

# The state of private pensions: Current 5500 data

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# THE STATE OF PRIVATE PENSIONS: CURRENT 5500 DATA

BY MARRIC BUESSING AND MAURICIO SOTO\*

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## Introduction

Every year, pension plan sponsors are required to file a return with the U.S. Department of Labor. These returns, known as the Form 5500 series, contain detailed information about the plans' finances, participants, and administrators that allows government agencies to monitor compliance with the Employee Retirement Income Security Act (ERISA) and the Internal Revenue Code.<sup>1</sup> The comprehensive nature of the Form 5500 series makes them a primary source for examining the state of the private pension world: from participation rates to financial health to 401(k) investment in company stock to the size of employer contributions — it is all there.

Unfortunately, these rich data are not available in a timely manner.<sup>2</sup> The data from the "Private Pension Plan Bulletins Abstract of Form 5500 Annual Reports" — the official tabulations put out by the Department of Labor commonly used by practitioners and researchers — have a five-year lag. Sponsors have up to ten months to file the forms, and it can take up to two years to convert the raw forms, which generally are filed in paper, into a manageable and complete dataset. Then, these data must be cleaned, analyzed, and tabulated. The resulting lag meant that as of early 2006, official tabulations were available only up to 2000.<sup>3</sup>

This brief uses raw 5500 Form data from the Department of Labor to extend the tabulations to 2003 — the latest year in which the datasets are available.<sup>4</sup> The estimations are done for the 1990-2003 period, and are presented as a data appendix to this brief. The 1990-2000 numbers match closely those from official reports; the 2001-2003 calculations bring the tabulations as up-to-date as currently possible.<sup>5</sup>

Using these recent data, this brief highlights trends that are impossible to observe in the current official releases: a notable increase in pension contributions for defined benefit plans; the decline and recovery of pension assets in the 2001-2003 period; the continued use of cash balance plans; and the sustained move in coverage towards defined contribution plans.

## Contributions to Defined Benefit Plans Tripled

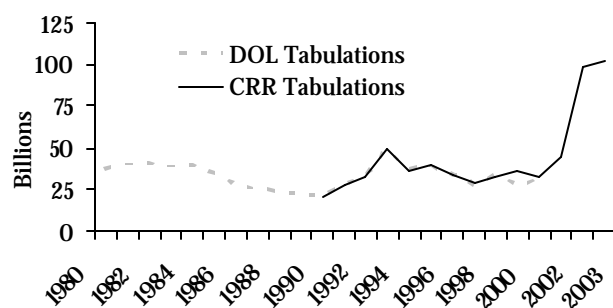
During the late 1980s and 1990s, a combination of growing asset values and regulatory constraints allowed defined benefit plan sponsors to make little or no contributions to their pension funds. After 2000, the decline of the stock market and the rapid

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drop of interest rates dubbed by analysts as "the perfect storm" brought an end to this contribution holiday.<sup>6</sup> As assets in the pension funds plummeted and projected liabilities increased, funding rules required many plan sponsors to inject a significant amount of cash into their pension funds. Figure 1 shows the sudden increase in contributions after 2000, from an average annual contribution between 1980 and 2000 of about \$30 billion per year to \$45 billion in 2001, and to about \$100 billion in 2002 and 2003. The dramatic increase in contributions to defined benefit plans contrasts with the stable trends of the annual inflows to defined contribution plans (see Table E16 of the data appendix that accompanies this brief).

**FIGURE 1. PENSION PLAN CONTRIBUTIONS TO DEFINED BENEFIT PLANS,\* 1980-2003**



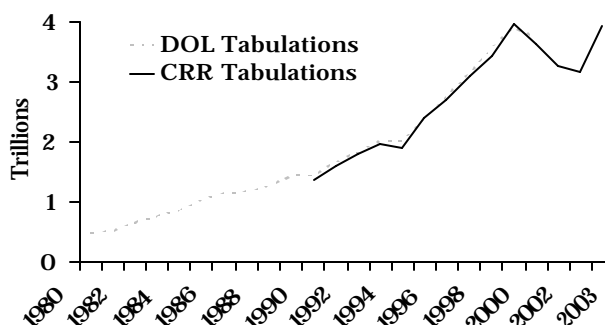
\*Note: Plans with 100 or more participants.

Sources: U.S. Department of Labor (2004) and (2005); and authors' calculations from raw universe 5500 data files.

