The Economics of Pension Insurance

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CHAPTER 3

Insurance Principles and the PBGC

There are two theories why the Pension Benefit Guaranty Corporation exists: first, to provide insurance coverage that cannot be offered in the private sector because of poor information or the possibility of catastrophic claims; and second, to transfer monies from workers in the majority of sound pension plans to participants in poorly funded plans in dying industries.

I will not enter this debate in this book.[1] Instead, I simply assume that the first theory is correct—that the intent of Congress is for the PBGC to establish sound insurance principles much like the private sector would if it could feasibly insure pensions in the long run. This assumption does not determine the content of the book, just the "handle" that I use to collect and discuss pension insurance principles. If the second theory is correct—that Congress intends to maintain a transfer system rather than an insurance system—then the book can be viewed as an explanation of how transfers are effected through violation of sound insurance principles.

I assume that a demand for pension insurance existed prior to 1974. This does not mean insurance in a quality-assurance sense. The private market could have acted as an agent of sorts to guarantee workers that the firm could pay termination-value benefits in the event of firm failure. Instead, it means a demand for insurance against firm failure when pension plans are not fully funded and/or are characterized by portfolios that are not matched against pension liabilities. It is assumed that no market arose to meet the latter demand primarily because of the possibility of catastrophic events.

[1]Lengthy discussions of these matters can be found in Ippolito, October 1985, and April 1988. Full citations are found in Appendix F to this book.

In addition, a reasonable argument could be made that no insurance company wanted to be the first to market a new line of insurance. In the absence of any information about the size of claims, and any experience with moral hazard and selection problems, the first firm in this market would be an innovator of sorts, a collector of statistics, and a developer of solutions to problems. Everyone has an incentive to free ride on the first entrant, that is, to copy the product of the first entrant's research, thus making it difficult for the first firm to recoup its development cost. In this sense, the PBGC can fulfill a role: it can collect and disseminate statistics on the frequency and magnitude of the insurable event and can identify moral hazard problems that need to be addressed, together with some attempted solutions.

In this chapter as well as the next two, I will discuss the experience of the PBGC from 1974 to 1986. This experience provides a basis to (1) understand reform efforts, including legislation enacted in 1987 (the subject of Chapters 6 and 8) and (2) formulate ideas for economically rational insurance schemes (the subject of Chapters 9 and 10).

DEVELOPING POLICY AT THE PBGC

The previous chapter's discussion centered around insurance principles that likely would characterize pension insurance in the private sector. Assuming the PBGC's ultimate goal is to mimic a private-sector solution, it is interesting to create a scorecard of sorts comparing its actual policy against these principles.

Benefit Guarantee

The PBGC guarantees nominal pension benefits. This guarantee introduces two sound principles into the insurance system: coinsurance with workers and the ability to immunize obligations. It has also pursued a vigorous policy to preserve the coinsurance feature by opposing new plans designed to offset worker losses following insufficient terminations.

ERISA is also written to control some moral hazard prior to termination. It does this by applying a five-year phase-in rule (20 percent per year) for newly enacted benefit increases. There is also an overall maximum benefit payment of $1,909 in 1988 dollars, indexed to the social security wage base.

While these rules work to control the amount of the guarantee, the PBGC, through regulation, has made decisions that have greatly expanded the nature of the guaranteed amount. These decisions include a regulation that pays benefits prior to normal retirement ages (usually age 62 or 65), *not* at actuarially reduced amounts but at amounts as high as those available at normal retirement. Thus, if a plan has a normal

retirement age of 62 but permits full benefits at age 55 with 30 years' service, the PBGC guarantees the full amount to anyone with 30 years' service (subject to the actuarially reduced maximum benefit at age 65). The PBGC could have guaranteed benefits beginning only at age 62 or paid benefits prior to age 62 at actuarially reduced rates, but it chose not to effect this policy.

In addition, the PBGC issued a benefit payments regulation[2] that later was interpreted by the PBGC to include the payment of pretermination *shutdown benefits*.[3] This means that if a plan has a provision to pay, for example, full unreduced benefits to all workers with 30 years' service on plant shutdown, a worker age 48 would be guaranteed full benefits at the PBGC (subject to the maximum benefits limit). In comparison to a rule that could have been consistent with the social security system (full benefits at age 65), the PBGC agreement to pay shutdown benefits to a 48-year-old worker is equivalent to paying unemployment benefits for 17 years and retirement benefits thereafter.

