Hard-Frozen Defined Benefit Plans

Findings for 2003-2004 and Preliminary Findings for 2005

PBGC

Protecting America's Pensions

Pension Benefit Guaranty Corporation

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Contents

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Findings for 2003-2004, and Preliminary Findings for 2005

Summary

In December 2005, PBGC published an analysis of defined benefit pension plans that were hard-frozen in 2003. (In a hard freeze, all benefit accruals in the plan cease.) That analysis found that, based on data then available:

- 9.4 percent of PBGC-insured single-employer defined benefit pension plans were hard-frozen at the end of the 2003 plan year;
- small plans were much more likely than large plans to be hard-frozen;
- only 2.5 percent of the participants whose single-employer benefits PBGC insures were then in hard-frozen plans.

Updated information for the 2003 plan year shows 9.5 percent of insured plans were hard-frozen at the end of 2003 but shows no increase in the percentage of participants covered by such plans.

Form 5500 data are currently available for almost all plans insured in 2004 and for about 90 percent of those insured in 2005. These data indicate that:

- 12 percent of PBGC-insured single-employer plans were hard-frozen at the end of the 2004 plan year;
- 14 percent were hard-frozen at the end of the 2005 plan year;
- 3.5 percent of all covered participants were in hard-frozen plans in 2004;
- 6.1 percent of all participants were in such plans in 2005.

The 2005 hard-frozen plan figure represents a 50 percent increase in the percentage of insured plans that were hard-frozen in just two years. The jump in the percentage of participants in hard-frozen plans from 2004 to 2005 can be attributed to the hard-freezing of three very large plans in 2005.

The level of freeze-related activity, both freezing and thawing, is more extensive than the net change would suggest. (A thawed plan is one reported to be hard-frozen in one year but not in the following year.) While the number of hard-frozen plans showed a net increase of about 700 plans between 2003 and 2004,[1] this reflects the freezing of about 1,300 plans during 2004 and the reported unfreezing or termination of about 600 plans that were reported frozen in 2003.[2] Preliminary indications are that there was also significant new freezing and thawing activity during the 2005 plan year.

[1] Because final 2005 data are not yet complete, this update only reports 2005 data by **percentage** of plans that were frozen, based on available data, but not by the **number** of plans.
[2] Plans that did not file a 2004 Form 5500 are assumed to have terminated.

Background

In 2002, a new frozen plan question was added to the Form 5500, the report pension plans are required to file annually with the Internal Revenue Service, the Department of Labor, and PBGC. This new question is a feature code for defined benefit pension plans that asks whether "as of the last day of the plan year, the plan provides that no participant will get any new benefit accrual (whether because of service or compensation)." In short, it asks if the plan is frozen under a "hard freeze" definition. The frozen plan data on the 2002 Form 5500s were not properly processed, limiting their usefulness. Thus, the 2003 data were the first that could be analyzed.

The value of the frozen-plan question is somewhat limited because not all plan freezes are hard freezes. A plan that is closed to new entrants but allows those already in the plan to continue to accrue benefits does not meet this definition. Neither does a plan that freezes benefit accruals for some, but not all, participants (a "partial freeze"). A plan that freezes service accruals for all active participants but allows benefits to increase with the growth in participants' wages (a "soft freeze") also fails to conform to the hard-freeze definition. News reports on plans that are being closed to new entrants or frozen for only certain classes of workers suggest that these other types of freezes are relatively common. However, Form 5500, on which PBGC bases its analysis, does not contain data that can be used to determine how common they actually are. Because these lesser frozen plans cannot be identified from the Form 5500 data base, they are assumed to be unfrozen plans for purposes of this study.

It generally takes about two years from the beginning of the plan year for Form 5500 data to reach PBGC. Thus, the data for 2004 are the most recent that are available for all insured plans. Data for 2005 are currently available for about 90 percent of the single-employer plans PBGC insured that year. As a result of this lag in data availability, recently announced hard freezes, such as those announced by IBM, Unisys, and Citigroup, are not included in these data.

A number of frozen plan studies have been published recently (see Appendix I). The studies often do not define what constitutes a frozen plan, or they combine frozen plans with plans having other characteristics. This makes it difficult to compare results across studies. And, as these studies generally are based on non-random samples of large plans, their results generally will not apply to the entire population of defined benefit plans. Unfortunately, the press frequently reports the results as if they did.

Results of This Study

The findings for the 2005 study were updated to take into account data for plans whose 2003 Form 5500s were not available at the time the 2005 study was undertaken. This update found that a slightly larger percentage of insured plans—9.5 percent—were hard-frozen in 2003 than was originally reported (9.4 percent). The changes from 2003 to 2004 reported below use these updated 2003 findings as the base. The 2005 data reported are based on the 2005 Form 5500 filings that are currently available.

Hard Frozen Plans by Plan Size

Overall, the proportion of PBGC-insured plans that were hard-frozen increased from 9.5 percent at the end of the 2003 plan year to 12.1 percent at the end of the 2004 plan year and to a preliminary 14.1 percent at the end of the 2005 plan year. As shown in Table 1, the percentage of plans that were hard-frozen tended to decline with the size of the plan. In 2003, plans with fewer than 100 participants, which accounted for almost two-thirds of all the single-employer plans insured by PBGC, were the most likely to be hard-frozen. However, in 2004 and 2005, plans with 100 to 999 participants were the most likely to be hard-frozen. Preliminary 2005 data indicate about one of six plans in this size stratum, which accounted for 25 percent of the single-employer plans insured by PBGC, were hard-frozen at the end of the plan year. At the other extreme, only about four percent of plans with 5,000 or more participants were hard-frozen in 2005, according to the preliminary results. These large plans accounted for less than four percent of insured plans.

