

Risk Management: Text and Cases

2nd edition

**Mark R. Greene
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Second Edition

RISK MANAGEMENT: Text and Cases

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In its second edition, this book continues in its goal of covering topics appropriate to a first course in risk management for those students who wish an introduction to risk and risk bearing as a function of the business firm. The treatment is limited primarily to situations where the happening of a random event will bring about financial loss. The identification, analysis, and measurement of loss possibilities, and the principal methods of managing such contingencies constitute the basic core of the book.

The definition of risk management adopted in the text is broad enough to include some topics not commonly associated with the risk management function. Chapters on speculative risk and merger and foreign operations have been included in recognition of the wide range of activity in which a risk manager may be engaged. Two new chapters have been added—Chapter 7, “Captive Insurers” and Chapter 17, “Claims Administration”—in recognition of the growing importance of these topics in the field of risk management.

Insurance as a major way of managing certain types of risk is considered at some length. The aspects of insurance treated are those that impinge directly on the risk management function. Thus, the emphasis is on insurance markets and products, selecting insurers and insurer intermediaries, the legal framework surrounding the transfer of risk to insurers, pricing of insurance contracts, and the principles followed by insurers in selecting risks. Extensive discussions of the details of insurance contracts and problems in the organization and management of insurers, and other institutional aspects of insurance are beyond the scope of this text and are typically available in specialized insurance courses.

Sufficient materials have been included in

Preface

the text to accommodate courses of varying lengths and emphasis. No assumptions are made about the extent of the students' prior knowledge of insurance. Thus, the book may be used as the text in an introductory course in risk and insurance, or it may be used in specialized risk management courses where some knowledge of insurance is presumed. In the latter case, the instructor may wish to omit certain chapters devoted mainly to insurance.

Over 200 end-of-chapter questions have been included. Many of these exercises are essentially of the review type, while others require the willingness of the student to seek out the needed information through the use of reference materials. In addition, Chapter 20 contains a set of cases that are designed to be of help to those instructors who wish to use a case as the main vehicle for instruction. In situations where the case method, as such, may not be used, the cases may serve as the basis for extensive written reports.

A number of persons and organizations have been helpful to the authors during the preparation of this text. Although it is not possible to list all of their names, special mention should

be made of Professor Harold C. Krogh, Dr. George Head, and Herbert L. Cunningham, who read substantial portions of the first edition of this text and offered valuable suggestions; of Paul R. Johnson, Peter Lusztig, and Jack Lowe, who participated in the preparation of some of the Stanford cases; and of Carol Corina, Norma Honza, Jane Castruccio, and Rita Plume, who typed much of the manuscript during the period it was being tested in the classroom. It is a pleasure for the authors to extend their thanks to them. The authors would also like to thank the students who helped gather some of the case materials and the risk managers who cooperated with them in supplying information. The authors are also indebted to the American Council of Life Insurance, American Management Association, A. M. Best and Co., Casualty Actuarial Society, Insurance Information Institute, Richard D. Irwin, Inc., Society of Actuaries, and Stanford University for permission to reprint certain materials.

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RISK MANAGEMENT AS A FUNCTION OF BUSINESS ADMINISTRATION

INTRODUCTION

Although such areas as finance, marketing, accounting, and production have long been considered functions of business management, it has only been relatively recently that risk and its management have been recognized as separate functions of business requiring knowledge and skill on the part of a corporate officer designated as a risk manager. Risk management may be defined as “the process for conserving the earning power and assets” of the firm (or the individual) “by minimizing the financial effect of accidental losses.”¹ The accidental losses that are normally contemplated are those that arise from such occurrences as plant fires, liability suits, and similar events. Considerable uncertainty surrounds when such events will occur and what the magnitude of the loss will be.

Although the risk manager is usually concerned only with pure risks of the type just mentioned, there are a number of techniques available for handling the adverse consequences of speculative risks.² Modern concepts of risk management emphasize the wide scope of the risk manager’s responsibility. In the future he may well work with speculative as well as pure risks and with a wide variety of risk-bearing techniques.

