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# COST OF RISK SURVEY

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1990

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## ACKNOWLEDGEMENTS

Foremost, the many individual Survey respondents deserve recognition for taking the time to complete the *1990 Cost of Risk Survey* questionnaire. Their contribution has led to increased knowledge about risk management costs and administration. It is hoped that these efforts will highlight the importance of the risk management function throughout business, government, and industry.

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## PREFACE

The *1990 Cost of Risk Survey* is the fifth study conducted jointly by the Risk and Insurance Management Society, Inc. (RIMS) and Tillinghast, a Towers Perrin company (Tillinghast). This study was previously conducted in 1979, 1981, 1983, and 1985.

This Survey documents the total cost of risk for all participants, and also shows the cost of risk by industry group and financial size. Data collected was for calendar year 1989. The intent of the Survey is to assist risk managers, financial executives, and others in evaluating their organization's costs of risk relative to other organizations of the same size in the same industry. It also provides important information regarding the structure of insurance programs and organizational risk management functions.

A discussion on the cost of risk concept follows. The reader should be aware that Appendix A contains sections on:

- Methodology
- Using the Survey
- Interpreting the Results, and
- Comments on Data Reporting.

### THE COST OF RISK CONCEPT

Risk management professionals continue to debate the problem of measuring their effectiveness in controlling costs. In 1962, Douglas Barlow, a former President of RIMS and the retired Risk Manager for Canada's Massey-Ferguson Ltd., proposed the concept of the "cost of risk" as a useful device for reporting the results of the risk and insurance management function to senior management. It is generally agreed that the cost of risk concept is an important tool for both the practicing risk manager and executive management. As defined by Barlow, cost of risk is the sum of:

- Net insurance premiums
- Unreimbursed losses (self-insured, self-retained)
- Risk control and loss prevention expenses
- Administrative costs

In addition, cost of risk may include net cost or gain associated with a captive insurance company, either single parent or association, if the organization participates in a captive.

Cost of risk usually refers to all costs associated with an organization's risk management function. For an individual organization, it provides a useful way to analyze these costs over time or to compare various cost elements.

The administration of the risk management function typically differs from one organization to another. For example, responsibilities, program structure, and record keeping associated with risk management can vary considerably. Cost of risk comparisons between organizations can therefore be less meaningful.

In an attempt to make more meaningful comparisons between organizations, the 1990 Survey was divided into five distinct parts. (Refer to Appendix B which contains a copy of the 1990 Survey questionnaire.) This approach addresses the increasingly diverse allocation of risk management responsibilities within respondent organizations. The five parts are:

- Demographic and Administrative Information
- Property and Liability Insurance
- Workers' Compensation Costs
- Self-Assumed Loss Costs
- Risk Control Costs.

Taken together, these five parts comprise the overall cost of risk. However, it is typically difficult for organizations to quantify risk control costs since activities can be dispersed throughout an organization rather than centralized into one unit. Since we received few responses to Part V: Risk Control Costs, all risk control expenditures were excluded from the data presented in this report.



## I. DEMOGRAPHICS

### SURVEY RESPONSE

The *1990 Cost of Risk Survey* was sent to 4,394 member organizations of RIMS and to the risk managers of nine non-member organizations in April of 1990. A total of 809 (18%) responded in sufficient detail to be included in the analysis. Not all surveys were complete in every respect, thus, the number of individual responses used to calculate certain statistics sometimes varied from the total number of responses.

Respondents were located in 48 states and the District of Columbia, as well as 9 Canadian provinces. Of the respondents from the United States, 147 respondents were located in the Northeast; 218 were located in the Midwest; 210 in the South; and 135 in the West.

Ninety-five (11.7%) of the respondents were Canadian. Most of these organizations reported premiums, losses, and other costs in Canadian dollars. We converted these to U.S. dollars in the tables in which we combined Canadian and U.S. responses. The conversion rate used for this 1990 Survey was \$1 Canadian = \$.8633 U.S. Chapter IX presents Canadian cost of risk data in Canadian dollars for those who wish to make Canadian-to-Canadian comparisons.

It is often useful to examine an organization's costs and practices relative to similar organizations, defined by both size and nature of operations. For this reason, we present certain data by industry group and respondent size. Data is presented for 27 industry groups: see Appendix C for a listing of how these industry groups correspond to standard industrial classification codes

### RESPONDENT PROFILE

Table 1 presents size aggregates and averages for revenues, deposits, assets, and employees of all respondents included in the *1990 Cost of Risk Survey*. The overall totals and averages are significantly higher than in past surveys. In some cases, the average amounts from the 1990 Survey were 40% or greater than previous years.

TABLE 1 1989 Respondent Profile AGGREGATES		
	1989	Number of Respondents
Total Revenues	\$ 1,305.9 billion	746
Total Deposits	\$ 671.9 billion	51
Total Assets	\$ 2,695.7 billion	651
Total Employees	\$ 8.8 million	785
AVERAGES		
	1989	
Average Revenues	\$ 1.7 billion	
Average Deposits	\$ 13.1 billion	
Average Assets	\$ 4.1 billion	
Average Employees	11,257	
Average Size of Risk Management Department	4.96 persons	

## INDUSTRY GROUP ANALYSIS

We asked the respondents to designate their primary Standard Industrial Classification (SIC) code. Some respondents provided more than one SIC code. In those cases, we selected the code that appeared first or seemed most appropriate. In some instances, we reclassified governmental entities providing specific services (e.g., utilities or risk pools) from the governmental entity SIC code to the code corresponding to the function. Table 2 shows the 27 industry group classifications, the number of respondents in each group, and the industrywide cost of risk as a percentage of revenues. (See Appendix C for a breakdown of each industry group classification.)

The greatest percentage of respondents came from the governmental sector (group 27) at 9.27% of the total number of respondents. The industry group with the highest average cost of risk as a percent of revenues was the transportation service industry (group 14) at 2.81%. The next highest was health care (group 25) with 2.30%.

Table 2 also shows the industrywide total premiums plus unreimbursed losses as a percent of revenues for each industry group. By this measure, the transportation service industry (group 14) had the highest cost at 2.53% of revenues. Health care (group 25) was the next highest at 2.23% of revenues. As indicated above, these same groups also had the highest cost of risk.

**TABLE 2**  
**Respondent Profile: Industry Groups**  
**1989**

Industry Group	No. of Respondents	% of Total	Industrywide Cost of Risk as a Percent of Revenues in 1989	Industrywide Premiums Plus Unreimbursed Losses as a % of Revenues in 1989
1 Mining & Energy	43	5.32%	0.50%	0.54%
2 Food, Agriculture	8	0.99	0.52	0.51
3 Food, Tobacco, Textiles	48	5.93	0.58	0.57
4 Construction	23	2.84	1.21	1.18
5 Lumber, Furniture, Packaging	19	2.35	0.46	0.44
6 Printing, Publishing	15	1.85	0.51	0.47
7 Chemicals, Rubber, Plastic	33	4.08	0.49	0.52
8 Primary Metals, Leather, Stone	19	2.35	0.64	0.63
9 Metal Products	20	2.47	0.78	0.75
10 Machinery	21	2.60	0.54	0.51
11 Electrical Equipment, Instruments	30	3.71	0.28	0.27
12 Misc. Manufacturing Industries	31	3.83	0.76	0.75
13 Transportation Equipment	11	1.36	0.81	0.77
14 Transportation Service	30	3.71	2.81	2.53
15 Telecommunications	17	2.10	0.18	0.17
16 Electric Utility	32	3.96	0.57	0.55
17 Natural Gas Utility	15	1.85	0.59	0.56
18 Combination Utility	22	2.72	0.82	0.79
19 Wholesale Trade	13	1.61	0.28	0.27
20 Retail Trade	39	4.82	0.53	0.51
21 Finance-Bank, S&L, Holding Co	54	6.67	0.32	0.30
22 Finance-Real Estate, Other	33	4.08	0.31	0.29
23 Insurance	37	4.57	0.13	0.13
24 Personal, Business Service	48	5.93	0.82	0.80
25 Health Care	26	3.21	2.30	2.23
26 Educational, Nonprofit Institutions	47	5.81	1.11	1.03
27 Governmental	75	9.27	0.37	0.34
<b>TOTAL</b>	<b>809</b>	<b>100.00%</b>	<b>0.52%</b>	<b>0.50%</b>

## OPERATING DATA

Tables 1 and 3 present a summary of the 1989 operating data for Survey respondents. Reported revenues totaled \$1,305.9 billion (746 respondents), the average revenues equalled \$1.7 billion, and the median for revenues was \$510 million. The highest amount of revenues reported by a respondent was \$52 billion. Most of these revenue figures were double those of previous surveys.

However, the lowest value of revenues reported by a respondent, \$2 million, was significantly lower than the lowest value of \$9.4 million from 1984. But overall, respondent organizations were larger in this Survey compared to the 1985 Survey since the average, the median revenues, and the first and third quartile revenues were higher in 1989 than in 1984.

Financial institutions frequently did not report revenues, but did provide data concerning deposits. The aggregate deposits totalled \$671.9 billion in 1989; the average was \$13.1 billion; the median for deposits was \$7 billion; the highest deposit value was \$77 billion; and the lowest deposit value was \$32 million. These values are more than double the deposits reported in the 1985 Survey.

The assets reported by respondents in this year's Survey also significantly exceeded the values from the 1985 Survey. The 1990 aggregate assets were \$2,695.7 billion; the average was \$4.1 billion; the median for assets was \$755 million; and the highest reported asset value was \$118 billion.

Respondent organizations reported a total of 8.8 million employees in 1989, averaging 11,257 employees per organization. The median number of employees was 3,505, the lowest number was 11, and the highest was 394,035. Even though the aggregate number of employees was greater than past surveys, the average, median, first quartile, and third quartile numbers were relatively similar.