## Pension Assets Rebounded

Figure 2 shows the extraordinary growth of pension assets in the last two decades. From 1980 to 2003, combined assets of defined benefit and defined contribution plans experienced an eight-fold increase to almost \$4 trillion. Compared to this growth, the fall of assets between 1999 and 2002 appears to be just a brief dip. By 2003, pension contributions and the recovery of the stock market drove the aggregate value of assets to a level comparable to that of 1999. The underlying data show that assets in defined contribution plans rebounded beyond 1999 levels, while defined benefit plans have yet to fully recover from the three year asset downturn (Table E13 of the data Appendix). These comprehensive tabulations show that 2002 was the first year in which the aggregate assets accumulated in defined contribution plans surpassed those from defined benefit plans.<sup>7</sup>

**FIGURE 2. TOTAL PENSION PLAN ASSETS,\* 1980-2003**



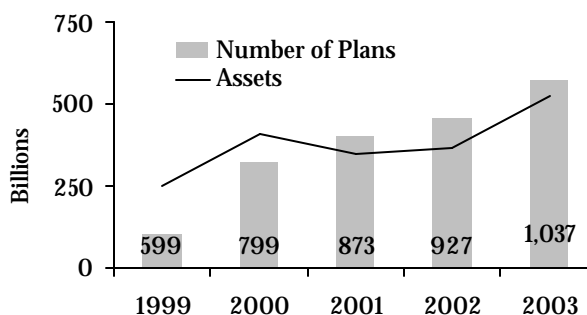
\*Note: Plans with 100 or more participants.

Sources: U.S. Department of Labor (2004); and authors' calculations from raw universe 5500 data files.

## Cash Balance Plans Grew

Since 1999, the Form 5500 has included a variable to identify cash balance plans.<sup>8</sup> In that year, there were about 600 cash balance plans with 100 or more participants totaling more than \$250 billion in assets. Figure 3 points to the expansion of cash balance plans up to 2003, with the number of plans increasing to more than 1,000, and assets growing to about \$530 billion.<sup>9</sup> Since 2003, cash balance plans have been the target of extensive litigation, which has brought their expansion to a virtual halt.

**FIGURE 3. PLAN ASSETS AND NUMBER OF CASH BALANCE PLANS,\* 1999-2003**



\*Note: Plans with 100 or more participants.

Source: Authors' calculations from raw universe 5500 data files.

Large plans were the most likely to switch to cash balance plans. Table 1 shows that while in 2003 cash balance plans accounted for less than 10 percent of defined benefit plans, they held more than a quarter of the assets.

**TABLE 1. PERCENT OF DEFINED BENEFIT PLANS, ASSETS, AND PARTICIPANTS IDENTIFIED AS CASH BALANCE**

Year	Number of Plans	Assets	Participants
1999	4%	13%	10%
2000	6	23	16
2001	7	21	17
2002	8	23	20
2003	9	26	22

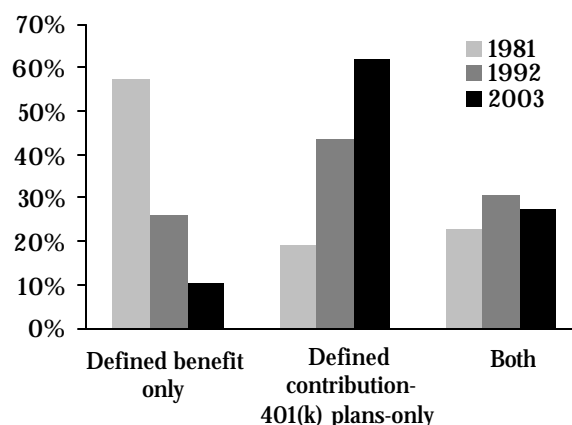
\*Note: Plans with 100 or more participants.

Source: Authors' calculations from raw universe 5500 data files.

## Shift to Defined Contribution Plans Continued

The prevalence of defined contribution plans in the private pension world is reflected in the most recent data. More than 60 percent of workers with pensions depend exclusively on a defined contribution plan, only about 10 percent are covered solely by a defined benefit plan, and the remaining 30 percent have dual coverage (see Figure 4).

**FIGURE 4. PERCENT OF WAGE AND SALARY WORKERS WITH PENSION COVERAGE BY TYPE OF PLAN, 1981-2003**



Sources: U.S. Department of Labor (2004) and authors' calculations from raw universe 5500 data files.