In addition, because the PBGC insures nominal benefits, there is great variation in the coinsurance value of the contract and a strong sensitivity of the PBGC's financial condition to variations in the long-term interest rate. The mirror of these problems is that workers are uncertain about what portion of their pension actually is insured in real terms. For much of this book, the character of this PBGC contract simply is accepted, but discussion of real-value insurance alternatives will take place later.

Pricing

These benefit-guarantee decisions would not be so problematic if a pricing scheme had been developed that set premiums in relation to risk and exposure. Until 1988, there was only one per-participant premium charge. The premium was not higher for plans that had higher benefit levels, lower funding ratios, more generous early retirement benefits, shutdown provisions, or higher risks of default. A small range of prices was introduced in 1988, but the range is so limited that it is economically indistinguishable from a flat premium pricing system (see Chapter 6).

In view of the inflexible pricing system, it might have been more logical to expect the PBGC and Congress to define a more homogeneous insurance policy. For example, until more information was obtained through experience, the policy could have been written to pay annual benefits not to exceed the "typical" pension plan benefit (say, 1

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[2]See 29 CFR 2621.4.

[3]Special benefits triggered by plant shutdowns that occur after termination of the pension plan are not guaranteed by the PBGC.

percent, times service, times the average of the highest-three wage years, to commence at age 62). This policy still would not rationalize a one-price policy because it ignores differential funding ratios and risks of default, but at least it would have substantially reduced the magnitude of the cross-subsidies that characterize the existing system.

There is also no provision for the premium to change even if overall exposure changes substantially. If the interest rate falls from 10 percent to 2 percent, PBGC exposure is increased greatly. Until 1988, there was no provision for premium levels to increase to reflect this reality. Since then, premiums can change somewhat but not by amounts sufficient to cover the higher expected claims amounts.

Control of Funding

The discussion of insurance principles in the previous chapter suggests the possibility that insurers could rationally provide insurance for plans that maintained either full funding or less-than-full funding. In the former case, claims would be made only when failures occurred *and* prices of trust securities fell below existing levels. In the latter case, the insurable event occurs on firm failure, even if asset prices remain unchanged from existing levels. Of course, the price of insurance in the former case would be much lower than in the latter case. PBGC insurance clearly falls in the second category.

Though full funding is not required under law, ERISA took some steps in the direction of controlling funding. For example, it precluded firms from holding their own stock or bonds in the plan beyond 10 percent of the portfolio. In addition, the *minimum funding rules* instituted were ostensibly designed to reduce underfunded pensions over time. It is apparent that these funding rules were not very constraining. When Allis-Chalmer's United Auto Workers pension plan terminated in July 1985, its funding ratio was less than 2 percent; the firm never received a funding waiver and never violated ERISA's funding rules.

On top of ineffective funding rules, ERISA permitted firms in distress to obtain contribution *waivers* in up to 5 of every 15 years. This policy permitted firms to defund their pension plans if they were in financial difficulty. Control over the waiver policy was given to the Internal Revenue Service rather than to the PBGC. If the IRS granted waivers, their tax revenue would tend to increase because of lower pension contributions; it is not obvious that increased exposure given to the PBGC always was recognized or given major consideration.

The institution of waivers, the inadequacy of minimum funding standards, and the lack of control over guaranteed benefits give firms enormous control over the magnitude and timing of the insurance claim. It is inconceivable that private-sector insurance firms would

provide protection to events so much in the control of the insured. This policy could be defensible if the PBGC had a high priority in bankruptcy because it essentially would be equivalent to setting market prices for insurance. For example, suppose bankruptcy rules were altered to create a new top-priority claim for pension obligations, so that up to 75 percent of these obligations were paid before all other claims, including secured claims. Then, in most cases, regardless of the moral hazard affiliated with defunding the pension prior to failure, the PBGC at most could absorb 25 percent of the promised benefits; the effective funding ratios would have a floor of 75 percent.[4]

The effect of such a rule could be that other creditors, including secured creditors, would have a strong incentive to set credit prices to reflect the firm's funding condition. That is, the higher the level of exposure and risk, the higher the interest rate that would be set by creditors to the plan sponsor. This is akin to the imposition of a risk-and-exposure–related premium structure enforced by the private sector.