Only 1.97% of all respondents reported their organization's domicile based outside the U.S. and Canada, while 11.74% reported a Canadian-based domicile. The remaining majority, 86.27% reported a U.S.-based domicile.

**TABLE 3  
RESPONDENT PROFILE: OPERATING DATA**

	<b>Lowest Value</b>	<b>First Quartile</b>	<b>Median</b>	<b>Third Quartile</b>	<b>Highest Value</b>	<b>Number of Respondents</b>
<b>Revenues</b>						
1989	\$2,000,000	\$180,000,000	\$510,000,000	\$1,500,000,000	\$52,000,000,000	746
<b>Assets</b>						
1989	\$4,000,000	\$219,000,000	\$755,000,000	\$2,841,000,000	\$118,000,000,000	651
<b>Deposits</b>						
1989	\$32,000,000	\$1,700,000,000	\$7,000,000,000	\$15,206,000,000	\$76,994,000,000	51
<b>Number of Employees</b>						
1989	11	1,215	3,505	9,500	394,035	785
<b>ORGANIZATION DOMICILE</b>						
				<b>Number of Respondents</b>	<b>Percent of Sample</b>	
	U.S.-based			698	86.27%	
	Canada-based			95	11.74%	
	Other			16	1.97%	
	Total			809	100.00%	

## INDUSTRY AVERAGES

Table 4 presents average revenues, assets, and employees for the 27 industry groups. Respondents from the telecommunications industry (group 15) recorded the highest average revenues while health care (group 25) reported the lowest average revenues. The financial group (group 21), including banks, S&Ls, and holding companies, reported the highest average assets. The industry group with the lowest average assets was the food, agriculture industry (group 2). Retail trade (group 20) had the largest average number of employees while the respondents from the food, agriculture industry (group 2) had the lowest average employee number.

**TABLE 4**  
**Respondent Averages: Industry Groups**  
**1989**

Industry Group	Revenues (000,000 omitted)	Assets (000,000 omitted)	Employees
1 Mining & Energy	\$1,274	\$1,471	2,606
2 Food, Agriculture	618	131	2,034
3 Food, Tobacco, Textiles	2,452	1,499	14,571
4 Construction	637	409	3,705
5 Lumber, Furniture, Packaging	2,864	2,832	14,034
6 Printing, Publishing	970	868	8,604
7 Chemicals, Rubber, Plastic	1,141	1,065	6,190
8 Primary Metals, Leather, Stone	1,304	1,109	8,744
9 Metal Products	710	569	6,104
10 Machinery	1,365	788	8,715
11 Electrical Equipment, Instruments	2,639	1,753	24,613
12 Misc. Manufacturing Industries	1,831	1,478	16,262
13 Transportation Equipment	2,815	1,466	19,935
14 Transportation Service	702	1,064	8,823
15 Telecommunications	5,522	8,676	38,423
16 Electric Utility	1,362	4,556	4,422
17 Natural Gas Utility	1,201	1,937	4,537
18 Combination Utility	1,266	3,070	4,916
19 Wholesale Trade	1,648	438	4,585
20 Retail Trade	3,536	1,723	39,517
21 Finance-Bank, S&L, Holding Co.	850	18,588	8,200
22 Finance-Real Estate, Other	1,071	8,137	2,816
23 Insurance	3,127	9,851	6,952
24 Personal, Business Service	925	858	9,513
25 Health Care	266	235	7,770
26 Educational, Nonprofit Institutions	338	772	6,189
27 Governmental	1,927	923	10,819

Table 5 presents the distribution of revenues by industry group. It shows the range of revenues, the median, and the average revenues for organizations in each group.

TABLE 5: DISTRIBUTION OF REVENUES BY INDUSTRY GROUP (\$MILLIONS)						
Industry Group	1989					Industrywide
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	
1 Mining & Energy	27	251	700	1,402	11,507	1,336
2 Food, Agriculture	3	273	628	972	1,200	618
3 Food, Tobacco, Textiles	14	438	1,200	2,893	14,325	2,452
4 Construction	15	50	165	760	5,100	666
5 Lumber, Furniture, Packaging	38	400	1,441	2,483	21,000	3,024
6 Printing, Publishing	200	376	550	1,485	3,122	971
7 Chemicals, Rubber, Plastic	17	165	477	1,929	6,550	1,177
8 Primary Metals, Leather, Stone	5	320	453	1,500	6,362	1,458
9 Metal Products	16	98	423	1,138	3,818	748
10 Machinery	85	197	500	1,466	5,956	1,366
11 Electrical Equipment, Instruments	15	362	668	1,650	39,000	2,730
12 Misc. Manufacturing Industries	26	221	746	1,725	20,000	1,893
13 Transportation Equipment	25	160	1,016	1,804	20,276	2,815
14 Transportation Service	25	60	224	700	3,000	726
15 Telecommunications	12	325	1,670	6,471	36,000	5,522
16 Electric Utility	101	299	694	2,088	6,904	1,362
17 Natural Gas Utility	261	309	856	2,500	3,204	1,201
18 Combination Utility	24	94	582	1,030	9,000	1,266
19 Wholesale Trade	48	124	685	2,058	11,136	1,649
20 Retail Trade	82	455	952	2,700	31,599	3,629
21 Finance-Bank, S&L, Holding Co	2	243	992	1,745	11,422	1,583
22 Finance-Real Estate, Other	14	72	167	600	11,335	1,219
23 Insurance	2	895	1,934	4,105	24,000	3,306
24 Personal, Business Service	27	110	297	963	12,000	1,010
25 Health Care	17	145	203	412	617	277
26 Educational, Nonprofit Institutions	12	135	264	573	1,632	379
27 Governmental	14	96	201	694	52,000	2,224

## II. HIGHLIGHTS

The 1990 Cost of Risk Survey is an important indicator of the risk financing and administrative policies and performance of a wide range of U.S. and Canadian organizations. Conclusions may be drawn from this base of information.

However, great caution is needed in attempting comparison of this Survey to prior Cost of Risk Surveys, as well as making inferences from statistically small industry or cost sub-group samples. We have excluded the risk control costs from this report due to limited and unreliable data. Therefore, the total cost of risk figures do not include the risk control component. Previously published survey reports included these risk control costs.

### **COST OF RISK**

The aggregate (gross) cost of risk for all respondents was \$7.7 billion in 1989. This represents an aggregate total cost of risk of 0.52% of revenues in 1989. As a percent of gross assets, the aggregate cost of risk was 0.22%. For banks and savings and loans reporting deposits, the aggregate cost of risk was 0.03% of deposits. Chapter VIII contains the tables summarizing the total cost of risk.

Table 6 shows the changes in the composition of the cost of risk dollar for 1989 compared to the previous survey years. We excluded risk control expenditures from all of the years since we did not tabulate risk control expenditures for 1989. Negative figures for the captive costs indicate captive profits.

### **PROPERTY AND LIABILITY PREMIUMS PLUS UNREIMBURSED LOSSES**

Property insurance premiums and unreimbursed losses have decreased over the years, while liability premiums have fluctuated and unreimbursed losses have increased. Workers' compensation premiums actually went down in 1989 over past years, but 1989's unreimbursed workers' compensation losses increased. The workers' compensation unreimbursed losses increased significantly to 16.7% in 1989, compared to 10.8% in 1984.

The 1990 Survey showed that workers' compensation is becoming a significant cost for employers in the U.S. and Canada. Respondents experienced significant increases in average costs of workers' compensation premiums, unreimbursed losses, and total unreimbursed losses plus claims adjustment fees and other expenses, over past surveys. We were not surprised by these results since health-care costs and indemnity payments have grown astronomically in the last five years.



**TABLE 6**  
**COMPOSITION OF THE COST OF RISK DOLLAR**  
**EXCLUDING RISK CONTROL EXPENDITURES**

	1977	1978	1979	1980	1981	1982	1983	1984	1989
Property Premiums	26.3%	24.6%	25.1%	24.4%	25.5%	25.5%	18.7%	19.4%	12.1%
Unreimbursed Property Losses	8.7	9.4	8.3	9.7	6.9	7.3	5.5	5.6	3.1
Liability Premiums	24.9	24.2	21.3	21.0	18.5	18.0	19.7	19.6	24.8
Unreimbursed Liability Losses	7.6	7.6	8.6	8.3	9.1	9.6	14.7	14.2	18.4
Workers' Compensation Premiums	26.3	26.3	25.4	24.6	25.2	25.6	24.7	25.2	22.7
Unreimbursed Workers' Compensation Losses	7.2	7.8	11.3	11.7	13.0	12.3	12.3	10.8	16.7
Captive Costs (profit)	-3.7	-2.7	-3.3	-3.3	-1.9	-2.3	-2.0	-1.5	-1.6
Outside Services	0.4	0.4	0.7	0.8	0.7	0.8	1.0	1.1	0.4
Departmental Costs	2.3	2.2	2.6	2.8	3.0	3.3	5.5	5.7	3.2
	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

## LIABILITY LIMITS

Table 7 provides a comparison of liability limits from the past surveys. Respondents purchased higher liability limits in 1989 than in 1984, about 6% of the respondents had limits of less than \$5 million in 1989, compared to 15% in 1984.

Limits for general liability and directors' and officers' liability, varied significantly by industry group and revenue size. In addition, the amounts of the 1990 umbrella/excess liability limits and directors' and officers' liability limits carried by the group of respondents as a whole were slightly less than in the 1985 Survey. (Tables 37-39).