## Conclusion

The detailed nature of the 5500 data makes them a primary source of pension information. But the richness of these data also makes them complex. This complexity creates a significant lag between the data collection and the time in which aggregate numbers are available to the public.

Fortunately, the Department of Labor makes a raw version of the data available to researchers in a relatively short period — about two years — which allows for the estimation of recent trends and changes in the pension world that are outlined in this brief. Recent data show a rapid increase in pension contributions for defined benefit plans after 1999; the data also highlight the continuation of previous trends — i.e., a shift towards defined contribution plans, and the expansion of cash balance plans between 1999 and 2003.

## Endnotes

1 The main users of the 5500 series data are the Internal Revenue Service (IRS), which monitors compliance with the Internal Revenue Code; the Department of Labor (DOL), which examines compliance with ERISA; the Pension Benefits Guarantee Corporation (PBGC), which follows plan terminations and pension insurance premiums; and the Social Security Administration, which informs participants about the pension benefits they will receive. Other users include the Federal Reserve Board and the Bureau of Economic Analysis.

2 For more details on the lags created by the filing, processing and release of the data sets and tabulations, see U.S. Government Accountability Office (2005).

3 As of December 2005, the year 2000 tabulations by the DOL were still preliminary and incomplete.

4 The data used here correspond to the raw universe data files available from the Department of Labor. These raw files are publicly available from the Public Disclosure Room at 200 Constitution Avenue, NW, Room N-1513, Washington, DC 20210, or by calling (202) 693-8673.

5 Tabulations are done for plans with 100 or more participants. The calculations used to produce these tabulations follow closely the Department of Labor's assumptions and methodology used to generate the official reports. A technical appendix released in conjunction with this brief contains the details of the estimations.

6 See Munnell and Soto (2004) for details on the circumstances that created a contribution holiday for defined benefit plans. They predict increases in contributions similar to the ones observed for the 2001-2003 period.

7 For all plan assets, including those with fewer than 100 participants, defined contribution assets surpassed defined benefit assets in 1992.

8 Cash balance arrangements are defined benefit plans where the employer prefunds contributions, selects the investments, and bears the risk. To the employee, however, a cash balance plan looks very much like a defined contribution plan. According to the form instructions, the indicator included in the 5500 Form may also account for "similar plans" in which at least part of the benefit is defined in terms "more common to a defined contribution plan."

9 Cash balance plan assets may include those used to fund benefits for grandfathered participants under the traditional benefit formula.

10 The most notable case was *Cooper vs. IBM Pension Plan*. The ruling in this case — issued July 31, 2003 — deemed IBM's cash balance plan illegal under the anti-discrimination requirements of ERISA.

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# APPENDIX

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Table E3. Number of Pension Plans with 100 or More Participants by Type of Plan, 1980-2003

Year	DOL Tabulations			CRR Calculations		
	Total	Defined Benefit	Defined Contribution	Total	Defined Benefit	Defined Contribution
1980	37,855	24,505	13,350			
1981	40,243	24,989	15,254			
1982	42,198	25,398	16,800			
1983	44,702	25,979	18,723			
1984	45,491	25,103	20,388			
1985	48,658	24,742	23,917			
1986	50,958	24,474	26,484			
1987	51,791	23,421	28,370			
1988	54,397	22,805	31,593			
1989	55,650	21,419	34,231			
1990	53,164	19,242	33,922	53,229	20,385	32,844
1991	53,777	18,454	35,324	53,484	19,681	33,803
1992	58,053	18,738	39,315	56,819	19,135	37,684
1993	59,482	18,660	40,822	58,261	18,464	39,797
1994	61,638	18,100	43,538	59,211	17,732	41,479
1995	62,287	17,087	45,200	61,324	17,253	44,071
1996	63,704	16,553	47,150	63,057	16,494	46,563
1997	66,345	15,852	50,493	64,993	15,793	49,200
1998	68,419	15,141	52,278	66,339	14,915	51,424
1999*	69,393	14,199	55,195	63,589	13,719	49,870
2000*	71,193	13,557	57,635	65,705	13,016	52,689
2001				70,641	12,892	57,749
2002				70,603	12,263	58,340
2003*				71,469	11,989	59,480

Sources: 1) Official data (1980-1999): *Abstract of 1999 Form 5500 Annual Reports*; (2000): Calculated from Table B1, *Preliminary Abstract of 2000 Form 5500 Annual Report*. 2) Authors' calculations (1990-2003): *Annual Return/Report Form 5500 Series for Plan Years 1990-2003*.