The substitution of private-sector enforcement for government enforcement did not occur. PBGC claims are included in those of unsecured creditors, and they recoup very little of their claims on firm failure (historical recoveries are in the range of 10 percent).[5]

In 1988, changes made in ERISA's minimum funding rules required stricter standards on firms that maintained underfunded pension plans and reduced the amount of defunding prior to termination. Owing to transitional rules (especially favorable to large integrated steel firms), it will be some time before the impact of these rules can be measured. The legislation, however, did not change the level of benefit guarantees; nor did it eliminate all the potential for defunding prior to termination. Thus, the possibility remains that these rules alone will not solve the so-called PBGC problem. Chapter 8 deals with these issues in detail.

The Insurable Event

When ERISA was enacted the insureds had much control over the insurable event. The firm could terminate a pension plan in exchange for 30 percent of its net worth at any time. This meant that firms were not required to enter bankruptcy proceedings or even evince financial distress in order to "put" their claim to the PBGC.

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[4]The floor would be lower in cases in which firms had insufficient assets to pay off unfunded pension liabilities. But because pensions would be at the top of the queue of creditors (including secured creditors), this would presumably be a rare event.

[5]PBGC claims are treated as priority claims (like unpaid taxes) up to 30 percent of the company's net worth. The problem is that many firms in bankruptcy proceedings arguably have little net worth.

In 1986, Congress enacted the Single-Employer Pension Plan Amendments Act of 1986 (SEPPAA), which redefined the insurable event. Essentially, it precluded the possibility that healthy firms could dump pension plans on the PBGC. As a practical matter, the law made financial "distress" the insurable event.

CONSEQUENCES OF CURRENT POLICY

The policies pursued at the PBGC represent serious violations of fundamental insurance principles. The pricing system makes no attempt to require insureds to face the cost of the insurance, and moral hazard is seemingly encouraged. Before considering reform ideas for the institution, which will be the subject of later chapters, it is useful first to review the experience of the PBGC under past policies, beginning with its pricing and claims history. In 1974, ERISA set a single-employer premium equal to $1 per participant per year; this was increased to $2.60 in 1978 and to $8.50 in 1986. These rates, however, proved insufficient to cover claims. The amount of the deficit is shown in Table 3–1.

What started as a small shortfall ($47 million in 1975) grew rapidly.

TABLE 3–1 PBGC Net Claims and Deficit ($ 1986)

Year	*Net Claims**	*Deficit†*	*Premium per Participant*
1975	$ 56	$ 47	$1.00
1976	31	71	1.00
1977	37	153	1.00
1978	109	207	2.60
1979	62	202	2.60
1980	110	123	2.60
1981	87	226	2.60
1982	300	380	2.60
1983	199	568	2.60
1984	36	481	2.60
1985	190	1,378	2.60
1986	2,695	3,826	8.50‡
Total	$4,112		

Note: Deficit is calculated as of September 30. Numbers for 1986 include LTV terminations.

* Losses for plans pending termination as of fiscal year-end are included in the deficit as of the end of the fiscal year in which the pending reserve is established. Net claims subsequently incurred for those plans are included above in the fiscal year in which the plan terminated, with the exception of fiscal 1986. Estimated claims for plans pending termination as of 9/30/86 are included above in net claims for fiscal year 1986.

† Deficit is as reported in PBGC's financial statements at fiscal year end (Annual Reports, various years), indexed to 1986 dollars.

‡ Effective in 1988, the base premium was increased to $16. In addition, an exposure-related charge is assessed against underfunded plans. The maximum premium is set at $50 (see Chapter 6).

Despite the premium increases, the deficit increased to $226 million in 1981, then to $481 million in 1984, and then to $3.8 billion in 1986. The data in this table provide the information to begin developing a rational insurance policy. The effort to control the increasing deficit has forced the PBGC and Congress to begin rethinking issues, including the insurable event, moral hazard, and pricing.