TABLE 7

## COMPARISON OF LIABILITY LIMITS

Limit	1978 Percent with this Limit	Cumulative 1978 Percent	1980 Percent with this Limit	Cumulative 1980 Percent	1982 Percent with this Limit	Cumulative 1982 Percent	1984 Percent with this Limit	Cumulative 1984 Percent	1989 Percent with this Limit	Cumulative 1989 Percent
Up to \$5,000,000	12.23%	12.23%	10.22%	10.22%	5.50%	5.50%	14.59%	14.59%	5.59%	5.59%
\$5,000,000 to \$15,000,000	21.36	33.59	12.72	22.94	9.80	15.30	9.73	24.32	12.10	17.69
\$15,000,001 to \$30,000,000	25.24	58.83	25.91	48.85	19.33	34.63	13.11	37.43	19.95	37.64
\$30,000,001 to \$60,000,000	23.69	82.52	21.36	70.21	22.15	56.78	22.20	59.63	24.87	62.51
\$60,000,001 to \$100,000,000	10.68	93.20	18.87	89.08	22.15	78.93	22.41	82.04	13.16	75.67
\$100,000,001 or Higher	6.80	100.00	10.92	100.00	21.07	100.00	17.97	100.00	23.67	99.34
\$0 (Self-insured)*									0.66	100.00

\*Note. The 1990 Survey form asked respondents to indicate lines of insurance that were self-insured. This was not asked in 1979 - 1985 Surveys, therefore no data is available.

## OTHER SIGNIFICANT INFORMATION

In addition to property and liability premiums and unreimbursed losses, administrative costs, and captive gain or loss, other information was collected to help develop useful statistics. This includes:

- **Property Insured Value.** Property insured value information permitted a calculation "rate" for property damage, business interruption, and extra expense insurance, as expressed in cents of premium per \$100 of insured value. The survey group had an average premium of 4.7 cents per \$100 of value. The mining and energy (group 1) and the wholesale trade (group 19) industries reported the highest average cost at .12% of insured value.
- **Retentions.** Retentions also varied, principally by size of organization. In addition, the 1990 property and liability deductibles for the total group of respondents were higher than those reported in the 1985 Survey. (Tables 18 and 40.)
- **Property Insurance Valuation and Coverage.** The overwhelming majority of the respondents, 93.3%, used replacement cost as the basis for insuring property (Table 8). In addition, most of the respondents, 94%, insured their property on an "all risk" basis.
- **Size of Risk Management/Insurance Department.** The average risk management insurance department employs 4.96 persons, with a median size of 3 persons. Risk management insurance department size was a function of organization size, responsibilities, and industry group classification (Tables 1 and 56).

The average risk management department size stayed practically the same as in 1984 which was 4.7 persons. Despite the fact that the overall totals and averages from Table 1 are higher than 1984, the staffing levels showed little change.

- **Top Risk Management Executive Reporting Relationship and Responsibilities.** The majority, 59.56%, of the risk management executives reported to financial functions (finance and treasury). In addition to purchasing property and liability insurance, their responsibilities included liability claims management, workers' compensation insurance purchase and claim management, property loss prevention, employee and public safety, and selection of brokers and/or agents (Tables 70-71).
- **Use and Compensation of Insurance Brokers/Agents.** Of the 37 respondents from the smallest revenue group (\$30 million and less), 35.1% used only one broker/agent, while 37.8% used two. Of the 95 respondents with revenues greater than \$3 billion, 74.8% used between

two and five brokers/agents (Table 74). The majority of respondents compensated their broker/agent between 6% and 10% of property and liability premiums (Table 75).

- **Relationship of Organization Size and Risk Financing Cost.** Larger respondent organizations appeared to have lower risk financing costs (premiums plus unreimbursed losses, as a percentage of revenues) than smaller ones.

### III. PROPERTY RISK FINANCING COSTS

Property risk financing costs include insurance premiums and unreimbursed losses addressing:

- Direct damage to buildings, contents, and other resources
- Business interruption and extra expense arising from direct damage
- Boiler and machinery direct damage, business interruption, and extra expense
- Miscellaneous categories of property risk including, but not limited to, costs arising from:
  - fidelity, crime and surety risks
  - inland and ocean marine exposures
  - physical damage to automobiles
  - export and credit risks
  - kidnap and ransom situations.

Most respondents indicated they purchased some form of property insurance. Several governmental entity respondents indicated they self-insured this exposure and only reported actual property losses.

#### VALUATION

As shown in Table 8, 93.3% of Survey respondents indicated that they use replacement cost valuation when purchasing direct damage property insurance. Only 4.8% use the actual cash value method, while 1.9% use some other method. This result indicates a continued preference toward and availability of replacement cost valuation for property insurance.

	<b>Number of Respondents</b>	<b>Percent of Sample</b>
Replacement Cost	726	93.3%
Actual Cash Value	37	4.8%
Other	15	1.9%
Total	778	100.0%

## PROPERTY DAMAGE, BUSINESS INTERRUPTION, AND EXTRA EXPENSE PREMIUMS

Most of the property insurance premiums related to fire, extended coverage, and/or all-risk perils covering direct damage, business interruption, extra expense, and other related coverages. A majority of the respondents (94%) insured on an all-risk basis. Also of note, the majority (83%) purchased property coverage with a property limit set on a blanket basis versus a specified per loss basis (12%).

Table 9 provides the average premium, the premium cost per \$100 of insured value when insured values were reported, and premiums as a percent of assets and revenues when assets or revenues were reported, for property damage, business interruption, and extra expense coverages.

Some of the premiums reported in Table 9 may include flood and earthquake, boiler and machinery, and other nonfire-related exposures since some respondents probably did not separate their organization's fire-related premiums from other categories of property insurance. However, this analysis represents a fair approximation of the overall cost regarding fire and related insurance premiums. In addition, some respondents with an all-risk blanket limit reported that same limit for property damage, business interruption, extra expense, and other coverages. This will tend to understate the cost per \$100 of insured value.

TABLE 9 1989 PROPERTY RISK FINANCING COSTS: PROPERTY DAMAGE, BUSINESS INTERRUPTION, AND EXTRA EXPENSE PREMIUMS			
Gross Premiums \$590,807,206	Average \$768,279		Number of Respondents 769
Gross Premiums \$523,663,470	Insured Value \$1,120,251,610,000	Cost Per \$100 of Value \$0.0467	691
Gross Premiums \$560,483,555	Gross Revenues \$1,232,492,000,000	% of Revenues 0.0454%	713
Gross Premiums \$529,167,283	Gross Assets \$2,657,005,000,000	% of Assets 0.0199%	625

## FLOOD AND EARTHQUAKE PREMIUMS AND LIMITS

Table 10 summarizes the flood and earthquake average premiums, premiums as a percentage of revenues for those reporting revenues, and premiums as a percentage of assets for those reporting assets. Predictably, fewer respondents carry flood and earthquake coverages than most other property coverages.

We discovered that premiums paid for earthquake coverage in California represented 92.6% of all earthquake premiums. We also learned that of those 68 respondents purchasing California earthquake insurance, the greatest number (32 or 47%) bought a per occurrence limit of \$10 million.

<b>TABLE 10</b> <b>1989 PROPERTY RISK FINANCING COSTS:</b> <b>FLOOD/EARTHQUAKE PREMIUMS (INCLUDING CALIFORNIA)</b>			
Gross Premiums \$30,731,191	Average \$232,812		Number of Respondents 132
Gross Premiums \$29,726,994	Gross Revenues \$239,477,000,000	% of Revenues 0.0124%	121
Gross Premiums \$27,627,285	Gross Assets \$291,227,000,000	% of Assets 0.0094%	107
<b>CALIFORNIA EARTHQUAKE ONLY</b>			
Gross Premiums \$11,382,885	Average \$167,395	% of All Earthquake Premiums 92.63%	68

## BOILER AND MACHINERY DIRECT DAMAGE AND BUSINESS INTERRUPTION PREMIUMS

The boiler and machinery direct damage and business interruption premiums are included in Table 11. Premiums averaged \$104,955 per respondent, and the Table includes the premium as a percentage of revenues and assets, when reported.

TABLE 11 1989 PROPERTY RISK FINANCING COSTS: BOILER AND MACHINERY DIRECT DAMAGE AND BUSINESS INTERRUPTION PREMIUMS			
Gross Premiums	Average		Number of Respondents
\$41,982,181	\$104,955		400
Gross Premiums	Gross Revenues	% of Revenues	
\$39,780,164	\$717,339,000,000	0.00554%	366
Gross Premiums	Gross Assets	% of Assets	
\$37,410,686	\$1,637,478,000,000	0.00228%	320



## FIDELITY/CRIME INSURANCE PREMIUMS

For fidelity and crime insurance, Table 12 shows the average premiums and the premiums as a percentage of revenues and assets, when reported. This table does not include blanket bond premiums for financial institutions. Fidelity/crime coverage averaged \$66,678 and was .004% of revenues.

TABLE 12 1989 PROPERTY RISK FINANCING COSTS: FIDELITY/CRIME INSURANCE PREMIUMS			
Gross Premiums \$36,673,014	Average \$66,678		Number of Respondents 550
Gross Premiums \$36,053,352	Gross Revenues \$840,005,000,000	% of Revenues 0.0043%	534
Gross Premiums \$33,817,696	Gross Assets \$1,149,003,000,000	% of Assets 0.0029%	451

## FINANCIAL INSTITUTIONS BLANKET BOND PREMIUMS

Table 13 provides the blanket bond premiums for financial institutions. Premiums averaged \$717,318, were .03% of revenues, and .009% of deposits. The average blanket bond premium and the premium as a percentage of deposits and revenues were significantly higher than the fidelity and crime premiums presented in Table 12. We are not surprised by these findings since financial institutions have greater overall exposure in this area, and have had greater experience of fidelity losses over the years.

<b>TABLE 13</b> <b>1989 PROPERTY RISK FINANCING COSTS:</b> <b>FINANCIAL INSTITUTIONS BLANKET BOND PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$75,318,467	\$717,318		105
Gross Premiums	Gross Revenues	% of Revenues	
\$44,372,364	\$152,118,000,000	0.02916%	76
Gross Premiums	Gross Assets	% of Assets	
\$73,304,817	\$1,370,078,000,000	0.00535%	91
Gross Premiums	Gross Deposits	% of Deposits	
\$62,822,466	\$670,479,000,000	0.00936%	49

## OTHER PROPERTY INSURANCE PREMIUMS

Other property insurance premiums are defined to include inland and ocean marine, automobile physical damage, export and credit, kidnap and ransom, and other "first party" insurance coverages. No single coverage stood out sufficiently within this group to merit separate compilation. Table 14 contains the average premium and premiums as a percentage of revenues and assets (when reported) for these other property coverages, similar in format to the other premium risk financing cost tables.

