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Michael R. Levin, Consultant

Sandra R. Duncan, Risk Analyst

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## INTRODUCTION

The 1991 Cost of Risk Survey is the sixth 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, 1985, and 1990.

This Survey documents the total cost of risk for all participants, and by industry group and financial size. Data collected was for calendar year 1990. 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
- Comments on Data Reporting
- Interpreting the Results.

## THE COST OF RISK CONCEPT

Risk management professionals continue to debate the problem of measuring their effectiveness in managing costs. In 1962, Douglas Barlow, a former President of RIMS and the now-retired Risk Manager for Canada's Massey-Ferguson Ltd., proposed the concept of the "cost of risk" as a useful method 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 consists of the sum of:

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

In principle, cost of risk 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 recordkeeping associated with risk management can vary considerably. Cost of risk comparisons between organizations can therefore become less meaningful.

In an attempt to make more meaningful comparisons between organizations, the 1991 Survey questionnaire had five distinct parts (Appendix B contains a copy of the 1991 Survey questionnaire). This approach addresses the 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 Property and Liability Losses
- Captive Insurance Program.

Along with risk control costs, these five parts comprise the overall cost of risk. However, it is typically difficult for organizations to quantify risk control expenditures, since activities can be dispersed throughout an organization rather than centralized into one unit. Since in the past we received few responses to questions regarding risk control costs, risk control expenditures were not requested on the 1991 Survey and are therefore excluded from the data presented in this report.



## I. DEMOGRAPHICS

### SURVEY RESPONSE

The 1991 Cost of Risk Survey was sent to 4,200 member organizations of RIMS in May of 1991. A total of 847 (20%) RIMS member organizations responded in sufficient detail to be included in the analysis. Not all surveys were complete in every respect, so the number of individual responses used to calculate certain statistics sometimes varied from the total number of responses.

Respondents were located in 45 states and the District of Columbia, as well as 9 Canadian provinces. Of the respondents from the United States, 167 respondents were located in the Northeast; 237 were located in the Midwest; 197 in the South; and 143 in the West.

One hundred three (12.2%) of the respondents were Canadian. Most Canadian organizations reported premiums, losses, and other costs in Canadian dollars. We converted Canadian dollars to U.S. dollars in the tables in which we combined Canadian and U.S. responses. The conversion rate used for this 1991 Survey was \$1 Canadian = \$.8621 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 1991 Cost of Risk Survey. The overall totals and averages represent a slight increase in revenues and employees as related to the 1990 Cost of Risk Survey, but a decrease in deposits and assets.

<b>TABLE 1 RESPONDENT PROFILE Aggregates</b>		
	<b>1990</b>	<b>Number of Respondents</b>
Total Revenues	\$ 1,434.8 billion	808
Total Deposits	\$ 597.8 billion	56
Total Assets	\$ 2,636.4 billion	690
Total Employees	\$ 9.3 million	840
<b>Averages</b>		
	<b>1990</b>	
Average Revenues	\$ 1.7 billion	
Average Deposits	\$ 10.6 billion	
Average Assets	\$ 3.8 billion	
Average Employees	11,098	
Average Size of Risk Management/Insurance Department	4.67 persons	

## **INDUSTRY GROUP ANALYSIS**

We asked 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 educational and nonprofit institutions sector, with 8.5% of the total number of respondents. The industry groups with the highest average cost of risk as a percent of revenues were the transportation service industry and the health care industry at 2.70% and 2.62%, respectively, followed by educational and nonprofit institutions, at 1.16%.

Table 2 also shows the industrywide total premiums plus unreimbursed losses as a percent of revenues for each industry group. By this measure, the health care industry had the highest cost at 2.52% of revenues, followed by the transportation service industry at 2.51% of revenues. As indicated above, these same groups also had the highest cost of risk.

**TABLE 2  
RESPONDENT PROFILE: INDUSTRY GROUPS  
1990**

<b>Industry Group</b>	<b>No. of Respondents</b>	<b>% of Total</b>	<b>Industrywide Cost of Risk as a Percent of Revenues in 1990</b>	<b>Industrywide Premiums Plus Unreimbursed Losses as a % of Revenues in 1990</b>
1 Mining & Energy	41	4.84%	0.60%	0.61%
2 Food, Agriculture	9	1.06	0.71	0.67
3 Food, Tobacco, Textiles	37	4.37	0.62	0.59
4 Construction	22	2.60	0.98	0.94
5 Lumber, Furniture, Packaging	17	2.01	0.79	0.79
6 Printing, Publishing	17	2.01	0.61	0.58
7 Chemicals, Rubber, Plastic	38	4.49	0.46	0.46
8 Primary Metals, Leather, Stone	20	2.36	0.60	0.60
9 Metal Products	21	2.48	0.72	0.70
10 Machinery	19	2.24	0.31	0.41
11 Electrical Equipment, Instruments	35	4.13	0.59	0.57
12 Misc. Manufacturing Industries	20	2.36	0.88	0.89
13 Transportation Equipment	8	0.94	0.45	0.45
14 Transportation Service	32	3.78	2.70	2.51
15 Telecommunications	19	2.24	0.36	0.35
16 Electric Utility	41	4.84	0.46	0.42
17 Natural Gas Utility	21	2.48	0.77	0.72
18 Combination Utility	32	3.78	0.74	0.72
19 Wholesale Trade	15	1.77	0.47	0.45
20 Retail Trade	47	5.55	0.67	0.64
21 Finance-Bank, S&L, Holding Co	54	6.38	0.29	0.28
22 Finance-Real Estate, Other	29	3.42	0.56	0.53
23 Insurance	40	4.72	0.18	0.16
24 Personal, Business Service	44	5.19	1.05	1.02
25 Health Care	31	3.66	2.62	2.52
26 Educational, Nonprofit Institutions	72	8.50	1.16	1.08
27 Governmental	66	7.79	0.65	0.61
<b>TOTAL</b>	<b>847</b>	<b>100.00%</b>	<b>0.61%</b>	<b>0.59%</b>

## **OPERATING DATA**

Tables 1 and 3 present a summary of the 1990 operating data for Survey respondents. Reported revenues totaled \$1,434.8 billion (808 respondents), the average revenues equalled \$1.7 billion, and the median for revenues was \$500 million. The highest amount of revenues reported by a respondent was \$125 billion, while the lowest was \$2 million.

Financial institutions frequently did not report revenues, but did provide data concerning deposits. The aggregate deposits totalled \$597.8 billion in 1990; the average was \$10.6 billion; the median for deposits was \$5 billion; the highest deposit value reported was \$71 billion; and the lowest deposit value was \$2 million.

The 1990 aggregate assets were \$2,636.4 billion; the average was \$3.8 billion; the median for assets was \$769 million; and the highest reported asset value was \$180 billion.

Respondent organizations reported a total of 9.3 million employees in 1990, averaging 11,098 employees per organization. The median number of employees was 3,445, the lowest number of employees reported was 6, and the highest was 761,000.

The majority of respondents, 86.65%, reported a U.S.-based domicile; while 12.17% reported a Canadian-based domicile. Only 1.18% of respondents (10 organizations) reported a domicile based outside the U.S. and Canada.

**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>						
1990	\$2,000,000	\$167,000,000	\$500,000,000	\$1,400,000,000	\$124,705,000,000	808
<b>Assets</b>						
1990	\$1,000,000	\$225,000,000	\$769,000,000	\$2,700,000,000	\$180,237,000,000	690
<b>Deposits</b>						
1990	\$2,000,000	\$1,419,000,000	\$4,607,500,000	\$12,459,500,000	\$70,713,000,000	56
<b>Number of Employees</b>						
1990	6	1,331	3,445	9,606	761,000	840
<b>ORGANIZATION DOMICILE</b>						
				<b>Number of Respondents</b>	<b>Percent of Sample</b>	
				734	86.65%	
				103	12.17%	
				10	1.18%	
				847	100.00%	

**INDUSTRY AVERAGES**

Table 4 presents average revenues, assets, and employees for the 27 industry groups. Respondents from the transportation equipment industry recorded the highest average revenues while educational and non-profit institutions reported the lowest average revenues. The transportation equipment industry reported the highest average assets. The industry group with the lowest average assets was construction. The transportation equipment industry also reported the largest average number of employees while the respondents from the finance-- real estate, other industry had the lowest average employee number.

**TABLE 4  
RESPONDENT PROFILE: INDUSTRY GROUP AVERAGES  
1990**

<b>Industry Group</b>	<b>Revenues (000,000 omitted)</b>	<b>Assets (000,000 omitted)</b>	<b>Employees</b>
1 Mining & Energy	\$2,442	\$2,968	4,485
2 Food, Agriculture	791	444	2,818
3 Food, Tobacco, Textiles	1,585	940	10,488
4 Construction	609	432	2,378
5 Lumber, Furniture, Packaging	1,530	1,542	8,840
6 Printing, Publishing	819	701	7,959
7 Chemicals, Rubber, Plastic	1,866	1,486	8,650
8 Primary Metals, Leather, Stone	2,419	2,341	15,169
9 Metal Products	1,109	548	5,317
10 Machinery	2,656	2,323	21,060
11 Electrical Equipment, Instruments	2,222	1,957	15,545
12 Misc. Manufacturing Industries	1,339	1,047	10,210
13 Transportation Equipment	17,271	24,860	108,123
14 Transportation Service	599	1,281	7,555
15 Telecommunications	3,603	7,416	36,007
16 Electric Utility	1,585	4,052	3,779
17 Natural Gas Utility	1,138	1,996	3,513
18 Combination Utility	1,189	2,731	3,961
19 Wholesale Trade	1,718	441	4,680
20 Retail Trade	2,842	1,114	29,710
21 Finance-Bank, S&L, Holding Co.	984	16,055	6,749
22 Finance-Real Estate, Other	681	1,796	2,166
23 Insurance	2,691	7,679	6,641
24 Personal, Business Service	1,009	2,267	11,272
25 Health Care	459	642	7,694
26 Educational, Nonprofit Institutions	423	694	8,038
27 Governmental	2,059	737	13,277

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

<b>TABLE 5: DISTRIBUTION OF REVENUES BY INDUSTRY GROUP (\$ in millions)</b>						
<b>Industry Group</b>	<b>1990</b>					
	<b>Lowest Value</b>	<b>First Quartile</b>	<b>Median</b>	<b>Third Quartile</b>	<b>Highest Value</b>	<b>Industry-wide</b>
1 Mining & Energy	7	256	562	1,866	24,800	2,442
2 Food, Agriculture	40	300	632	850	2,832	792
3 Food, Tobacco, Textiles	35	450	900	1,517	7,751	1,586
4 Construction	25	100	246	733	3,200	610
5 Lumber, Furniture, Packaging	172	625	1,191	2,350	4,800	1,627
6 Printing, Publishing	100	392	595	1,297	2,770	819
7 Chemicals, Rubber, Plastic	16	245	650	1,718	24,081	1,917
8 Primary Metals, Leather, Stone	20	393	696	4,053	10,865	2,420
9 Metal Products	7	184	368	1,200	8,000	1,110
10 Machinery	38	268	1,400	4,000	14,000	2,656
11 Electrical Equipment, Instruments	15	325	720	3,056	12,915	2,223
12 Misc. Manufacturing Industries	36	182	674	1,138	13,000	1,340
13 Transportation Equipment	22	168	1,347	5,209	124,705	17,272
14 Transportation Service	17	68	169	425	4,617	639
15 Telecommunications	25	195	1,100	7,680	14,345	3,603
16 Electric Utility	47	303	593	1,508	17,326	1,586
17 Natural Gas Utility	100	325	668	1,528	4,083	1,139
18 Combination Utility	17	57	444	1,417	9,470	1,189
19 Wholesale Trade	6	83	1,001	2,159	8,000	1,719
20 Retail Trade	2	326	989	2,000	32,070	2,843
21 Finance-Bank, S&L, Holding Co.	14	240	717	2,104	13,672	1,898
22 Finance-Real Estate, Other	2	80	203	452	11,000	706
23 Insurance	3	410	1,300	2,751	27,000	2,760
24 Personal, Business Service	8	80	318	1,000	11,000	1,033
25 Health Care	11	141	216	475	2,000	459
26 Educational, Nonprofit Institutions	3	86	183	585	3,445	424
27 Governmental	28	96	224	931	55,000	2,266

## II. HIGHLIGHTS

The 1991 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 in making inferences from statistically small industry or cost sub-group samples. Risk control costs are not included in this report. Therefore, the total cost of risk figures do not include the risk control component. Previously published survey reports (1979-1985) included these risk control costs.

### **COST OF RISK**

The aggregate (gross) cost of risk for all respondents was \$9.0 billion in 1990. This represents an aggregate total cost of risk of 0.61% of revenues in 1990. As a percentage of gross assets, the aggregate cost of risk was 0.29%. For banks and savings and loans reporting deposits, the aggregate cost of risk was 0.04% of deposits. (Chapter VIII, starting on page 65, contains the tables summarizing the total cost of risk.)

Table 6 shows the changes in the composition of the cost of risk dollar for 1990 compared to the previous survey years. We excluded risk control expenditures from all of the previous years since we did not tabulate risk control expenditures for 1989 or 1990. Negative figures for 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 liability losses have increased. Workers' compensation premiums actually went down in 1990 over past years, but 1990's unreimbursed workers' compensation losses increased significantly to 18.9% of the cost of risk dollar, compared to 10.8% in 1984 and 16.7% in 1989.



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

	<b>1977</b>	<b>1978</b>	<b>1979</b>	<b>1980</b>	<b>1981</b>	<b>1982</b>	<b>1983</b>	<b>1984</b>	<b>1989</b>	<b>1990</b>
Property Premiums	26.3%	24.6%	25.1%	24.4%	25.5%	25.5%	18.7%	19.4%	12.1%	12.1%
Unreimbursed Property Losses	8.7	9.4	8.3	9.7	6.9	7.3	5.5	5.6	3.1	5.1
Liability Premiums	24.9	24.2	21.3	21.0	18.5	18.0	19.7	19.6	24.8	24.5
Unreimbursed Liability Losses	7.6	7.6	8.6	8.3	9.1	9.6	14.7	14.2	18.4	18.1
Workers' Compensation Premiums	26.3	26.3	25.4	24.6	25.2	25.6	24.7	25.2	22.7	19.4
Unreimbursed Workers' Compensation Losses	7.2	7.8	11.3	11.7	13.0	12.3	12.3	10.8	16.7	18.9
Captive Costs (profit)	-3.7	-2.7	-3.3	-3.3	-1.9	-2.3	-2.0	-1.5	-1.6	-2.0
Outside Services	0.4	0.4	0.7	0.8	0.7	0.8	1.0	1.1	0.4	0.8
Departmental Costs	2.3	2.2	2.6	2.8	3.0	3.3	5.5	5.7	3.2	3.1
	100.0	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. 7.1% of the respondents had limits of less than \$5 million in 1990, compared to 5.6% in 1989. The percent of organizations that are self-insured increased from 0.66% in 1989 to 1.11% in 1990.

Limits for excess/umbrella and directors' and officers' liability, varied significantly by industry group and revenue size (Tables 38-40). In addition, the 1991 excess/umbrella liability limits and directors' and officers' liability limits carried by respondents as a whole were slightly higher than the limits reported in the 1990 Survey.

**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	1990 Percent with this Limit	Cumulative 1990 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%	7.05%	7.05%
\$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	12.63	19.68
\$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	16.83	36.51
\$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	23.89	60.40
\$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	13.12	73.52
\$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	25.37	98.89
\$0 (Self-insured)*									0.66	100.00	1.11	100.00

\*Note: The 1990 and 1991 Survey forms 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 insurance program 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 4.4 cents per \$100 of value. The mining and energy and the construction industry groups reported the highest average cost at 0.12% and 0.11% respectively, of insured value. (Tables 9 and 25).
- **Retentions.** Retentions varied, principally, by size of organization. In addition, the 1991 property and liability deductibles for the total group of respondents were higher than those reported in the 1990 Survey. (Tables 18 and 41.)
- **Size of Risk Management/Insurance Department.** The average risk management/insurance department employs 4.67 persons, with a median size of 3 persons (2 professional, 1 clerical). The average risk management department size was practically the same as in 1989, (4.96 persons). Risk management/insurance department size was a function of organization size, responsibilities, and industry group classification (Tables 1, 56 and 57).
- **Top Risk Management Executive Reporting Relationship and Responsibilities.** The majority, 60.48%, of the risk management executives reported to financial functions (finance and treasury) while 11.12% reported to the CEO/president. The majority of the respondents reported having general or shared authority for purchasing property and liability insurance (92.5%), liability claims management (89.2%), workers' compensation insurance purchase (83.4%) and claim management (72.2%), property loss prevention (78.8%), employee and public safety (61.9%), and selection of brokers and/or agents (92.3%). (Tables 70-71).
- **Use and Compensation of Insurance Brokers/Agents.** Of the 51 respondents from the smallest revenue group (\$30 million or less), 25.5% used only one broker/agent, while 37.3% used two. Of the 95 respondents with revenues greater than \$3 billion, 76.8% used between two and five brokers/agents (Table 75). The majority of respondents compensated their broker/agent between 6% and 10% of property and liability premiums (Table 76).

### 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.

#### VALUATION

As shown in Table 8, 94.9% of Survey respondents indicated that they use replacement cost valuation when purchasing direct damage property insurance. Only 3.6% use the actual cash value method, while 1.5% use some other method. This result indicates a continued preference toward and availability of replacement cost valuation for property insurance.

<b>TABLE 8</b>		
<b>1990 PROPERTY RISK FINANCING COSTS: VALUATION BASIS</b>		
	<b>Number of Respondents</b>	<b>Percent of Sample</b>
Replacement Cost	795	94.9%
Actual Cash Value	30	3.6%
Other	13	1.5%
<b>Total</b>	<b>838</b>	<b>100.0%</b>

**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 (97%) insured on an all-risk basis. Also of note, the majority (85%) purchased property coverage with a property limit set on a blanket basis versus a specified per loss basis (10%). 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.

<b>TABLE 9</b> <b>1990 PROPERTY RISK FINANCING COSTS:</b> <b>PROPERTY DAMAGE, BUSINESS INTERRUPTION, AND EXTRA EXPENSE PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$757,729,522	\$924,060		820
Gross Premiums	Insured Value	Cost Per \$100 of Value	
\$653,554,342	\$1,496,830,000,000	\$0.0436	742
Gross Premiums	Gross Revenues	% of Revenues	
\$749,413,521	\$1,419,088,000,000	0.0528%	783
Gross Premiums	Gross Assets	% of Assets	
\$695,818,881	\$2,580,929,000,000	0.02696%	672

## 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 90.4% of all earthquake premiums. Of those 60 respondents purchasing California earthquake insurance, 11 or 18% bought a per occurrence limit of \$10 million; 8 respondents or 13% purchased a limit of \$50 million; and 5 respondents or 8% purchased \$100 million or more in coverage.