The data in the table make two things clear. First, the stickiness of the premium charges suggests the PBGC and Congress have been reluctant to believe that growing claims are a permanent fixture of the insurance system. Second, the data confirm the variance in claims over time: the annual claims amounts vary from less than 10 percent of the average annual claims amount to over 12 times the average. This variance is attributed to two factors. First, most of the PBGC's deficit is attributable to a handful of large claims. This is made evident in Table 3–2, which lists the 12 largest claims against the PBGC through 1986. These events account for fully 76 percent of the PBGC's claims through 1986. Second, the underlying possibility of plan termination is not independent across plans. A common factor responsible for much of the deficit at the PBGC is the decline of a single industry, steel. The data in Table 3–3 show that terminations from the steel industry account for

TABLE 3–2 The Twelve Largest Claims against PBGC as of 1986 (dollars in millions)

Number of Plans	*Plan Sponsor*	*Fiscal Year Termination Occurred*	*Event Resulting in Termination*	*Net Claim in 1986 Dollars*	*Percentage of Total PBGC Net Claims*
4	LTV	1986*	Chapter 11	$2,038	49.7
9	Wheeling-Pittsburgh	1986	Chapter 11	384	9.4
1	Allis-Chalmers	1985	Other†	145	3.7
10	Allis-Chalmers	1986	Other†	7	.2
8	White Motors	1982	Chapter 11	74	1.8
3	Rath Packing	1982	Other‡	68	1.7
3	Continental Steel	1986	Chapter 7	59	1.4
2	Wisconsin Steel	1980	Chapter 11	75	1.8
2	McLouth Steel	1983	Chapter 11	62	1.5
3	Braniff Airlines	1982	Chapter 11	58	1.4
4	White Farm Equipment	1982	Chapter 11	55	1.3
3	Phoenix Steel	1983	Chapter 11	45	1.1
2	Alan Wood Steel	1978	Chapter 11	60	1.4
	Total			$3,130	76.4†

Note: A list of the largest 100 insufficient pension plan terminations ranked by underfunding amount at termination is found in Appendix A, Table A–13.

* Three of LTV's plans actually terminated in early FY87. They are shown here as FY86 terminations due to their inclusion as pending terminations as of 9/30/86 in PBGC's financial statement.

† Allis-Chalmers underwent a reorganization with its creditors that was outside of the bankruptcy chapters.

‡ Rath Packing terminated its plans due to adverse business conditions while still an ongoing firm not in bankruptcy.

TABLE 3–3 PBGC Claims from Steel Industry (in millions, adjusted to $ 1986)

Year	*Steel Claims*	*All Claims*	*Percentage*
1975	$ 2	$ 56	3.5
1976	7	31	22.5
1977	21	47	56.7
1978	66	109	60.5
1979	18	62	29.0
1980	84	110	76.3
1981	13	87	14.3
1982	10	300	3.3
1983	155	199	77.8
1984	8	36	22.2
1985	10	190	5.5
1986	2,827	2,895	97.6
Total	$3,221	$4,112	78.3

SOURCE: Nominal claims are taken from the PBGC Annual Report, 1986, and adjusted to 1986 dollars using the Bureau of Labor Statistics nonagricultural wage index (see Appendix A, Table A–1). Steel claims are based on a separate analysis of the Case Processing File.

almost 80 percent of all PBGC claims. A list of 50 large steel industry pension plan terminations (not including the three restored LTV plans) is given in Table 3–4.

Because the steel claims are heavily weighted by the LTV terminations, it is useful to depict the distribution of claims prior to this event. Table 3–5 shows this distribution as of June 1986 (prior to the LTV event) based on the largest 100 insufficient plan terminations through that date.[6] Fully 43 percent of claims came from the steel industry and another 20 percent from the auto industry. These two industries accounted for over three fifths of the PBGC claims. Equally interesting, virtually all claims have come from pension plans covering unionized workers (almost 95 percent).[7]

In addition, the interest rate has played an important role in the economic condition of the PBGC. Over the 1975–87 period, the PBGC immediate close-out rate at the end of the fiscal year varied from 6.75 percent in 1977 to 10.50 percent in 1982 to 7.75 percent in 1986. The highest close-out rate over the entire period was 11 percent. Had the interest rate been 11 percent over the entire period, total claims over the history of the PBGC would have been roughly two thirds of actual amounts (see Table 3–6).