Table 1. Percentage of PBGC-Insured Single-Employer Plans That Had a Hard Freeze in Place, by Plan Size, 2003-2005

Plan Size	Percent Frozen			Percent Change in Percentage		
	2003	2004	2005	2003-4	2004-5	2003-5
Less than 100	10.3%	12.6%	14.2%	22.9%	12.6%	38.4%
100 - 999	9.7	13.2	16.7	35.7	26.4	71.5
1,000 - 4,999	6.0	8.4	10.7	40.3	27.5	78.9
5,000 - 9,999	2.3	3.7	5.2	58.3	40.4	122.3
10,000 or more	1.8	2.0	2.9	12.4	42.3	60.0
All Plans	9.5%	12.1%	14.1%	26.8%	16.8%	48.1%

Participants in Hard-Frozen Plans

Because most hard-frozen plans were small plans, the percentage of participants affected by hard freezes was relatively small, growing from 2.5 percent at the end of 2003 to a preliminary 6.1 percent at the end of 2005. Overall, the smaller the plan size, the greater the percentage of participants who were in frozen plans, as shown in Table 2. More than 18 percent of participants in plans with fewer than 100 participants were in hard-frozen plans at the end of the 2005 plan year compared with only four percent of participants in plans with 10,000 or more participants.

The percentage of participants in frozen plans increased for all plan sizes. Except for the largest size group, the growth in the percentage of participants in frozen plans for each size stratum was quite similar to the growth in the percentage of plans that were hard-frozen. Because the largest size group is open-ended, freezing one or two very large sized plans can have a large impact on the percent of participants who are in hard-frozen plans. This is what happened in 2005. In 2003, the three largest hard-frozen plans had between 20,000 and 25,000 participants each. In 2004, the three largest hard-frozen plans had about 23,000, 35,000, and 62,000 participants, respectively. At the end of 2005, Sears froze its two large plans for Sears and K-Mart employees. These two plans had almost 400,000 participants between them. At the end of the same year, Lucent Technologies hard-froze a plan that had an additional 125,000 frozen plan participants. These three plans accounted for most of the growth in the number of participants in hard-frozen plans for 2005.

Table 2. Percentage of All Participants in Hard-Frozen PBGC-Insured Single-Employer Plans, by Plan Size, 2003-2005

Plan Size	Percent in Frozen Plans			Percent Change in Percentage		
	2003	2004	2005	2003-4	2004-5	2003-5
Less than 100	12.6%	15.9%	18.3%	25.7%	14.9%	44.5%
100 – 999	9.3	12.6	15.8	36.3	24.8	70.2
1,000 - 4,999	5.7	8.0	10.6	40.5	31.5	84.7
5,000 - 9,999	2.5	4.0	5.6	61.3	39.6	125.2
10,000 or more	0.7	1.1	4.0	48.7	264.2	441.6
All Plans	2.5%	3.5%	6.1%	41.3%	77.1%	150.2%

The average size of hard-frozen and unfrozen plans is comparable except for the largest sized plans, as shown in Table 3. Hard-frozen plans with between 5,000 and 9,999 participants have about 400 more participants, on average, than do unfrozen plans. Among the plans with 10,000 or more participants, the average size of those that were hard-frozen was much smaller in 2003 and 2004 than the average size of unfrozen plans, but frozen plans were almost 50 percent larger in 2005. The three very large plans frozen by Sears and Lucent Technologies accounted for the large increase in the average size of these hard-frozen plans in 2005.

Table 3. Average Size of Hard-Frozen and Unfrozen PBGC-Insured Single-Employer Plans, by Plan Size, 2003-2005

Plan Size	Frozen Plans			Unfrozen Plans		
	2003	2004	2005	2003	2004	2005
Less than 100	24	25	24	19	19	18
100 – 999	333	334	335	350	351	358
1,000 - 4,999	2,133	2,141	2,186	2,237	2,243	2,217
5,000 - 9,999	7,459	7,570	7,496	7,092	7,054	7,018
10,000 or more	14,786	20,155	50,512	36,926	37,998	36,461
All Plans	285	327	502	1,192	1,247	1,260

Type of Single-Employer Plan

The plans PBGC insures may base benefits on a percentage of the participant's compensation, on a flat-dollar amount per year of service, or on a hybrid formula. During the period under study, there was much uncertainty about whether cash balance plans, the primary type of hybrid plan, met all the conditions to be considered a "qualified" plan.[3] Because of this uncertainty, many defined benefit plans reported to be candidates for freezing by their sponsors were hybrid plans. However, as Table 4 shows, in all three years hybrid plans were the least likely of the three plan types to have been hard-frozen. The percentage of hybrid plans that were hard-frozen in each of the three years was only about 60 percent of the percentage of either pay-based or flat-dollar plans that had been hard-frozen.

[3] Title VII of the Pension Protection Act of 2006 (P.L. 109-280) clarified the qualification status of cash balance plans and other plans using hypothetical accounts that were created on or after June 29, 2005. The status of plans created earlier than this date was not resolved by this legislation.