TABLE 10 1990 PROPERTY RISK FINANCING COSTS: FLOOD/EARTHQUAKE PREMIUMS (INCLUDING CALIFORNIA)			
Gross Premiums \$19,050,193	Average \$186,766		Number of Respondents 102
Gross Premiums \$18,660,860	Gross Revenues \$202,168,000,000	% of Revenues 0.0092%	96
Gross Premiums \$18,807,853	Gross Assets \$290,797,000,000	% of Assets 0.0064%	94
CALIFORNIA EARTHQUAKE ONLY			
Gross Premiums \$11,722,205	Average \$195,370	% of All Earthquake Premiums 90.44%	60

## BOILER AND MACHINERY DIRECT DAMAGE AND BUSINESS INTERRUPTION PREMIUMS

The boiler and machinery direct damage and business interruption average premiums and premiums as a percent of revenues and assets, when reported, are included in Table 11. Premiums averaged \$97,264 per respondent in 1990, slightly lower than the 1989 average of \$104,955.

<b>TABLE 11</b>			
<b>1990 PROPERTY RISK FINANCING COSTS:</b>			
<b>BOILER AND MACHINERY DIRECT DAMAGE AND BUSINESS INTERRUPTION PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$32,583,631	\$97,264		335
Gross Premiums	Gross Revenues	% of Revenues	
\$32,317,518	\$471,734,000,000	0.00685%	315
Gross Premiums	Gross Assets	% of Assets	
\$29,301,180	\$1,095,014,000,000	0.00267%	276

#### **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 insurance premiums decreased from 1989 to 1990. The average fidelity/crime insurance premium was \$54,296 in 1990, and \$66,678 in 1989. It was 0.003% of revenues in 1990, and 0.004% of revenues in 1989.

<b>TABLE 12</b>			
<b>1990 PROPERTY RISK FINANCING COSTS:</b>			
<b>FIDELITY/CRIME INSURANCE PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$32,632,395	\$54,296		601
Gross Premiums	Gross Revenues	% of Revenues	
\$31,610,292	\$1,013,210,000,000	0.00311%	592
Gross Premiums	Gross Assets	% of Assets	
\$29,334,440	\$1,363,466,000,000	0.00215%	494



**FINANCIAL INSTITUTIONS BLANKET BOND PREMIUMS**

Table 13 provides the blanket bond premiums for financial institutions. Premiums averaged \$538,885, were 0.01% of revenues, and 0.008% 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.

Financial institution blanket bond premiums, like fidelity/crime insurance premiums, decreased from 1989 to 1990. The average financial institution blanket bond premium was \$538,885 in 1990, and \$717,318 in 1989. In 1990 it was 0.013% of revenues, while in 1989 it was 0.029% of revenues.

<b>TABLE 13                      1990 PROPERTY RISK FINANCING COSTS:                      FINANCIAL INSTITUTIONS BLANKET BOND PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$56,583,001	\$538,885		105
Gross Premiums	Gross Revenues	% of Revenues	
\$36,199,109	\$287,766,000,000	0.01257%	77
Gross Premiums	Gross Assets	% of Assets	
\$55,348,069	\$1,322,825,000,000	0.00418%	77
Gross Premiums	Gross Deposits	% of Deposits	
\$44,748,784	\$588,470,000,000	0.00760%	46

**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.

The average premiums paid for these "other" property coverages were higher at \$447,761 than the average premiums paid for flood/earthquake (\$186,766); boiler and machinery direct damage and

business interruption (\$97,264); and fidelity/crime (\$54,296). Property damage, business interruption and extra expense, and financial institutions blanket bond average premiums were higher at \$924,060 and \$538,885 respectively. "Other" property premiums as a percentage of revenues were also higher at 0.019% than all of the property lines except for property damage and time element (0.053%).

TABLE 14 1990 PROPERTY RISK FINANCING COSTS: OTHER PROPERTY PREMIUMS			
Gross Premiums	Average		Number of Respondents
\$187,612,232	\$447,761		419
Gross Premiums	Gross Revenues	% of Revenues	
\$175,789,862	\$944,452,000,000	0.01861%	399
Gross Premiums	Gross Assets	% of Assets	
\$179,782,560	\$1,536,883,000,000	0.01169%	361

#### 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 \$1,312,151 in 1990, and \$1,191,730 in 1989. Total property premiums were 0.073% of revenues in 1990 and 0.067% in 1989. Property premiums were 0.039% of assets in 1990 and 0.031% of assets in 1989.

**TABLE 15  
1990 PROPERTY RISK FINANCING COSTS:  
TOTAL PROPERTY INSURANCE PREMIUMS**

Gross Premiums	Average		Number of Respondents
\$1,086,461,104	\$1,312,151		828
Gross Premiums	Gross Revenues	% of Revenues	
\$1,044,245,292	\$1,421,338,000,000	0.0734%	791
Gross Premiums	Gross Assets	% of Assets	
\$1,008,515,183	\$2,594,001,000,000	0.0386%	679

### UNREIMBURSED PROPERTY LOSSES

The unreimbursed property loss data includes losses that 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 1990 loss information, as well as whether or not they kept records for unreimbursed property losses. Statistics on unreimbursed losses included only respondents who both indicated that they kept records and reported a figure for unreimbursed losses.

Table 16 provides statistics on total unreimbursed property losses. Respondents, on the average, had significantly higher unreimbursed losses in 1990 at \$757,919 than in 1989 at \$459,345, which is a percentage increase of 65%. A large portion of this increase was attributable to a large loss of \$105,400,000 reported by a respondent from the mining and energy industry. Unreimbursed property losses for 1990 were 54.25% of the total 1990 property premiums paid by respondents.

**TABLE 16  
PROPERTY RISK FINANCING COSTS:  
TOTAL UNREIMBURSED PROPERTY LOSSES**

	Gross Losses	Average	Percentage increase	Number of Respondents
1990	\$450,962,331	\$757,919	65.0%	595
1989	\$236,103,334	\$459,345		514
	Gross Losses	Gross Revenues	% of Revenues	
1990	\$449,895,131	\$1,104,983,000,000	0.0407%	567
	Gross Losses	Gross Assets	% of Assets	
1990	\$405,279,476	\$2,057,358,000,000	0.0196%	488
	Gross Losses	Gross Property Premiums	% of Property Premiums	
1990	\$444,923,631	\$820,047,764	54.25%	587

**TOTAL PROPERTY RISK FINANCING COSTS**

Table 17 shows total property premiums plus unreimbursed losses. These costs for 1990, which averaged \$1,839,023, were 0.104% of revenues, and 0.054% of assets.

**TABLE 17  
1990 PROPERTY RISK FINANCING COSTS:  
PREMIUMS PLUS UNREIMBURSED LOSSES**

Gross Property Risk Costs	Average			Number of Respondents
\$1,537,423,435	\$1,839,023			836
Gross Property Risk Costs	Gross Revenues	% of Revenues		
\$1,494,140,423	\$1,427,817,000,000	0.104%		798
Gross Property Risk Costs	Gross Assets	% of Assets		
\$1,413,794,659	\$2,606,293,000,000	0.054%		684

#### **PREDOMINANT PROPERTY RETENTION/DEDUCTIBLE**

Respondents were asked to indicate the size of their predominant property retention or deductible. Table 18 shows the 1991 property deductible size corresponding to six ranges of 1990 revenues. It also shows the deductible size for all respondents. Fifty-two 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**  
**1991 PROPERTY RETENTION/DEDUCTIBLE SIZE, BY 1990 REVENUE SIZE**

Revenues	Property Retention/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 5.7%	7 20.0%	10 28.6%	0 .0%	7 20.0%	3 8.6%	5 14.3%	1 2.9%	0 .0%	0 .0%
\$30,000,001 to \$100,000,000	1 1.3%	9 11.3%	22 27.5%	16 20.0%	20 25.0%	5 6.3%	3 3.8%	2 2.5%	2 2.5%	0 .0%
\$100,000,001 to \$300,000,000	2 1.4%	4 2.9%	24 17.1%	21 15.0%	39 27.9%	34 24.3%	15 10.7%	1 0.7%	0 .0%	0 .0%
\$300,000,001 to \$1,000,000,000	2 0.9%	12 5.5%	24 11.1%	21 9.7%	50 23.0%	58 26.7%	41 18.9%	5 2.3%	4 1.8%	0 .0%
\$1,000,000,001 to \$3,000,000,000	0 .0%	4 2.6%	6 3.8%	15 9.6%	41 26.3%	31 19.9%	44 28.2%	8 5.1%	7 4.5%	0 .0%
\$3,000,000,001 or higher	0 0%	0 0%	3 3.3%	4 4.4%	8 8.9%	23 25.6%	19 21.1%	14 15.6%	10 11.1%	9 10.0%
Total all respondents	7 1.0%	36 5.0%	89 12.4%	77 10.7%	165 23.0%	154 21.4%	127 17.7%	31 4.3%	23 3.2%	9 1.3%

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

Industry Group	1990					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industry-wide
1 Mining & Energy	.01	.14	.17	.28	2.71	2.19
2 Food, Agriculture	.02	.08	.19	.25	.56	.15
3 Food, Tobacco, Textiles	.03	.05	.06	.11	.29	.07
4 Construction	.00	.02	.08	.13	.46	.05
5 Lumber, Furniture, Packaging	.04	.06	.10	.20	.30	.15
6 Printing, Publishing	.03	.05	.06	.09	.18	.06
7 Chemicals, Rubber, Plastic	.01	.07	.11	.19	.51	.07
8 Primary Metals, Leather, Stone	.03	.06	.10	.18	.55	.13
9 Metal Products	.01	.05	.06	.09	.18	.04
10 Machinery	.02	.04	.07	.11	.47	.06
11 Electrical Eqmt., Instruments	.03	.06	.08	.11	.36	.07
12 Misc. Manufacturing Industries	.02	.05	.08	.11	.39	.10
13 Transportation Equipment	.01	.04	.05	.14	.93	.02
14 Transportation Service	.02	.03	.07	.21	2.22	.13
15 Telecommunications	.01	.04	.05	.08	.15	.04
16 Electric Utility	.01	.09	.13	.22	.88	.15
17 Natural Gas Utility	.02	.04	.06	.14	.54	.12
18 Combination Utility	.04	.10	.17	.44	1.25	.19
19 Wholesale Trade	.00	.02	.04	.06	4.61	.02
20 Retail Trade	.01	.02	.04	.07	.24	.03
21 Finance-Bank, S&L, Holding Co.	.03	.06	.13	.43	3.65	.13
22 Finance-Real Estate, Other	.02	.11	.24	.68	13.76	.14
23 Insurance	.01	.01	.02	.03	.09	.02
24 Personal, Business Service	.00	.03	.05	.11	3.49	.03
25 Health Care	.03	.04	.06	.11	6.90	.11
26 Educational, Nonprofit Institutions	.01	.07	.10	.15	16.36	.08
27 Governmental	.00	.04	.07	.15	4.77	.02

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

Industry Group	1990					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industry-wide
1 Mining & Energy	.00	.06	.13	.27	3.79	.16
2 Food, Agriculture	.08	.14	.25	.32	.82	.26
3 Food, Tobacco, Textiles	.03	.07	.11	.18	.39	.12
4 Construction	.02	.05	.10	.26	.58	.07
5 Lumber, Furniture, Packaging	.02	.08	.13	.20	.29	.15
6 Printing, Publishing	.03	.04	.08	.14	.17	.07
7 Chemicals, Rubber, Plastic	.02	.07	.16	.22	.48	.09
8 Primary Metals, Leather, Stone	.03	.08	.11	.19	.56	.14
9 Metal Products	.02	.08	.12	.16	.38	.09
10 Machinery	.02	.05	.07	.14	.58	.07
11 Electrical Eqmt., Instruments	.03	.06	.11	.13	.30	.07
12 Misc. Manufacturing Industries	.02	.07	.13	.19	.64	.13
13 Transportation Equipment	.01	.02	.07	.22	.27	.01
14 Transportation Service	.01	.03	.07	.15	.40	.06
15 Telecommunications	.00	.02	.03	.05	.09	.02
16 Electric Utility	.00	.03	.05	.09	.20	.06
17 Natural Gas Utility	.01	.03	.06	.07	.21	.07
18 Combination Utility	.00	.03	.07	.16	.36	.08
19 Wholesale Trade	.03	.09	.18	.23	1.40	.11
20 Retail Trade	.01	.07	.12	.17	.80	.07
21 Finance-Bank, S&L, Holding Co.	.00	.01	.01	.02	5.40	.01
22 Finance-Real Estate, Other	.01	.03	.04	.10	11.30	.05
23 Insurance	.00	.00	.01	.02	.58	.01
24 Personal, Business Service	.00	.05	.09	.12	1.51	.01
25 Health Care	.02	.04	.06	.13	.50	.08
26 Educational, Nonprofit Institutions	.00	.03	.05	.10	20.67	.05
27 Governmental	.00	.02	.03	.07	.44	.07



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

Industry Group	1990					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industry-wide
1 Mining & Energy	.00	.03	.05	.11	1.23	.14
2 Food, Agriculture	.01	.01	.03	.10	.18	.06
3 Food, Tobacco, Textiles	.00	.01	.01	.03	.07	.01
4 Construction	.00	.00	.03	.05	.14	.01
5 Lumber, Furniture, Packaging	.00	.01	.02	.08	.43	.10
6 Printing, Publishing	.00	.01	.01	.01	.04	.00
7 Chemicals, Rubber, Plastic	.00	.01	.01	.03	.23	.02
8 Primary Metals, Leather, Stone	.00	.01	.03	.06	.31	.05
9 Metal Products	.00	.01	.01	.01	.03	.01
10 Machinery	.00	.01	.01	.03	.61	.02
11 Electrical Eqmt., Instruments	.00	.01	.01	.02	.04	.01
12 Misc. Manufacturing Industries	.00	.01	.01	.02	.14	.01
13 Transportation Equipment	.00	.00	.01	.03	.20	.00
14 Transportation Service	.00	.02	.13	.29	.83	.03
15 Telecommunications	.00	.01	.01	.02	.78	.03
16 Electric Utility	.00	.02	.05	.09	.77	.04
17 Natural Gas Utility	.01	.01	.03	.05	.12	.03
18 Combination Utility	.00	.03	.06	.13	4.24	.17
19 Wholesale Trade	.00	.00	.01	.03	.04	.00
20 Retail Trade	.00	.00	.01	.04	12.00	.01
21 Finance-Bank, S&L, Holding Co.	.00	.00	.01	.02	.11	.01
22 Finance-Real Estate, Other	.00	.02	.04	.17	4.44	.02
23 Insurance	.00	.00	.00	.01	1.02	.00
24 Personal, Business Service	.00	.00	.01	.03	7.55	.01
25 Health Care	.00	.00	.01	.01	.07	.01
26 Educational, Nonprofit Institutions	.00	.01	.02	.05	11.58	.05
27 Governmental	.00	.01	.03	.05	10.21	.02

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

Industry Group	1990					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industry-wide
1 Mining & Energy	.00	.01	.03	.07	.37	.11
2 Food, Agriculture	.01	.01	.07	.08	.54	.10
3 Food, Tobacco, Textiles	.00	.01	.02	.06	.21	.02
4 Construction	.00	.01	.03	.12	.29	.01
5 Lumber, Furniture, Packaging	.00	.01	.03	.07	.30	.10
6 Printing, Publishing	.00	.01	.01	.02	.04	.01
7 Chemicals, Rubber, Plastic	.00	.01	.02	.03	.16	.03
8 Primary Metals, Leather, Stone	.01	.02	.03	.07	.34	.05
9 Metal Products	.00	.01	.01	.04	.05	.01
10 Machinery	.00	.01	.02	.04	.30	.02
11 Electrical Eqmt., Instruments	.00	.01	.01	.02	.06	.01
12 Misc. Manufacturing Industries	.00	.01	.01	.05	.22	.01
13 Transportation Equipment	.00	.00	.01	.06	.06	.00
14 Transportation Service	.00	.01	.03	.12	.58	.01
15 Telecommunications	.00	.00	.01	.02	.60	.02
16 Electric Utility	.00	.01	.01	.03	.30	.02
17 Natural Gas Utility	.00	.01	.02	.03	.05	.02
18 Combination Utility	.00	.01	.03	.07	1.53	.07
19 Wholesale Trade	.00	.01	.06	.13	1.53	.02
20 Retail Trade	.00	.01	.05	.08	.23	.03
21 Finance-Bank, S&L, Holding Co.	.00	.00	.00	.00	.12	.00
22 Finance-Real Estate, Other	.00	.00	.00	.04	1.69	.01
23 Insurance	.00	.00	.00	.00	.34	.00
24 Personal, Business Service	.00	.01	.01	.05	3.26	.00
25 Health Care	.00	.00	.01	.01	.08	.01
26 Educational, Nonprofit Institutions	.00	.00	.01	.05	11.58	.04
27 Governmental	.00	.01	.01	.06	.10	.04

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

Industry Group	1990					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industry-wide
1 Mining & Energy	.04	.19	.28	.42	3.61	.32
2 Food, Agriculture	.04	.06	.31	.52	.57	.20
3 Food, Tobacco, Textiles	.03	.06	.09	.13	.20	.08
4 Construction	.01	.05	.11	.20	.26	.06
5 Lumber, Furniture, Packaging	.05	.07	.13	.27	.73	.25
6 Printing, Publishing	.05	.08	.08	.12	.22	.07
7 Chemicals, Rubber, Plastic	.02	.08	.10	.21	.53	.09
8 Primary Metals, Leather, Stone	.03	.07	.17	.20	.59	.18
9 Metal Products	.05	.05	.08	.10	.16	.05
10 Machinery	.05	.06	.08	.12	1.08	.08
11 Electrical Eqmt., Instruments	.03	.05	.10	.11	.24	.08
12 Misc. Manufacturing Industries	.04	.05	.09	.11	.27	.11
13 Transportation Equipment	.02	.05	.05	.08	1.14	.02
14 Transportation Service	.04	.12	.31	.99	2.89	.16
15 Telecommunications	.02	.05	.07	.11	.29	.08
16 Electric Utility	.01	.11	.19	.34	.97	.20
17 Natural Gas Utility	.03	.03	.11	.18	.37	.15
18 Combination Utility	.07	.17	.26	.71	4.68	.36
19 Wholesale Trade	.00	.03	.06	.06	.22	.03
20 Retail Trade	.02	.03	.05	.08	.24	.04
21 Finance-Bank, S&L, Holding Co.	.03	.08	.20	.44	3.73	.14
22 Finance-Real Estate, Other	.10	.13	.33	.88	14.47	.16
23 Insurance	.01	.01	.02	.03	.10	.02
24 Personal, Business Service	.00	.03	.07	.16	11.03	.04
25 Health Care	.03	.04	.06	.11	.54	.12
26 Educational, Nonprofit Institutions	.02	.09	.14	.20	.62	.12
27 Governmental	.01	.06	.10	.21	14.98	.04