[6]Industry and union codes were taken from the case processing files, supplemented by cross-matches with the U.S. Department of Labor's so-called EBS–1 tapes.

[7]Plans covering unionized workers are dramatically underfunded compared to plans covering nonunionized workers. See Ippolito, 1986.

TABLE 3–4 Steel Plan Terminations, 50 Largest Claims (excluding LTV terminations)

	Date of Termination	*Plan Underfunding*
WPSC-Ohio Valley Pension Plan*	11/08/85	$255.6
Republic Steel	09/30/86	219.2
Kaiser Steel Hourly	07/28/87	201.0
WPSC-Mon Valley Pension Plan*	11/08/85	161.4
WPSC Retirement Income Pension Plan*	11/08/85	93.5
Wisconsin Steel Works	05/16/80	55.3
Alan Wood Steel Co. Hourly	11/01/77	34.8
Continental Steel Corp	02/14/86	34.2
Mesta Machine Hourly	06/16/83	34.1
Kaiser Steel Salaried	02/28/87	31.5
Century Brass Products, Inc.	12/02/85	29.7
LTV—Reserve Mining Hourly	05/24/87	28.7
McLouth Steel Corp. Hourly	11/30/82	27.1
Phoenix Steel Corp. Claymont	08/22/83	22.8
Phoenix Steel Corp. Phoenixville	08/22/83	17.9
McLouth Steel Corp. Salaried	11/30/82	15.0
Heppenstall Co. Hourly	05/31/79	13.9
Mackintosh-Hemphill	01/31/87	13.6
Chase Brass and Copper Co.	06/28/76	13.3
Washburn Wire Company	10/31/76	13.2
Continental Steel Corp. Plan B	02/14/86	12.4
LTV—Continental EMSCO**	04/30/88	8.4
WPSC RR Mon Valley*	11/08/85	8.4
Donner Hanna Coke Hourly	12/01/87	7.5
LTV—Reserve Mining-Salaried**	03/25/87	7.4
Lebanon Steel Foundry Hourly	07/31/83	6.8
Washburn Wire Co.	10/01/79	6.4
Volco Steelworkers	10/22/85	5.8
Central Foundry Co. Molders	05/18/81	5.8
Alan Wood Steel Co. Salaried	11/01/77	5.7
Johnson Steel and Wire Co.	09/13/82	5.7
Mid-Vale Heppenstall Company	04/30/76	5.1
Kaiser Steel Fabricating	07/28/87	4.7
Kaiser Steel Napa	08/03/87	4.2
Continental Steel Corp. Joliet	02/14/86	4.1
Ironton Coke Corp. Hourly	05/06/82	4.0
The Union Metal Manufacturing	05/15/85	3.9
McKeesport Steel Casting	04/13/84	3.9
New Jersey Zinc Co.	01/01/83	3.6
Adirondack Foundries Hourly	12/31/87	3.6
Van Huffel Tube Corp.	11/30/85	3.5
Lebanon Steel Foundry	06/30/83	3.2
Universal Foundry Co.	04/08/85	3.1
Standard Tube of Detroit	12/30/83	2.7
Van Huffel Tube Corp.	11/30/85	2.7
Ashtabula Forge, Inc.	08/31/83	2.4
Superior Steel Casting Co.	08/11/78	2.4
Newman-Crosby Steel, Inc.	05/30/83	2.3
Adirondack Foundries Salaried	12/31/87	2.3
Mesta Machine Co. Salaried	06/16/83	2.2

Note: Plan underfunding differs from the net claim against the premium system. It excludes recoveries for unpaid contributions and employer liability. Claims are usually 20 percent lower than total underfunding at termination.

Duplicate entries denote multiple plan terminations by the same plan sponsor

* Wheeling-Pittsburgh Steel Company.