Table 4. PBGC-Insured Single-Employer Plans That Were Hard-Frozen, By Plan Type, 2003-2005

Type of Plan	2003		2004		2005	
	Percent Hard-Frozen	Percent of All Plans	Percent Hard-Frozen	Percent of All Plans	Percent Hard-Frozen	Percent of All Plans
Pay-Based	8.9%	81.1%	11.6%	81.2%	13.5%	81.2%
Flat-Dollar	9.7	14.8	11.5	14.5	13.7	14.3
Hybrid	5.5	5.7	6.7	6.5	8.0	7.6
Not Reported	25.2	3.2	31.0	3.1	35.0	3.1
All Plans	9.5%	100.0%	12.1%	100.0%	14.1%	100.0%

Note: The individual components of "Percent of All Plans" add to more than 100 percent primarily because a number of hybrid plans also reported being either a pay-based plan or a flat-dollar plan, resulting in some double counting.

Funding Level of Frozen Plans

While funding levels of all PBGC-insured plans generally improved between 2003 and 2005, hard-frozen plans continued to be more poorly funded than plans that had not been frozen. (See Table 5.) In 2003 nearly half the hard-frozen plans were less than 80 percent funded on a current liability basis compared with one-third of the unfrozen plans.[4] In 2004, these percentages had fallen to a third and a sixth, respectively, and they fell slightly more in 2005. Unfrozen plans were nearly twice as likely as hard-frozen plans to be fully funded in all three years.

Table 5. Current-Liability-Funded Ratios of Hard-Frozen and Unfrozen Plans, 2003-2005

Funded Ratio	2003		2004		2005	
	Frozen Plans	Unfrozen Plans	Frozen Plans	Unfrozen Plans	Frozen Plans	Unfrozen Plans
Less than 60 %	14.9%	8.2%	8.5%	4.5%	7.5%	4.0%
60 – 79 %	32.5	25.8	24.1	13.1	22.6	12.2
80 – 99 %	25.4	25.9	33.6	29.1	35.7	28.8
100 % or better	17.1	30.1	25.0	43.3	22.8	44.8
Missing *	10.1	10.1	8.9	10.0	11.4	10.3
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Percent of All Plans	9.5	90.5	12.1	87.9	14.1	85.9

Note: Percents may not add to 100 percent because of rounding.
** The "Missing" plans did not provide sufficient information for their funded ratios to be calculated.*

[4] This funded ratio divides the "current value of assets," a market-based value, by current liabilities calculated using the actuary-selected interest rate from within the allowable corridor.

Liabilities and Assets

Table 6 shows the percentage of the total assets and liabilities of all plans that were held by hard-frozen plans, broken down by plan size. As one might expect, the pattern across plan sizes for each of the three years generally followed the pattern of the percentage of plans that were hard-frozen for these three years. However, the percentages of both total assets and liabilities that were held by hard-frozen plans were less than the percentages of plans that were hard-frozen and the percentages of participants who were in hard-frozen plans.

Table 3 indicated that, within each size stratum as measured by the number of participants in the plan, frozen and unfrozen plans were of roughly comparable plan size, except for the two largest size strata. Thus, the reason for the lower average asset and liability levels must lie elsewhere. There are a few possible explanations for this finding. First, no new benefits accrue in hard-frozen plans, so no contributions need to be made to cover new accruals. Over time, as benefits are paid, the levels of assets and liabilities in hard-frozen plans should decline. The asset and liability levels in ongoing plans are likely to either increase as active participants accrue additional benefits or remain relatively constant (although they could decline as well). Second, hard-frozen plans could be plans that provide benefits that are less generous than the average.[5]

Table 6. Percentage of All Plan Assets and Liabilities That Were Held in Hard-Frozen PBGC-Insured Single-Employer Plans, by Plan Size, 2003-2005

	Percent of All Assets in Frozen Plans			Percent of All Liabilities in Frozen Plans		
Plan Size	2003	2004	2005	2003	2004	2005
Less than 100	7.2%	5.9%	6.9%	8.9%	7.6%	6.1%
100 – 999	7.1	9.3	12.2	7.7	10.1	13.4
1,000 - 4,999	3.9	5.3	7.1	4.1	5.9	8.0
5,000 - 9,999	1.4	2.7	3.6	1.0	3.1	4.1
10,000 or more	0.4	0.5	2.7	0.4	0.5	2.7
All Plans	1.3%	1.7%	3.8%	1.4%	1.9%	4.1%

[5] Because the Form 5500 does not have a plan's benefit formula in an electronic form, the validity of this second point could not be tested.

Sponsors of Multiple Plans

Companies sponsoring two or more plans represent about 6 percent of all companies sponsoring PBGC-insured single-employer plans.[6] (See Table 7.) They sponsor about 15 percent of all single-employer plans insured by PBGC. These companies were more likely to have frozen a plan than were companies sponsoring only one plan (19 percent versus 12 percent in 2004). However, companies sponsoring multiple plans froze a smaller percentage of the plans they sponsored than did companies sponsoring only one plan (10 percent versus 12 percent in 2004). Of the companies sponsoring multiple plans, only about 25 percent of those that froze any of their plans had frozen all their plans.