Values from Raw Data			
1999	46,581	9,778	36,803
2000	53,679	10,050	43,629
2003	67,569	11,240	56,329

\*For 1999 and 2000, the Annual Return/Report Form 5500 Series data do not include a significant number of plans, some of which have assets greater than \$2.5 billion. The 2003 data are preliminary and incomplete — about 5 percent of the plans are missing. To obtain the aggregate totals, the missing plans are imputed by: 1) identifying plans that existed in the prior year that are not in the current year; 2) projecting these plans to the current year; and 3) applying the average rate of growth for different measures (assets, participants, etc.) from those plans that are observed in the prior and current year.

Table E4. Estimated Private Wage and Salary Worker Participation Rates under Defined Benefit and Defined Contribution Plans, 1980-2003

Thousands

Year	Number of Wage and Salary Workers	DOL Tabulations						CRR Calculations					
		Workers Covered by						Workers Covered by					
		Defined Benefit Plan Only		Defined Contribution Plan Only		Both a Defined Benefit Plan and a Defined Contribution Plan(s)		Defined Benefit Plan Only		Defined Contribution Plan Only		Both a Defined Benefit Plan and a Defined Contribution Plan(s)	
		Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1980	78,349	21,861	28	6,201	8	8,239	11						
1981	80,282	21,458	27	7,214	9	8,585	11						
1982	82,318	18,680	23	8,108	10	10,998	13						
1983	84,410	17,529	21	9,376	11	12,349	15						
1984	86,732	16,357	19	9,877	11	13,716	16						
1985	88,293	14,603	17	11,514	13	14,292	16						
1986	90,267	15,096	17	12,626	14	13,433	15						
1987	91,559	15,592	17	13,396	15	12,835	14						
1988	93,012	14,667	16	14,040	15	13,299	14						
1989	94,448	13,768	15	15,404	16	13,368	14						
1990	94,772	12,273	13	16,023	17	13,932	15						
1991*	94,959	12,233	13	17,024	18	13,370	14	11,909	13	16,832	18	14,862	16
1992*	96,577	11,557	12	19,340	20	13,665	14	11,092	11	18,470	19	13,640	14
1993	97,749	10,449	11	19,632	20	14,537	15	10,790	11	20,876	21	13,991	14
1994	101,077	9,929	10	20,781	21	14,551	14	10,838	11	20,828	21	13,815	14
1995	102,162	8,978	9	22,734	22	14,417	14	9,160	9	24,199	24	14,532	14
1996	104,313	7,830	8	23,954	23	15,303	15	8,837	8	24,490	23	14,505	14
1997	106,955	6,768	6	26,785	25	15,851	15	7,651	7	28,871	27	15,330	14
1998	108,340	7,061	7	28,839	27	15,802	15	7,250	7	28,331	26	15,730	15
1999*	110,131	7,215	7	31,464	29	15,414	14	6,462	6	29,810	27	15,620	14
2000*	111,097							5,678	5	33,269	30	15,251	14
2001	111,905							5,625	5	34,850	31	14,928	13
2002	113,497							6,075	5	35,120	31	15,614	14
2003*	114,707							5,969	5	35,986	31	16,343	14

Sources: 1) Official data (1980-1999): *Abstract of 1999 Form 5500 Annual Reports*; (2000-2003): Estimated from "The Employment Situation" 1997-2003 (Bureau of Labor Statistics). 2) Authors' calculations (1990-2003): *Annual Return/Report Form 5500 Series for Plan Years 1990-2003*.



Table E7. Number of Participants in Pension Plans with 100 or More Participants by Type of Plan, 1980-2003  
Thousands