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

Industry Group	1990					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industry-wide
1 Mining & Energy	.00	.08	.18	.32	1.17	.27
2 Food, Agriculture	.09	.17	.23	.83	1.28	.36
3 Food, Tobacco, Textiles	.04	.06	.16	.23	.60	.14
4 Construction	.02	.04	.19	.29	.83	.09
5 Lumber, Furniture, Packaging	.02	.10	.19	.30	.52	.25
6 Printing, Publishing	.05	.07	.11	.15	.17	.08
7 Chemicals, Rubber, Plastic	.02	.07	.13	.33	.59	.12
8 Primary Metals, Leather, Stone	.03	.10	.15	.23	.70	.19
9 Metal Products	.07	.07	.09	.25	.39	.10
10 Machinery	.06	.07	.09	.22	.62	.09
11 Electrical Eqmt., Instruments	.04	.06	.12	.14	.34	.09
12 Misc. Manufacturing Industries	.05	.06	.13	.21	.73	.14
13 Transportation Equipment	.01	.03	.05	.19	.33	.02
14 Transportation Service	.03	.04	.13	.27	.97	.07
15 Telecommunications	.00	.02	.04	.08	.13	.04
16 Electric Utility	.01	.04	.07	.12	.34	.08
17 Natural Gas Utility	.02	.03	.08	.09	.25	.08
18 Combination Utility	.00	.07	.15	.29	1.69	.15
19 Wholesale Trade	.04	.09	.23	.41	2.93	.13
20 Retail Trade	.01	.09	.20	.26	.85	.10
21 Finance-Bank, S&L, Holding Co	.00	.01	.01	.02	5.52	.01
22 Finance-Real Estate, Other	.01	.03	.06	.13	12.30	.06
23 Insurance	.00	.01	.01	.03	13.37	.01
24 Personal, Business Service	.02	.06	.11	.15	4.77	.02
25 Health Care	.02	.04	.05	.14	.55	.09
26 Educational, Nonprofit Institutions	.02	.05	.07	.12	.44	.08
27 Governmental	.01	.04	.05	.12	.49	.11

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

Industry Group	1990					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industry-wide
1 Mining & Energy	.01	.06	.09	.16	.71	.12
2 Food, Agriculture	.02	.11	.16	.24	.32	.05
3 Food, Tobacco, Textiles	.02	.04	.07	.13	.35	.06
4 Construction	.04	.12	.19	.37	6.20	.11
5 Lumber, Furniture, Packaging	.02	.04	.08	.09	.27	.05
6 Printing, Publishing	.02	.04	.06	.07	.13	.05
7 Chemicals, Rubber, Plastic	.02	.07	.10	.14	.41	.07
8 Primary Metals, Leather, Stone	.02	.04	.05	.10	.31	.09
9 Metal Products	.01	.03	.05	.06	.61	.04
10 Machinery	.00	.03	.05	.09	1.30	.01
11 Electrical Eqmt., Instruments	.01	.03	.05	.06	.25	.05
12 Misc. Manufacturing Industries	.02	.04	.06	.08	.11	.06
13 Transportation Equipment	.01	.04	.06	.21	.28	.02
14 Transportation Service	.01	.04	.06	.20	1.51	.04
15 Telecommunications	.01	.03	.05	.08	.25	.02
16 Electric Utility	.01	.03	.04	.06	.17	.04
17 Natural Gas Utility	.03	.05	.07	.14	1.00	.08
18 Combination Utility	.01	.04	.06	.09	.72	.05
19 Wholesale Trade	.04	.06	.08	.38	2.13	.07
20 Retail Trade	.01	.04	.06	.12	.49	.03
21 Finance-Bank, S&L, Holding Co.	.01	.05	.07	.12	1.18	.05
22 Finance-Real Estate, Other	.00	.03	.04	.08	.26	.03
23 Insurance	.01	.04	.06	.11	.28	.07
24 Personal, Business Service	.02	.05	.12	.23	1.97	.06
25 Health Care	.01	.03	.03	.06	.25	.07
26 Educational, Nonprofit Institutions	.01	.03	.04	.07	1.25	.04
27 Governmental	.00	.03	.05	.09	12.64	.05

#### **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
- Owned and non-owned aircraft liability
- Other miscellaneous liability expenses including:
  - other insurance premiums
  - unreimbursed liability losses
  - claims adjustment fees
  - other related expenditures.

Respondents were asked to provide only the current year losses (instead of the two most recent years, as in prior surveys). Any loss figures shown are not the ultimate costs since they are as of approximately March, 1990, and do not reflect the past two years' development.

Tables 26 through 36 show liability premiums for various categories of risk. A few respondents reported all liability premiums in either the "workers' compensation" or the "general liability" category, which may distort the figures slightly for these individual cost of risk components. As a result, Table 37, "Total Liability and Workers' Compensation Premiums" presents the most accurate 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. As a result, 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.

The 1990 data reveals that the average U.S. workers' compensation premium was \$2.2 million, while Canada's average was \$2.4 million. This is contrary to 1989 data (1990 survey) which showed that the average workers' compensation premium for U.S.-based organizations significantly exceeded the average payment for a Canadian-based organization. Reported premiums were 0.128% of revenues for the U.S., while in Canada they were 0.188% of revenues. Finally, the average premium per employee in the U.S. was \$238, compared to \$310 per employee in Canada.

Compared to 1989, average U.S. premiums decreased about 15%, from \$2,617,281. However, Canadian premiums increased 55%, from \$1,567,145. We attribute the significant increase in Canadian premiums to better reporting by Canadian risk managers of costs paid to provincial workers' compensation boards.

**TABLE 26  
1990 LIABILITY RISK FINANCING COSTS:  
WORKERS' COMPENSATION PREMIUMS**

<b>UNITED STATES:</b>			
Gross Premiums	Average		Number of Respondents
\$1,556,695,147	\$2,217,514		702
Gross Premiums	Gross Revenues	% of Revenues	
\$1,521,135,272	\$1,185,193,000,000	0.1283%	671
Gross Premiums	Gross Number of Employees	Average Premium Per Employee	
\$1,549,850,303	6,515,461	\$237.87	698
<b>CANADA: (in U.S. Dollars)</b>			
Gross Premiums	Average		Number of Respondents
\$169,923,616	\$2,427,480		70
Gross Premiums	Gross Revenues	% of Revenues	
\$169,404,459	\$89,930,000,000	0.1883%	67
Gross Premiums	Gross Number of Employees	Average Premium Per Employee	
\$169,923,616	547,411	\$310.41	70



**PRIMARY GENERAL AND AUTOMOBILE LIABILITY PREMIUMS**

This category typically includes premiums for the first layer of coverage (up to \$5 million per occurrence) for general and automobile liability. Table 27 shows that the average premium for these coverages was \$1.1 million, and the premiums were 0.063% of revenues. For 54.5% of the respondents, these premiums included product liability coverage.

Only 11.7% of respondents purchased claims-made coverage. 12.9% of respondents indicated that they did not purchase primary general or automobile liability insurance.

<b>TABLE 27</b> <b>1990 LIABILITY RISK FINANCING COSTS:</b> <b>PRIMARY GENERAL AND AUTO LIABILITY PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$764,296,784	\$1,073,450		712
Gross Premiums	Gross Revenues	% of Revenues	
\$744,718,118	\$1,173,899,000,000	0.0634%	679

**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 \$768,838, and premiums were 0.043% of revenues. For 61.1% of the respondents, these premiums included product liability coverage. 45.7% of respondents purchased coverage on a claims-made basis.

<b>TABLE 28</b>			
<b>1990 LIABILITY RISK FINANCING COSTS: EXCESS/UMBRELLA LIABILITY PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$580,472,970	\$768,838		755
Gross Premiums	Gross Revenues	% of Revenues	
\$574,028,563	\$1,334,648,000,000	0.0430%	722

### **PRODUCT LIABILITY PREMIUMS**

The Survey questionnaire asked respondents to provide information on product liability coverages. As stated previously, a number of respondents purchased product liability coverage within their primary general liability policy (54.5% of respondents within a general liability policy), and some included it within their excess coverages (61.1% of respondents within an excess coverage).

Of the 87 respondents that purchased product liability coverage (separate from their primary and excess commercial general liability program), 55.6% purchased the policy for aircraft products, while 11% purchased coverage for pharmaceutical or medical products.

Table 29 shows that the average premium cost for product liability was \$3.8 million and that premiums were 0.11% of revenues.

<b>TABLE 29</b>			
<b>1990 LIABILITY RISK FINANCING COSTS: PRODUCT LIABILITY PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$331,071,397	\$3,805,418		87
Gross Premiums	Gross Revenues	% of Revenues	
\$331,071,397	\$314,153,000,000	0.105%	87

**PROFESSIONAL LIABILITY PREMIUMS**

Respondents provided information on their professional liability coverages. While 208 respondents indicated they purchased this coverage, 122 indicated a specific coverage type. Of the 122 respondents, 36.1% purchased health care-related professional liability coverage including medical malpractice, hospital professional liability, and nursing liability; 9.8% purchased legal malpractice coverage; and 8.2% purchased engineers and architects errors and omissions coverage.

Table 30 shows that the average premium cost was \$853,254 and that premiums were 0.05% of revenues.

TABLE 30 1990 LIABILITY RISK FINANCING COSTS: PROFESSIONAL LIABILITY PREMIUMS			
Gross Premiums	Average		Number of Respondents
\$177,476,897	\$853,254		208
Gross Premiums	Gross Revenues	% of Revenues	
\$175,198,998	\$327,171,000,000	0.053%	197

**DIRECTORS' & OFFICERS' LIABILITY PREMIUMS**

As Table 31 shows, respondents paid an average of \$407,569 in premiums for directors' and officers' liability, and premiums were 0.02% of revenues. For financial institutions, premiums were 0.006% of deposits. It is interesting to note that more than half of all survey respondents, 66.7%, purchased D&O coverage.

<b>TABLE 31</b>			
<b>1990 LIABILITY RISK FINANCING COSTS:</b>			
<b>DIRECTORS' &amp; OFFICERS' LIABILITY PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$230,276,889	\$407,569		565
Gross Premiums	Gross Revenues	% of Revenues	
\$215,980,844	\$1,092,580,000,000	0.019%	537
Gross Premiums	Gross Deposits	% of Deposits	
\$39,714,758	\$584,108,000,000	0.006%	50

### **FIDUCIARY AND ERISA LIABILITY PREMIUMS**

Table 32 shows that respondents paid an average of \$44,770 in premiums for fiduciary/ERISA liability coverage. The premiums were 0.002% of revenues.

<b>TABLE 32</b>			
<b>1990 LIABILITY RISK FINANCING COSTS:</b>			
<b>FIDUCIARY/ERISA LIABILITY PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$22,395,333	\$44,770		500
Gross Premiums	Gross Revenues	% of Revenues	
\$21,683,829	\$972,448,000,000	0.002%	479

### **ENVIRONMENTAL IMPAIRMENT LIABILITY PREMIUMS**

Table 33 shows that 50 respondents paid an average premium of \$281,347 for environmental impairment liability coverage. However, one of these respondents paid premiums of \$7,143,000, which distorts the overall average. By removing this respondent from the average premium calculation, the average premium was about \$140,000. The respondent which paid the \$7.1 million premium purchased limits of \$25 million and was from the transportation equipment industry.

While respondents indicated policy limits ranging from \$1,000,000 to \$50 million, 37% purchased limits of \$1 million. Of the respondent organizations that purchased environmental impairment liability coverage, 16% came from the chemicals, rubber or plastics industry and 14% were from the retail trade industry.

<b>TABLE 33</b> <b>1990 LIABILITY RISK FINANCING COSTS:</b> <b>ENVIRONMENTAL IMPAIRMENT LIABILITY PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$14,067,352	\$281,347		50
Gross Premiums	Gross Revenues	% of Revenues	
\$14,067,352	\$205,469,000,000	0.006%	50

#### **OWNED AND NON-OWNED AIRCRAFT LIABILITY PREMIUMS**

The 1991 Survey questionnaire differs from previous surveys in requesting that respondents identify any owned and non-owned aircraft liability policies purchased. Table 34 shows that 452 respondents paid an average of \$41,917 in premiums for owned and non-owned aircraft liability coverage. The premiums were 0.0016% of revenues.

<b>TABLE 34</b> <b>1990 LIABILITY RISK FINANCING COSTS:</b> <b>OWNED AND NON-OWNED AIRCRAFT LIABILITY PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$18,946,540	\$41,917		452
Gross Premiums	Gross Revenues	% of Revenues	
\$18,528,571	\$1,108,727,000,000	0.0016%	440

**OTHER LIABILITY PREMIUMS**

The Survey requested that respondents provide information on "other" liability insurance policies not listed on the questionnaire. Thirty-five percent of the Survey respondents indicated that they purchased "other" liability insurance. Among those respondents, the most prevalent types of "other" liability were:

- Foreign Liability 37 12.4%
- Marine Liability 28 9.4%
- Airport/Aviation-related Liability 26 8.7%
- Nuclear Liability 18 6.0%
- Auto Liability 16 5.4%

Table 35 shows that respondents paid an average premium of \$223,196 for these "other" liability policies. In addition, premiums were 0.0096% of revenues.

<b>TABLE 35</b> <b>1990 LIABILITY RISK FINANCING COSTS:</b> <b>OTHER LIABILITY PREMIUMS</b>			
Gross Premiums	Average		Number of Respondents
\$66,735,654	\$223,196		299
Gross Premiums	Gross Revenues	% of Revenues	
\$64,068,350	\$663,973,000,000	0.0096%	277

**TOTAL LIABILITY PREMIUMS (EXCLUDING WORKERS' COMPENSATION)**

Table 36 presents the gross total liability premiums (excluding workers' compensation premiums) paid by respondents. The average total liability premium paid in 1990 was \$2.7 million. As a percent of revenues, total liability premiums equalled 0.151%.

TABLE 36 1990 LIABILITY RISK FINANCING COSTS: TOTAL LIABILITY PREMIUMS (EXCLUDING WORKERS' COMPENSATION)			
Gross Premiums	Average		Number of Respondents
\$2,205,729,816	\$2,670,375		826
Gross Premiums	Gross Revenues	% of Revenues	
\$2,159,346,022	\$1,422,461,000,000	0.151%	787

### TOTAL LIABILITY AND WORKERS' COMPENSATION PREMIUMS

Table 37 includes both liability and workers' compensation premiums. The average premiums were \$4.7 million, and premiums were 0.269% of revenues.

TABLE 37 1990 LIABILITY RISK FINANCING COSTS: TOTAL LIABILITY AND WORKERS' COMPENSATION PREMIUMS			
Gross Premiums	Average		Number of Respondents
\$3,932,828,579	\$4,681,938		840
Gross Premiums	Gross Revenues	% of Revenues	
\$3,849,885,753	\$1,430,018,000,000	0.269%	801

### LIABILITY LIMITS

Respondents indicated the liability insurance limits carried for both primary general and excess/umbrella liability insurance. Tables 38 and 39 profile the excess/umbrella liability limits carried, by industry group and revenues, respectively. Table 38 shows that 61% of the 818 respondents providing limit information carried limits of \$50 million or less for excess/umbrella liability.