** Not one of the four LTV terminations in 1986 (see chap. 1).

TABLE 3–5 Claims by Union Status, June 1986

Union Status of Terminated Underfunded Pension Plan		*Percent of Claims*
Nonunion		5.4%
Union		
Steel workers	43.0%	
Auto workers	20.0	
Others	31.6	
Total		94.6
Grand total		100.0%

NOTE: Numbers exclude LTV terminations; otherwise, they are based on the largest 100 insufficient plan terminations through June 1986.

SOURCE: PBGC Case Processing File, supplemented by the U.S. Department of Labor, EBS–1 tape.

Another way to see the importance of the interest rate is to calculate exposure levels facing the PBGC over time. Table 3–7 and Figure 3–1 show the exposure presented to the PBGC from all single-employer defined benefit plans from 1978 to 1986 (estimated). The funding ratios are calculated from Form 5500 Annual Pension Plan Reports and adjusted to 1986 dollars and the size of the defined benefit

TABLE 3–6 Sensitivity of Net Claims to Interest Rates (dollars in millions)

Fiscal Year	*PBGC Close-Out Rate*	*Net Claims in Nominal Dollars*	*Net Claims in 1986 Dollars*	*Net Claims, 1986 Dollars, Assuming a Close-Out Rate of 11 percent for All Years*
1975	8.00%	$ 30	$ 56	$ 35
1976	7.00	18	31	16
1977	6.75	23	37	23
1978	7.25	73	109	63
1979	7.75	45	62	39
1980	9.00	85	110	73
1981	10.25	73	87	67
1982	10.50	263	300	297
1983	9.50	183	199	165
1984	10.50	35	36	31
1985	9.25	177	190	148
1986*	7.75	2,895	2,895	1,704
Total	8.62%	$3,900	$4,112	$2,661

Note: The method used to adjust liabilities to a common interest rate is described in book Appendix B.

* Net claims figures for fiscal year 1986 include estimated claims for plans pending termination as of 9/30/86.

FIGURE 3–1 Termination Underfunding, 1978–1986

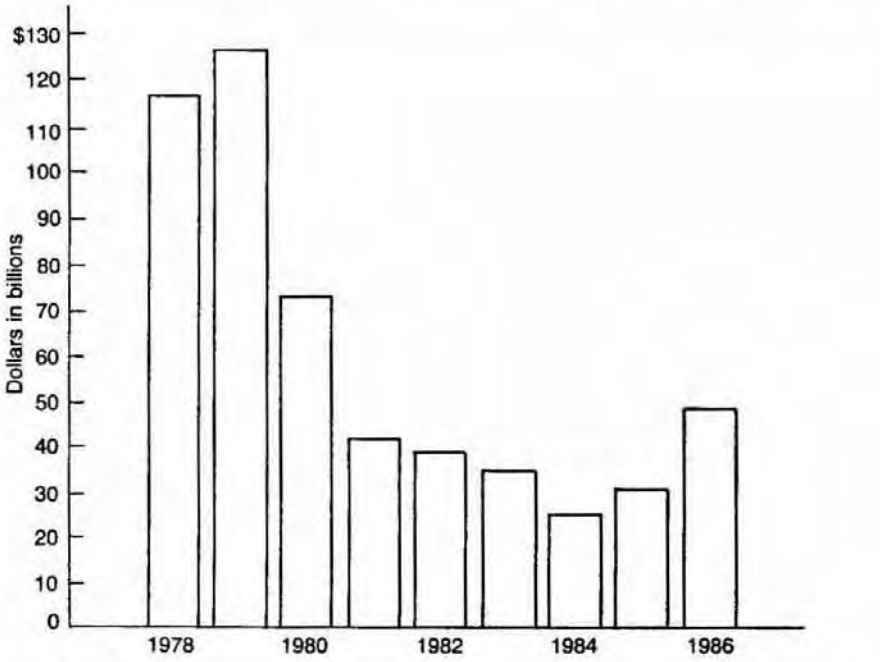


TABLE 3–7 Exposure Levels Facing the PBGC (dollars in billions)