Year	DOL Tabulations			CRR Calculations		
	Total	Defined Benefit	Defined Contribution	Total	Defined Benefit	Defined Contribution
1980	52,162	35,984	16,178			
1981	54,266	36,748	17,518			
1982	56,366	36,446	19,920			
1983	62,275	37,871	24,404			
1984	67,009	38,967	28,042			
1985	67,112	37,633	29,478			
1986	68,746	37,956	30,790			
1987	69,810	37,950	31,860			
1988	69,340	39,002	30,338			
1989	68,205	38,562	29,643			
1990	68,655	37,553	31,102	70,004	38,957	31,047
1991	69,221	37,801	31,420	71,265	38,938	32,327
1992	72,838	38,402	34,436	74,327	39,292	35,035
1993	74,783	39,237	35,546	76,444	39,337	37,107
1994	75,964	39,394	36,570	76,372	38,661	37,711
1995	78,079	38,843	39,236	81,185	39,473	41,712
1996	82,145	40,317	41,828	83,838	40,425	43,413
1997	84,708	39,661	45,047	88,146	40,238	47,908
1998	88,776	40,835	47,942	90,405	40,429	49,976
1999*	90,690	40,931	49,760	94,109	40,614	53,495
2000*	92,058	41,115	50,871	94,921	38,831	56,090
2001				96,730	38,556	58,174
2002				99,078	40,218	58,860
2003*				104,194	42,583	61,611

Sources : 1) Official data (1980-1999): *Abstract of 1999 Form 5500 Annual Report* ; (2000): Estimated from Table A1, *Preliminary Abstract of 2000 Form 5500 Annual Report* , and Table E5., *Abstract of 1999 Form 5500 Annual Report* . 2) Authors' calculations (1990-2003): *Annual Return/Report Form 5500 Series for Plan Years 1990-2003*.

**Values from Raw Data**

1999	60,939	26,017	34,922
2000	64,862	24,944	39,918
2003	93,111	38,774	54,337

\*For 1999 and 2000, the Annual Return/Report Form 5500 Series data do not include a significant number of plans, some of which have assets greater than \$2.5 billion. The 2003 data are preliminary and incomplete — about 5 percent of the plans are missing. To obtain the aggregate totals, the missing plans are imputed by: 1) identifying plans that existed in the prior year that are not in the current year; 2) projecting these plans to the current year; and 3) applying the average rate of growth for different measures (assets, participants, etc.) from those plans that are observed in the prior and current year.

Table E10. Number of Active Participants in Pension Plans with 100 or More Participants by Type of Plan, 1980-2003

Thousands

Year	DOL Tabulations			CRR Calculations		
	Total	Defined Benefit	Defined Contribution	Total	Defined Benefit	Defined Contribution
1980	43,620	28,305	15,315			
1981	44,830	28,125	16,704			
1982	46,741	27,782	18,959			
1983	51,428	28,104	23,324			
1984	54,184	28,331	25,853			
1985	55,041	27,145	27,896			
1986	55,706	26,820	28,886			
1987	55,599	26,760	28,838			
1988	54,428	26,555	27,872			
1989	53,262	26,004	27,258			
1990	53,887	25,182	28,705	54,083	25,710	28,373
1991	53,334	24,633	28,701	54,265	25,083	29,182
1992	55,524	24,340	31,184	55,828	24,658	31,170
1993	56,019	24,192	31,827	56,303	23,743	32,560
1994	56,181	23,759	32,422	55,827	23,360	32,467
1995	57,201	22,724	34,477	57,457	22,416	35,041
1996	58,706	22,546	36,160	58,613	22,065	36,548
1997	60,858	22,085	38,773	61,928	21,591	40,337
1998	63,083	22,345	40,738	63,305	22,107	41,198
1999*	62,896	22,115	40,781	63,425	20,972	42,453
2000*	62,885	21,712	41,173	63,224	19,392	43,832
2001				63,873	19,040	44,833
2002				64,830	19,404	45,426
2003*				67,504	20,543	46,961

Sources : 1) Official data (1980-1999): *Abstract of 1999 Form 5500 Annual Report* ; (2000): Estimated from Table A1, *Preliminary Abstract of 2000 Form 5500 Annual Report* , and Table E10., *Abstract of 1999 Form 5500 Annual Report* . 2) Authors' calculations (1990-2003): *Annual Return/Report Form 5500 Series for Plan Years 1990-2003*.

**Values from Raw Data**

1991	51,768	25,073	26,695
1992	52,666	24,647	28,019
1999	41,721	13,758	27,963
2000	44,106	12,574	31,532
2003	59,997	18,626	41,371

\*For 1999 and 2000, the Annual Return/Report Form 5500 Series data do not include a significant number of plans, some of which have assets greater than \$2.5 billion. The 2003 data are preliminary and incomplete — about 5 percent of the plans are missing. To obtain the aggregate totals, the missing plans are imputed by: 1) identifying plans that existed in the prior year that are not in the current year; 2) projecting these plans to the current year; and 3) applying the average rate of growth for different measures (assets, participants, etc.) from those plans that are observed in the prior and current year.