Table 7 Characteristics of Companies Sponsoring Only One PBGC-Insured Single-Employer Plan and of Companies Sponsoring Multiple Plans, 2003-2005

Percent of:	2003		2004		2005	
	One Plan	Multiple Plans	One Plan	Multiple Plans	One Plan	Multiple Plans
All Plans	84.3%	15.7%	85.0%	15.0%	85.8%	14.2%
All Frozen Plans	86.2	13.8	86.5	13.5	86.6	13.4
All Sponsors	93.5	6.5	93.7	6.3	94.2	5.8
Sponsor Plans That Are Frozen	9.7	8.4	12.3	10.2	14.2	13.3
Sponsors Freezing Any Plans	9.7	15.5	12.3	19.2	14.2	23.1
Sponsors Freezing All Plans	9.7	3.5	12.3	5.1	14.2	6.7

Hard Frozen Plans by Industry

The percentage of plans that were hard-frozen increased over the 2003-2005 period for each major industry group (see Table 8). The greatest increase in the <u>number</u> of hard-frozen plans over the two-year period occurred within the Services and Manufacturing sectors. The Finance, Insurance, and Real Estate sector had the third largest increase in the <u>number</u> of hard-frozen plans. The Retail Trade sector had the greatest percentage of plans that were hard-frozen in 2003 and 2004 but fell to second place behind the Manufacturing sector in 2005.

[6] This figure is based on plans sponsored by companies with unique employer identification numbers (EINs). Some companies, especially controlled groups, have several different EINs. In this section, each unique EIN is assumed to represent a separate company.

Within the Manufacturing sector, nearly 25 percent of insured plans in the Fabricated Metal Products and Rubber and Plastics industries were hard-frozen at the end of the 2005 plan year. The greatest percentage increase in the proportion of plans that were hard-frozen occurred in the Motor Vehicle manufacturing sector. While the percent of plans in this industry that were hard-frozen more than doubled over the two-year period, the total percentage of Motor Vehicle plans that were hard-frozen was among the lowest for all industries in 2003 and remained among the lowest in 2005.

Table 8. Percentage of PBGC-Insured Single-Employer Plans That Had a Hard Freeze in Place, by Industry, 2003-2005

				Percent Change in Percentage		
Industry	2003	2004	2005	2003-2004	2004-2005	2003-2005
Agriculture, Mining, and Construction	**10.2%**	**13.3%**	**14.1%**	**30.7%**	**6.2%**	**38.8%**
Manufacturing	**11.5**	**14.9**	**17.9**	**30.4**	**19.7**	**56.1**
Chemicals and Allied Products	7.6	9.8	13.2	29.9	34.5	74.7
Fabricated Metal Products	16.2	19.3	24.3	19.4	25.8	50.2
Motor Vehicles	4.6	9.6	11.1	110.3	15.2	142.2
Primary Metals	13.1	14.7	18.0	11.9	22.4	37.0
Rubber and Plastics	12.9	19.0	23.4	46.6	23.1	80.4
Petroleum	5.8	10.0	9.8	72.7	-2.0	69.3
Other Manufacturing	11.0	14.6	17.1	32.9	17.0	55.5
Transportation and Utilities	**7.3**	**9.9**	**10.5**	**36.0**	**5.6**	**43.5**
Air Transportation	11.6	11.6	17.2	0.0	48.3	48.3
Other Transportation	9.6	13.3	14.1	38.5	5.8	46.5
Utilities	2.8	4.4	4.0	57.4	-10.6	40.8
Wholesale Trade	**11.8**	**13.3**	**15.3**	**12.9**	**14.9**	**29.7**
Retail Trade	**12.6**	**15.6**	**16.2**	**24.0**	**3.8**	**28.7**
Finance, Insurance, and Real Estate	**5.7**	**7.0**	**8.9**	**22.9**	**27.0**	**56.0**
Services	**8.9**	**11.5**	**13.9**	**29.0**	**20.5**	**55.4**
All Sectors	**9.5%**	**12.1%**	**14.1%**	**26.7%**	**16.8%**	**48.1%**

Collective Bargaining Status

Collectively bargained plans were less likely than non-bargained plans to be hard-frozen in any year under study. In 2003, only 7.4 percent of collectively bargained plans were hard-frozen compared with 9.8 percent of non-bargained plans. By 2005, an additional 4.5 percent of the plans in each group had been hard-frozen, a somewhat surprising result. One would expect a smaller increase in the percentage of collectively bargained plans that were hard-frozen relative to that experienced by non-bargained plans because sponsors must negotiate with employee unions to make changes to collectively bargained plans, many negotiations only take place every 3-5 years, and employees tend to want to keep the benefits that were agreed to in the past.

Decision to Terminate

According to the Form 5500, in 2003 sponsors had made a decision to terminate more than 20 percent of the hard-frozen plans and almost seven percent of the unfrozen plans. Both these percentages declined slightly in 2004 (to 19 percent and six percent, respectively) and then returned to the 2003 levels in 2005. Sponsors that hard-froze their plans during 2004 and 2005 were no more likely to have decided to terminate these plans than were sponsors who hard-froze their plans before 2004.

Dynamics of the Change in the Percent of Hard-Frozen Plans

The universe of insured plans is not static. Each year new plans are created and existing plans terminate or merge with other plans. Some existing plans change the conditions under which they operate. In non-bargained plans, sponsors can make changes unilaterally. In bargained plans, the changes must be agreed to by the employees' unions, unless the sponsor is in bankruptcy and the bankruptcy court changes the terms of the bargaining agreement.