Year	*PBGC Close-Out Rate*	*Funding Ratios Average*	*Exposure ($ 1986)*
1978	7.25%	92.9%	$116.7
1979	7.75	88.5	126.0
1980	9.00	107.2	73.0
1981	10.25	128.8	42.1
1982	10.50	130.9	39.5
1983	9.50	139.2	35.8
1984	10.50	153.9	25.9
1985	9.25	145.6	31.8
1986	7.75	128.5	49.2
Average	9.08%	123.9%	$ 59.9

Note: Exposure is adjusted to 1986 dollars and size of pension universe. Real funding ratios are calculated for each year using a constant 2 percent discount rate. Assets in year *t* are then set equal to assets in 1986 times the real funding ratio in year *t* divided by the same ratio in 1986. Liabilities in year *t* are set equal to those in 1986 but adjusted to the PBGC immediate rate in year *t* shown in the table.

SOURCE: Form 5500 Annual Pension Plan Reports.

universe in 1986. Thus, exposure does not reflect increases attributable to inflation or real growth in the system over time. Liabilities are converted to the PBGC immediate annuity rates shown in Table 3–7.

The variance in exposure is dramatic. It has varied from as little as $25 billion to over $126 billion in real terms over a period of only five years. Though some of this variation is attributable to overall movements in securities markets, most of it is attributable to changes in long-term nominal interest rates. This relationship is demonstrated in Table 3–8 and Figure 3–2, which show total underfunding in all defined benefit plans on an ongoing basis (also adjusted to net out inflationary growth and overall real growth in the system).

Ongoing liabilities are calculated using a common 2 percent interest rate for all years, reflecting pension promises to index pensions to wages until retirement (and to at least partially index pensions to prices beyond retirement). Variation in ongoing funding ratios as shown in Table 3–8 is not attributable to interest rate changes but instead to volatility in asset values. Because of increasing asset prices over the period, ongoing underfunding in defined benefit plans has decreased from $343 billion in 1978 to $187 billion in 1984.

Figure 3–3 visually compares the variation in ongoing and termination underfunding. In both cases, I have indexed underfunding relative to 1982 amounts. There is less variation in the ongoing underfunding compared to termination underfunding. The latter variable is a function of asset values and nominal long-term interest rates; the former variable varies with asset values but not with long-term interest rates.

The absolute amount of underfunding in an ongoing sense, however, is larger than in a termination sense owing to the much larger

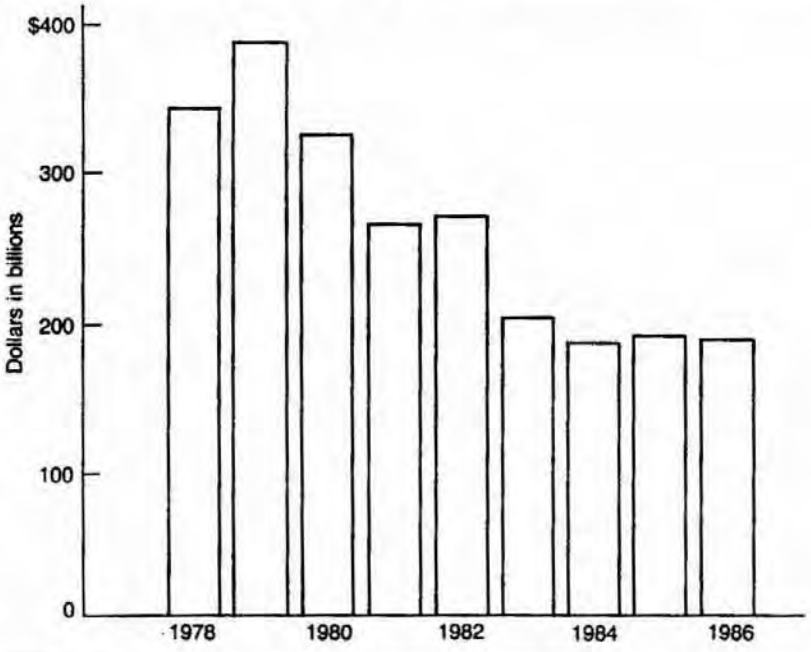
TABLE 3–8 Pension Underfunding on an Ongoing Basis (dollars in billions)

Year	*Funding Ratios Average*	*Underfunding ($ 1986)*
1978	65.3%	$343.0
1979	60.3	387.5
1980	67.3	325.8
1981	74.4	268.5
1982	74.1	272.4
1983	84.3	203.5
1984	87.5	187.6
1985	86.5	191.3
1986	87.2	189.3
Average	76.4%	$262.8

Note: Underfunding is adjusted to 1986 dollars and size of pension universe. The adjustment procedure is same as described in the notes to Table 3–7, except liabilities in all years are fixed at 1986 levels, evaluated at a common 2 percent interest rate.