In this chapter the following topics are considered:

1. Objective of risk management
2. Scope of risk management

¹ James Cristy, “Selling Insurance to Risk Managers,” *The National Insurance Buyer* 13 (September 1966), p. 16.

² A pure risk is one in which the occurrence of some uncertain event can only result in loss. A speculative risk is one where gain or loss may occur. See Chapter 2 for an extended discussion of risk.

1

The Field of Risk Management

3. Organization for risk management
4. Responsibilities of the risk manager
5. Qualifications of the risk manager
6. Relationship of risk management to general management
7. Relationship of risk management to insurance

OBJECTIVE OF RISK MANAGEMENT

The principal objective of risk management has been defined as "the effective planning of resources needed to recover financial balance and operating effectiveness after a fortuitous loss, thus obtaining a short-term cost of risk stability and long-term risk minimization."³ To achieve such an objective the risk manager must select the method of risk treatment that results in a net economic advantage to the firm. In the top-level management of the firm, there is often "conflict between optimization of return on capital and the increasing demand that waste of human, natural, and financial resources cease."⁴ Risk managers can help in the resolution of the conflict through their activities in risk and cost control.⁵

SCOPE OF RISK MANAGEMENT

It is sometimes argued that the management of risk could encompass all of the operations of a business and that all of the top executives of a firm are in effect risk managers. It is necessary, therefore, to define the scope of the risk management field in order to differentiate it from the total operation of the business enterprise.

³ Edgard S. Clark, "Financial Officers, Change, and Risk Management," Address Before the Financial Officers of Northern California, January 31, 1973.

⁴ *Ibid.*

⁵ By risk control is meant those activities, such as prevention, that result in reducing the probability that loss will occur.

Historically, the scope of risk management as a separate activity within the business firm was fairly well limited. Typically, the risk manager was essentially an insurance manager whose primary responsibilities centered around those risks that were amenable to transfer to professional risk takers, primarily property and liability insurance companies. Additionally, the risk manager (or insurance manager) would have some responsibility for safety and prevention. Over time the scope of the risk management function was enlarged to include some nontransfer methods of risk treatment such as planned no insurance, self-insurance, and related procedures. For the most part, the emphasis was on the protection of physical assets rather than on human assets.

An issue often arises about whether the protection of human assets through employee benefit programs, including such areas as group life insurance, group disability insurance, group travel accident insurance, and pensions, is properly within the purview of the risk manager. One of the early studies dealing with this issue was published by the National Industrial Conference Board in 1956, where it was found that 60 percent of the companies surveyed gave the corporate insurance manager the chief responsibility for the administration of employee benefits. A more recent study of this matter was made by *Time* in cooperation with the Risk and Insurance Management Society.⁶ Their survey, conducted at the end of 1974, involved a six-page questionnaire that was sent to 1,786 companies and organizations in the United States that were members of RIMS (Risk and Insurance Management Society). Slightly over 50 percent of the questionnaires were returned, resulting in a total response of 909 firms. Approximately 53 percent of the full-time risk/insurance managers who responded to the questionnaire were in-

⁶ "The Future and Changing Roles of Corporate Insurance as Seen by the Risk/Insurance Managers," An Attitudinal Survey sponsored by *Time* in cooperation with the Risk and Insurance Management Society, 1975. For reference to the most recent RIMS study, see footnote 9.

volved in the administration of employee benefit plans, while about 57 percent of the part-time managers had such responsibility. Table 1-1 provides additional details. Although these results show a slight decline in responsibility for employee benefits as compared to 1956, they show an increase over 1966. In the latter year professor Ivry found that approximately 50 percent of the full-time insurance managers who responded to his questionnaire were involved in the administration of employee benefit plans.⁷

Of the full-time risk/insurance managers in the 1974 *Time* study who indicated that they had responsibility for employee benefits, approximately 94 percent said this responsibility was in the health area, 51 percent had responsibility for pensions, and 23 percent for rehabilitation. Other areas mentioned were life insurance, disability, compensation, accident, profit sharing, benefits payment, travel, auto, and safety. Involvement in these other areas was not particularly substantial. The percentage of those having responsibility varied from 1.3 percent to 14.8 percent. These findings do not differ substantially from the results of Professor O'Connell's study, which was published in 1976.⁸ He found that approximately 20 percent of the risk managers he surveyed had full responsibility for benefit programs.