The average premiums paid for these "other" property coverages were higher at \$461,978 than the average premiums paid for flood/earthquake (\$232,812); boiler and machinery direct damage and business interruption (\$104,955); and fidelity/crime (\$66,678). Property damage, business interruption and extra expense, and financial institutions blanket bond average premiums were higher at \$768,279 and \$717,318 respectively. Premiums as a percentage of revenues were also higher at .022% than all of the others except for property damage and time element (.045%) and financial institutions blanket bond (.029%).

Gross Premiums	Average		Number of Respondents
\$155,224,936	\$461,978		336
Gross Premiums	Gross Revenues	% of Revenues	
\$152,369,439	\$683,651,000,000	0.02228%	307
Gross Premiums	Gross Assets	% of Assets	
\$131,475,118	\$1,433,863,000,000	0.00916%	287

## TOTAL PROPERTY INSURANCE PREMIUMS

Table 15 shows the property insurance premium totals including the average premiums and the premiums as a percentage of revenues and assets. The average premiums paid by respondents equalled \$1,191,730. They paid property premiums of .067% of revenues, and .031% of assets.

<b>TABLE 15</b> <b>1989 PROPERTY RISK FINANCING COSTS:</b> <b>TOTAL PROPERTY INSURANCE PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$936,699,899	\$1,191,730		786
Gross Premiums	Gross Revenues	% of Revenues	
\$868,748,773	\$1,291,742,000,000	0.0672%	724
Gross Premiums	Gross Assets	% of Assets	
\$838,458,591	\$2,668,455,000,000	0.0314%	633

## UNREIMBURSED PROPERTY LOSSES

The unreimbursed property loss data includes losses which fall within deductibles or are not insured. They may be uninsured because the organization did not identify the risk, could not find any coverage, or because they chose not to purchase coverage for the risk. This data also includes costs arising from the difference between actual replacement cost of insured property and any other valuation formula applied to losses. Respondents were asked for 1989 and 1988 loss information, as well as whether or not they kept records for unreimbursed property losses. Statistics on unreimbursed losses included only respondents who indicated that they kept records or respondents who reported a figure for unreimbursed losses.

Table 16 provides statistics on total unreimbursed property losses. Respondents, on the average, had higher unreimbursed losses in 1989 at \$459,345 than in 1988 at \$391,551, which is a percentage increase of 17.3%. Unreimbursed property losses for 1989 were 39.9% of the total 1989 property premiums paid by respondents. A respondent from the telecommunications industry (group 15) reported the largest total unreimbursed losses for 1989, which were \$15 million. The largest 1988 unreimbursed losses were \$15.7 million reported by a respondent from the retail trade industry (group 20).

TABLE 16 PROPERTY RISK FINANCING COSTS: TOTAL UNREIMBURSED PROPERTY LOSSES				
	Gross Losses	Average	Percentage increase	Number of Respondents
1989	\$236,103,334	\$459,345	17.3%	514
1988	\$181,288,569	\$391,551		463
	Gross Losses	Gross Revenues	% of Revenues	
1989	\$224,454,660	\$923,618,000,000	0.0243	480
	Gross Losses	Gross Assets	% of Assets	
1989	\$214,202,738	\$1,696,007,000,000	0.0126%	418
	Gross Losses	Gross Property Premiums	% of Property Premiums	
1989	\$232,300,563	\$582,188,527	39.90%	505

## TOTAL PROPERTY RISK FINANCING COSTS

Table 17 shows total property premiums plus unreimbursed losses. These costs for 1989, which averaged \$1,486,442, were .084% of revenues, and .039% of assets.

TABLE 17 1989 PROPERTY RISK FINANCING COSTS: PREMIUMS PLUS UNREIMBURSED LOSSES			
Gross Property Risk Costs	Average		Number of Respondents
\$1,172,803,233	\$1,486,442		789
Gross Property Risk Costs	Gross Revenues	% of Revenues	
\$1,093,203,433	\$1,295,888,000,000	0.084%	731
Gross Property Risk Costs	Gross Assets	% of Assets	
\$1,052,661,329	\$2,677,616,000,000	0.039%	638

## PREDOMINANT PROPERTY DEDUCTIBLES

Respondents were asked to indicate the size of their predominant property retention or deductible. Table 18 shows the 1990 property deductible size corresponding to six ranges of 1989 revenues. It also shows the deductible size for all respondents. Fifty-eight percent of respondents maintain a property deductible of less than \$50,000.

## INDUSTRY GROUP ANALYSES

Tables 19 through 24 present statistical analyses of property premiums and unreimbursed losses, both individually and combined, as a percentage of assets and revenues, for each industry group. Table 25 provides analysis of property damage, business interruption, extra expense, flood and earthquake, and boiler & machinery premiums as a percent of insured value.

**TABLE 18**  
**1990 PROPERTY DEDUCTIBLE SIZE, BY 1989 REVENUES**

Revenues	Property Deductible										
	Less than \$500	\$501 to \$1,000	\$1,001 to \$5,000	\$5,001 to \$10,000	\$10,001 to \$50,000	\$50,001 to \$100,000	\$100,001 to \$500,000	\$500,001 to \$1,000,000	\$1,000,001 to \$5,000,000	Over \$5,000,000	
\$30,000,000 or less	2 11.1%	3 16.7%	4 22.2%	1 5.6%	6 33.3%	1 5.6%	0 .0%	1 5.6%	0 .0%	0 .0%	
\$30,000,001 to \$100,000,000	1 1.5%	10 15.2%	23 34.8%	11 16.7%	17 25.8%	1 1.5%	2 3.0%	1 1.5%	0 .0%	0 .0%	
\$100,000,001 to \$300,000,000	2 1.4%	8 5.8%	30 21.7%	18 13.0%	42 30.4%	23 16.7%	12 8.7%	3 2.2%	0 .0%	0 .0%	
\$300,000,001 to \$1,000,000,000	2 1.1%	6 3.4%	19 10.9%	20 11.4%	57 32.6%	44 25.1%	21 12.0%	6 3.4%	0 .0%	0 .0%	
\$1,000,000,001 to \$3,000,000,000	0 .0%	2 1.4%	10 7.2%	11 7.9%	37 26.6%	29 20.9%	40 28.8%	5 3.6%	5 3.6%	0 .0%	
\$3,000,000,001 or higher	0 0%	0 0%	3 3.5%	2 2.4%	15 17.6%	24 28.2%	15 17.6%	12 14.1%	10 11.8%	4 4.7%	
Total all respondents	7 1.1%	29 4.7%	89 14.3%	63 10.1%	174 28.0%	122 19.6%	90 14.5%	28 4.5%	15 2.4%	4 .6%	

**TABLE 19**  
**PROPERTY PREMIUMS AS A PERCENT OF REVENUES**

Industry Group	1989					Industrywide
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	
1 Mining & Energy	.01	.12	.19	.32	2.36	.18
2 Food, Agriculture	.02	.07	.14	.31	.39	.21
3 Food, Tobacco, Textiles	.01	.04	.06	.09	1.38	.06
4 Construction	.02	.04	.06	.11	.28	.07
5 Lumber, Furniture, Packaging	.03	.07	.11	.16	.46	.09
6 Printing, Publishing	.03	.06	.08	.11	.18	.09
7 Chemicals, Rubber, Plastic	.01	.07	.12	.20	.89	.12
8 Primary Metals, Leather, Stone	.03	.06	.09	.10	.93	.10
9 Metal Products	.03	.05	.08	.09	.17	.10
10 Machinery	.01	.04	.06	.07	.29	.05
11 Electrical Eqmt., Instruments	.01	.05	.07	.11	.23	.04
12 Misc. Manufacturing Industries	.02	.05	.08	.12	.39	.06
13 Transportation Equipment	.02	.04	.05	.10	1.36	.08
14 Transportation Service	.01	.04	.13	.28	2.67	.13
15 Telecommunications	.00	.04	.07	.08	.58	.03
16 Electric Utility	.01	.11	.18	.27	.81	.20
17 Natural Gas Utility	.02	.04	.05	.08	.38	.10
18 Combination Utility	.03	.08	.12	.22	.98	.18
19 Wholesale Trade	.00	.02	.04	.12	.18	.02
20 Retail Trade	.00	.02	.04	.07	.14	.03
21 Finance-Bank, S&I, Holding Co.	.02	.07	.13	.37	6.55	.19
22 Finance-Real Estate, Other	.03	.07	.33	.74	7.86	.10
23 Insurance	.00	.01	.01	.03	.08	.02
24 Personal, Business Service	.00	.03	.07	.13	.29	.04
25 Health Care	.02	.04	.07	.11	.28	.08
26 Educational, Nonprofit Institutions	.01	.07	.11	.16	.34	.14
27 Governmental	.00	.04	.07	.17	1.18	.03