Table E13. Pension Plan Assets of Plans with 100 or More Participants  
by Type of Plan, 1980-2003 (amounts in millions)

Year	DOL Tabulations			CRR Calculations		
	Total	Defined Benefit	Defined Contribution	Total	Defined Benefit	Defined Contribution
1980	476,766	369,957	106,809			
1981	524,910	405,584	119,326			
1982	659,724	506,448	153,276			
1983	768,256	581,765	186,491			
1984	867,745	637,765	229,979			
1985	1,041,074	758,372	282,702			
1986	1,150,192	828,797	321,395			
1987	1,174,244	812,037	362,207			
1988	1,262,768	857,330	405,438			
1989	1,439,138	943,401	495,737			
1990	1,432,072	917,712	514,360	1,389,430	872,361	517,069
1991	1,671,942	1,061,826	610,116	1,610,899	1,012,095	598,804
1992	1,832,728	1,116,401	716,326	1,793,111	1,098,426	694,685
1993	2,024,360	1,215,014	809,346	1,991,038	1,191,702	799,336
1994	2,020,001	1,185,471	834,529	1,920,248	1,122,539	797,709
1995	2,399,984	1,375,623	1,024,361	2,421,001	1,380,484	1,040,517
1996	2,776,297	1,556,821	1,219,476	2,729,614	1,539,367	1,190,247
1997	3,154,982	1,709,990	1,444,991	3,090,990	1,701,671	1,389,319
1998	3,579,261	1,896,931	1,682,330	3,449,526	1,841,179	1,608,347
1999*	3,918,940	2,025,843	1,893,097	3,964,182	2,068,844	1,895,338
2000*	3,748,590	1,957,122	1,791,468	3,655,900	1,892,779	1,763,121
2001				3,286,006	1,644,378	1,641,628
2002				3,161,462	1,563,012	1,598,450
2003*				3,947,691	1,945,427	2,002,264

Sources: 1) Official data (1980-1999): *Abstract of 1999 Form 5500 Annual Report*; (2000): Estimated from Table C4, *Preliminary Abstract of 2000 Form 5500 Annual Report*. 2) Authors' calculations (1990-2003): *Annual Return/Report Form 5500 Series for Plan Years 1990-2003*.

Values from Raw Data			
1999	2,510,523	1,227,812	1,282,711
2000	2,445,270	1,161,062	1,284,208
2003	3,552,102	1,764,479	1,787,623

\*For 1999 and 2000, the Annual Return/Report Form 5500 Series data do not include a significant number of plans, some of which have assets greater than \$2.5 billion. The 2003 data are preliminary and incomplete — about 5 percent of the plans are missing. To obtain the aggregate totals, the missing plans are imputed by: 1) identifying plans that existed in the prior year that are not in the current year; 2) projecting these plans to the current year; and 3) applying the average rate of growth for different measures (assets, participants, etc.) from those plans that are observed in the prior and current year.

Table E16. Pension Plan Contributions to Plans with 100 or More Participants  
by Type of Plan, 1980-2003

Millions

Year	DOL Tabulations			CRR Calculations		
	Total	Defined Benefit	Defined Contribution	Total	Defined Benefit	Defined Contribution
1980	52,612	36,756	15,856			
1981	58,968	39,822	19,147			
1982	62,408	40,766	21,642			
1983	65,090	38,720	26,370			
1984	72,064	39,347	32,717			
1985	73,613	34,592	39,021			
1986	69,960	27,502	42,458			
1987	72,107	25,497	46,610			
1988	72,286	23,285	49,000			
1989	76,925	21,960	54,965			
1990	77,105	20,418	56,687	77,724	20,926	56,798
1991	89,215	27,726	61,489	88,076	27,438	60,638
1992	103,581	32,945	70,636	100,849	32,864	67,985
1993	127,683	49,672	78,011	126,882	49,187	77,695
1994	120,420	37,113	83,307	117,576	36,740	80,836
1995	130,682	39,017	91,665	132,167	39,869	92,298
1996	138,738	33,860	104,877	136,518	33,622	102,896
1997	143,655	27,886	115,770	141,367	28,799	112,568
1998	163,705	33,057	130,649	161,061	32,993	128,068
1999*	172,035	27,803	144,232	177,518	35,608	141,910
2000*	187,779	31,039	156,739	182,177	33,350	148,827
2001				195,945	44,262	151,683
2002				254,057	97,821	156,236
2003*				268,555	101,193	167,362

Sources: 1) Official data (1980-1999): *Abstract of 1999 Form 5500 Annual Report*; (2000): Table C9, *Preliminary Abstract of 2000 Form 5500 Annual Report*. 2) Authors' calculations (1990-2003): *Annual Return/Report Form 5500 Series for Plan Years 1990-2003*.