**TABLE 38**  
**1991 EXCESS/UMBRELLA LIABILITY LIMITS CARRIED: PROFILE BY 1990 INDUSTRY GROUP**

Industry Group	Amount of 1991 Excess/Umbrella 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	2 5.0%	0 .0%	1 2.5%	2 5.0%	0 .0%	3 7.5%	1 2.5%	5 12.5%	3 7.5%	2 5.0%	1 2.5%	3 7.5%	6 15.0%	11 27.5%
2. Food, Agriculture	0 .0%	2 22.2%	1 11.1%	1 11.1%	1 11.1%	0 .0%	1 11.1%	1 11.1%	0 .0%	1 11.1%	1 11.1%	0 .0%	0 .0%	0 .0%
3. Food, Tobacco, Textiles	1 2.7%	1 2.7%	0 .0%	2 5.4%	1 2.7%	2 5.4%	2 5.4%	6 16.2%	6 16.2%	7 18.9%	3 8.1%	0 .0%	4 10.8%	2 5.4%
4. Construction	1 4.8%	3 14.3%	1 4.8%	2 9.5%	1 4.8%	1 4.8%	2 9.5%	4 19.0%	2 9.5%	2 9.5%	0 .0%	1 4.8%	0 .0%	1 4.8%
5. Lumber, Furniture, Pkg.	0 .0%	0 .0%	1 5.9%	0 .0%	1 5.9%	0 .0%	3 17.6%	4 23.5%	2 11.8%	5 29.4%	1 5.9%	0 .0%	0 .0%	0 .0%
6. Printing, Publishing	0 .0%	0 .0%	0 .0%	3 18.8%	1 6.3%	2 12.5%	1 6.3%	5 31.3%	4 25.0%	0 .0%	0 .0%	0 .0%	0 .0%	0 .0%
7. Chemicals/Rubber/Plastic	3 8.1%	4 10.8%	0 .0%	4 10.8%	2 5.4%	2 5.4%	1 2.7%	2 5.4%	1 2.7%	5 13.5%	0 .0%	2 5.4%	1 2.7%	10 27.0%
8. Prim. Metals/Leather/Stone	0 .0%	0 .0%	1 5.0%	1 5.0%	0 .0%	0 .0%	3 15.0%	2 10.0%	3 15.0%	5 25.0%	1 5.0%	1 5.0%	0 .0%	3 15.0%
9. Metal Products	1 4.8%	4 19.0%	0 .0%	1 4.8%	3 14.3%	1 4.8%	0 .0%	3 14.3%	1 4.8%	4 19.0%	0 .0%	1 4.8%	2 9.5%	0 .0%
10. Machinery	0 .0%	1 5.6%	1 5.6%	1 5.6%	0 .0%	0 .0%	0 .0%	1 5.6%	4 22.2%	4 22.2%	2 11.1%	2 11.1%	1 5.6%	1 5.6%
11. Elec. Equipment Instruments	2 5.7%	3 8.6%	0 .0%	4 11.4%	2 5.7%	0 .0%	2 5.7%	6 17.1%	3 8.6%	3 8.6%	1 2.9%	2 5.7%	5 14.3%	2 5.7%
12. Misc. Manufacturing Ind.	1 5.3%	1 5.3%	1 5.3%	1 5.3%	0 .0%	3 15.8%	1 5.3%	5 26.3%	2 10.5%	2 10.5%	0 .0%	0 .0%	0 .0%	2 10.5%
13. Transportation Equipment	0 .0%	0 .0%	1 14.3%	0 .0%	3 42.9%	0 .0%	0 .0%	0 .0%	0 .0%	0 .0%	1 14.3%	1 14.3%	0 .0%	1 14.3%
14. Transportation Service	7 22.6%	4 12.9%	3 9.7%	1 3.2%	1 3.2%	2 6.5%	1 3.2%	4 12.9%	0 .0%	5 16.1%	0 .0%	0 .0%	2 6.5%	1 3.2%
15. Telecommunications	0 .0%	1 5.6%	1 5.6%	0 .0%	0 .0%	1 5.6%	2 11.1%	2 11.1%	1 5.6%	4 22.2%	1 5.6%	0 .0%	4 22.2%	1 5.6%
16. Electric Utility	2 5.0%	1 2.5%	3 7.5%	1 2.5%	4 10.0%	0 .0%	7 17.5%	5 12.5%	5 12.5%	4 10.0%	2 5.0%	3 7.5%	2 5.0%	1 2.5%
17. Natural Gas Utility	0 .0%	0 .0%	0 .0%	0 .0%	2 10.0%	0 .0%	1 5.0%	2 10.0%	2 10.0%	1 5.0%	0 .0%	1 5.0%	1 5.0%	10 50.0%
18. Combination Utility	3 9.4%	2 6.3%	0 .0%	2 6.3%	2 6.3%	2 6.3%	1 3.1%	2 6.3%	3 9.4%	6 18.8%	1 3.1%	3 9.4%	2 6.3%	3 9.4%
19. Wholesale Trade	1 6.7%	3 20.0%	0 .0%	3 20.0%	1 6.7%	0 .0%	2 13.3%	1 6.7%	1 6.7%	3 20.0%	0 .0%	0 .0%	0 .0%	0 .0%
20. Retail Trade	1 2.2%	2 4.4%	4 8.9%	6 13.3%	2 4.4%	1 2.2%	1 2.2%	11 24.4%	5 11.1%	5 11.1%	3 6.7%	2 4.4%	1 2.2%	1 2.2%
21. Finance-Bank/S&L/Holding Co.	2 3.7%	4 7.4%	3 5.6%	7 13.0%	7 13.0%	3 5.6%	4 7.4%	8 14.8%	9 16.7%	3 5.6%	1 1.9%	1 1.9%	1 1.9%	1 1.9%
22. Finance-Real Estate/Other	0 .0%	0 .0%	1 3.6%	0 .0%	5 17.9%	3 10.7%	2 7.1%	3 10.7%	1 3.6%	6 21.4%	2 7.1%	1 3.6%	1 3.6%	3 10.7%
23. Insurance	6 15.4%	4 10.3%	1 2.6%	1 2.6%	0 .0%	4 10.3%	3 7.7%	3 7.7%	7 17.9%	4 10.3%	2 5.1%	1 2.6%	1 2.6%	2 5.1%
24. Personal, Bus. Service	10 23.8%	7 16.7%	0 .0%	4 9.5%	6 14.3%	0 .0%	1 2.4%	5 11.9%	4 9.5%	4 9.5%	0 .0%	0 .0%	1 2.4%	0 .0%
25. Health Care	9 33.3%	2 7.4%	1 3.7%	1 3.7%	0 .0%	1 3.7%	4 14.8%	2 7.4%	5 18.5%	2 7.4%	0 .0%	0 .0%	0 .0%	0 .0%
26. Educational/Nonprofit Inst.	24 35.3%	10 14.7%	2 2.9%	6 8.8%	3 4.4%	3 4.4%	2 2.9%	5 7.4%	2 2.9%	9 13.2%	1 1.5%	0 .0%	1 1.5%	0 .0%
27. Governmental	41 66.1%	6 9.7%	0 .0%	3 4.8%	1 1.6%	2 3.2%	1 1.6%	2 3.2%	1 1.6%	2 3.2%	0 .0%	1 1.6%	0 .0%	2 3.2%
Total Respondents in Each Category	117 14.3%	65 7.9%	27 3.3%	57 7.0%	49 6.0%	36 4.4%	49 6.0%	99 12.1%	77 9.4%	98 12.0%	24 2.9%	26 3.2%	36 4.4%	58 7.1%



**TABLE 39  
1991 EXCESS/UMBRELLA LIABILITY LIMITS CARRIED: PROFILE BY 1990 REVENUE SIZE**

Revenues	Amount of 1991 Excess/Umbrella 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	21 44.7%	6 12.8%	3 6.4%	1 2.1%	3 6.4%	1 2.1%	3 6.4%	4 8.5%	2 4.3%	1 2.1%	2 4.3%	0 .0%	0 .0%	0 .0%
\$30,000,001 to \$100,000,000	22 24.4%	24 26.7%	5 5.6%	13 14.4%	4 4.4%	3 3.3%	3 3.3%	4 4.4%	4 4.4%	5 5.6%	0 .0%	0 .0%	2 2.2%	1 1.1%
\$100,000,001 to \$300,000,000	30 19.4%	17 11.0%	10 6.5%	16 10.3%	16 10.3%	12 7.7%	12 7.7%	16 10.3%	10 6.5%	8 5.2%	0 .0%	3 1.9%	1 .6%	4 2.6%
\$300,000,001 to \$1,000,000,000	23 9.9%	10 4.3%	5 2.2%	16 6.9%	11 4.7%	13 5.6%	25 10.8%	40 17.2%	30 12.9%	29 12.5%	6 2.6%	8 3.4%	8 3.4%	8 3.4%
\$1,000,000,001 to \$3,000,000,000	9 5.6%	1 .6%	2 1.2%	2 1.2%	10 6.2%	6 3.7%	4 2.5%	25 15.4%	19 11.7%	37 22.8%	6 3.7%	8 4.9%	14 8.6%	19 11.7%
\$3,000,000,001 or higher	3 3.2%	4 4.2%	0 0%	2 2.1%	0 0%	1 1.1%	1 1.1%	7 7.4%	7 7.4%	16 16.8%	10 10.5%	7 7.4%	11 11.6%	26 27.4%
Total all respondents in each category	108 13.8%	62 7.9%	25 3.2%	50 6.4%	44 5.6%	36 4.6%	48 6.1%	96 12.3%	72 9.2%	96 12.3%	24 3.1%	26 3.3%	36 4.6%	58 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 40 shows that 55.4% of the 541 respondents to this question carried limits of \$20 million or less.

## **PREDOMINANT LIABILITY DEDUCTIBLE/RETENTION**

Respondents were asked to indicate the size of their predominant liability deductible/retention. Table 41 shows the liability deductible/retention corresponding to six revenue ranges. As expected, larger organizations reported higher liability deductibles/retentions. For example, 59.0% of respondents with revenues greater than \$3 billion maintained a deductible/retention between \$500,001 and \$5 million.

**TABLE 40**  
**1991 DIRECTORS' AND OFFICERS' LIABILITY LIMITS CARRIED:**  
**PROFILE BY 1990 REVENUE SIZE**

Revenue	Amount of 1991 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%	13 56.5%	2 8.7%	2 8.7%	1 4.3%	1 4.3%	0 .0%	1 4.3%	2 8.7%	1 4.3%	0 .0%	0 .0%
\$30,000,001 to \$100,000,000	0 .0%	21 50.0%	11 26.2%	2 4.8%	5 11.9%	1 2.4%	0 .0%	0 .0%	0 .0%	1 2.4%	1 2.4%	0 .0%
\$100,000,001 to \$300,000,000	0 .0%	37 39.4%	23 24.5%	12 12.8%	7 7.4%	4 4.3%	4 4.3%	4 4.3%	1 1.1%	1 1.1%	0 .0%	1 1.1%
\$300,000,001 to \$1,000,000,000	0 .0%	30 17.6%	39 22.9%	19 11.2%	20 11.8%	18 10.6%	7 4.1%	10 5.9%	10 5.9%	6 3.5%	8 4.7%	3 1.8%
\$1,000,000,001 to \$3,000,000,000	0 .0%	9 8.7%	20 14.8%	8 5.9%	9 6.7%	36 26.7%	2 1.5%	8 5.9%	15 11.1%	16 11.9%	11 8.1%	1 .7%
\$3,000,000,001 or higher	0 .0%	0 .0%	4 5.2%	2 2.6%	4 5.2%	8 10.4%	5 6.5%	7 9.1%	14 18.2%	15 19.5%	10 13.0%	8 10.4%
Total all respondents in each category	0 .0%	110 20.3%	99 18.3%	45 8.3%	46 8.5%	68 12.6%	18 3.3%	30 5.5%	42 7.8%	40 7.4%	30 5.5%	13 2.4%

**TABLE 41**  
**1991 LIABILITY DEDUCTIBLE/RETENTION CARRIED:**  
**PROFILE BY 1990 REVENUE SIZE**

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
\$30,000,000 or less	0 0%	2 11.1%	1 5.6%	2 11.1%	5 27.8%	1 5.6%	3 16.7%	2 11.1%	2 11.1%
\$30,000,001 to \$100,000,000	0 .0%	6 9.7%	7 11.3%	5 8.1%	14 22.6%	5 8.1%	14 22.6%	4 6.5%	7 11.3%
\$100,000,001 to \$300,000,000	1 1.2%	7 8.5%	3 3.7%	8 9.8%	6 7.3%	13 15.9%	34 41.5%	7 8.5%	3 3.7%
\$300,000,001 to \$1,000,000,000	0 .0%	5 3.2%	7 4.5%	4 2.6%	14 9.1%	15 9.7%	75 48.7%	17 11.0%	17 11.0%
\$1,000,000,001 to \$3,000,000,000	1 .8%	0 .0%	2 1.7%	2 1.7%	4 3.4%	6 5.0%	51 42.9%	32 26.9%	21 17.6%
\$3,000,000,001 or higher	0 .0%	0 .0%	1 1.6%	3 4.9%	1 1.6%	2 3.3%	18 29.5%	15 24.6%	21 34.4%
Total all respondents in each category	2 .4%	20 4.0%	21 4.2%	24 4.8%	44 8.9%	42 8.5%	195 39.3%	77 15.5%	71 14.3%

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

Table 42 shows that the average unreimbursed workers' compensation loss was \$4.2 million for 1990, and \$3.8 million for 1989 (as reported in the 1990 Cost of Risk Survey). Losses were 0.176% of revenues, and the average loss per employee was \$261. Thirty-two respondents reported losses in excess of \$10 million. Five of these respondents incurred losses over \$50 million, and one reported total self-assumed workers' compensation losses of \$192 million.

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 42 LIABILITY RISK FINANCING COSTS: UNREIMBURSED WORKERS' COMPENSATION LOSSES				
	Gross Losses	Average	% Increase	Number of Respondents
1990	\$1,613,464,866	\$4,234,815	11.6%	381
1989	\$1,225,483,513	\$3,794,066		323
	Gross Losses	Gross Revenues	% of Revenues	
1990	\$1,578,749,812	\$893,466,000,000	0.176%	369
	Gross Losses	Gross Employees	Average Loss Per Employee	
1990	\$1,606,651,666	6,154,643	\$261	378

## UNREIMBURSED GENERAL AND AUTOMOBILE LIABILITY LOSSES

Table 43 shows that the amount of unreimbursed general and automobile liability losses averaged \$2.1 million in 1990 and \$1.8 million in 1989 (1990 Survey). The 1990 losses were 0.115% of revenues.

TABLE 43 LIABILITY RISK FINANCING COSTS: UNREIMBURSED GENERAL/AUTO LIABILITY LOSSES				
	Gross Losses	Average	% Increase	Number of Respondents
1990	\$1,020,925,656	\$2,113,717	17.5%	483
1989	\$687,531,173	\$1,799,275		371
	Gross Losses	Gross Revenues	% of Revenues	
1990	\$1,012,466,871	\$873,713,000,000	0.115%	467

## UNREIMBURSED PRODUCT AND PROFESSIONAL LIABILITY LOSSES

Table 44 shows that in 1990 average losses for product/professional liability were \$2.8 million, up from \$2.0 million in 1989 (1990 Survey). These average liability losses were 37% higher in 1990 versus 1989. The 1990 losses were 0.130% of revenues.

TABLE 44 LIABILITY RISK FINANCING COSTS: UNREIMBURSED PRODUCT/PROFESSIONAL LIABILITY LOSSES				
	Gross Losses	Average	% Increase	Number of Respondents
1990	\$496,817,133	\$2,775,514	36.5%	179
1989	\$250,035,197	\$2,032,806		123
	Gross Losses	Gross Revenues	% of Revenues	
1990	\$493,352,482	\$378,932,000,000	0.130%	174

## OTHER UNREIMBURSED LIABILITY LOSSES

For the small number of respondents that reported losses for other lines of liability insurance, Table 45 shows that the average amount of other unreimbursed liability losses decreased 72% from \$2 million in 1989 (1990 Survey) to \$0.6 million in 1990. Over two-thirds of the gross losses can be attributed to two respondents to the 1990 survey who indicated "other" losses of \$34.1 million and \$33.6 million, respectively. Excluding those two respondents, the 1989 average is approximately \$525,000 for 43 respondents.

	Gross Losses	Average	% Increase	Number of Respondents
1990	\$ 32,178,003	\$564,526	-71.9%	57
1989	\$ 90,256,445	\$2,005,699		45
	Gross Losses	Gross Revenues	% of Revenues	
1990	\$29,289,965	\$58,450,000,000	0.050%	53

## CLAIMS ADJUSTMENT FEES AND OTHER INTERNAL/EXTERNAL EXPENSES

Table 46 shows the claims adjustment fees and other internal and external expenses, both separately and combined for unreimbursed liability and workers' compensation losses.

The average costs for adjusting unreimbursed liability losses (excluding workers' compensation) decreased from \$410,751 in 1989 to \$332,678 in 1990. The expenses for liability losses were 10.45% of losses in 1990 and 13.62% in 1989.

The average cost to adjust workers' compensation losses decreased 8% from \$368,345 in 1989 to \$337,651 in 1990. Expenses as a percentage of losses decreased slightly for workers' compensation from 9.15% in 1989 to 8.47% in 1990.

On the average the claims adjustment fees and expenses for liability and workers' compensation combined decreased from \$508,473 in 1989 to \$472,127 in 1990, while the expenses as a percentage of losses decreased from 9.68% in 1989 to 7.82% in 1990.

**TABLE 46  
LIABILITY RISK FINANCING COSTS:  
CLAIMS ADJUSTMENT FEES AND OTHER INTERNAL AND EXTERNAL EXPENSES**

<b>LIABILITY</b>				
	<b>Gross Expense</b>	<b>Average</b>	<b>% Increase</b>	<b>Number of Respondents</b>
1990	\$76,848,758	\$332,678	-19.0%	231
1989	\$70,649,342	\$410,751		172
	<b>Gross Expense</b>	<b>Gross Liability Losses</b>	<b>% of Losses</b>	
1990	\$75,959,607	\$726,313,947	10.45%	225
1989	\$67,589,609	\$496,179,799	13.62%	159
<b>WORKERS' COMPENSATION</b>				
	<b>Gross Expense</b>	<b>Average</b>	<b>% Increase</b>	
1990	\$87,451,749	\$337,651	-8.33%	259
1989	\$74,774,122	\$368,345		203
	<b>Gross Expense</b>	<b>Gross WC Losses</b>	<b>% of Losses</b>	
1990	\$86,031,297	\$1,014,822,440	8.47%	250
1989	\$74,557,237	\$814,660,104	9.15%	198
<b>LIABILITY AND WORKERS' COMPENSATION COMBINED</b>				
	<b>Gross Expense</b>	<b>Average</b>	<b>% Increase</b>	
1990	\$164,300,507	\$472,127	-7.1%	348
1989	\$145,423,464	\$508,473		286
	<b>Gross Expense</b>	<b>Gross Losses</b>	<b>% of Losses</b>	
1990	\$162,519,677	\$2,076,855,284	7.82%	342
1989	\$143,798,945	\$1,484,855,925	9.68%	275



**TOTAL UNREIMBURSED LIABILITY AND WORKERS' COMPENSATION LOSSES PLUS CLAIMS  
ADJUSTMENT FEES AND OTHER EXPENSES**

According to Table 47, total unreimbursed liability losses and related expenses (excluding workers' compensation) averaged \$3 million in 1990, a 10.4% decrease from an average of \$3.4 million in 1989. The 1990 losses plus expenses were 0.165% of revenues.

Total unreimbursed workers' compensation losses and expenses increased from an average of \$4 million in 1989 to \$4.4 million in 1990. Losses plus expenses were 0.179% of revenues, and the average losses and expenses per employee were \$267 in 1990.

**TABLE 47  
LIABILITY RISK FINANCING COSTS:  
TOTAL UNREIMBURSED LIABILITY AND WORKERS' COMPENSATION LOSSES  
PLUS CLAIMS ADJUSTMENT FEES AND OTHER INTERNAL/EXTERNAL EXPENSES**

<b>LIABILITY</b>				
	<b>Gross Losses/Expenses</b>	<b>Average</b>	<b>% Increase</b>	<b>Number of Respondents</b>
1990	\$1,628,789,550	\$3,006,967	-10.4%	541
1989	\$1,426,472,157	\$3,356,405		425
	<b>Gross Losses/Expenses</b>	<b>Gross Revenues</b>	<b>% of Revenues</b>	
1990	\$1,611,632,086	\$978,096,000,000	0.1647%	523
<b>WORKERS' COMPENSATION</b>				
	<b>Gross Losses/Expenses</b>	<b>Average</b>	<b>% Increase</b>	
1990	\$1,700,916,615	\$4,361,324	10.0%	390
1989	\$1,300,257,635	\$3,964,200		328
	<b>Gross Losses/Expenses</b>	<b>Gross Revenues</b>	<b>% of Revenues</b>	
1990	\$1,663,512,898	\$930,121,000,000	0.1788%	378
	<b>Gross Losses/Expenses</b>	<b>Gross Employees</b>	<b>Average Losses/Expenses Per Employee</b>	
1990	\$1,693,230,008	6,326,193	\$267	387
<b>LIABILITY AND WORKERS' COMPENSATION COMBINED</b>				
	<b>Gross Losses/Expenses</b>	<b>Average</b>	<b>% Increase</b>	
1990	\$3,327,686,165	\$5,574,013	4.46%	597
1989	\$2,726,729,792	\$5,336,066		511
	<b>Gross Losses/Expenses</b>	<b>Gross Revenue</b>	<b>% of Revenue</b>	
	\$3,275,144,984	\$1,191,935,000,000	0.2747%	577

## TOTAL LIABILITY RISK FINANCING COSTS

Table 48 provides the total risk financing costs for liability and workers' compensation. These values consist of total premiums, unreimbursed losses, and claims adjustment fees and related expenses. The average liability risk financing cost excluding workers' compensation equalled \$4.6 million and was 0.264% of revenues. The average workers' compensation cost was \$4.3 million, and was 0.249% of revenues. The average cost for liability and workers' compensation combined was \$8.6 million, and was 0.497% of revenues.