**TABLE 20  
PROPERTY PREMIUMS AS A PERCENT OF ASSETS**

Industry Group	1989					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industrywide
1 Mining & Energy	.03	.08	.16	.27	2.03	.16
2 Food, Agriculture	.03	.42	.80	1.39	2.97	1.01
3 Food, Tobacco, Textiles	.00	.06	.10	.20	2.47	.10
4 Construction	.01	.05	.11	.26	.85	.11
5 Lumber, Furniture, Packaging	.04	.07	.10	.15	.49	.09
6 Printing, Publishing	.04	.06	.10	.15	.21	.10
7 Chemicals, Rubber, Plastic	.02	.09	.16	.30	.56	.13
8 Primary Metals, Leather, Stone	.03	.10	.12	.15	.31	.12
9 Metal Products	.06	.07	.10	.19	.29	.12
10 Machinery	.04	.06	.08	.12	.15	.08
11 Electrical Eqmt., Instruments	.01	.08	.10	.15	.23	.07
12 Misc. Manufacturing Industries	.03	.06	.10	.16	.65	.08
13 Transportation Equipment	.04	.09	.12	.19	.38	.15
14 Transportation Service	.00	.04	.08	.17	1.93	.08
15 Telecommunications	.00	.01	.03	.05	.25	.02
16 Electric Utility	.00	.03	.06	.08	.21	.06
17 Natural Gas Utility	.02	.02	.03	.07	.14	.06
18 Combination Utility	.00	.03	.05	.10	.22	.07
19 Wholesale Trade	.01	.04	.07	.09	.51	.07
20 Retail Trade	.02	.06	.11	.16	2.04	.06
21 Finance-Bank, S&L, Holding Co.	.00	.01	.01	.01	.08	.01
22 Finance-Real Estate, Other	.00	.03	.10	.16	.67	.01
23 Insurance	.00	.00	.01	.02	.04	.01
24 Personal, Business Service	.01	.03	.06	.16	1.02	.05
25 Health Care	.02	.04	.06	.13	.44	.09
26 Educational, Nonprofit Institutions	.00	.02	.06	.08	.34	.06
27 Governmental	.00	.02	.04	.06	.41	.06

**TABLE 21  
UNREIMBURSED PROPERTY LOSSES AS A PERCENT OF REVENUES**

Industry Group	1989					Industrywide
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	
1 Mining & Energy	.00	.03	.04	.08	.37	.05
2 Food, Agriculture	.01	.01	.01	.01	.02	.01
3 Food, Tobacco, Textiles	.00	.00	.01	.02	.08	.01
4 Construction	.00	.01	.01	.04	.13	.01
5 Lumber, Furniture, Packaging	.00	.01	.03	.06	.30	.05
6 Printing, Publishing	.00	.01	.01	.02	.02	.01
7 Chemicals, Rubber, Plastic	.00	.01	.03	.07	1.00	.02
8 Primary Metals, Leather, Stone	.00	.01	.04	.08	.19	.08
9 Metal Products	.00	.01	.01	.02	.17	.02
10 Machinery	.00	.01	.01	.02	.03	.01
11 Electrical Eqmt., Instruments	.00	.01	.01	.02	.09	.01
12 Misc. Manufacturing Industries	.00	.01	.01	.02	.04	.01
13 Transportation Equipment	.00	.01	.03	.04	.10	.01
14 Transportation Service	.00	.01	.03	.12	.51	.03
15 Telecommunications	.00	.01	.03	.08	.20	.02
16 Electric Utility	.00	.03	.05	.08	.29	.05
17 Natural Gas Utility	.00	.01	.01	.03	.09	.02
18 Combination Utility	.00	.01	.02	.09	.17	.02
19 Wholesale Trade	.00	.00	.00	.01	.01	.00
20 Retail Trade	.00	.00	.01	.03	.08	.02
21 Finance-Bank, S&L, Holding Co.	.00	.00	.01	.03	.07	.00
22 Finance-Real Estate, Other	.00	.01	.02	.04	.48	.00
23 Insurance	.00	.00	.00	.00	.05	.01
24 Personal, Business Service	.00	.00	.01	.01	.10	.02
25 Health Care	.00	.00	.01	.01	.04	.01
26 Educational, Nonprofit Institutions	.00	.01	.02	.04	.14	.03
27 Governmental	.00	.01	.02	.06	.24	.01

**TABLE 22  
UNREIMBURSED PROPERTY LOSSES AS A PERCENT OF ASSETS**

Industry Group	1989					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industrywide
1 Mining & Energy	.00	.01	.02	.10	.83	.05
2 Food, Agriculture	.02	.03	.05	.08	.10	.03
3 Food, Tobacco, Textiles	.00	.01	.01	.05	.19	.02
4 Construction	.00	.01	.03	.11	.20	.02
5 Lumber, Furniture, Packaging	.00	.01	.02	.04	.29	.05
6 Printing, Publishing	.00	.01	.02	.02	.03	.01
7 Chemicals, Rubber, Plastic	.01	.01	.03	.06	.21	.02
8 Primary Metals, Leather, Stone	.00	.02	.04	.11	.21	.09
9 Metal Products	.00	.01	.02	.03	.27	.02
10 Machinery	.00	.01	.01	.02	.05	.03
11 Electrical Eqmt., Instruments	.00	.01	.02	.04	.16	.01
12 Misc. Manufacturing Industries	.00	.01	.02	.03	.06	.01
13 Transportation Equipment	.01	.01	.03	.07	.11	.01
14 Transportation Service	.00	.01	.01	.05	1.67	.02
15 Telecommunications	.00	.00	.01	.07	.26	.01
16 Electric Utility	.00	.01	.01	.03	.11	.02
17 Natural Gas Utility	.00	.01	.01	.02	.05	.01
18 Combination Utility	.00	.00	.00	.02	.09	.01
19 Wholesale Trade	.00	.00	.01	.01	.04	.00
20 Retail Trade	.00	.01	.03	.07	.11	.03
21 Finance-Bank, S&L, Holding Co.	.00	.00	.00	.00	.02	.00
22 Finance-Real Estate, Other	.00	.00	.00	.01	.03	.00
23 Insurance	.00	.00	.00	.00	.03	.00
24 Personal, Business Service	.00	.00	.01	.01	.08	.02
25 Health Care	.00	.00	.01	.01	.05	.01
26 Educational, Nonprofit Institutions	.00	.01	.01	.03	.10	.01
27 Governmental	.00	.01	.02	.03	.14	.02

**TABLE 23  
PROPERTY PREMIUMS PLUS UNREIMBURSED PROPERTY LOSSES  
AS A PERCENT OF REVENUES**

Industry Group	1989					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industrywide
1 Mining & Energy	.04	.16	.22	.53	2.41	.23
2 Food, Agriculture	.02	.07	.15	.32	.39	.22
3 Food, Tobacco, Textiles	.01	.04	.07	.11	1.38	.07
4 Construction	.02	.06	.07	.11	.32	.08
5 Lumber, Furniture, Packaging	.04	.07	.14	.25	.48	.14
6 Printing, Publishing	.03	.07	.09	.12	.19	.10
7 Chemicals, Rubber, Plastic	.01	.10	.14	.26	1.81	.14
8 Primary Metals, Leather, Stone	.03	.09	.11	.16	.93	.17
9 Metal Products	.04	.06	.09	.12	.24	.12
10 Machinery	.02	.04	.06	.08	.31	.06
11 Electrical Eqmt., Instruments	.01	.06	.08	.14	.23	.05
12 Misc. Manufacturing Industries	.02	.05	.09	.14	.39	.07
13 Transportation Equipment	.03	.05	.08	.11	1.46	.09
14 Transportation Service	.01	.05	.16	.54	2.68	.16
15 Telecommunications	.01	.04	.07	.20	.67	.05
16 Electric Utility	.01	.13	.23	.37	.85	.25
17 Natural Gas Utility	.02	.04	.07	.11	.38	.13
18 Combination Utility	.04	.08	.13	.30	.99	.20
19 Wholesale Trade	.00	.02	.05	.13	.18	.02
20 Retail Trade	.00	.03	.06	.09	.17	.04
21 Finance-Bank, S&L, Holding Co.	.02	.08	.14	.37	6.55	.20
22 Finance-Real Estate, Other	.03	.08	.35	.74	7.94	.10
23 Insurance	.01	.01	.02	.04	.12	.03
24 Personal, Business Service	.00	.04	.07	.12	.30	.06
25 Health Care	.02	.06	.08	.13	.28	.08
26 Educational, Nonprofit Institutions	.03	.08	.12	.19	.36	.17
27 Governmental	.00	.05	.08	.24	1.37	.04

**TABLE 24: PROPERTY PREMIUMS PLUS UNREIMBURSED PROPERTY LOSSES  
AS A PERCENT OF ASSETS**

Industry Group	1989					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industrywide
1 Mining & Energy	.03	.09	.19	.38	2.86	.20
2 Food, Agriculture	.03	.44	.83	1.42	3.07	1.04
3 Food, Tobacco, Textiles	.00	.07	.12	.28	2.47	.12
4 Construction	.01	.06	.16	.36	.95	.13
5 Lumber, Furniture, Packaging	.05	.09	.12	.26	.49	.14
6 Printing, Publishing	.04	.09	.11	.15	.22	.11
7 Chemicals, Rubber, Plastic	.03	.11	.18	.31	.65	.15
8 Primary Metals, Leather, Stone	.03	.12	.18	.24	.31	.20
9 Metal Products	.06	.08	.12	.25	.38	.15
10 Machinery	.03	.06	.09	.12	.15	.10
11 Electrical Eqmt., Instruments	.01	.09	.13	.19	.40	.08
12 Misc. Manufacturing Industries	.04	.06	.12	.17	.65	.09
13 Transportation Equipment	.09	.11	.15	.30	.40	.16
14 Transportation Service	.00	.04	.09	.38	1.93	.10
15 Telecommunications	.00	.03	.03	.05	.47	.03
16 Electric Utility	.00	.04	.07	.10	.26	.07
17 Natural Gas Utility	.02	.03	.06	.09	.14	.08
18 Combination Utility	.00	.04	.05	.11	.23	.08
19 Wholesale Trade	.01	.04	.07	.09	.55	.07
20 Retail Trade	.02	.08	.14	.21	2.08	.09
21 Finance-Bank, S&L, Holding Co.	.00	.01	.01	.01	.10	.01
22 Finance-Real Estate, Other	.00	.04	.10	.16	.67	.01
23 Insurance	.00	.00	.01	.02	.06	.01
24 Personal, Business Service	.01	.04	.07	.15	1.02	.07
25 Health Care	.02	.05	.07	.13	.44	.10
26 Educational, Nonprofit Institutions	.00	.02	.07	.09	.34	.07
27 Governmental	.00	.03	.05	.08	.56	.08