Tables 1 through 8 are based on the number of plans that were reported as hard-frozen at the end of 2003, 2004, and 2005. Each year a number of new plans were reported to be hard-frozen and a number that were reported to be hard-frozen at the end of the previous year were "thawed." (A thawed plan is one reported to be hard-frozen in one year but not in the following year.) Many thawed plans were plans that terminated or otherwise failed to file a Form 5500 using the same employer identification number or plan number as in the previous year. Other thawed plans remained active but changed their reported status to indicate they were no longer frozen. The analysis that follows looks exclusively at changes in the number of frozen plans between 2003 and 2004 because those are the only years for which Form 5500 hard-frozen plan data are available for essentially all insured single-employer plans.

Dynamics of Increase by Plan Size: Table 9 shows the dynamics of the increase, by plan size, in the number of frozen plans during the 2004 plan year. The table shows that more than 600 of the 2,900 plans that reported being hard-frozen at the end of 2003 did not report being frozen at the end of the 2004 plan year (they had "thawed"). More than twice as many plans, almost 1,300, that were not reported to be hard-frozen at the end of the 2003 plan year were reported to be hard-frozen at the end of the 2004 plan year. (A few plans moved from one size category to another during 2004. The net change is shown for each size category.) Thus, there was much more "freeze activity" going on than the end of plan year numbers might suggest.

Table 9. Change in the Number of Hard-Frozen PBGC-Insured Single-Employer Plans, by Plan Size, 2003-2004

Plan Size	Number Frozen At the End of 2003	Plan Size Change for 2004 (Net)	Thawed During 2004	Frozen During 2004	Number Frozen At the End of 2004
Less than 100	2,065	52	559	882	2,440
100 – 999	696	-39	46	316	927
1,000 - 4,999	141	-11	7	72	195
5,000 - 9,999	12	0	0	7	19
10,000 or more	11	-2	1	4	12
Total	2,925	0	613	1,281	3,593

Recent Freeze Activity, by Industry: This freeze activity is also apparent when one looks at changes across industries. (See table 10.) In all major industries, the number of plans that were newly hard-frozen in 2004 was at least 33 percent of the number of plans that were hard-frozen at the end of the 2003 plan year, and this ratio approached 50 percent in several major industries. On the other hand, at least one plan of every six in each major industry that was listed as hard-frozen at the end of the 2003 plan year was not so listed at the end of the 2004 plan year. Both the Manufacturing and Services industries experienced a net 225-plan increase during 2004 in the number of hard-frozen plans. There was a lot of freeze-related activity taking place during 2004, and preliminary results for 2005 indicate such activity continued into that year as well.

Table 10. Number of Hard-Frozen PBGC-Insured Single-Employer Plans and Source of Change, by Industry, 2003-2004

Industry	Frozen End of 2003	Industry Changed in 2004	Thawed During 2004	Frozen During 2004	Frozen End of 2004
Agriculture, Mining, and Construction	**266**	**2**	**58**	**124**	**334**
Manufacturing	**952**	**-3**	**159**	**387**	**1,177**
Chemicals and Allied Products	54	0	14	27	67
Fabricated Metal Products	230	0	36	67	261
Motor Vehicles	16	2	5	19	32
Primary Metals	64	-1	15	18	66
Rubber and Plastics	55	0	6	28	77
Petroleum	7	0	1	6	12
Other Manufacturing	526	-4	82	222	662
Transportation and Utilities	**78**	**5**	**18**	**37**	**102**
Air Transportation	8	0	1	1	8
Other Transportation	59	5	15	28	77
Utilities	11	0	2	8	17
Wholesale Trade	**265**	**-3**	**65**	**92**	**289**
Retail Trade	**201**	**-3**	**40**	**77**	**235**
Finance, Insurance, and Real Estate	**304**	**-2**	**81**	**151**	**372**
Services	**859**	**4**	**192**	**413**	**1,084**
Total	**2,925**	**0**	**613**	**1,281**	**3,593**

Thawed Plans: Of the plans that reported being frozen in 2003, 613 were not reported as frozen in 2004. Of these, 477 (more than 75 percent) did not file a 2004 Form 5500. Although only 274 of these 477 plans indicated on their 2003 Form 5500 that it was the final filing, all are treated as if they had terminated. (See Table 11.) In reality, some may have merged with another plan, others may have failed to file their 2004 Form 5500, and some may have filed under another employer identification number that could not be matched with the 2003 number. The remaining 136 thawed plans filed Form 5500s in both 2003 and 2004. Of these, 52 indicated that the 2004 Form 5500 would be their final filing. Most of these 52 plans reported having no participants in 2004. Nine additional plans indicated on their 2004 filings that their sponsors had made the decision to terminate the plan. Upon examining a sample of the remaining 75 plans,[7] 40 percent were found to be hard-frozen even though the freeze was not reported in the 2004 feature codes. Twenty-four percent had a partial or soft freeze but were not hard-frozen. The remaining 36 percent were not frozen during either the 2003 or 2004 plan years, although one was hard-frozen effective January 1, 1999, and then unfrozen effective January 1, 2001, with benefit credits given for the two years the freeze had been in effect. These last two groups of thawed plans, representing 60 percent of the sampled plans, apparently erroneously reported being hard-frozen in 2003 and corrected the error on their 2004 filings. (The 2003 frozen-plan feature code indicators for these plans were not revised based on these findings.)