<b>TABLE 48</b>			
<b>1990 LIABILITY RISK FINANCING COSTS:</b>			
<b>TOTAL LIABILITY AND WORKERS' COMPENSATION PREMIUMS, UNREIMBURSED LOSSES AND CLAIMS ADJUSTMENT FEES AND OTHER INTERNAL/EXTERNAL EXPENSES</b>			
<b>LIABILITY</b>			
Gross Liability Risk Cost	Average		Number of Respondents
\$3,832,499,366	\$4,562,499		840
Gross Liability Risk Cost	Gross Revenues	% of Revenues	
\$3,770,978,108	\$1,429,833,000,000	0.2637%	801
<b>WORKERS' COMPENSATION</b>			
Gross WC Risk Cost	Average		
\$3,428,015,378	\$4,274,333		802
Gross WC Risk Cost	Gross Revenues	% of Revenues	
\$3,354,052,629	\$1,349,205,000,000	0.2485%	765
<b>LIABILITY AND WORKERS' COMPENSATION COMBINED</b>			
Gross Liability/WC Risk Cost	Average		
\$7,260,514,744	\$8,602,505		844
Gross Liability/WC Risk Cost	Gross Revenues	% of Revenues	
\$7,125,030,737	\$1,434,653,000,000	0.4966%	805

## **INDUSTRY GROUP ANALYSES**

Tables 49 through 52 provide a full review of liability and workers' compensation risk financing costs for each industry group.

The health care industry had the highest average industrywide liability risk financing costs (excluding workers' compensation) at 1.92% of revenues, while the transportation service industry had the highest average industrywide workers' compensation and combined liability and workers' compensation risk financing costs at 1.29% and 2.60% of revenues, respectively.

Workers' compensation costs per employee by industry group are presented in Table 52. The construction industry had the highest average workers' compensation cost per employee industrywide at \$1,149, followed closely by the transportation service industry at an average cost of \$1,038 per employee.

**TABLE 49  
LIABILITY RISK FINANCING COSTS AS A PERCENT OF REVENUES  
(EXCLUDING WORKERS' COMPENSATION)**

Industry Group	1990					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industry-wide
1 Mining & Energy	.03	.13	.22	.45	3.50	.20
2 Food, Agriculture	.05	.09	.17	.44	.81	.19
3 Food, Tobacco, Textiles	.04	.10	.18	.26	.89	.16
4 Construction	.06	.40	.50	.78	2.30	.46
5 Lumber, Furniture, Packaging	.04	.07	.17	.19	.29	.14
6 Printing, Publishing	.06	.08	.14	.25	.96	.16
7 Chemicals, Rubber, Plastic	.06	.19	.39	.54	5.84	.26
8 Primary Metals, Leather, Stone	.05	.14	.21	.35	4.50	.19
9 Metal Products	.03	.23	.35	.54	1.37	.25
10 Machinery	.00	.10	.24	.51	5.45	.15
11 Electrical Eqmt., Instruments	.03	.12	.21	.41	1.54	.22
12 Misc. Manufacturing Industries	.11	.23	.46	.68	2.55	.41
13 Transportation Equipment	.10	.18	.40	.87	1.72	.28
14 Transportation Service	.03	.66	1.49	3.46	6.68	1.31
15 Telecommunications	.04	.11	.23	.31	31.63	.13
16 Electric Utility	.01	.16	.22	.31	.68	.16
17 Natural Gas Utility	.12	.27	.40	.58	8.91	.35
18 Combination Utility	.07	.28	.41	1.25	6.88	.27
19 Wholesale Trade	.01	.05	.15	.62	3.64	.23
20 Retail Trade	.00	.14	.23	.37	.77	.25
21 Finance-Bank, S&L, Holding Co.	.00	.10	.18	.64	1.78	.19
22 Finance-Real Estate, Other	.00	.23	.55	3.40	25.30	.27
23 Insurance	.01	.04	.08	.16	8.74	.08
24 Personal, Business Service	.00	.16	.64	1.68	34.45	.63
25 Health Care	.02	.62	1.18	2.71	44.40	1.92
26 Educational, Nonprofit Institutions	.01	.13	.30	.54	12.05	.60
27 Governmental	.00	.11	.40	1.15	9.39	.17

**TABLE 50  
WORKERS' COMPENSATION RISK FINANCING COSTS AS A PERCENT OF REVENUES**

Industry Group	1990					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industry-wide
1 Mining & Energy	.00	.04	.18	.51	3.68	.09
2 Food, Agriculture	.12	.18	.58	1.20	1.49	.28
3 Food, Tobacco, Textiles	.06	.20	.39	.68	2.10	.35
4 Construction	.12	.28	.61	1.25	3.96	.43
5 Lumber, Furniture, Packaging	.17	.21	.25	.75	.97	.42
6 Printing, Publishing	.12	.23	.30	.53	.81	.35
7 Chemicals, Rubber, Plastic	.02	.11	.19	.26	.99	.11
8 Primary Metals, Leather, Stone	.05	.32	.38	.64	1.97	.24
9 Metal Products	.03	.34	.58	1.09	2.59	.42
10 Machinery	.01	.09	.26	.43	2.23	.18
11 Electrical Eqmt., Instruments	.06	.14	.24	.36	1.02	.28
12 Misc. Manufacturing Industries	.15	.27	.36	.70	2.03	.37
13 Transportation Equipment	.13	.22	.36	1.93	12.14	.16
14 Transportation Service	.09	.62	1.52	2.30	7.79	1.29
15 Telecommunications	.01	.08	.11	.25	.36	.12
16 Electric Utility	.00	.06	.09	.17	1.30	.07
17 Natural Gas Utility	.02	.09	.13	.21	3.00	.23
18 Combination Utility	.00	.12	.20	.40	2.00	.10
19 Wholesale Trade	.01	.04	.09	.19	1.37	.05
20 Retail Trade	.05	.23	.36	.58	2.10	.35
21 Finance-Bank, S&L, Holding Co	.01	.04	.08	.30	2.20	.08
22 Finance-Real Estate, Other	.00	.09	.30	.99	20.70	.10
23 Insurance	.00	.02	.05	.12	.50	.05
24 Personal, Business Service	.00	.10	.35	1.20	5.93	.36
25 Health Care	.07	.32	.56	.92	4.68	.52
26 Educational, Nonprofit Institutions	.00	.18	.32	.50	2.39	.30
27 Governmental	.01	.27	.49	1.38	3.50	.36

**TABLE 51  
LIABILITY AND WORKERS' COMPENSATION RISK FINANCING COSTS  
AS A PERCENT OF REVENUES**

Industry Group	1990					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industry-wide
1 Mining & Energy	.03	.19	.43	.99	4.43	.29
2 Food, Agriculture	.09	.29	.72	1.19	2.30	.47
3 Food, Tobacco, Textiles	.14	.37	.59	.87	2.31	.52
4 Construction	.31	.64	1.17	2.37	6.26	.89
5 Lumber, Furniture, Packaging	.04	.29	.44	.79	1.14	.56
6 Printing, Publishing	.21	.35	.50	.68	1.49	.51
7 Chemicals, Rubber, Plastic	.10	.36	.59	.82	6.83	.37
8 Primary Metals, Leather, Stone	.05	.36	.65	.93	6.47	.43
9 Metal Products	.05	.76	.93	1.57	3.86	.67
10 Machinery	.11	.18	.48	.82	7.68	.33
11 Electrical Eqmt., Instruments	.15	.32	.43	.70	1.60	.50
12 Misc. Manufacturing Industries	.34	.56	.89	1.36	4.58	.78
13 Transportation Equipment	.23	.45	1.18	2.32	13.85	.43
14 Transportation Service	.03	1.76	3.42	5.79	10.35	2.60
15 Telecommunications	.04	.23	.40	.54	31.36	.25
16 Electric Utility	.01	.24	.29	.48	1.79	.23
17 Natural Gas Utility	.15	.39	.59	.86	11.91	.58
18 Combination Utility	.07	.40	.54	1.76	7.16	.36
19 Wholesale Trade	.02	.08	.24	.82	5.00	.28
20 Retail Trade	.05	.39	.57	.89	2.87	.59
21 Finance-Bank, S&L, Holding Co.	.00	.14	.31	1.05	3.98	.27
22 Finance-Real Estate, Other	.00	.29	.84	4.02	46.00	.37
23 Insurance	.03	.06	.12	.29	9.14	.13
24 Personal, Business Service	.00	.40	1.13	2.59	13.01	.97
25 Health Care	.62	1.12	1.88	4.02	47.40	2.43
26 Educational, Nonprofit Institutions	.02	.39	.68	1.07	10.12	.90
27 Governmental	.01	.40	.83	2.64	10.51	.53

**TABLE 52  
WORKERS' COMPENSATION COSTS PER EMPLOYEE**

Industry Group	1990					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industry-wide
1 Mining & Energy	\$113	\$238	\$488	\$1,078	\$5,088	\$550
2 Food, Agriculture	485	693	1,076	1,780	2,080	801
3 Food, Tobacco, Textiles	264	406	724	1,229	2,116	595
4 Construction	422	780	1,260	2,468	4,364	1,149
5 Lumber, Furniture, Packaging	244	389	848	1,100	1,817	750
6 Printing, Publishing	167	281	371	445	752	390
7 Chemicals, Rubber, Plastic	76	254	412	671	1,501	320
8 Primary Metals, Leather, Stone	163	614	878	1,281	2,818	491
9 Metal Products	168	577	779	1,289	4,153	961
10 Machinery	24	225	423	782	1,792	303
11 Electrical Eqmt., Instruments	116	239	351	536	1,824	508
12 Misc. Manufacturing Industries	301	370	517	813	1,916	648
13 Transportation Equipment	254	368	646	1,947	9,710	339
14 Transportation Service	120	571	1,116	1,935	5,704	1,038
15 Telecommunications	9	154	212	375	684	120
16 Electric Utility	22	187	282	660	3,544	291
17 Natural Gas Utility	135	255	360	801	2,327	746
18 Combination Utility	10	238	486	731	2,667	289
19 Wholesale Trade	142	324	541	935	1,182	553
20 Retail Trade	36	185	298	504	1,808	351
21 Finance-Bank, S&L, Holding Co.	27	62	102	162	1,345	125
22 Finance-Real Estate, Other	4	205	464	696	1,725	309
23 Insurance	23	117	161	296	603	213
24 Personal, Business Service	1	169	273	575	7,856	392
25 Health Care	38	202	274	522	1,412	312
26 Educational, Nonprofit Institutions	4	93	155	283	1,061	164
27 Governmental	16	291	507	946	5,943	547



## V. CAPTIVE INSURANCE PROGRAM

In order to evaluate the net cost or benefit of any wholly-owned captive insurance company, respondents were asked to determine the extra cost (loss) or benefit (income) of their captive program, if applicable.

Table 53 shows that the average reported income generated by a captive insurance program for the 87 respondents was \$2.0 million. Captive net income as a percent of total premiums plus unreimbursed losses increased significantly from 5.97% in 1989 (1990 Survey) to 7.85% in 1990.

<b>TABLE 53</b>			
<b>1990 CAPTIVE INSURANCE PROGRAM</b>			
Total Net Income	Average Income		Number of Respondents
\$176,171,967	\$2,024,965		87
Total Net Income	Gross Premiums Plus Unreimbursed Losses	Net Income as % of Premiums Plus Unreimbursed Losses	
\$176,171,967	\$2,243,856,670	7.851%	87

**VI. OTHER RISK MANAGEMENT EXPENSES**

Other risk management expenses are typically defined to include costs for risk control (loss prevention) and the cost of outside services. However, since in the past we received poor responses to the survey's questions on risk control expenditures, these costs were not requested on the 1991 Survey questionnaire.

**COSTS FOR OUTSIDE SERVICES (EXCLUDING EXTERNAL RISK CONTROL)**

Costs for outside services include brokers fees (those not included within premium cost), consulting fees, and miscellaneous costs not otherwise captured. Table 54 shows that these expenditures averaged \$124,042 in 1990, a 62% increase from the 1989 average of \$76,780 (1990 Survey), and were 1.981% of gross insurance premiums.

<b>TABLE 54</b>			
<b>1990 COSTS FOR OUTSIDE SERVICES</b>			
Gross Costs	Average		Number of Respondents
\$68,843,448	\$124,042		555
Gross Costs	Gross Premiums	% of Premiums	
\$68,813,275	\$3,473,104,632	1.981%	553

**VII. RISK MANAGEMENT AND INSURANCE DEPARTMENT COSTS**

**RISK MANAGEMENT AND INSURANCE DEPARTMENT COSTS: WAGES, SALARY, OVERHEAD, TRAVEL, ETC.**

Table 55 shows that risk management department expenditures (excluding premiums, losses and other costs captured earlier) averaged \$353,824 in 1990. In addition, these costs were 0.019% of revenues, 5.75% of premiums, and 3.53% of premiums plus unreimbursed losses in 1990. These represent only slight increases from the 1989 data collected in the 1990 Survey.

<b>TABLE 55</b>			
<b>1990 RISK MANAGEMENT AND INSURANCE DEPARTMENT COSTS</b>			
Gross Costs	Average		Number of Respondents
\$273,859,911	\$353,824		774
Gross Costs	Gross Revenues	% of Revenues	
\$265,893,033	\$1,331,732,000,000	0.019%	736
Gross Costs	Gross Premiums	% of Premiums	
\$273,147,596	\$4,748,629,451	5.752%	771
Gross Costs	Gross Premiums Plus Unreimbursed Losses	% of Premiums Plus Unreimbursed Losses	
\$273,330,596	\$7,745,739,383	3.528%	772

**SIZE OF RISK MANAGEMENT AND INSURANCE DEPARTMENT**

Table 56 shows that in 1990, the average risk management and insurance department industrywide employed 4.67 professional and clerical employees. The median size for a department totalled 3 employees, and the highest value was 88 employees. Respondent risk management/insurance departments had, on the average, 3.05 professional staff members.

<p align="center"><b>TABLE 56</b> <b>SIZE OF RISK MANAGEMENT AND INSURANCE DEPARTMENT</b></p>								
<b>1990</b>	<b>Lowest Value</b>	<b>First Quartile</b>	<b>Median</b>	<b>Third Quartile</b>	<b>Highest Value</b>	<b>Industry Average</b>	<b>Total Employees</b>	<b>Number of Respondents</b>
Professional	0.10	1.00	2.00	3.00	51.00	3.05	2,565	840
Clerical	0.10	1.00	1.00	2.00	41.00	1.92	1,369	711
Total	0.10	1.80	3.00	5.00	88.00	4.67	3,934	821

The number of employees in the risk management/insurance department varied according to revenue size. Table 57 shows that 36.0% of the 808 respondents had 2.1 to 5 employees. Cumulatively, 77% had between zero and five risk management/insurance department employees. Of the respondent organizations reporting over \$3 billion in revenues, 51.6% had between 5.1 and 20 employees in their risk management/insurance department. Conversely, 84.8% of respondent organizations reporting revenues of less than \$1 billion had between zero and five risk management/insurance department employees.

<b>TABLE 57 SIZE OF RISK MANAGEMENT AND INSURANCE DEPARTMENT BY 1990 REVENUE SIZE</b>						
<b>Revenues</b>	<b>Total Risk Management/Insurance Department Employees</b>					
	<b>0 to 1</b>	<b>1.1 to 2</b>	<b>2.1 to 5</b>	<b>5.1 to 10</b>	<b>10.1 to 20</b>	<b>Over 20</b>
\$30,000,000 or less	14 27.5%	16 31.4%	13 25.5%	4 7.8%	2 3.9%	2 3.9%
\$30,000,001 to \$100,000,000	28 29.8%	30 31.9%	25 26.6%	8 8.5%	2 2.1%	1 1.1%
\$100,000,001 to \$300,000,000	43 26.2%	48 29.3%	49 29.9%	20 12.2%	3 1.8%	1 6%
\$300,000,001 to \$1,000,000,000	43 18.1%	62 26.2%	92 38.8%	24 10.1%	12 5.1%	4 1.7%
\$1,000,000,001 to \$3,000,000,000	7 4.2%	33 19.8%	82 49.1%	27 16.2%	15 9.0%	3 1.8%
\$3,000,000,001 or higher	2 2.1%	5 5.3%	30 31.6%	30 31.6%	19 20.0%	9 9.5%
Total, all respondents	137 17.0%	194 24.0%	291 36.0%	113 14.0%	53 6.6%	20 2.5%

Table 58 shows the relationship between the size of the risk management/insurance department and the amount of premiums plus unreimbursed losses. Predictably, responding organizations with lower costs had smaller risk management departments, while those organizations with higher costs had larger risk management/insurance departments.

