kevin Binder, Melissa Rasman, and Roslyn Silverman.

#### Notes

1. Neither the present analysis nor the report that preceded this study (Hay

Huggins 1990) used a survey of actual plan administrative costs.

2. The previous (Hay Huggins 1990) report on pension plan expenses included the same series of economic assumptions, but some of these were estimates. Actual numbers have been substituted for those estimates so minor adjustments to the 1990 study results are used in the present analysis.

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#### APPENDIX TABLE 1 Assumed Average Hourly Rates for Administrative Costs, 1996

Level of work	In-house administration		Actuarial		Accounting/at	ttorney
1	Clerk/sec.	\$15.23	Clerk/sec.	\$47.45	Clerk/sec.	\$47.45
2	Tech. assoc.	\$21.32	Tech. assoc.	\$101.23	Tech. assoc.	\$75.92
3	Mgr.	\$30.45	Assoc. act.	\$158.17	Assoc.	\$158.13
4	Bnft. mgr.	\$45.68	Conslt.	\$316.33	Prtnr.	\$316.33

Source: Author's computations using Hay Group data.

Note: The PBGC premiums were as scheduled in the law that applied to each of the years. These rates were \$2.60 per participant in 1981; \$8.50 beginning in 1986; \$16.00 beginning in 1989; and \$19.00 beginning in 1991. Before 1985, the premiums excluded employees under age 25. These employees were added to the PBGC base in 1985 since REA required that they be covered. There were no employees in the model under age 21. It was assumed that there would not be any additional risk-related PBGC premium.

#### APPENDIX TABLE 2 Economic Assumptions

Year	CPI increase (%)	Wage growth (%)
1981	10.3	9.8
1982	6.0	6.5
1983	3.0	5.1
1984	3.4	7.3
1985	3.5	4.3
1986	1.6	5.1
1987	3.6	4.7
1988	4.0	4.8
1989	4.8	4.4
1990	5.2	5.0
1991	4.1	2.9
1992	2.9	5.4
1993	2.8	1.3
1994	2.5	3.5
1995	2.7	3.5
1996	3.0	3.5

Source: Board of Trustees (1995); 1995 and 1996 estimated by the author.

#### APPENDIX TABLE 3 Average Salary Assumptions

Number of employees	Average salary (\$)
15	20,000
75	25,000
500	30,000
10,000	30,000

Source: Author's computations using Hay Group data.