The most recent study bearing on the relationship of employee benefits to risk management as well as to other aspects of the risk manager's position was conducted in 1980 by the Risk and Insurance Management Society's Research Committee in conjunction with *Time Magazine*.⁹ This study, which was similar to the investigation undertaken in 1974-1975, in-

TABLE 1-1
Involvement of Risk/Insurance Managers in
Administration of Employee Benefit Plans
1974

Responsibility for Employee Benefits	Responding Managers	
	Full-time (percent)	Part-time (percent)
Yes	52.5	56.6
No	47.5	43.4
TOTAL	100.0	100.0

SOURCE: 1974 *Time* survey, p. 64.

volved an eight-page questionnaire that was sent to 2,897 United States members of RIMS. Some 1,429 completed questionnaires were returned, a return comparable to the earlier study.

In the 1980 RIMS-*Time* study the firms who received the questionnaires were asked to give the title of the person responsible for day-to-day risk management operations and the same information for employee benefits. Approximately 27 percent of those responding indicated that the person responsible for risk management was the same as for employee benefits. There was some variation in the percentages depending on whether the risk manager was full- or part-time, with slightly over 24 percent of the full-time managers indicating responsibility for employee benefits compared with about 32 percent of the risk managers who had additional duties. In terms of the person to whom the risk manager and employee benefits manager reported, the respondents indicated that it was the same person in about 34 percent of the cases. These figures show that employee benefits continue to be an important part of the work of a substantial proportion of risk managers.

Professor Ivry found, as might be expected, that risk/insurance managers who were officers of their companies were more involved in the administration of the employee benefit plans

⁷ David A. Ivry, "The Corporate Insurance Manager and Employee Benefit Plans," *The Journal of Risk and Insurance* 33 (March 1966), pp. 1-17.

⁸ John J. O'Connell, "Changing Responsibilities and Activities of Risk Managers—1969 vs. 1975," *Risk Management* 23 (January 1976), p. 21.

⁹ The Risk and Insurance Management Society, Inc. and *Time Magazine*, *The Present Status and Future Role of Risk Management: A Survey of U.S. Risk Managers* (New York: RIMS, Inc., 1981), p. 69.

than insurance managers as a whole. Among the insurance managers who were officers, approximately 48 percent were involved in all plans, and some 35 percent were involved in some plans. In cases where corporate insurance managers are in no way involved in employee benefit programs, the reason often is that other structures exist within the firm for the purpose of administering employee benefits. The personnel department is often given the responsibility, which it discharges through a Director of Employee Benefits. A distinction is sometimes made between wage and salaried employees. Administration of benefits for the former group might reside with the personnel department, while the latter would be the responsibility of the insurance department. Sometimes the involvement of the insurance manager in employee benefit plans is chiefly advisory or in some other way a shared responsibility. Ivry found that part-time insurance managers were also involved in employee benefit plans. Approximately 48 percent of this group indicated that they were involved in all plans.

In terms of the attitude of risk managers toward involvement in employee benefit administration, approximately 64 percent of full-time managers indicated that insurance managers should be involved in employee benefits. Of those full-time insurance managers involved in all employee benefit plans, some 90 percent indicated that they should be involved.