<b>TABLE 58</b>						
<b>SIZE OF RISK MANAGEMENT AND INSURANCE DEPARTMENT BY 1990 PREMIUMS PLUS UNREIMBURSED LOSSES</b>						
<b>Premiums Plus Unreimbursed Losses</b>	<b>Total Risk Management/Insurance Department Employees</b>					
	<b>0 to 1</b>	<b>1.1 to 2</b>	<b>2.1 to 5</b>	<b>5.1 to 10</b>	<b>10.1 to 20</b>	<b>Over 20</b>
<b>\$300,000 or less</b>	16 61.5%	6 23.1%	2 7.7%	1 3.8%	0 .0%	1 3.8%
<b>\$300,001 to \$1,000,000</b>	48 47.5%	31 30.7%	18 17.8%	4 4.0%	0 .0%	0 .0%
<b>\$1,000,001 to \$3,000,000</b>	52 21.7%	87 36.3%	80 33.3%	18 7.5%	3 1.3%	0 .0%
<b>\$3,000,001 to \$10,000,000</b>	22 7.9%	69 24.8%	132 47.5%	40 14.4%	10 3.6%	5 1.8%
<b>\$10,000,001 to \$30,000,000</b>	5 3.4%	14 9.6%	59 40.4%	42 28.8%	20 13.7%	6 4.1%
<b>\$30,000,001 or higher</b>	0 .0%	0 .0%	13 23.2%	13 23.2%	22 39.3%	8 14.3%
<b>Total, all Respondents</b>	143 16.9%	207 24.4%	304 35.9%	118 13.9%	55 6.5%	20 2.4%

### VIII. TOTAL COST OF RISK

Table 59 shows the total cost of risk, defined as the sum of premiums, unreimbursed losses, other risk management and insurance expenses, captive expenses, and departmental expenses. The cost of risk, as presented in this report, does not include risk control expenditures.

In 1990, the total cost of risk, as defined above, averaged \$10.6 million, was 0.611% of revenues, and 0.288% of assets. For financial institutions, the total cost of risk was 0.038% of deposits.

Gross Cost of Risk	Average		Number of Respondents
\$8,963,894,265	\$10,583,110		847
Gross Cost of Risk	Gross Revenues	% of Revenues	
\$8,776,131,095	\$1,434,836,000,000	0.611%	808
Gross Cost of Risk	Gross Assets	% of Assets	
\$7,609,790,379	\$2,636,449,000,000	0.288%	690
Gross Cost of Risk	Gross Deposits	% of Deposits	
\$229,807,544	\$597,824,000,000	0.038%	56

Table 60 illustrates an alternative measure to the cost of risk: total property and liability premiums plus unreimbursed losses. The costs for these components averaged \$10.4 million, were 0.593% of revenues, 0.281% of assets, and 0.035% of deposits for financial institutions.

<b>TABLE 60</b>			
<b>1990 TOTAL PROPERTY AND LIABILITY PREMIUMS PLUS UNREIMBURSED LOSSES</b>			
Gross Premium Plus Losses	Average		Number of Respondents
\$8,797,938,179	\$10,411,761		845
Gross Premium Plus Losses	Gross Revenues	% of Revenues	
\$8,513,681,515	\$1,434,836,000,000	0.593%	808
Gross Premium Plus Losses	Gross Assets	% of Assets	
\$7,411,700,607	\$2,636,440,000,000	0.281%	689
Gross Premium Plus Losses	Gross Deposits	% of Deposits	
\$212,556,666	\$597,824,000,000	0.035%	56

Table 61 shows that the average total property and liability premium per respondent was \$6 million in 1990. The highest total property and liability premiums paid by any respondent was \$441 million, while the lowest was \$5,000.

<b>TABLE 61</b>				
<b>1990 TOTAL PROPERTY AND LIABILITY PREMIUMS</b>				
Lowest Value	First Quartile	Median	Third Quartile	Highest Value
\$5,000	\$1,062,194	\$2,470,570	\$6,039,700	\$441,439,909
	Gross Premium	Average	Number of Respondents	
	\$5,019,289,683	\$5,918,974	847	



Table 62 shows the relative sizes of the components of the cost of risk excluding risk control costs. Again, the lowest value of the cost of risk as a percent of revenues was negative since captive profits were considered a negative cost of risk.

<b>TABLE 62 RELATIONSHIPS OF COST OF RISK COMPONENTS</b>					
Year	Lowest Value	First Quartile	Median	Third Quartile	Highest Value
<b>Cost of Risk as a Percent of Revenues</b>					
1990	-0.435%	0.458%	0.814%	1.564%	44.554%
<b>Property Premiums as a Percent of Revenues</b>					
1990	0.001%	0.042%	0.082%	0.152%	16.364%
<b>Property Premiums as a Percent of Assets</b>					
1990	0.001%	0.028%	0.070%	0.149%	20.667%
<b>Property Risk Financing Costs as a Percent of Revenues</b>					
1990	0.004%	0.053%	0.101%	0.197%	19.217%
<b>Property Risk Financing Costs as a Percent of Assets</b>					
1990	0.001%	0.039%	0.086%	0.182%	13.373%
<b>Property Premiums as a Percent of Insured Value</b>					
1990	0.000%	0.043%	0.078%	0.159%	12.716%
<b>Liability Premiums as a Percent of Revenues</b>					
1990	0.000%	0.096%	0.207%	0.455%	26.224%
<b>Liability Risk Financing Costs as a Percent of Revenues</b>					
1990	0.001%	0.139%	0.281%	0.631%	44.401%
<b>Workers' Compensation Premiums as a Percent of Revenues</b>					
1990	0.000%	0.047%	0.156%	0.381%	20.700%
<b>Workers' Compensation Risk Financing Costs as a Percent of Revenues</b>					
1990	0.000%	0.122%	0.290%	0.610%	20.700%

Table 63 reviews the relationship of organization size and total property and liability premiums plus unreimbursed losses as a percentage of revenues. As evidenced, a clear relationship exists between these factors: as revenues increase, premiums plus unreimbursed losses as a percent of revenues appear to fall.

<b>TABLE 63 PROPERTY AND LIABILITY PREMIUMS PLUS UNREIMBURSED LOSSES AS A PERCENT OF REVENUES BY REVENUE SIZE</b>	
<b>Revenues</b>	<b>Cost as % of 1990 Revenues</b>
\$30,000,000 or less	6.969%
\$30,000,001 to \$100,000,000	4.457%
\$100,000,001 to \$300,000,000	1.417%
\$300,000,001 to \$1,000,000,000	1.023%
\$1,000,000,001 to \$3,000,000,000	0.706%
3,000,000,001 or higher	0.407%

Since many responding organizations have accurate records of premiums and losses, but not of other types of risk management costs, total premiums plus unreimbursed losses as a percentage of revenues is another way to examine relative costs of risk. Table 64 presents total property and liability premiums plus unreimbursed losses as a percentage of revenues by industry group classification. The transportation service industry had the highest average industrywide cost at 2.75% of revenues, according to this measure, followed by the health care industry group at 2.19% of revenues.

Tables 65 and 66 analyze the total cost of risk (excluding risk control expenditures) by industry group relative to revenues and assets. The industry with the highest average total cost of risk as a percentage of revenues was transportation service, reporting 2.94%. Relative to assets, governmental entities had the highest average total cost of risk as a percentage of assets, reporting 1.94%.

Please note that the column with the lowest values in Tables 65 and 66 contains some negative figures. Although it seems illogical for firms to have a negative cost of risk, these were negative due to the information we received from certain respondents reporting gains from their captive programs.

**TABLE 64  
TOTAL PROPERTY AND LIABILITY PREMIUMS PLUS UNREIMBURSED LOSSES  
AS A PERCENT OF REVENUES**

Industry Group	1990					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industry-wide
1 Mining & Energy	.11	.49	.71	1.26	8.03	.62
2 Food, Agriculture	.33	.61	.86	1.33	2.49	.67
3 Food, Tobacco, Textiles	.21	.46	.69	1.02	2.60	.60
4 Construction	.36	.69	1.33	2.43	6.47	.95
5 Lumber, Furniture, Packaging	.31	.41	.56	.89	1.65	.81
6 Printing, Publishing	.17	.38	.58	.75	1.71	.58
7 Chemicals, Rubber, Plastic	.16	.48	.73	1.02	7.34	.46
8 Primary Metals, Leather, Stone	.27	.48	.75	1.06	7.06	.61
9 Metal Products	.06	.82	.98	1.62	3.98	.72
10 Machinery	.14	.28	.66	.89	8.76	.41
11 Electrical Eqmt., Instruments	.15	.39	.58	.82	1.66	.58
12 Misc. Manufacturing Industries	.40	.64	1.04	1.45	4.66	.89
13 Transportation Equipment	.37	.49	1.23	2.43	14.99	.45
14 Transportation Service	.09	2.10	3.66	5.87	12.61	2.75
15 Telecommunications	.06	.28	.45	.60	1.27	.31
16 Electric Utility	.05	.34	.55	.83	2.08	.42
17 Natural Gas Utility	.19	.54	.64	.98	12.45	.73
18 Combination Utility	.18	.59	.92	2.42	7.50	.72
19 Wholesale Trade	.02	.15	.28	.84	9.62	.31
20 Retail Trade	.07	.44	.66	.99	2.95	.63
21 Finance-Bank, S&L, Holding Co.	.00	.19	.50	1.54	7.71	.41
22 Finance-Real Estate, Other	.00	.45	1.33	4.05	42.55	.53
23 Insurance	.03	.07	.15	.34	9.20	.15
24 Personal, Business Service	.01	.49	1.33	2.69	13.08	1.01
25 Health Care	.65	1.21	1.95	3.80	31.65	2.19
26 Educational, Nonprofit Institutions	.06	.46	.85	1.18	9.21	1.02
27 Governmental	.04	.49	.91	2.93	10.60	.56

**TABLE 65**  
**TOTAL COST OF RISK AS A PERCENT OF REVENUES**  
**(EXCLUDING RISK CONTROL EXPENDITURES)**

Industry Group	1990					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industry-wide
1 Mining & Energy	.09	.56	.78	1.25	8.90	.60
2 Food, Agriculture	.35	.65	.89	1.37	2.72	.71
3 Food, Tobacco, Textiles	.21	.52	.70	1.11	2.64	.62
4 Construction	.37	.71	1.52	2.57	6.98	.98
5 Lumber, Furniture, Packaging	.32	.44	.58	.91	1.66	.80
6 Printing, Publishing	.30	.39	.61	.79	1.73	.61
7 Chemicals, Rubber, Plastic	.17	.48	.76	1.05	7.63	.46
8 Primary Metals, Leather, Stone	.26	.50	.78	1.16	7.12	.60
9 Metal Products	.06	.88	1.02	1.65	4.01	.72
10 Machinery	.44	.29	.71	.93	9.08	.31
11 Electrical Eqmt., Instruments	.16	.40	.59	.83	1.77	.59
12 Misc. Manufacturing Industries	.41	.62	1.13	1.51	4.66	.89
13 Transportation Equipment	.37	.49	1.12	2.54	15.50	.45
14 Transportation Service	.11	2.16	3.93	6.27	12.98	2.94
15 Telecommunications	.06	.28	.53	.75	1.70	.32
16 Electric Utility	.05	.36	.65	.94	3.73	.46
17 Natural Gas Utility	.20	.62	.77	1.04	12.59	.77
18 Combination Utility	.18	.61	.96	2.74	8.30	.74
19 Wholesale Trade	.02	.23	.32	.88	9.62	.32
20 Retail Trade	.10	.46	.70	1.03	3.13	.65
21 Finance-Bank, S&L, Holding Co.	.00	.22	.53	1.83	8.48	.44
22 Finance-Real Estate, Other	.01	.47	1.37	4.14	44.55	.56
23 Insurance	.05	.09	.15	.40	19.17	.17
24 Personal, Business Service	.01	.53	1.46	2.71	15.88	1.03
25 Health Care	.47	1.26	2.02	3.62	32.95	2.23
26 Educational, Nonprofit Institutions	.07	.49	.91	1.36	9.26	1.07
27 Governmental	.05	.54	1.04	2.99	11.00	.59

**TABLE 66**  
**TOTAL COST OF RISK AS A PERCENT OF ASSETS**  
**(EXCLUDING RISK CONTROL EXPENDITURES)**

Industry Group	1990					
	Lowest Value	First Quartile	Median	Third Quartile	Highest Value	Industry-wide
1 Mining & Energy	.01	.24	.54	.95	11.83	.49
2 Food, Agriculture	.48	1.33	1.87	2.04	3.75	1.26
3 Food, Tobacco, Textiles	.34	.67	1.21	1.91	4.67	1.05
4 Construction	.12	1.47	2.67	6.96	10.31	1.39
5 Lumber, Furniture, Packaging	.13	.39	.72	1.42	2.62	.80
6 Printing, Publishing	.17	.49	.66	.97	1.37	.71
7 Chemicals, Rubber, Plastic	.22	.45	.89	1.45	6.62	.58
8 Primary Metals, Leather, Stone	.22	.56	.95	1.20	8.49	.62
9 Metal Products	.25	.77	2.28	3.00	8.77	1.47
10 Machinery	.32	.39	.70	1.24	4.42	.35
11 Electrical Eqmt., Instruments	.23	.44	.82	1.13	2.13	.67
12 Misc. Manufacturing Industries	.39	.95	1.57	2.06	8.85	1.12
13 Transportation Equipment	.27	.53	.59	4.55	4.65	.31
14 Transportation Service	.08	.50	1.44	5.35	21.52	1.32
15 Telecommunications	.03	.13	.23	.44	.94	.16
16 Electric Utility	.01	.13	.23	.31	1.02	.18
17 Natural Gas Utility	.14	.28	.46	.75	2.52	.44
18 Combination Utility	.06	.24	.44	.64	5.28	.32
19 Wholesale Trade	.36	.82	1.81	3.78	16.44	1.82
20 Retail Trade	.37	1.14	1.98	3.37	5.37	1.65
21 Finance-Bank, S&L, Holding Co.	.00	.02	.03	.05	17.95	.03
22 Finance-Real Estate, Other	.04	.13	.15	.64	12.20	.21
23 Insurance	.01	.03	.08	.14	1.67	.06
24 Personal, Business Service	.01	.62	1.52	4.13	47.63	.45
25 Health Care	.49	1.32	2.02	2.68	14.66	1.87
26 Educational, Nonprofit Institutions	.01	.25	.40	1.03	7.75	.67
27 Governmental	.01	.30	.52	1.38	15.60	1.94

## IX. CANADIAN COST OF RISK

Canadian RIMS members were identified so their statistics could be compiled separately. All previous tables in this Survey include data on Canadian organizations, converted to U.S. dollars. This chapter presents Canadian data separately, in Canadian dollars, for those who wish to make Canadian-to-Canadian comparisons.

### CANADIAN PROPERTY RISK FINANCING COSTS

Table 67 indicates that the 1990 average total property premiums plus unreimbursed losses for Canadian organizations were \$2.1 million; the costs were 0.127% of revenues and 0.055% of assets.

<b>TABLE 67</b>			
<b>1990 TOTAL CANADIAN PROPERTY RISK FINANCING COSTS: PREMIUMS PLUS UNREIMBURSED LOSSES</b>			
Gross Property Risk Costs	Average		Number of Respondents
\$205,196,594	\$2,051,965		100
Gross Property Risk Costs	Gross Revenues	% of Revenues	
\$195,126,271	\$152,930,054,518	0.127%	95
Gross Property Risk Costs	Gross Assets	% of Assets	
\$188,774,218	\$338,712,446,351	0.055%	83

**CANADIAN LIABILITY RISK FINANCING COSTS**

As shown in Table 68, average total Canadian liability risk financing costs, excluding workers' compensation, were \$1.5 million, and 0.094% of revenues. Average total Canadian workers' compensation risk financing costs were \$3.4 million, and 0.229% of revenues.

<b>TABLE 68</b>			
<b>1990 TOTAL CANADIAN LIABILITY AND WORKERS' COMPENSATION RISK FINANCING COSTS: PREMIUMS, UNREIMBURSED LOSSES, AND CLAIMS ADJUSTMENT FEES AND RELATED EXPENSES</b>			
<b>LIABILITY:</b>			
Gross Liability Risk Cost	Average		Number of Respondents
\$151,385,359	\$1,498,864		101
Gross Liability Risk Cost	Gross Revenues	% of Revenues	
\$148,473,510	\$156,971,349,031	0.094%	96
<b>WORKERS' COMPENSATION:</b>			
Gross WC Risk Cost	Average		
\$249,366,121	\$3,415,974		73
Gross WC Risk Cost	Gross Revenues	% of Revenues	
\$248,733,128	\$108,599,930,402	0.229%	70

## TOTAL CANADIAN COST OF RISK

Table 69 documents the total Canadian cost of risk excluding risk control expenditures. The average Canadian cost of risk was \$6.1 million, 0.388% of revenues, and 0.141% of assets. For financial institutions reporting deposits, cost of risk was 0.014% of deposits.

Gross Cost of Risk	Average		Number of Respondents
\$626,343,925	\$6,081,008		103
Gross Cost of Risk	Gross Revenues	% of Revenues	
\$611,297,083	\$157,154,622,433	0.388%	98
Gross Cost of Risk	Gross Assets	% of Assets	
\$527,004,505	\$373,047,210,300	0.141%	86
Gross Cost of Risk	Gross Deposits	% of Deposits	
\$18,239,762	\$122,064,725,669	0.014%	6



## X. THE RISK MANAGER

### REPORTING RELATIONSHIPS

The top risk management executive reported to a variety of organization functions. As Table 70 indicates, 60.48% reported to the Finance or Treasury function, while 11.12% reported to the CEO/President. As reported in the 1990 Survey, 59.56% of the risk management executives reported to the Finance or Treasury function and 9.63% reported to the CEO/President.

<b>Function to Which Top Risk Management Executive Reports</b>	<b>Number of Respondents</b>	<b>Percent of Total</b>
1. Finance	297	35.15%
2. Treasury	214	25.33%
3. Administration	75	8.88%
4. CEO/President	94	11.12%
5. Legal	62	7.34%
6. Human Resources/Personnel	29	3.43%
7. Other	74	8.76%

### FUNCTIONAL RESPONSIBILITIES

Table 71 depicts the top risk management executive's level of responsibility for various functional areas. The majority of respondents indicated the top risk management executive had general or shared authority as follows: 92.5% for property and liability insurance purchases; 89.2% for liability claims management; 83.4% for workers' compensation insurance purchases; 72.2% for workers' compensation claims management; 78.8% for property loss prevention; 61.9% for employee and public safety; 92.3% for selection of brokers and agents; and 46.9% for environmental affairs.

Not surprisingly, the majority of respondents indicated the top risk management executive was not responsible for the following: 61.1% for employee benefits - welfare plans; and 71.7% for pension and profit sharing - deferred compensation plans.