**TABLE 25: PROPERTY DAMAGE, BUSINESS INTERRUPTION, EXTRA EXPENSE,  
FLOOD/EARTHQUAKE, AND BOILER & MACHINERY PREMIUMS  
AS A PERCENT OF INSURED VALUE**

Industry Group	1989					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industrywide
1 Mining & Energy	.00	.09	.14	.21	1.47	.12
2 Food, Agriculture	.03	.07	.16	.34	.99	.09
3 Food, Tobacco, Textiles	.01	.03	.05	.08	.86	.05
4 Construction	.01	.08	.25	.67	3.85	.07
5 Lumber, Furniture, Packaging	.02	.04	.07	.09	1.14	.05
6 Printing, Publishing	.01	.03	.06	.07	.21	.04
7 Chemicals, Rubber, Plastic	.01	.05	.09	.14	.37	.08
8 Primary Metals, Leather, Stone	.01	.02	.03	.06	.37	.02
9 Metal Products	.01	.03	.06	.07	.19	.04
10 Machinery	.01	.02	.05	.05	1.60	.07
11 Electrical Eqmt., Instruments	.01	.04	.05	.08	5.25	.04
12 Misc. Manufacturing Industries	.01	.03	.05	.08	.34	.02
13 Transportation Equipment	.01	.02	.03	.06	.17	.01
14 Transportation Service	.01	.04	.07	.17	1.33	.07
15 Telecommunications	.00	.01	.03	.10	.59	.01
16 Electric Utility	.00	.02	.04	.07	.26	.02
17 Natural Gas Utility	.01	.03	.05	.09	.21	.06
18 Combination Utility	.01	.03	.05	.07	.12	.10
19 Wholesale Trade	.02	.03	.08	.17	.79	.12
20 Retail Trade	.01	.02	.06	.11	3.74	.03
21 Finance-Bank, S&L, Holding Co.	.01	.04	.06	.09	.66	.06
22 Finance-Real Estate, Other	.01	.02	.04	.07	.47	.03
23 Insurance	.00	.03	.06	.10	.70	.03
24 Personal, Business Service	.01	.04	.11	.15	.70	.04
25 Health Care	.01	.02	.03	.06	.48	.04
26 Educational, Nonprofit Institutions	.00	.02	.04	.07	4.82	.04
27 Governmental	.00	.03	.06	.09	.40	.03

#### IV. LIABILITY RISK FINANCING COSTS

Liability risk financing costs include premiums and expenses associated with:

- Workers' compensation
- General liability (primary and excess)
- Automobile liability
- Product liability
- Professional liability
- Directors' and officers' liability
- Fiduciary and ERISA liability
- Environmental impairment liability
- Other miscellaneous liability expenses including:
  - other insurance premiums
  - unreimbursed liability losses
  - claims adjustment fees
  - other related expenditures.

Most of the respondents provided loss information that was not completely developed, i.e. did not represent the ultimate cost. This would tend to make 1988 responses for losses appear relatively larger than 1989, as the 1988 losses have had a longer time to develop.

Tables 26 through 35 show liability premiums for various categories of risk. Some respondents reported all liability premiums in either the "workers' compensation" or the "general liability" category, which may distort the figures for these individual cost of risk components. As a result, Table 36, "Total Liability and Workers' Compensation Premiums" presents the most reliable data for analytical purposes.

#### WORKERS' COMPENSATION PREMIUMS

Table 26 contains the data collected on workers' compensation premiums for the U.S. and Canada. We divided responses according to where the base of operations was for the respondent. This meant that U.S.-based organizations with Canadian employees and Canadian-based organizations with U.S. employees had some costs misclassified. In most cases, however, the substantial majority of employees were correctly allocated.

Not surprisingly, the premiums in the U.S. significantly exceeded the premiums in Canada. The average U.S. workers' compensation premium was \$2.6 million, while Canada's average was \$1.6 million. Reported premiums were .156% of revenues for the U.S., while in Canada they were .105% of revenues. Finally, the average premium per employee in the U.S. was \$280, compared to \$187 per employee in Canada. These comparisons demonstrate that workers' compensation health care and indemnity payments are higher in the U.S. than in Canada.

TABLE 26 1989 LIABILITY RISK FINANCING COSTS: WORKERS' COMPENSATION PREMIUMS			
<b>UNITED STATES:</b>			
Gross Premiums	Average		Number of Respondents
\$1,695,998,669	\$2,617,281		648
Gross Premiums	Gross Revenues	% of Revenues	
\$1,587,130,781	\$1,018,419,000,000	0.1558%	602
Gross Premiums	Gross Number of Employees	Average Premium Per Employee	
\$1,648,874,060	5,882,502	\$280.30	635
<b>CANADA: (in U.S. Dollars)</b>			
Gross Premiums	Average		Number of Respondents
\$65,820,112	\$1,567,145		42
Gross Premiums	Gross Revenues	% of Revenues	
\$65,656,431	\$62,662,000,000	0.1047%	40
Gross Premiums	Gross Number of Employees	Average Premium Per Employee	
\$65,180,407	348,666	\$186.94	41



## PRIMARY GENERAL AND AUTOMOBILE LIABILITY PREMIUMS

This category typically includes premiums for the first \$1 million to \$5 million of coverage for general and automobile liability. Table 27 shows that the average premium for these coverages was \$1.2 million, and the premiums were .069% of revenues. For 61.3% of the respondents, these premiums included product liability coverage.

Only 11.3% of all respondents purchased claims-made coverage. In many cases, respondents did not purchase primary general or automobile liability insurance and left this section blank.

**TABLE 27**  
**1989 LIABILITY RISK FINANCING COSTS: PRIMARY GENERAL AND AUTO LIABILITY PREMIUMS**

Gross Premiums	Average		Number of Respondents
\$783,081,667	\$1,151,590		680
Gross Premiums	Gross Revenues	% of Revenues	
\$722,775,958	\$1,039,863,000,000	0.0695%	625

## EXCESS AND UMBRELLA LIABILITY PREMIUMS

This category of premiums includes the cost of coverage above either primary insurance, a substantial deductible, or a self-insured retention. Table 28 shows that the average excess/umbrella liability premium was \$756,549, and premiums were .042% of revenues. For 68.6% of the respondents, these premiums included product liability coverage.

Several governmental entities did not purchase primary or excess liability coverage. As can be observed, although some respondents did not purchase excess coverage, more purchased excess than primary coverage. Only 28.2% of all respondents purchased coverage on a claims-made basis.

TABLE 28 1989 LIABILITY RISK FINANCING COSTS: EXCESS/UMBRELLA LIABILITY PREMIUMS			
Gross Premiums	Average		Number of Respondents
\$528,071,550	\$756,549		698
Gross Premiums	Gross Revenues	% of Revenues	
\$501,836,207	\$1,181,470,000,000	0.0424%	650

## PRODUCT LIABILITY PREMIUMS

In the Survey questionnaire, we asked respondents to provide information on product liability coverages. As stated previously, a number of respondents purchase product liability coverage within their primary general liability policy (61.3% of respondents within a general liability policy), and some include it within their excess coverages (68.6% of respondents within an excess coverage).

Of the 65 respondents that purchased product liability coverage (separate from their primary and excess commercial general liability program), 65% purchased the policy for aircraft products.

Table 29 shows that the average premium cost for product liability was \$2.2 million and the premiums were .08% of revenues.

Gross Premiums	Average		Number of Respondents
\$147,974,317	\$2,276,527		65
Gross Premiums	Gross Revenues	% of Revenues	
\$147,974,317	\$192,521,000,000	0.076%	65

**PROFESSIONAL LIABILITY PREMIUMS**

Respondents provided information on their professional liability coverages. Of the 188 respondents to this question, 29% purchased health care-related professional liability coverage including medical malpractice, hospital professional liability, and nursing liability; 14% purchased legal malpractice coverage; and 11% purchased engineers and architects errors and omissions coverage.

Table 30 shows that the average premium cost was \$611,918 and the premium was .04% of revenues.

<b>TABLE 30</b> <b>1989 LIABILITY RISK FINANCING COSTS:</b> <b>PROFESSIONAL LIABILITY PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$115,040,661	\$611,918		188
Gross Premiums	Gross Revenues	% of Revenues	
\$91,717,914	\$208,009,000,000	0.044%	169

## DIRECTORS' & OFFICERS' LIABILITY PREMIUMS

As Table 31 shows, respondents paid an average of \$417,146 in premiums, and premiums were .02% of revenues. For financial institutions, premiums were .005% of deposits. It is interesting to note here that more than half of all respondents, 63%, purchased D&O coverage.

TABLE 31 1989 LIABILITY RISK FINANCING COSTS: DIRECTORS' & OFFICERS' LIABILITY PREMIUMS			
Gross Premiums	Average		Number of Respondents
\$213,996,016	\$417,146		513
Gross Premiums	Gross Revenues	% of Revenues	
\$191,487,900	\$935,716,000,000	0.020%	478
Gross Premiums	Gross Deposits	% of Deposits	
\$37,034,638	\$664,929,000,000	0.005%	46

## FIDUCIARY AND ERISA LIABILITY PREMIUMS

Table 32 shows that respondents paid an average of \$35,595 in premiums for fiduciary/ERISA liability coverage. The premiums were only .001% of revenues.

TABLE 32 1989 LIABILITY RISK FINANCING COSTS: FIDUCIARY/ERISA LIABILITY PREMIUMS			
Gross Premiums	Average		Number of Respondents
\$15,840,059	\$35,595		445
Gross Premiums	Gross Revenues	% of Revenues	
\$15,096,051	\$811,194,000,000	0.001%	415

## ENVIRONMENTAL IMPAIRMENT LIABILITY PREMIUMS

The 1990 Survey questionnaire differs from previous surveys since we requested that respondents identify any environmental impairment liability policies purchased. Table 33 shows that 53 respondents pay an average premium of \$309,283 for environmental impairment liability coverage. However, three of these respondents paid premiums more than double any of the other respondents, at \$1.5 million, \$2.5 million, and \$5.7 million, which distorts the overall average. By removing these three respondents from the average premium calculation, the average premium was about \$134,000.