SOURCE: From 5500 Annual Pension Plan Reports.

FIGURE 3–2 Ongoing Underfunding, 1978–1986



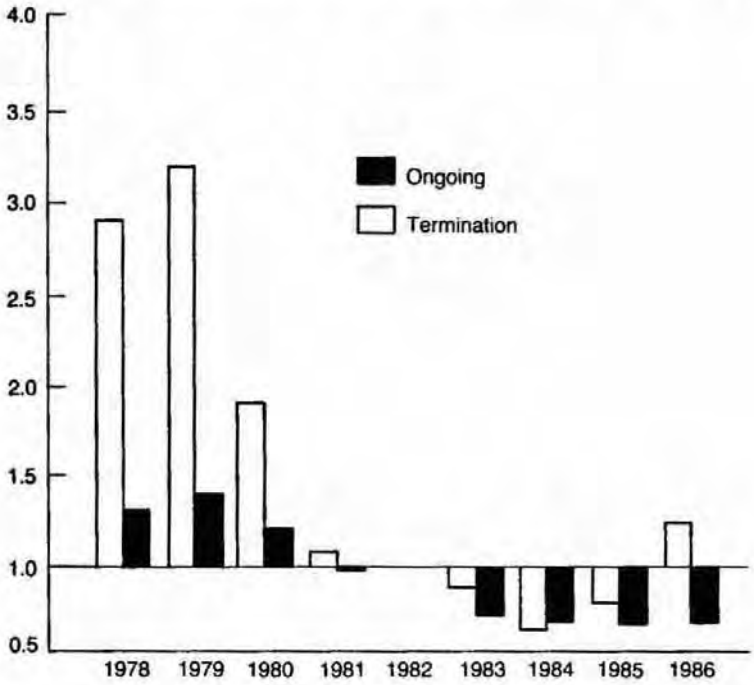
liabilities in the former. A comparison of Tables 3–7 and 3–8 shows that if PBGC insurance covered full expected pension benefits, instead of termination benefits, exposure levels would be over four times higher (and the coinsurance factor would be zero).

CONCLUSION

In this chapter, an attempt was made to summarize the insurance contract written by the Pension Benefit Guaranty Corporation. The system adopts a pension concept (termination-value pensions) that is insurable. And some rules were instituted by ERISA to protect the insurance system from obvious abuse. But many policies that violate sound insurance principles have been, and are, followed.

Much of the problem facing the PBGC is attributable to two factors: first, a lack of knowledge about the true extent of expected claims and the determinants of these claims; and second, a lack of a pricing system that allocates costs to expected claims. Notwithstanding the information problem, it is obvious that some pension features in some plans are costly relative to the average plan. If premium pricing is inflexible (as it apparently is, owing to congressional constraints), it is peculiar that the

FIGURE 3–3 Variation in Funding, 1978–1986 (relative to 1982 funding ratio)



PBGC issued regulations guaranteeing unreduced (instead of actuarially reduced) benefits to early retirees, including "very" early retirees eligible for shutdown benefits.

Moreover, owing to ineffective funding rules, partial coverage of enhanced pension benefits prior to termination, and inexplicable provisions (such as contribution waivers, which are outside the control of the PBGC), the moral hazard problems facing the PBGC are very large. The combination of operating an insurance company in violation of fundamental insurance principles, especially the absence of a rational pricing policy, has led to extraordinary economic problems at the PBGC.

The data also provide some evidence as to why private insurers may be reluctant to accept a brand new line of insurance. It is still not clear what claims levels can be expected, even after 13 years of experience. Claims are dominated by a few large terminations, mostly in the same industry. This discussion will be continued in Chapter 4, which traces the history of PBGC claims.