<b>TABLE 71 1990 TOP RISK MANAGEMENT EXECUTIVE: RESPONSIBILITIES</b>				
<b>Functional Area</b>	<b>General Authority</b>	<b>Shared Authority</b>	<b>Recommend Only</b>	<b>Not Responsible</b>
Property and Liability Insurance Purchase	733 87.3%	44 5.2%	59 7.0%	4 .5%
Liability Claims Management	546 65.3%	200 23.9%	55 6.6%	35 4.2%
Workers' Compensation Insurance Purchase	620 75.7%	63 7.7%	49 6.0%	87 10.6%
Workers' Compensation Claims Management	405 48.9%	193 23.3%	63 7.6%	168 20.3%
Property Loss Prevention	388 46.2%	274 32.6%	127 15.1%	51 6.1%
Employee/Public Safety	220 26.4%	295 35.5%	168 20.2%	149 17.9%
Environmental Affairs	109 13.2%	279 33.7%	196 23.7%	243 29.4%
Employee Benefits - Welfare Plans	129 15.4%	120 14.4%	76 9.1%	510 61.1%
Pension/Profit Sharing - Deferred Compensation Plans	87 10.5%	96 11.6%	51 6.2%	593 71.7%
Security	78 9.5%	158 19.2%	201 24.4%	387 47.0%
Selection of Brokers/Agents	702 83.9%	70 8.4%	53 6.3%	12 1.4%

### **HANDLING OF RESPONSIBILITIES**

Table 72 shows where risk management functions are handled within a company. As reported by respondents, 95.2% handle property and liability insurance purchase and 93.0% handle the selection of brokers/agents within the risk management department. Security (86.9%), pension/profit sharing, deferred compensation plans (85.1%) and employee benefits (80.4%) were most often handled by other departments. 28.4% use a third party administrator to handle workers' compensation claims management and 19.3% use them to handle liability claims management.

<b>TABLE 72 TOP RISK MANAGEMENT EXECUTIVE: HANDLING OF RESPONSIBILITIES</b>			
<b>Functional Area</b>	<b>How Handled</b>		
	<b>Within Risk Management Department</b>	<b>Within Another Department</b>	<b>By a Third Party Administrator</b>
Property and Liability Insurance Purchase	791 95.2%	32 3.9%	8 1.0%
Liability Claims Management	529 63.4%	145 17.4%	161 19.3%
Workers' Compensation Insurance Purchase	656 82.1%	131 16.4%	12 1.5%
Workers' Compensation Claims Management	314 37.6%	284 34.0%	237 28.4%
Property Loss Prevention	488 59.2%	307 37.3%	29 3.5%
Employee/Public Safety	270 33.5%	530 65.7%	7 0.9%
Environmental Affairs	162 20.8%	609 78.2%	8 1.0%
Employee Benefits - Welfare Plans	127 16.0%	638 80.4%	29 3.7%
Pension/Profit Sharing - Deferred Compensation Plans	81 10.4%	661 85.1%	35 4.5%
Security	94 12.1%	678 86.9%	8 1.0%
Selection of Brokers/Agents	760 93.0%	49 6.0%	8 1.0%

## **EMPLOYMENT STATUS**

Tables 73 and 74 indicate the full-time employment status of the top risk management executive. Table 73 shows employment status by 1990 revenues, while Table 74 shows it by 1990 cost of risk.

Table 73 shows a clear relationship between employment status and organization size. Of all respondents reporting revenues greater than \$3 billion, 95.8% had a full-time risk manager. The respondent group also reported a similar relationship between employment status and total cost of risk (Table 74); all respondents (100%) with a cost of risk over \$30 million had a full-time risk manager.

<b>TABLE 73</b>	
<b>1990 TOP RISK MANAGEMENT EXECUTIVE JOB: FULL-TIME STATUS BY 1990 REVENUE SIZE</b>	
<b>Revenues</b>	<b>Full-Time</b>
\$30,000,000 or less	34 66.66%
\$30,000,001 to \$100,000,000	59 62.76%
\$100,000,001 to \$300,000,000	111 68.51%
\$300,000,001 to \$1,000,000,000	176 74.57%
\$1,000,000,001 to \$3,000,000,000	149 89.75%
\$3,000,000,001 or higher	91 95.78%
Total, all respondents	620 77.11%

<b>TABLE 74</b>	
<b>1990 TOP RISK MANAGEMENT EXECUTIVE JOB: FULL-TIME STATUS BY 1990 COST OF RISK</b>	
<b>Cost of Risk</b>	<b>Full-Time</b>
\$300,000 or less	4 21.05%
\$300,001 to \$1,000,000	38 46.91%
\$1,000,001 to \$3,000,000	163 68.20%
\$3,000,001 to \$10,000,000	258 86.28%
\$10,000,001 to \$30,000,000	131 91.60%
\$30,000,001 or higher	61 100.00%
Total, all respondents	655 77.88%

## XI. USE OF INSURANCE BROKERS/AGENTS

### NUMBER OF INSURANCE BROKERS/AGENTS USED

Table 75 shows the number of insurance brokers/agents used by survey respondents, profiled by 1990 revenues. The majority of respondents, 77.2%, used between one and three insurance brokers/agents. Only 0.1% of the respondents reported using no insurance brokers or agents in 1990 compared to 2.4% in 1989.

<b>TABLE 75</b>								
<b>NUMBER OF INSURANCE BROKERS/AGENTS USED:</b>								
<b>PROFILE BY 1990 REVENUE SIZE</b>								
<b>Revenues</b>	<b>Number of Insurance Brokers/Agents Used</b>							
	<b>None</b>	<b>One</b>	<b>Two</b>	<b>Three</b>	<b>Four</b>	<b>Five</b>	<b>Six to Ten</b>	<b>Greater Than Ten</b>
\$30,000,000 or less	0 .0%	13 25.5%	19 37.3%	9 17.6%	3 5.9%	4 7.8%	1 2.0%	2 3.9%
\$30,000,001 to \$100,000,000	0 .0%	28 29.8%	36 38.3%	20 21.3%	7 7.4%	2 2.1%	1 1.1%	0 .0%
\$100,000,001 to \$300,000,000	0 .0%	58 35.4%	44 26.8%	29 17.7%	10 6.1%	12 7.3%	8 4.9%	3 1.8%
\$300,000,001 to \$1,000,000,000	1 .4%	71 30.0%	71 30.0%	54 22.8%	20 8.4%	12 5.1%	6 2.5%	2 .8%
\$1,000,000,001 to \$3,000,000,000	0 .0%	32 19.2%	42 25.1%	41 24.6%	23 13.8%	15 9.0%	13 7.8%	1 .6%
\$3,000,000,001 or higher	0 .0%	6 6.3%	26 27.4%	25 26.3%	16 16.8%	6 6.3%	13 13.7%	3 3.2%
<b>Total Respondents in Each Category</b>	1 .1%	208 25.7%	238 29.5%	178 22.0%	79 9.8%	51 6.3%	42 5.2%	11 1.4%

## BROKER/AGENT COMPENSATION

Table 76 provides the broker/agent compensation as a percentage of premium for property insurance, liability insurance, workers' compensation, and other insurance coverages. For both property and liability insurance, the majority of respondents, 56.8% and 53.6%, respectively, paid compensation between 6% and 10% of premiums to brokers/agents.

<b>TABLE 76</b>					
<b>1990 BROKER/AGENT COMPENSATION</b>					
	<b>Amount of Compensation: Percent of Premium</b>				
	<b>Less than 3%</b>	<b>3% to 5%</b>	<b>6% to 10%</b>	<b>11% to 20%</b>	<b>Over 20%</b>
Property Insurance	15 3.4%	59 13.6%	247 56.8%	107 24.6%	7 1.6%
Liability Insurance	21 4.8%	87 19.8%	236 53.6%	92 20.9%	4 .9%
Workers' Compensation	42 12.9%	115 35.3%	134 41.1%	32 9.8%	3 .9%
Other	8 7.1%	17 15.2%	62 55.4%	23 20.5%	2 1.8%

Table 77 shows the method of compensation for brokers/agents by type of coverage. The most frequently cited response, for each line of coverage, for method of broker/agent compensation was straight commission.

<b>TABLE 77</b>			
<b>1990 BROKER/AGENT COMPENSATION:</b>			
<b>METHOD OF COMPENSATION</b>			
	<b>Fixed Fee for Service</b>	<b>Negotiated Commission</b>	<b>Straight Commission</b>
Property Insurance	244 33.3%	105 14.3%	383 52.3%
Liability Insurance	272 35.6%	132 17.3%	360 47.1%
Workers' Compensation	247 39.5%	94 15.0%	284 45.4%
Other	50 28.7%	23 13.2%	101 58.0%

Table 78 shows how agents/brokers are typically compensated for insurance placement, retention selection, risk analysis, annual loss projections, property exposure surveys, and risk management information systems. For some respondents, these services were not provided by their agent/broker - most notably, 65.1% of respondents did not receive risk management information systems from their agent/broker.

<b>TABLE 78 1990 BROKER/AGENT COMPENSATION: SERVICES SUPPLIED FOR COMPENSATION</b>			
<b>Service</b>	<b>Included In Commission</b>	<b>Fee for Service</b>	<b>Not Provided by Broker/Agent</b>
Insurance Placement	576 68.9%	252 30.1%	8 1.0%
Retention Selection	345 42.8%	157 19.5%	304 37.7%
Risk Analysis	360 44.5%	204 25.2%	245 30.3%
Annual Loss Projection	256 32.0%	168 21.0%	376 47.0%
Property Exposure Survey	325 40.8%	166 20.8%	306 38.4%
Risk Management Information Systems	150 19.1%	124 15.8%	511 65.1%
Other	24 48.0%	25 50.0%	1 2.0%

## APPENDIX A

### METHODOLOGY

The information presented in the 1991 Cost of Risk Survey report was gathered from the 847 usable responses (20%) to the 4,200 questionnaires mailed in May of 1991 to RIMS' first deputy members. The 1991 Survey questionnaire was presented in five parts to address the diverse allocation of risk management responsibilities within respondent organizations; additional questions regarding the use of insurance brokers, insurance companies, etc. were asked; in most cases the Survey requested only one year of data.

All completed questionnaires were reviewed for accuracy. Tillinghast conducted telephone and/or written follow-up with approximately 60% of the respondents in order to clarify and verify responses.

The confidentiality of all participants has been strictly maintained. All Surveys were destroyed by RIMS after tabulation.

The questionnaire and all instructions are included as Appendix B. When reading sections, it may be useful to refer to this Appendix to identify what is included in the data presented.

### USING THE 1991 COST OF RISK SURVEY

We believe that the 1991 Cost of Risk Survey documents the costs of risk for the 27 industry groups examined. However, there are three cautions to be noted in using this study:

1. The 1991 Cost of Risk Survey is a stand-alone study that does not update past surveys. Some but not all of the respondents to the 1991 Survey may have participated in earlier surveys. In addition, survey questions have changed from survey to survey and may not be comparable.
2. A high cost of risk does not necessarily indicate that a poor job has been done. Rather, it could reflect a superior job in identifying, treating, and accounting for the cost of all exposures facing the organization. It may also represent the results of a superior effort of purchasing high limits of cover with broad terms and conditions.



3. Likewise, a low cost of risk is not proof of superior risk management performance.

How then should the reader use the 1991 Cost of Risk Survey? First, in its simplest form, it provides a method for categorizing various risk and insurance costs. Second, it can serve as a benchmark against which an organization's cost of risk can be compared to similar organizations.

#### **COMMENT ON DATA REPORTING**

**1990 Data.** Respondents were asked to provide premiums, deductibles, and limits for their 1990 insurance coverages, on a calendar year basis. For those policies not corresponding with the 1990 calendar year, we requested respondents to calculate the cost for the 1990 calendar year or to assign the cost to the year in which the policy year ends (e.g., an October 1, 1989-September 30, 1990 policy would be a 1990 policy).

**1989 Data.** Some results from the 1990 Cost of Risk Survey (which collected 1989 data) are presented within this report.

**Risk Control Costs.** Risk control expenditures were not requested on the 1991 survey questionnaire. Therefore, risk control expenditures have been excluded from the data presented in this report.

**Self-Insured, Self-Retained, or Self-Assumed Loss Costs.** While we received a greater number of usable responses to this part of the 1991 Survey, compared to previous attempts, some of the responses were still incomplete. In some cases, respondents were unable to provide any information, or only tracked aggregate annual payments. We found that some of the respondents still do not maintain detailed records of their self-assumed losses or administrative costs.

We requested self-assumed liability loss costs for 1990. Liability claims pay out over time, and the final costs may not be known for many years. This can lead to the under- or overestimation of total losses. As reserving practices vary among claims managers, care must be exercised when using these numbers for analysis and comparison.

**Administrative Costs.** While we asked for the total risk management department budget, including all administrative costs, wages, salaries, bonuses, allocated and fixed overhead costs, etc., many respondents provided only "direct salary" expenses.

**Property Valuation and Premiums.** Property premiums were not perfectly comparable since some organizations reported property insurance values on the basis of replacement cost, whereas others used actual cash value or other methods of valuation. Also, some organizations insured only against fire and extended perils, while others insured on a broader basis.

**Liability Insurance Costs.** Some respondents purchased loss-sensitive insurance programs, e.g., paid loss retrospectively rated programs. In these instances, respondents often were unable to provide a reasonable estimate of the ultimate cost of the programs. In these instances we relied on proxies such as standard premium.

## **INTERPRETING THE RESULTS**

Throughout this report, six statistical terms are used. The "Lowest Value" and "Highest Value" numbers refer to the responses which represented the lowest and highest figures. The "Median" is the figure at which one-half of the responses had a lower value and one-half had a higher value.

The "First and Third Quartile" numbers are those at which one-quarter of the responses are below and above that figure, respectively. The "Industrywide Cost of Risk" number represents the sum of the costs for a given industry group divided by the sum of, in most instances, the total revenues or assets for that industry group.

For ease of use, self-insured losses are referred to as uninsured losses except where such funding techniques are commonly referred to as "self-insurance," such as in workers' compensation.

**APPENDIX B: COST OF RISK QUESTIONNAIRE**

**1991 Cost of Risk Survey**

**PART I: DEMOGRAPHIC AND ADMINISTRATIVE INFORMATION**

**1.0 Organization Domicile** (please check one):

- A. U.S. based company or organization.
- B. Canadian based company or organization. If Canadian, please indicate if responses are in: Canadian dollars  U.S. dollars
- C. Other (please specify): \_\_\_\_\_

**2.0 Industry**

2.1 As we are trying to determine where your major exposures lie, please provide the primary 4-digit Standard Industrial Classification (SIC) code (from the list on the opposite page) which is representative of your primary activity as determined by the product, group of products produced or handled, or service rendered. (This will be the industry group your organization's data will be included within.)

Primary Standard Industrial Classification code: \_\_\_\_\_

2.2 Please provide a one to three-word description of your organization's primary function, e.g. primary care hospital, commercial bank, clothing retailer, etc.

Primary industry or service: \_\_\_\_\_

**3.0 Risk Management/Insurance Department**

3.1 Number of employees in department in 1990. Include both full-time employees and those with some responsibilities unrelated to risk/insurance management by indicating the fraction of time spent on matters relating to risk/insurance management. (For example, an Assistant Treasurer who spends one-half time on risk management would be indicated as "0.5".)

- A. Professional Staff \_\_\_\_\_
- B. Clerical Staff \_\_\_\_\_
- C. Total \_\_\_\_\_

3.2 Total risk management department budget, including all administrative costs, wages, salaries, bonuses, allocated and fixed overhead costs, staff training, dues, travel, subscriptions, etc. Please DO NOT INCLUDE premiums, self-assumed losses or other costs paid to outsiders such as consultants, brokers, etc.

Total Departmental Budget \$ \_\_\_\_\_

3.3 Is the top risk management job a full-time position? Yes  No

3.4.A Does the top risk management executive have direct budgetary responsibility for the items listed below? (Please write in the *letter* of the most accurate description in column A.)

- a = general authority
- b = shared authority (with another department or function)
- c = recommend only
- d = not responsible

3.4.B Are these functions handled within the risk management/insurance department?

Function	(A)	(B)		
	Respon- sibility	How Handled?		
		Within RM Dept.	Within Another Dept.	By a Third Party Administrator
A. Property & liability insurance purchase	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Liability claims management	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Workers' compensation insurance purchase	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Workers' compensation claims management	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Property loss prevention	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Employee/public safety	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. Environmental affairs	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. Security	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I. Selection of brokers/agents	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J. Employee benefits - welfare plans	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
K. Pension/profit sharing, qualified/registered deferred compensation plans	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
L. Other, _____	_____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.5 Function to which the top risk management executive reports: (please check one)

- A. Treasury
- B. Legal
- C. Finance
- D. CEO/President
- E. Administration
- F. Human Resources/Personnel
- G. Other (please specify): \_\_\_\_\_

#### 4.0 Use of Insurance Agencies/Brokerage Firms

4.1 With how many insurance agencies/brokerage firms does your organization work?

- 0
- 1
- 2
- 3
- 4
- 5
- 6-10
- 11+

4.2 How are your agencies/brokerage firms compensated and what % of premium does their compensation represent?

	<u>Straight Commission</u>	<u>Negotiated Commission</u>	<u>Fee for Service</u>	<u>% of Premium</u>
A. Property Insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
B. Liability Insurance	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
C. Workers' Compensation	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____
D. Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	_____

4.3 How is your agent/broker compensated for these services? (please check all that apply)

<u>Type of Service</u>	<u>Included In Commission</u>	<u>Fee for Service</u>	<u>Not Provided</u>
A. Insurance placement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Retention selection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Risk analysis	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Annual loss projection	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Property exposure survey	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Risk management information systems	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. Other: _____	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**5.0 Fees to Outside Service Providers**

Please indicate 1990 fees you paid for risk management information systems, casualty actuaries, brokerage services (not included in premium), and risk management or insurance consultants who perform audits or reviews of your insurance and safety programs, self-insurance studies, etc. Do not show costs included in premium figures.

- 5.1 Brokers/agents' fees not included in premium \$ \_\_\_\_\_
- 5.2 Outside consulting fees \$ \_\_\_\_\_
- 5.3 Miscellaneous other costs, such as risk management information systems \$ \_\_\_\_\_

## 6.0 Risk Financing

6.1 How do you finance your general liability, auto liability and workers' compensation programs?  
(please check all that apply)

	General Liability	Auto Liability	Workers' Compensation
A. Fixed Cost Program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B. Incurred Loss Retrospectively Rated Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C. Paid Loss Retrospectively Rated Plan	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D. Deductible Program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E. Pooling Arrangement	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F. Captive Insurer	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G. Purchasing Group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H. Risk Retention Group	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I. Qualified Self-Insurance Program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J. Dividend Program	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## 7.0 1990 Company Data

This information, particularly revenues, is necessary for survey compilation. If actual data cannot be supplied, please provide estimates.