The limits and industry group classifications of the three respondents that paid the highest premiums for environmental impairment liability were as follows:

- The respondent which paid the \$1.5 million premium purchased limits of \$5 million and was from the combination utility industry (group 18);
- The organization which paid \$2.5 million in premiums had a \$10 million limit and was from the chemicals, rubber, and plastic industry (group 7); and
- The respondent which paid \$5.7 million in premiums had a \$100 million limit and was from the transportation equipment industry (group 13).

While respondents indicated policy limits ranging from \$860,000 to \$260 million, 25% purchased limits of \$1 million. Of the respondent organizations that purchased environmental impairment liability coverage, 26% came from the mining and energy industry (group 1).

Gross Premiums	Average		Number of Respondents
\$16,392,033	\$309,283		53
Gross Premiums	Gross Revenues	% of Revenues	
\$16,291,295	\$79,549,000,000	0.020%	50

## OTHER LIABILITY PREMIUMS

We requested that respondents provide information on any "other" liability insurance policies not listed on the questionnaire. Forty-five percent of the respondents indicated that they purchased "other" liability insurance. Twenty-seven percent of these respondent organizations purchased owned and non-owned aircraft liability policies.

Table 34 shows that respondents paid an average premium of \$293,615 for these "other" liability policies. In addition, premiums were .0116% of revenues.

Gross Premiums	Average		Number of Respondents
\$106,288,760	\$293,615		362
Gross Premiums	Gross Revenues	% of Revenues	
\$79,878,200	\$683,131,000,000	0.0116%	334

## TOTAL LIABILITY PREMIUMS (EXCLUDING WORKERS' COMPENSATION)

Table 35 presents the gross total liability premiums (excluding workers' compensation premiums) paid by respondents. The average total liability premium paid in 1989 was \$2.5 million. As a percent of revenues, total liability premiums equalled .143%.

Gross Premiums	Average		Number of Respondents
\$1,926,685,063	\$2,505,442		769
Gross Premiums	Gross Revenues	% of Revenues	
\$1,767,057,842	\$1,228,280,000,000	0.143%	710

## TOTAL LIABILITY AND WORKERS' COMPENSATION PREMIUMS

Table 36 includes both liability and workers' compensation premiums. The average premiums were \$4.7 million, and premiums were .277% of revenues.

<b>TABLE 36</b> <b>1989 LIABILITY RISK FINANCING COSTS:</b> <b>TOTAL LIABILITY AND WORKERS' COMPENSATION PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$3,688,503,844	\$4,692,752		786
Gross Premiums	Gross Revenues	% of Revenues	
\$3,419,845,054	\$1,233,037,000,000	0.277%	726

## LIABILITY LIMITS

Respondents indicated the amount of liability insurance limits carried for both primary general and umbrella/excess liability insurance. Tables 37 and 38 profile the umbrella/excess liability limits carried, by industry group and revenues, respectively. Table 37 shows that half of the 757 respondents providing limit information, 50.2%, carried limits of \$40 million or less for umbrella/excess liability.



**TABLE 37**  
**1990 LIABILITY LIMITS CARRIED: PROFILE BY 1989 INDUSTRY GROUP**

Amount of 1990 Umbrella/Excess Liability Limits Carried (\$ in millions)

Industry Group	Amount of 1990 Umbrella/Excess Liability Limits Carried (\$ in millions)													
	Up to \$5	\$6 to \$10	\$11 to \$15	\$16 to \$20	\$21 to \$25	\$26 to \$30	\$31 to \$40	\$41 to \$50	\$51 to \$75	\$76 to \$100	\$101 to \$125	\$126 to \$150	\$151 to \$200	Over \$200
1. Mining & Energy	3 7.1%	0 .0%	1 2.4%	3 7.1%	1 2.4%	1 2.4%	0 0%	4 9.5%	3 7.1%	3 7.1%	2 4.8%	4 9.5%	8 19.0%	9 21.4%
2. Food, Agriculture	2 25.0%	0 .0%	0 .0%	0 .0%	1 12.5%	0 0%	2 25.0%	2 25.0%	0 0%	1 12.5%	0 0%	0 0%	0 0%	0 0%
3. Food, Tobacco, Textiles	0 .0%	3 6.3%	0 .0%	2 4.2%	2 4.2%	1 2.1%	4 8.3%	7 14.6%	10 20.8%	9 18.8%	2 4.2%	2 4.2%	2 4.2%	4 8.3%
4. Construction	3 13.0%	4 17.4%	2 8.7%	3 13.0%	1 4.3%	0 0%	2 8.7%	3 13.0%	1 4.3%	3 13.0%	1 4.3%	0 0%	0 0%	0 0%
5. Lumber, Furniture, Pkg.	0 .0%	0 .0%	0 .0%	3 15.8%	1 5.3%	3 15.8%	2 10.5%	1 5.3%	2 10.5%	4 21.1%	2 10.5%	0 0%	0 0%	1 5.3%
6. Printing, Publishing	0 .0%	0 .0%	0 .0%	3 20.0%	1 6.7%	3 20.0%	2 13.3%	2 13.3%	0 0%	2 13.3%	0 0%	0 0%	1 6.7%	1 6.7%
7. Chemicals/Rubber/Plastic	2 6.5%	1 3.2%	2 6.5%	1 3.2%	4 12.9%	0 0%	3 9.7%	4 12.9%	3 9.7%	5 16.1%	0 0%	0 0%	1 3.2%	5 16.1%
8. Prim. Metals/Leather/Stone	1 5.6%	2 11.1%	0 0%	1 5.6%	1 5.6%	0 0%	3 16.7%	5 27.8%	0 0%	2 11.1%	0 0%	0 0%	2 11.1%	1 5.6%
9. Metal Products	0 0%	3 15.8%	2 10.5%	3 15.8%	2 10.5%	1 5.3%	0 0%	3 15.8%	0 0%	3 15.8%	1 5.3%	0 0%	1 5.3%	0 0%
10. Machinery	1 4.8%	0 .0%	2 9.5%	3 14.3%	1 4.8%	0 0%	2 9.5%	4 19.0%	2 9.5%	1 4.8%	1 4.8%	1 4.8%	2 9.5%	1 4.8%
11. Elec. Equipment Instruments	2 6.7%	2 6.7%	2 6.7%	3 10.0%	1 3.3%	1 3.3%	2 6.7%	2 6.7%	2 6.7%	7 23.3%	0 0%	0 0%	4 13.3%	2 6.7%
12. Misc. Manufacturing Ind.	1 3.6%	2 7.1%	1 3.6%	1 3.6%	3 10.7%	2 7.1%	1 3.6%	3 10.7%	5 17.9%	1 3.6%	0 0%	2 7.1%	4 14.3%	2 7.1%
13. Transportation Equipment	0 0%	0 0%	0 0%	1 10.0%	1 10.0%	1 10.0%	1 10.0%	2 20.0%	0 0%	1 10.0%	1 10.0%	0 0%	1 10.0%	1 10.0%
14. Transportation Service	3 11.5%	2 7.7%	0 0%	1 3.8%	1 3.8%	1 7.7%	3 11.5%	4 15.4%	1 3.8%	3 11.5%	0 0%	0 0%	2 7.7%	4 15.4%
15. Telecommunications	0 .0%	1 5.9%	1 5.9%	0 0%	1 5.9%	0 0%	0 0%	3 17.6%	1 5.9%	3 17.6%	0 0%	0 0%	5 29.4%	2 11.8%
16. Electric Utility	2 6.7%	2 6.7%	0 0%	0 0%	4 13.3%	2 6.7%	4 13.3%	5 16.7%	0 0%	3 10.0%	1 3.3%	2 6.7%	3 10.0%	2 6.7%
17. Natural Gas Utility	0 .0%	0 .0%	0 0%	0 0%	2 13.3%	0 0%	1 6.7%	1 6.7%	1 6.7%	1 6.7%	1 6.7%	0 0%	0 0%	8 53.3%
18. Combination Utility	1 5.6%	1 5.6%	1 5.6%	0 0%	3 16.7%	0 0%	0 0%	1 5.6%	4 22.2%	2 11.1%	1 5.6%	1 5.6%	2 11.1%	1 5.6%
19. Wholesale Trade	2 16.7%	2 16.7%	0 0%	0 0%	3 25.0%	0 0%	0 0%	1 8.3%	1 8.3%	3 25.0%	0 0%	0 0%	0 0%	0 0%
20. Retail Trade	2 5.4%	0 .0%	5 13.5%	3 8.1%	2 5.4%	0 0%	3 8.1%	7 18.9%	4 10.8%	4 10.8%	0 0%	0 0%	4 10.8%	3 8.1%
21. Finance-Bank/S&L/Holding Co.	3 5.7%	3 5.7%	2 3.8%	7 13.2%	3 5.7%	2 3.8%	8 15.1%	11 20.8%	8 15.1%	2 3.8%	0 0%	2 3.8%	1 1.9%	1 1.9%
22. Finance-Real Estate/Other	1 3.0%	2 6.1%	0 0%	3 9.1%	1 3.0%	1 3.0%	2 6.1%	6 18.2%	4 12.1%	8 24.2%	1 3.0%	1 3.0%	0 0%	3 9.1%
23. Insurance	1 2.8%	2 5.6%	3 8.3%	4 11.1%	0 0%	5 13.9%	1 2.8%	6 16.7%	6 16.7%	6 16.7%	0 0%	0 0%	1 2.8%	1 2.8%
24. Personal, Bus. Service	7 15.2%	5 10.9%	3 6.5%	6 13.0%	8 17.4%	3 6.5%	2 4.3%	5 10.9%	1 2.2%	2 4.3%	1 2.2%	0 0%	2 4.3%	1 2.2%
25. Health Care	6 25.0%	2 8.3%	3 12.5%	3 12.5%	4 16.7%	0 0%	3 12.5%	1 4.2%	2 8.3%	0 0%	0 0%	0 0%	0 0%	0 0%
26. Educational/Nonprofit Inst.	13 33.3%	8 20.5%	2 5.1%	3 7.7%	2 5.1%	0 0%	2 5.1%	4 10.3%	1 2.6%	3 7.7%	1 2.6%	0 0%	0 0%	0 0%
27. Governmental	35 59.3%	11 18.6%	1 1.7%	4 6.8%	1 1.7%	0 0%	0 0%	1 1.7%	0 0%	2 3.4%	0 0%	2 3.4%	2 3.4%	0 0%
Total Respondents in Each Category	91 12.0%	58 7.7%	33 4.4%	61 8.1%	55 7.3%	28 3.7%	53 7.0%	98 12.9%	62 8.2%	84 11.1%	16 2.1%	17 2.2%	48 6.3%	53 7.0%