**Values from Raw Data**

1999	119,498	19,792	99,706
2000	128,703	18,735	109,968
2003	245,759	91,030	154,729

\*For 1999 and 2000, the Annual Return/Report Form 5500 Series data do not include a significant number of plans, some of which have assets greater than \$2.5 billion. The 2003 data are preliminary and incomplete — about 5 percent of the plans are missing. To obtain the aggregate totals, the missing plans are imputed by: 1) identifying plans that existed in the prior year that are not in the current year; 2) projecting these plans to the current year; and 3) applying the average rate of growth for different measures (assets, participants, etc.) from those plans that are observed in the prior and current year.

Table E19. Pension Plan Benefits Disbursed from Plans with 100 or More Participants by Type of Plan, 1980-2003

Millions

Year	DOL Tabulations			CRR Calculations		
	Total	Defined Benefit	Defined Contribution	Total	Defined Benefit	Defined Contribution
1980	30,157	20,072	10,085			
1981	37,762	24,545	13,217			
1982	44,571	28,093	16,478			
1983	55,693	32,763	22,920			
1984	64,775	40,223	24,552			
1985	79,405	45,530	33,875			
1986	91,999	53,244	38,754			
1987	87,680	51,445	36,225			
1988	84,926	48,381	36,546			
1989	94,987	54,339	40,648			
1990	95,167	55,564	39,603	94,459	54,337	40,122
1991	104,951	62,014	42,937	104,785	61,069	43,716
1992	121,678	69,924	51,755	124,682	71,295	53,387
1993	127,076	72,433	54,643	128,289	72,636	55,653
1994	138,034	77,764	60,269	135,451	75,769	59,682
1995	149,099	78,034	71,065	154,220	80,346	73,874
1996	177,023	89,858	87,166	178,720	89,782	88,938
1997	189,413	89,493	99,920	191,650	91,765	99,885
1998	224,414	102,886	121,528	227,818	104,480	123,338
1999*	258,739	110,674	148,065	260,775	110,874	149,901
2000*	286,049	120,556	165,493	282,077	121,073	161,004
2001				253,784	113,395	140,389
2002				260,806	123,220	137,586
2003*				269,009	132,754	136,255

Sources: 1) Official data (1980-1999): *Abstract of 1999 Form 5500 Annual Report*; (2000): Table C9, *Preliminary Abstract of 2000 Form 5500 Annual Report*. 2) Authors' calculations (1990-2003): *Annual Return/Report Form 5500 Series for Plan Years 1990-2003*.

**Values from Raw Data**

1999	176,812	70,385	106,427
2000	193,106	71,354	121,752
2003	247,249	121,272	125,977

\*For 1999 and 2000, the Annual Return/Report Form 5500 Series data do not include a significant number of plans, some of which have assets greater than \$2.5 billion. The 2003 data are preliminary and incomplete — about 5 percent of the plans are missing. To obtain the aggregate totals, the missing plans are imputed by: 1) identifying plans that existed in the prior year that are not in the current year; 2) projecting these plans to the current year; and 3) applying the average rate of growth for different measures (assets, participants, etc.) from those plans that are observed in the prior and current year.

Table D6. Number of 401(k)-Type Plans, Assets, Income, Contributions, Benefits, and Participants  
Participants in thousands, amounts in millions