Table 11. Hard-Frozen Plans in 2003 That Were Not Reported Hard Frozen in 2004, by Reason

Reason Not Hard-Frozen at the End of 2004	Number
2004 Form 5500 Not Filed	477
2004 Form 5500 Filed, Not Reported to be Hard-Frozen	136
2004 Reported to be The Last Filing Year	52
Decision Made to Terminate the Plan	9
Plans Where Termination Decision Had Not Been Made	75
*Hard-Frozen, Although Not Reported to be in 2004**	*30*
*Partial or Soft Freeze, Not a Hard-Frozen Plan**	*18*
*Not Frozen in Any Way in 2003 or 2004**	*27*
Total	613

* *Based on a sample of the 75 plans*

Newly Frozen Plans: The Form 5500 data indicate that 1,281 plans were newly hard-frozen during 2004. This was more than four percent of all the single-employer plans PBGC insured that year. These newly hard-frozen plans were 36 percent of the 3,593 plans that were hard-frozen at the end of the 2004 plan year. Most of these newly hard-frozen plans—1,147—were plans for which 2003 and 2004 Form 5500 data are available. The remaining 134 newly reported hard-frozen plans did not have matching 2003 Form 5500s.

[7] The plan descriptions in the attachments to the Schedule Bs were examined for the 25 largest of the remaining 75 plans.

The distribution of these newly hard-frozen plans by plan size is virtually identical to the distribution of plans that were hard-frozen before 2004. (See Table 12.) The newly hard-frozen plans were slightly more likely to be small plans and slightly less likely to be plans with 100-999 participants than were plans that were hard-frozen before 2004. However, on average, these newly hard-frozen plans were better funded on a current liability basis than were plans that had been frozen in earlier years. (See Table 13.)

Table 12. Number and Percent of PBGC-Insured Single-Employer Plans That Were Hard-Frozen During and Before the 2004 Plan Year, by Plan Size

Plan Size	Hard-Frozen During 2004	Percent	Hard-Frozen Before 2004	Percent
Less than 100	882	68.9%	1,558	67.4%
100 – 999	316	24.7	611	26.4
1,000 – 4,999	72	5.6	123	5.3
5,000 – 9,999	7	0.5	12	0.5
10,000 or more	4	0.3	8	0.3
Total	1,281	100.0%	2,312	100.0%

Note: Percents may not add to 100 percent because of rounding.

Table 13. Current Liability Funded Status of Plans Hard-Frozen During 2004 and Earlier Years

Funded Ratio	Frozen During 2004		Frozen Before 2004	
	Number	Percent	Number	Percent
Less than 60 %	93	8.5%	378	16.3%
60 – 79 %	257	23.6	834	36.1
80 – 99 %	358	32.8	638	27.6
100 % or better	314	28.8	381	16.5
Missing*	69	6.3	81	3.5
Total	1,281	100.0%	2,312	100.0%

** The "Missing" plans did not provide sufficient information for their funded ratios to be calculated.*

Conclusions

This analysis of the Form 5500 data indicates that the percentage of PBGC-insured plans that were hard-frozen increased from 9.5 percent at the end of 2003 to 12.1 percent at the end of 2004, and it apparently continued to increase to an estimated 14.1 percent at the end of the 2005 plan year. The vast majority of hard-frozen plans were small plans. Preliminary 2005 data indicate that only 6.1 percent of participants whose benefits PBGC insures were in hard-frozen plans. Press reports indicate several very large employers hard-froze their plans during 2006 and 2007, so the percentage of insured plans that are hard-frozen and the percentage of participants who are in such plans should continue to increase in later data.

A hard freeze is the most onerous type of plan freeze. Freezing benefit accruals for participants who do not meet certain age, tenure, location, or job series conditions (partial freezes) and closing plans to new entrants (closed plans) are actions that diminish the value of defined benefit plans. Published reports indicate that a number of large companies have been implementing partial freezes (e.g., Chemical Financial Corporation, GM, Sun Trust Bank, WellPoint, and Whirlpool among others) or closing at least some of their plans to new entrants (e.g., Alcoa, DuPont, Ford, Lockheed Martin, Motorola, and Nissan among others). Combined with a growing number of plans that have been hard-frozen, these reported lesser freezes indicate the private sector defined benefit system is going through a period of transition.

The desire to restructure benefits to better align them with benefits being offered by competitors is often the primary rationale sponsors give for freezing their defined benefit plan and replacing it with an (enhanced) defined contribution plan. Other rationales are a desire to have more predictable and less volatile accounting and contribution requirements, a desire to avoid administrative complexities caused by changes in pension law and accounting standards, and a desire to reduce long-term compensation costs.

Whether any of these recent freeze decisions will be reversed remains to be seen. Most analysts believe that once a company has taken and survived the employee morale hit that comes from freezing a plan, it has little incentive to unfreeze the plan. The evidence shows that few hard-frozen plans have been unfrozen to date.

From PBGC's perspective or from a company's financial perspective, the freezing of benefit accruals has little short-term impact. Plans continue to pay premiums to PBGC based on the number of participants in the plan even though the companies' workers (the active participants) are no longer accruing benefits. Companies with frozen plans still must make minimum required contributions to the plan and follow all other requirements under federal pension law. However, because the companies' workers are not accruing new benefits that have to be funded, over time sponsors should find it somewhat easier to fully fund their underfunded frozen plans.