7.1 Please check one box in Col. A and indicate corresponding figure in Col. B.

	<u>Column A</u>	<u>Column B</u>
Total 1990 worldwide:	<input type="checkbox"/> revenues <input type="checkbox"/> gross sales <input type="checkbox"/> budget (if unit of gov't., non-profit org., university, etc.)	\$ _____ 000,000
7.2 Deposits (if a banking organization)		\$ _____ 000,000
7.3 Total year-end assets (from financial statement)		\$ _____ 000,000
7.4 Is your organization privately held?	<input type="checkbox"/> Privately held <input type="checkbox"/> Not privately held	
7.5 Total 1990 year-end number of employees in your organization (include both full-time and part-time employees; if your business is seasonal, provide the average number of employees):		

U.S.	Canadian	Other	Total
_____	_____	_____	_____
_____	_____	_____	_____

**PART II: PROPERTY AND LIABILITY INSURANCE**

**8.0 Property Insurance Program**

We are trying to determine your organization's total 1990 property insurance premium, both international and domestic, as well as your insured values. Please include premiums paid to captives and risk sharing pools.

**8.1 Property Coverage (check all that apply)**

A. Property Coverage is primarily:

- (1) All risk
- (2) Fire
- (3) DIC
- (4) EC only
- (5) Specified perils

B. Property limit is set:

- (1) Blanket basis
- (2) Specified per loss
- (3) Other \_\_\_\_\_

C. Predominant Property Valuation Basis:

- (1) Replacement Cost
- (2) Actual Cash Value (ACV)
- (3) Other (please specify): \_\_\_\_\_

**8.2 1990 Property Premiums, Insured Values, Limits (Please breakdown premium components. If a policy is written on a blanket basis where sub-components are not separately identifiable, please list the insured value on line A.1 only.)**

	<u>Coverage Not Purchased</u>	<u>Insured Value</u>	<u>Limit Purchased</u>	<u>Premium</u>
A.1 Property damage	<input type="checkbox"/>	\$ .000.000	\$ .000.000	\$ _____
A.2 Business interruption (BI) <input type="checkbox"/> included in A.1	<input type="checkbox"/>	\$ .000.000	\$ .000.000	\$ _____
A.3 Extra expense (EE) <input type="checkbox"/> included in A.1	<input type="checkbox"/>	\$ .000.000	\$ .000.000	\$ _____
A.4 Flood <input type="checkbox"/> included in A.1	<input type="checkbox"/>	\$ .000.000	\$ .000.000	\$ _____
A.5 Earthquake, excluding CA <input type="checkbox"/> included in A.1	<input type="checkbox"/>	\$ .000.000	\$ .000.000	\$ _____
B. Boiler and machinery direct damage, BI, and EE <input type="checkbox"/> included in A.1	<input type="checkbox"/>	\$ .000.000	\$ .000.000	\$ _____
C. Fidelity/crime insurance	<input type="checkbox"/>		\$ .000.000	\$ _____
D. Financial institutions blanket bond	<input type="checkbox"/>		\$ .000.000	\$ _____
E. California earthquake	<input type="checkbox"/>	\$ .000.000	\$ .000.000	\$ _____
F. Inland/Ocean Marine	<input type="checkbox"/>	\$ .000.000	\$ .000.000	\$ _____
G. Other property:				
1. _____		\$ .000.000	\$ .000.000	\$ _____
2. _____		\$ .000.000	\$ .000.000	\$ _____
H. Total Preliums (sum of A.1 through G)				\$ _____

## 9.0 Liability Insurance Program

We are trying to determine the ultimate cost of your organization's total 1990 liability insurance premium (excluding workers' compensation) as well as the limits. Please include premiums for guaranteed cost programs, estimated ultimate retrospectively rated program cost, and for captives and risk sharing pools.

	Coverage Not Purchased	Claims Made	Limit	Premium
A. Primary general, auto and, if included in policy, products <input type="checkbox"/> Includes product liability	<input type="checkbox"/>	<input type="checkbox"/>	\$ <u>000,000</u>	\$ _____
B. Excess general, auto and, if included in policies, products <input type="checkbox"/> Includes product liability	<input type="checkbox"/>			
Umbrella		<input type="checkbox"/>	\$ <u>000,000</u>	\$ _____
First		<input type="checkbox"/>	\$ <u>000,000</u>	\$ _____
Second		<input type="checkbox"/>	\$ <u>000,000</u>	\$ _____
All other excess		<input type="checkbox"/>	\$ <u>000,000</u>	\$ _____
C. Product liability if a separate policy is purchased (including excess)	<input type="checkbox"/>	<input type="checkbox"/>	\$ <u>000,000</u>	\$ _____
Product type: (e.g. aircraft products) _____				
D. Professional liability if a separate policy is purchased (including excess)	<input type="checkbox"/>	<input type="checkbox"/>	\$ <u>000,000</u>	\$ _____
Professional coverage: (e.g. medical malpractice) _____				
E. Directors' & officers' liability	<input type="checkbox"/>	<input type="checkbox"/>	\$ <u>000,000</u>	\$ _____
F. Environmental impairment liability	<input type="checkbox"/>	<input type="checkbox"/>	\$ <u>000,000</u>	\$ _____
G. Fiduciary/ERISA liability	<input type="checkbox"/>	<input type="checkbox"/>	\$ <u>000,000</u>	\$ _____
H. Owned & non-owned aircraft liability	<input type="checkbox"/>	<input type="checkbox"/>	\$ <u>000,000</u>	\$ _____
I. Other liability:				
1. _____			\$ <u>000,000</u>	\$ _____
2. _____			\$ <u>000,000</u>	\$ _____
J. Total Premiums (sum of A through I)				\$ _____



## PART III: WORKERS' COMPENSATION COSTS

### 10.0 Workers' Compensation Insurance Program

We are trying to determine the ultimate cost of your organization's 1990 total workers' compensation program as well as your predominant per occurrence deductible or retention. Please include premiums for guaranteed cost programs, estimated ultimate retrospectively rated program cost for the accident year and premiums for captives.

- |      |   |                 |
|------|---|-----------------|
| 10.1 | Workers' compensation/employers liability premiums, including cost of letters of credit, excess workers' compensation premiums, and bonds for self-insurers | \$ _____        |
| 10.2 | Payments to state funds   | \$ _____        |
| 10.3 | Payments to Canadian provincial workers' compensation board   | \$ _____        |
| 10.4 | <b>Total Premiums &amp; Payments</b>  | <b>\$ _____</b> |

### 11.0 Self-Assumed Workers' Compensation Losses

We are trying to determine what portion of your workers' compensation losses are self-assumed or self-insured. This reflects costs for losses which actually occurred in 1990 — whether or not the losses have been reported or the costs have been paid. For your convenience, we have separated these costs into their three components — amounts already paid, outstanding reserves (amounts on known claims that you expect to pay in the future), and estimated incurred-but-not-reported (IBNR) amounts on claims which occurred in that year.

	No Self-Assumed <u>Loss</u>	<u>Paid Amounts</u>	Reserved <u>Amounts</u>	IBNR <u>Amounts</u>
11.1 1990 self-assumed workers' comp. losses	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____
11.2 Claims adjustment fees and other expenses (internal and external) not included above		\$ _____	\$ _____	
11.3 <b>Total Losses &amp; Fees</b>		<b>\$ _____</b>	<b>\$ _____</b>	<b>\$ _____</b>

- 11.4 Do you keep records on self-assumed workers' compensation losses?       Records kept  
 No records kept

- 11.5 Predominant 1990 workers' compensation per occurrence retention or deductible: *(If your program is fixed cost, please write "fixed cost.")*  
 \$ \_\_\_\_\_

**PART IV: SELF-ASSUMED PROPERTY AND LIABILITY LOSSES**

**12.0 Property**

Please specify or estimate the dollar amount of self-assumed or self-insured property losses experienced by your company in 1990. This could include losses within property program deductibles and auto physical damage losses. These should be losses which are otherwise insurable and should exclude ordinary business expenses (e.g. inventory shrinkage).

- 12.1 Total 1990 Self-Assumed Property Losses \$ \_\_\_\_\_
- 12.2 Do you keep records on self-assumed property losses?  Records kept  
 No records kept
- 12.3 Predominant 1990 property retention or deductible \$ \_\_\_\_\_

**13.0 Liability**

We are trying to determine what portion of your total liability costs are self-insured or self-assumed. This reflects costs for losses which actually occurred in 1990 — whether or not the losses have been reported or the costs have been paid. For your convenience, we have separated these costs into their three components — amounts already paid on losses which occurred in that year, outstanding reserves (amounts on known claims that you expect to pay in the future) on claims which occurred in that year, and estimated incurred-but-not-reported (IBNR) amounts for these claims.

**NOTE:** The cost of any unrecovered products-recall expense should be included in your answer to question B. EEO and EPA suits and settlements not covered by insurance should be included in your response to questions C and D.

13.1 1990 Self-Assumed Liability Losses

	No Self-Assumed Loss	Paid Amounts	Reserved Amounts	IBNR Amounts
A General and auto liability	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____
B Product liability	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____
C Professional liability	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____
D Other liability losses	<input type="checkbox"/>	\$ _____	\$ _____	\$ _____
E Claims adjustment fees and other expenses, including legal costs, not included above.		\$ _____	\$ _____	
F Total Losses & Fees		\$ _____	\$ _____	\$ _____

- 13.2 Do you keep records on self-assumed liability losses?  Records kept  
 No records kept
- 13.3 Predominant 1990 general liability policy retention or deductible \$ \_\_\_\_\_

**PART V: CAPTIVE INSURANCE PROGRAM**

**14.0 Single-Parent Captive Insurers**

In question 14.1 we are trying to evaluate the net cost or benefit of any wholly-owned captive insurance company if applicable. The premiums paid to the captive would be shown under previous questions. Thus, we are trying to determine the extra cost (loss) of benefit (income) of your organization's captive program. These amounts include both underwriting and investment income and are related to your own risks and are before income taxes.

1990

Net Profit

Net Loss

14.1 Captive insurance company's profit or loss

\$ \_\_\_\_\_

**APPENDIX C: APPLICABLE STANDARD INDUSTRIAL CLASSIFICATION CODES**

**Cost of Risk  
Industry Groups**

**Applicable Standard Industrial Classification (SIC) Codes**

1	Mining & Energy	1000	Metal Mining
		1200	Coal Mining
		1300	Oil and Gas Extraction
		1400	Mining and Quarrying of Nonmetallic Minerals, except Fuels
		2900	Petroleum Refining and Related Industries
		4600	Pipelines, except Natural Gas
2	Food, Agriculture	0100	Agricultural Production - Crops
		0200	Agricultural Production - Livestock
		0700	Agricultural Services
		0800	Forestry
		0900	Fishing, Hunting, and Trapping
3	Food, Tobacco, Textiles (Manufacturing)	2000	Food and Kindred Products
		2100	Tobacco Products
		2200	Textile Mill Products
		2300	Apparel and Other Textile Products
4	Construction - Building, Heavy, Special	1500	Building Construction - General Contractors and Operative Builders
		1600	Heavy Construction other than Building Construction; Contractors
		1700	Construction - Special Trade Contractors
5	Lumber, Furniture, Packaging	2400	Lumber and Wood Products, except Furniture
		2500	Furniture and Fixtures
		2600	Paper and Allied Products
6	Printing, Publishing	2700	Printing, Publishing and Allied Industries
7	Chemicals, Rubber, Plastic	2800	Chemicals and Allied Products (includes Pharmaceuticals)
		3000	Rubber and Miscellaneous Plastic Products
8	Primary Metals, Leather, Stone	3100	Leather and Leather Products
		3200	Stone, Clay, Glass and Concrete Products
		3300	Primary Metal Industries
9	Metal Products	3400	Fabricated Metal Products, except Machinery and Transportation Equipment
10	Machinery	3500	Industrial and Commercial Machinery and Computer Equipment
11	Electrical Equipment, Instruments	3600	Electronic and Other Electrical Equipment and Components, except Computer Equipment
		3800	Measuring, Analyzing and Controlling Instruments; Photographic, Medical, and Optical Goods; Watches and Clocks
12	Misc. Manufacturing Industries	3900	Miscellaneous Manufacturing Industries
13	Transportation Equipment	3700	Transportation Equipment

**Cost of Risk  
Industry Groups**

**Applicable Standard Industrial Classification (SIC) Codes**

14 Transportation Service	4000	Railroad Transportation
	4100	Local and Suburban Transit & Interurban Hwy. Passenger Transp.
	4200	Motor Freight Transportation and Warehousing
	4400	Water Transportation
	4500	Transportation by Air
	4700	Transportation Services
15 Telecommunications	4800	Communications, Telephone, Radio and TV Broadcasting, etc.
16 Electric Utility	4910	Electric Utilities
17 Natural Gas Utility	4920	Gas Production and Distribution
18 Combination Utility	4930	Combined Electric and Gas Utility
	4999	All Other Utilities (Water, Sanitary, etc.)
19 Wholesale Trade	5000	Wholesale Trade - Durable Goods
	5100	Wholesale Trade - Nondurable Goods
20 Retail Trade	5200	Building Materials, Hardware, Garden Supply, Mobile Home Dealers
	5300	General Merchandise Stores
	5400	Food Stores
	5500	Automotive Dealers and Gasoline Service Stations
	5600	Apparel and Accessory Stores
	5700	Home Furniture, Furnishings and Equipment Stores
	5800	Eating and Drinking Places
	5900	Miscellaneous Retail Stores
21 Finance - Bank, S&L, Holding Companies	6000	Depository Institutions
	6100	Nondepository Credit Institutions
	6700	Holding and Other Investment Offices
22 Finance - Real Estate, Other	6200	Security and Commodity Brokers, Dealers, Exchanges and Services
	6500	Real Estate
23 Insurance	6300	Insurance Carriers
	6400	Insurance Agents, Brokers and Service
24 Personal, Business Service	7000	Hotels, Rooming Houses, Camps and Other Lodging Places
	7200	Personal Services
	7300	Business Services
	7500	Auto Repair, Services and Parking
	7600	Miscellaneous Repair Services
	7800	Motion Pictures
	7900	Amusement and Recreation Services
	8100	Legal Services
	8700	Engineering, Accounting, Research, Mgmt. and Related Services
8990	Services, Not Elsewhere Classified	
25 Health Care	8000	Health Services, Hospitals, Clinics, Labs, Nursing Homes, etc.

**Cost of Risk  
Industry Groups**

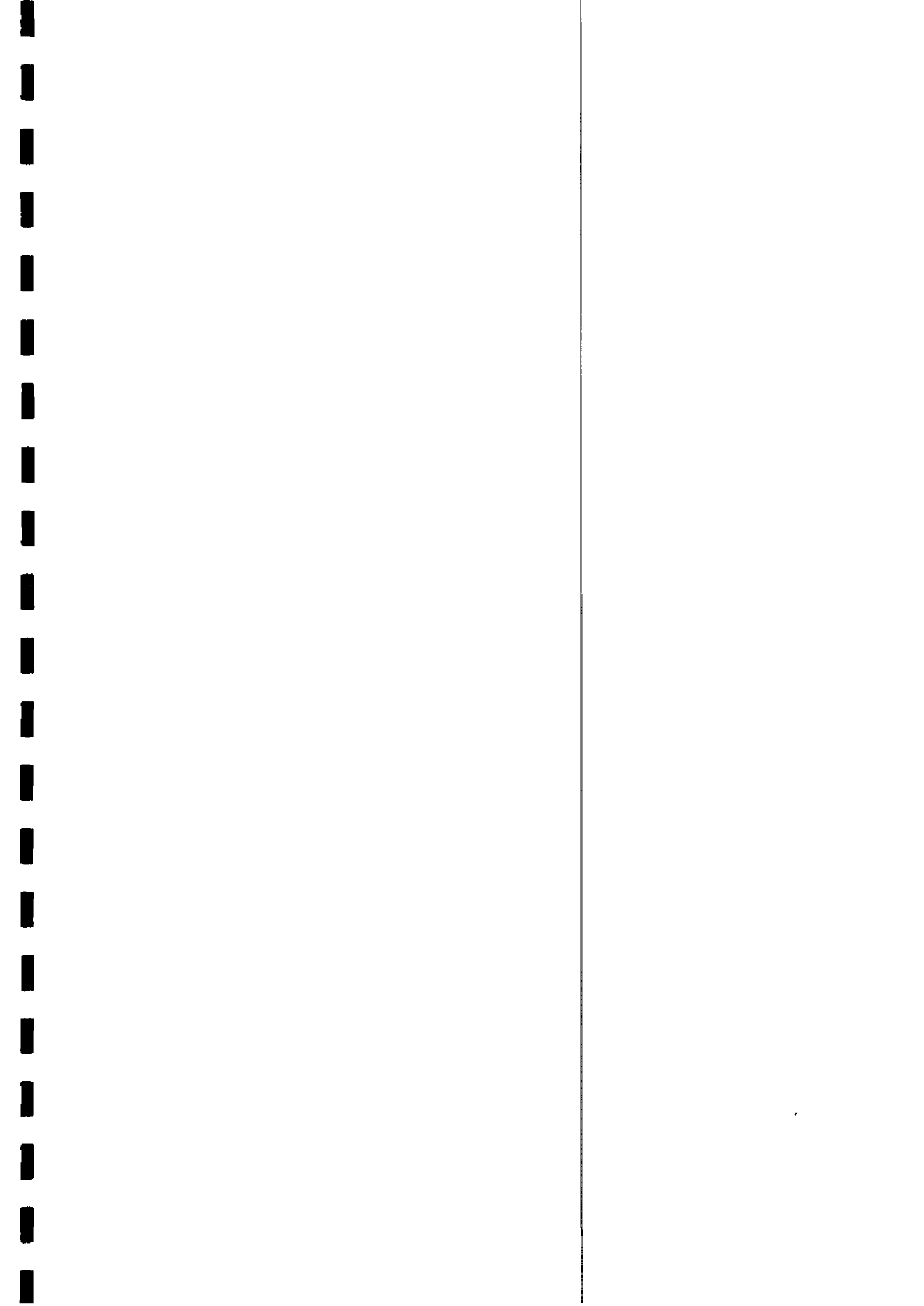
26 Educational, Nonprofit  
Institutions

27 Governmental

**Applicable Standard Industrial Classification (SIC) Codes**

8200 Educational Services, Universities, Schools, Libraries, etc.  
8300 Social Services, Daycare, Residential Care, etc.  
8400 Museums, Art Galleries and Botanical and Zoological Gardens  
8600 Membership Organizations

4300 United States Postal Service  
8940 Municipalities  
8950 Cities  
8960 Counties  
8970 States



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