In summarizing his study, Ivry concludes:

It can be argued that the field of employee benefits is so highly specialized today that the insurance manager should confine his activities to the increasingly complex field of exposures in the property-liability area. The ideal arrangement would be for an insurance manager or risk manager to have several subordinates who are specialists in these particular areas. There would be a specialist(s) in the traditional areas of corporate insurance management and a specialist or specialists in employee benefit plans. The insurance manager would rely heavily on the technical skills of his subordinates. He would be himself more a manager than a technician, but there would be centralization of insurance activity in one de-

partment. There appear to be advantages to this approach compared with the approach used by some companies that create an employee benefits department completely separate from the insurance department. Often the two managers report to different officials. From an efficiency point of view, this approach can be questioned seriously.¹⁰

Including employee benefit plans within the scope of the risk management function seems highly logical, particularly so when one considers that most of these plans typically make use of insurance techniques to meet the risks inherent in such plans.

Over the years the scope of the risk manager's activity has broadened considerably. Today it is more common than before to refer to the person in charge of risk management for the business firm as a *risk manager* rather than an *insurance manager*. (See Table 1-2.) Likewise, much more consideration is being given to the noninsurance aspects of managing risk. Insurance is now seen as being only one of a large number of methods for meeting risk. It is possible that in the future the risk manager will not limit his activities to the analysis and meeting of pure risk situations, but will extend his activity to include many aspects of speculative risk. It is possible that such activities as quality control, market research, business forecasting, hedging, and investment will be within the scope of a risk department administered by an officer of the business firm.

ORGANIZATION FOR RISK MANAGEMENT

Once the importance and scope of the risk management function has been recognized, it is necessary to consider where in the organizational structure of the firm to locate the office of risk manager. That no single answer to this problem

¹⁰ Ivry, "The Corporate Insurance Manager and Employee Benefit Plans," p. 16-17.

TABLE 1-2
Titles of Risk/Insurance Department Heads

Title Words	Total Respondents	Risk Manager	
		Full-Time (Percent)	Add'l Duties (Percent)
1980 SURVEY			
Manager/Management	64.8	74.9	49.8
Risk	39.7	51.2	24.1
Insurance	34.1	39.5	26.2
Vice-President	10.0	7.3	14.1
1975 SURVEY			
Manager/Management	51.0	62.5	35.3
Risk	16.6	23.4	7.8
Insurance	60.0	74.6	39.0
Vice-President	7.3	3.5	12.5

SOURCE: Mitchell York, "RIMS/Time Magazine Survey: Where Are We Heading," *Risk Management* 28 (June 1981), p. 12.

exists is evident from a survey of the literature on this aspect of risk management.

The National Industrial Conference Board study of risk management published in 1956 showed that 60 percent of the surveyed companies had either a separate insurance department or a full-time insurance manager. Ivry reported that approximately 71 percent of the firms he surveyed had full-time insurance managers.¹¹ The 1974 and 1980 *Time* studies were in substantial agreement with the Conference Board report and showed that in 1980, 59 percent of the companies that responded accorded their risk/insurance managers full-time status. The 1980 study also showed that in those situations where the risk/insurance manager was part-time, the additional responsibilities involved such things, for example, as administration, accounting, employee benefits, and cash management. The titles of risk/insurance managers, whether full- or part-time, vary consid-

erably. This same study found that for full-time managers such words as *insurance*, *manager*, *director*, *risk*, *vice-president*, to name a few, appeared in the title. Between 7 and 8 percent of the full-time managers had the title of vice-president compared to between 3 and 4 percent in 1974. A smaller percentage had the titles of treasurer or secretary. (Further detail appears in Table 1-2.) There was also considerable variation in the titles of executives to whom risk managers report. Approximately 39 percent of the full-time risk managers reported to the vice-president, 20 percent to the treasurer, 54 percent to finance, and 3 percent to the president. Examples of other officers to whom the managers reported are controller, chairman of the board, secretary, director, and executive.¹² For the most part risk and insurance managers report to officers with responsibilities in the general field of finance, even though insurance is only in part a financial function. Since the function of risk management is not easily categorized in terms

¹¹ Insurance manager and risk manager are used interchangeably in this discussion. Historically, the expression "insurance manager" was the more common.

¹² For more detailed information see "The Present Status, and Future Role of Risk Management, Detail Tables," p. 72.