From a longer-term perspective, freezing plans and closing them to new entrants could have a significant impact on the defined benefit system. The data indicate that sponsors are more likely to have made a decision to terminate frozen plans than unfrozen plans. This, combined with the closing of the frozen plans to new entrants, even for those that do not terminate, suggests that the total number of insured participants will continue the recently observed downward trend. PBGC's flat-rate premium income could decline if the rate of participant decline exceeds the increase in the average national wage, which is used to index PBGC's flat premium rate. In any event, PBGC's flat-rate premium revenue will be lower than it would have been had these plans not been frozen or closed to new entrants. If the funding levels of the frozen plans improve as a result of the freeze or closing them to new entrants, PBGC's variable-rate premium income could also be reduced, making it more difficult for PBGC to recover from its current negative net financial position. At the same time, if the funding levels improve, PBGC's anticipated future claims should also be smaller.

Appendix I: Recent Studies Related to Plan Freezes

Recent studies related to the freezing of defined benefit pension plans have fallen into one or more of three general categories—the percentage of plans that have been frozen or whose sponsors purportedly plan to enact a freeze in the next year or two, the rationales for why sponsors are freezing their plans, and the consequences of freezing a plan.

Percent of Plans That Have Been Frozen

Relatively few new plan freeze studies have been published since the last report issued by PBGC (*An Analysis of Frozen Defined Benefit Plans, December 2005*). Those that are available have tended to focus on past and anticipated freeze activity by large companies. Some studies have restricted their sample to clients of companies that provide benefit consultant services. Others have restricted their sample to very large companies. None of the studies is based on a random sample of defined benefit plans or on data from the entire universe of defined benefit plans. These studies provide important insights into what is happening in certain segments of the defined benefit plan universe, but their results should not be interpreted as representing plan freeze activity in the defined benefit universe as a whole.

Hewitt Associates conducts an annual survey of human resource professionals to determine their areas of focus and the actions their companies are likely to take for their defined contribution and defined benefit plans. The survey conducted at the end of 2006 obtained responses from 146 employers (Hewitt Associates, January 2007).[8] Of the 66 percent of employers who maintained a defined benefit plan, four percent had hard-frozen at least one of their plans and an additional 31 percent had closed at least one of their plans to new hires. An additional four percent said they were very likely to freeze one or more of their plans in the short term.

Harper, Strand and Tucker (February 2007) reported that a recent study of Fortune 200 companies by Mercer Human Resources found that approximately 20 percent had either frozen their plans or closed them to new entrants. However, less than 10 percent had hard-frozen their plans.

[8] No information is provided on the number of plans these companies sponsor. Only six percent of these responses (nine companies) were from employers with fewer than 1,000 U.S. employees. In contrast, 88 percent of the plans insured by PBGC have fewer than 1,000 participants. This raises the question of whether their results are applicable to the universe of plans PBGC insures.

The Pension Management Research Panel (September 2006) reported that, of 139 U.S. companies and 163 Canadian companies responding to a Pension Management Research Panel "Quick Poll," six percent reported they had plans that were currently frozen, an additional 27 percent had closed their plans to new entrants, two percent were in the process of terminating their plans, and 23 percent were planning to make changes to their plans. Of those planning to make changes, almost a third (29 percent) anticipated closing, freezing, or terminating their plans by the end of 2007. More than a third of the U.S. companies that had closed a plan to new entrants but not frozen it at the time of the survey indicated they anticipated freezing the plan by the end of 2007. Overall, U.S. companies were somewhat more likely to have frozen or closed a plan (39 percent) than were Canadian companies (30 percent).

Towers Perrin (September 2006) surveyed major employers immediately after Congress passed the Pension Protection Act of 2006 (PPA). Of the 126 companies that responded, 11 percent had already frozen their largest pension plan and an additional 24 percent had closed theirs to new hires. Five percent of companies whose plans had not been frozen or closed said they intend to freeze their plan as a result of PPA's enactment.

Watson Wyatt (July 2007) reported that the number of Fortune 1000 companies that had either frozen or terminated one or more defined benefit plans increased from 113 in 2006 to 138 in 2007. While the number of companies freezing their plans continued to increase, the rate at which they were freezing their plans declined. In their July 2006 study, Watson Wyatt reported that 48 of the 113 companies with frozen or terminated plans continued to sponsor defined benefit plans that had not been frozen. In most cases, these 48 companies froze or terminated the plans for salaried employees and maintained the active plans for unionized workers.

Jack VanDerhei (July 2007) analyzed the 162 responses from an EBRI/Mercer survey of Mercer's retirement business contact list clients. Twenty-eight percent of these companies had either closed or frozen a defined benefit plan within the previous two years and another 16 percent expected to do so within the next two years. Thirteen percent of these companies had frozen a plan in the last two years. The survey did not ascertain how many companies had frozen plans prior to the two-year period or what percent of the plans they sponsored were frozen at the time of the survey.