TABLE 38  
1990 LIABILITY LIMITS CARRIED: PROFILE BY 1989 REVENUE SIZE

Revenues	AMOUNT OF 1990 UMBRELLA/EXCESS LIABILITY LIMITS CARRIED (\$ in millions)													
	Up to \$5	\$6 to \$10	\$11 to \$15	\$16 to \$20	\$21 to \$25	\$26 to \$30	\$31 to \$40	\$41 to \$50	\$51 to \$75	\$76 to \$100	\$101 to \$125	\$126 to \$150	\$151 to \$200	Over \$200
\$30,000,000 or less	16 53.3%	3 10.0%	4 13.3%	1 3.3%	1 3.3%	1 3.3%	1 3.3%	1 3.3%	1 3.3%	1 3.3%	0 .0%	0 .0%	0 .0%	0 0%
\$30,000,001 to \$100,000,000	20 27.0%	20 27.0%	9 12.2%	9 12.2%	5 6.8%	1 1.4%	1 1.4%	1 1.4%	3 4.1%	4 5.4%	0 .0%	1 1.4%	0 .0%	0 0%
\$100,000,001 to \$300,000,000	19 12.3%	15 9.7%	12 7.7%	24 15.5%	16 10.3%	6 3.9%	17 11.0%	21 13.5%	7 4.5%	7 4.5%	0 .0%	4 2.6%	5 3.2%	2 1.3%
\$300,000,001 to \$1,000,000,000	16 8.2%	14 7.1%	3 1.5%	11 5.6%	22 11.2%	13 6.6%	19 9.7%	36 18.4%	19 9.7%	22 11.2%	5 2.6%	2 1.0%	8 4.1%	6 3.1%
\$1,000,000,001 to \$3,000,000,000	7 4.6%	1 .7%	3 2.0%	6 3.9%	7 4.6%	5 3.3%	9 5.9%	19 12.5%	19 12.5%	29 19.1%	6 3.9%	6 3.9%	15 9.9%	20 13.2%
\$3,000,000,001 or higher	3 3.3%	1 1.1%	1 1.1%	1 1.1%	0 .0%	1 1.1%	1 1.1%	5 5.5%	11 12.1%	17 18.7%	4 4.4%	3 3.3%	19 20.9%	24 26.4%
Total all respondents in each category	81 11.6%	54 7.7%	32 4.6%	52 7.4%	51 7.3%	27 3.9%	48 6.9%	83 11.9%	60 8.6%	80 11.5%	15 2.1%	16 2.3%	47 6.7%	52 7.4%

## **DIRECTORS' AND OFFICERS' LIABILITY LIMITS**

Respondents were asked to indicate the amount of directors' and officers' liability insurance limits carried, including excess limits. Table 39 shows that half of the 485 responses to this question, 50.9%, carried limits of \$15 million or less.

## **PREDOMINANT LIABILITY DEDUCTIBLE/RETENTION**

Respondents were asked to indicate the size of their predominant liability deductible/retention. Table 40 shows the liability deductible/retention corresponding to six revenue ranges. As expected, larger organizations reported higher liability deductibles/retentions. For example, 56.6% of respondents with revenues greater than \$3 billion maintained a deductible/retention between \$500,001 and \$5 million.

**TABLE 39**  
**1990 DIRECTORS' AND OFFICERS' LIMITS CARRIED:**  
**PROFILE BY 1989 REVENUES**

Revenues	AMOUNT OF 1990 DIRECTORS' & OFFICERS' LIMITS CARRIED (\$in millions)												
	Less than \$1	\$1 to \$5	\$6 to \$10	\$11 to \$15	\$16 to \$20	\$21 to \$25	\$26 to \$30	\$31 to \$40	\$41 to \$50	\$51 to \$75	\$76 to \$100	Over \$100	
\$30,000,000 or less	0 .0%	12 70.6%	3 17.6%	0 .0%	0 .0%	1 5.9%	0 .0%	0 .0%	0 .0%	1 5.9%	0 .0%	0 .0%	
\$30,000,001 to \$100,000,000	0 .0%	28 70.0%	7 17.5%	1 2.5%	1 2.5%	2 5.0%	0 .0%	0 .0%	0 .0%	1 2.5%	0 .0%	0 .0%	
\$100,000,001 to \$300,000,000	1 1.1%	37 38.9%	23 24.2%	9 9.5%	7 7.4%	7 7.4%	3 3.2%	6 6.3%	0 .0%	1 1.1%	1 1.1%	0 .0%	
\$300,000,001 to \$1,000,000,000	0 .0%	26 18.8%	34 24.6%	22 15.9%	13 9.4%	17 12.3%	2 1.4%	6 4.3%	5 3.6%	7 5.1%	5 3.6%	1 .7%	
\$1,000,000,001 to \$3,000,000,000	0 .0%	8 6.6%	17 14.0%	12 9.9%	13 10.7%	26 21.5%	3 2.5%	5 4.1%	14 11.6%	12 9.9%	6 5.0%	5 4.1%	
\$3,000,000,001 or higher	0 0%	1 1.4%	4 5.4%	2 2.7%	3 4.1%	5 6.8%	4 5.4%	8 10.8%	14 18.9%	10 13.5%	14 18.9%	9 12.2%	
Total all respondents in each category	1 .2%	112 23.1%	88 18.1%	46 9.5%	37 7.6%	58 12.0%	12 2.5%	25 5.2%	33 6.8%	32 6.6%	26 5.4%	15 3.1%	

TABLE 40  
1990 LIABILITY DEDUCTIBLE/RETENTION CARRIED:  
PROFILE BY 1989 REVENUES

Revenues	DEDUCTIBLE/RETENTION									
	\$500 or Less	\$501 to \$1,000	\$1,001 to \$5,000	\$5,001 to \$10,000	\$10,001 to \$50,000	\$50,001 to \$100,000	\$100,001 to \$500,000	\$500,001 to \$1,000,000	\$1,000,001 to \$5,000,000	\$5,000,001 to \$10,000,000
\$30,000,000 or less	0 .0%	3 27.3%	0 .0%	1 9.1%	5 45.5%	2 18.2%	0 .0%	0 .0%	0 .0%	0 .0%
\$30,000,001 to \$100,000,000	1 2.3%	1 2.3%	6 14.0%	3 7.0%	8 18.6%	4 9.3%	16 37.2%	3 7.0%	1 2.3%	1 2.3%
\$100,000,001 to \$300,000,000	1 1.2%	8 9.5%	6 7.1%	5 6.0%	9 10.7%	18 21.4%	24 28.6%	6 7.1%	7 8.3%	7 8.3%
\$300,000,001 to \$1,000,000,000	0 .0%	4 3.3%	6 4.9%	3 2.5%	9 7.4%	13 10.7%	58 47.5%	19 15.6%	10 8.2%	10 8.2%
\$1,000,000,001 to \$3,000,000,000	3 2.9%	4 3.9%	3 2.9%	5 4.9%	6 5.8%	6 5.8%	40 38.8%	20 19.4%	16 15.5%	16 15.5%
\$3,000,000,001 or higher	0 .0%	1 1.7%	0 .0%	0 .0%	5 8.3%	2 3.3%	18 30.0%	11 18.3%	23 38.3%	23 38.3%
Total all respondents in each category	5 1.2%	21 5.0%	21 5.0%	17 4.0%	42 9.9%	45 10.6%	156 36.9%	59 13.9%	57 13.5%	57 13.5%

## UNREIMBURSED (SELF-ASSUMED) WORKERS' COMPENSATION LOSSES

Table 41 shows that the average unreimbursed workers' compensation loss was \$3.8 million for 1989, and \$3.5 million for 1988. Losses were .196% of revenues, and the average loss per employee was \$253. A respondent from the transportation service industry (group 14) reported the highest 1989 and 1988 incurred self-assumed workers' compensation losses (reserves, IBNR, and paid amounts) of \$40 million and \$30 million, respectively.

These calculations include only those respondents reporting that they self-insure workers' compensation. In a limited number of circumstances, respondents reported losses that were paid by insurers. We attempted to review this with respondents to eliminate double counting, although some duplication may remain.

TABLE 41 LIABILITY RISK FINANCING COSTS: UNREIMBURSED WORKERS' COMPENSATION LOSSES				
	Gross Losses	Average	% Increase	Number of Respondents
1989	\$1,225,483,513	\$3,794,066	8.2%	323
1988	\$1,073,383,711	\$3,507,789		306
	Gross Losses	Gross Revenues	% of Revenues	
1989	\$1,151,984,009	\$586,466,000,000	0.196%	309
	Gross Losses	Gross Employees	Average Loss Per Employee	
1989	\$1,173,541,043	4,632,446	\$253	316