Year	DOL Tabulations						CRR Calculations					
	Plans	Total Assets	Net Income	Total Contributions	Total Benefits	Total Active Participants	Plans	Total Assets	Net Income	Total Contributions	Total Benefits	Total Active Participants
1990	17,571	354,496	26,393	43,170	28,389	N/A	18,456	362,048	26,877	43,822	28,851	17,843
1991*	18,937	401,771	66,161	44,939	29,228	N/A	18,067	402,871	63,539	44,034	30,004	17,509
1992*	23,336	510,165	60,213	55,633	38,495	N/A	23,011	505,520	57,130	53,228	38,944	20,263
1993	25,371	556,899	69,470	58,983	38,080	19,772	25,296	563,643	69,540	59,572	38,956	21,276
1994	28,623	607,804	41,372	65,488	44,401	21,568	28,015	581,755	42,100	64,046	43,597	22,130
1995	31,339	773,941	147,219	73,944	54,162	23,877	31,198	796,593	147,695	75,395	56,413	24,864
1996	34,599	952,511	137,868	87,406	67,855	26,081	34,191	937,506	136,197	86,555	68,465	26,756
1997	37,528	1,126,421	201,509	96,154	78,405	28,374	37,512	1,087,592	194,957	94,812	78,196	29,634
1998	41,048	1,377,161	203,453	111,086	101,104	30,933	40,357	1,317,882	196,636	109,690	101,668	31,889
1999*	43,454	1,577,607	179,764	124,936	123,331	32,463	39,945	1,541,847	164,353	120,598	122,644	33,749
2000*							42,730	1,493,261	-75,643	131,771	138,076	36,025
2001							47,662	1,390,645	-81,218	134,060	121,202	37,083
2002							48,982	1,375,862	-127,087	139,348	120,031	37,784
2003*							50,947	1,754,518	275,069	151,297	120,568	40,320

Sources: 1) Official data (1980-1999): *Abstract of 1999 Form 5500 Annual Report*. 2) Authors' calculations (1990-2003): *Annual Return/Report Form 5500 Series for Plan Years 1990-2003*

**Values from Raw Data**

1991	6,935	45,979	9,839	7,147	3,021	3,705
1992	20,703	423,012	49,707	44,973	31,927	17,441
1999	29,868	1,114,959	117,502	88,670	92,060	24,782
2000	35,449	1,070,888	-46,234	96,740	103,097	26,861
2003	48,258	1,557,744	277,730	139,775	111,386	36,917

\*For 1991 and 1992 plans for which the indicator for 401(k) plans is missing, the 401(k) status is imputed using data from 1990; for 1999 and 2000, the Annual Return/Report Form 5500 Series data do not include a significant number of plans, some of which have assets greater than \$2.5 billion. The 2003 data are preliminary and incomplete — about 5 percent of the plans are missing. To obtain the aggregate totals, the missing plans are imputed by: 1) identifying plans that existed in the prior year that are not in the current year; 2) projecting these plans to the current year; and 3) applying the average rate of growth for different measures (assets, participants, etc.) from those plans that are observed in the prior and current year.

Table CB1. Cash Balance Plans with 100 or More Participants  
Participants in thousands, amounts in millions

Year	Plans	Total Assets	Total Contributions	Total Benefits	Total Participants	Total Active Participants
1999*	599	247,743	2,090	15,394	4,090	2,302
2000*	799	412,369	2,391	30,699	6,317	3,227
2001	873	347,355	9,100	27,281	6,746	3,423
2002	927	365,495	21,647	33,049	7,869	3,930
2003*	1,037	528,150	26,212	38,239	9,516	4,812

Sources: Authors' calculations (1999-2003); *Annual Return/Report Form 5500 Series for Plan Years 1999-2003*

#### Values from Raw Data

1999	575	223,190	1,961	14,077	3,711	2,135
2000	571	220,459	1,689	16,788	3,669	1,958
2003	973	464,590	22,464	33,727	8,732	4,468

\*For 1999 and 2000, the Annual Return/Report Form 5500 Series data do not include a significant number of plans, some of which have assets greater than \$2.5 billion. The 2003 data are preliminary and incomplete — about 5 percent of the plans are missing. To obtain the aggregate totals, the missing plans are imputed by: 1) identifying plans that existed in the prior year that are not in the current year; 2) projecting these plans to the current year; and 3) applying the average rate of growth for different measures (assets, participants, etc.) from those plans that are observed in the prior and current year.

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## About the Center

The Center for Retirement Research at Boston College was established in 1998 through a grant from the Social Security Administration. The Center's mission is to produce first-class research and forge a strong link between the academic community and decisionmakers in the public and private sectors around an issue of critical importance to the nation's future. To achieve this mission, the Center sponsors a wide variety of research projects, transmits new findings to a broad audience, trains new scholars, and broadens access to valuable data sources. Since its inception, the Center has established a reputation as an authoritative source of information on all major aspects of the retirement income debate.

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