The range of results, from four percent of sponsors freezing at least one plan (Hewitt) to 13 percent freezing a plan in the past two years (VanDerhei), is wide, given that most of the companies in the various studies were large companies. The freeze definition is generally not stated in these studies and, in the case of the Watson Wyatt study, is combined with plan terminations. Study results may be different, in part, because of the differences in freeze definitions. The studies generally stated how many companies responded to the survey but not how many were in the original sample. Thus, how well the responding companies represented the population from which the original sample was drawn is unknown. If companies that had frozen their plan were more likely to respond to the survey than those that did not, then there will be an upward response bias in the reported results. In addition, many of these companies sponsor more than one plan, but the studies do not state how many of their plans were frozen. Unless the companies that freeze at least one plan freeze all their plans, the percentage of plans that are frozen will be smaller than the number of companies freezing at least one of their plans. The bottom line is that results of these studies should generally not be viewed as representative of what is happening among all defined benefit plans.

Reasons Plans Were Frozen

Several studies indicated a sponsor's primary motivation for freezing its pension plans is to eliminate or reduce costs (Aon, October 2003; McIlvaine, May 2006; Mercer, February 2006; Nordstrom, September 2006; and Pension Management Research Panel, September 2006). Indeed, Watson Wyatt (July 2006) indicates that, until 2005, plans that were frozen had relatively low funding ratios and the sponsoring companies were usually in financial distress. In a study of 15 Standard & Poor 500 companies that indicated an intention to freeze their defined benefit plans, Mercer found that these companies faced higher contribution requirements as a percentage of revenues or operating cash flows than other S&P 500 companies sponsoring defined benefit plans (February 2006). It also found plans were more likely to be frozen when the plan was large relative to the size of the company or where company profit margins were thin.

A second primary reason for freezing plans listed by the above studies is to reduce cost and accounting expense volatility. Other primary motivators in the above studies included the influence of the companies' boards, the realization of the inherent risks from holding plan assets in equities, and the unpredictability of future contribution and accounting requirements. Nordstrom also pointed out that the recent decision of several corporate icons with well-funded plans to freeze their plans has acted as a catalyst to get other companies to review freezing as an option and to motivate some to freeze their plans.

The EBRI/Mercer survey asked how important a number of factors were in the decision to freeze a plan (Nordstrom (June 2007) and VanDerhei (July 2007)). There, the most important reason for freezing a plan was as part of the company's overall benefit restructuring strategy. Other important reasons were the impacts of PPA provisions, accounting rule changes promulgated by the Financial Accounting Standards Board, competitive pressures, and younger workers' lack of interest in defined benefit plans.

Munnell, Golub-Sass, Soto, and Vitagliano (March 2006) proposed four reasons why companies freeze their pension plans. The reasons, which are not based on survey data, include: companies' desire to reduce labor costs in the face of global competition; the desire to restrict the growth in total benefit costs by reducing pension costs to offset rapidly growing health benefit costs; the recognition that market risk, longevity risk, and regulatory risk impose a potential cost burden on the company that it may not be willing to bear over the long term; and separation of upper management's retirement income system from that of the rank and file has resulted in the devaluation of traditional pensions in the eyes of management.

Consequences of Freezing a Plan

While concerns about plan costs and contribution and pension expense volatility are primary motivations for freezing a plan, freezing a plan has only a modest immediate impact on these variables (Harper et al, February 2007; McIlvaine, May 2006; Morgan, May 2006; and Nordstrom, September 2006). Hard-freezing a plan eliminates future benefit accruals, but the company continues to have an obligation to fund existing and future shortfalls as well as to comply with the day-to-day administrative, compliance, and fiduciary responsibilities. These responsibilities include funding the plan, paying PBGC premiums, filing the Form 5500, and following all other requirements under federal pension law. Plan investments may be restructured to better match assets and liabilities. A fully funded frozen plan receives little advantage from high risk/high return investments because there are no new accruals to cover and any excess assets will be subject to a 50 percent excise tax at termination (Rubin, 2007).

Freezing a plan does not affect the level of benefits plan participants have accrued at the time of the freeze. Retired participants and separated vested participants will receive all the benefits they were expecting and entitled to under the terms of the plan. Active participants will receive all the benefits they had earned but not all the benefits they were expecting. And the difference between what they will actually receive, even if the company enrolls them in an enhanced 401(k) plan, and what they had expected to earn for a full career under the defined benefit plan can be substantial (Munnell et al, March 2006). Workers in their 50s when the freeze occurred who contributed six percent of salary to the 401(k) plan (with a three percent employer match) could receive a combined defined benefit/401(k) benefit that was one-third smaller than what they would have received if the defined benefit plan had not been frozen.

VanDerhei (March 2006) shows there is tremendous variability in what it would take to financially indemnify active participants for a plan freeze. The variability depends on the worker's age, salary, job tenure, years to retirement, type of defined benefit plan, plan characteristics, and underlying economic assumptions. Older and longer-tenured workers tend to be more affected because they do not have as much time left in their working careers to make 401(k) contributions to offset the accrual loss from a pension freeze. To maintain their expected retirement income and retirement age, they may have to contribute 15-20 percent of annual pay (or more) to their 401(k) plan.

Freezing a defined benefit plan can make it more difficult to manage the company's workforce. The company may find the freeze negatively affects employee morale and productivity. It loses the ability to provide early retirement windows by enhancing retirement benefits that can be funded over time. It may also find that older workers determine they cannot afford to retire and so remain on the job, blocking the advancement of younger workers who may be more productive.

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