BOOK REVIEWS

The Liability Maze: The Impact of Liability Law on Safety and Innovation, edited by Peter W. Huber and Robert E. Litan (Brookings Institution, 1991).

Reviewer: David F. Babbel, Department of Insurance and Risk Management, The Wharton School, University of Pennsylvania

The Liability Maze is a volume of essays and studies conducted by a team of scientists, engineers, economists, physicians, and attorneys directed toward examining the impacts of U.S. liability law on safety and innovation. Among the team are many of the leading thinkers and researchers in the area. These authors focus on five key sectors of the economy where liability has had the greatest effects: the automobile, chemical, general aviation, and pharmaceutical industries, and the delivery of medical services.

Behind the expansion of liability rules has been the assumption that increased rules and liability promote safety by raising the price of negligence and product defects. This has been especially prevalent with so-called strict liability cases, under which defendants can be held liable even without proof of their negligence. A contrary school of thought has emerged which suggests that the broad and unpredictable sweep of U.S. liability law actually deters innovation. The lack of supporting data for both schools of thought has not deterred policy-makers from forging ahead.

Little empirical research was available prior to the publication of this volume, which contains several pioneering empirical studies that present evidence relating to each school of thought. Evidence is gleaned from extensive interviews and case studies, from preexisting legal and technical literature, and from comparative analyses of safety and innovation trends in countries with different liability systems.

The editors strove to select authors in an even-handed manner. The general structure of exposition employed in the volume is to present two independent studies on each of the five economic sectors examined and then to have a third author give critical commentary on each pair of studies. This format will be especially appreciated by nonexperts in the area of liability law and its effects and is helpful given the varied empirical procedures employed.

Not surprisingly, given the differences in sectors studied, approaches taken, and the number of authors commissioned to perform the studies, the authors do not converge on a consensus about the impact of the U.S. tort system on American living standards. Rather, the studies underscore the hazards of generalizing in this area. Nonetheless, the studies do provide support for the sentiment of making the law more predictable and less inhospitable to individuals' and firms' efforts to innovate and improve safety.

These studies undoubtedly will stimulate further research based on alternative approaches and different data sets. Sophistication in research methodology is likely to increase over time. Indeed, the editors thoughtfully set out a research agenda that they believe will help policy-makers achieve closure on at least some of the remaining open questions.

The studies were sponsored by the Brookings Institution and funded by the A. V. Starr Foundation, the Sloan Foundation, and the Center for Economic Progress and Employment. Editors Huber and Litan are now with the Manhattan Institute and the antitrust division of the U.S. Department of Justice, respectively. For a textbook that provokes discussion and controversy in an undergraduate insurance course, I highly recommend two of Huber's other books, *Liability: The Legal Revolution and Its Consequences* and *Galileo's Revenge: Junk Science in the Courtroom. The Liability Maze,* on the other hand, takes a more balanced, scholarly approach and would be an excellent starting place for graduate studies concerned with the status and effects of our liability laws.

Since 1991, when the volume was published, a number of legislative initiatives have addressed issues raised in *The Liability Maze.* For instance, in the 1994 case *Daubert vs. Merrill Dow Pharmaceuticals,* dealing with the anti-nausea pregnancy drug Benedectine, the Supreme Court has provided some additional guidance about the kind of scientific evidence that is admissible from experts in legal proceedings. The same court recently struck down punitive damages in a general liability case (*Haslip*). A bill on general aviation has gone to the floor of Congress. The Federal Product Liability Reform Act was filibustered to death but may be resurrected in the next Congress. Medical malpractice reforms are currently linked to various national health proposals.

Supplements to the ideas set forth in *The Liability Maze* will become available as additional research sheds light on its open questions and as legislation evolves. Nonetheless, the book will serve as an excellent grounding to the liability maze that was made in America.

BOOK REVIEWS

Corporate Environmentalism in a Global Economy: Social Values in International Technology Transfer, by Halina S. Brown, Patrick Derr, Ortwin Renn, and Allen L. White (Quorum Books, 1993).

Reviewer: S. J. Chang, Associate Professor of Finance, Illinois State University

Modern societies have long pursued development, equity, and independence only to recognize that such values often collide with another set of values such as environment, health, and safety. In this book, Brown and her colleagues provide an excellent analysis of this potential conflict by looking at three actual cases of international technology transfer. The analysis deals with how the parties involved--multinational corporations, local venture partners, and host countries--negotiate and reconcile sets of these conflicting values. It presents rich insights that can prove to be valuable for multinational corporations' hazard management.

The major questions the authors raise at the beginning are why some multinational corporations perform better in environment, health, and safety than others; the extent to which multinational corporations influence the environment, health, and safety outcome as opposed to venture partners and host countries; what motivates and constrains these parties during negotiation, construction, and start-up stages; and what tradeoffs are made during the process to balance competing objectives. All in all, the authors successfully provide answers to these questions, but not necessarily in the most effective and convincing manner.

Part of the reason lies in the authors' failure to present a convincing argument that the two sets of values do conflict with each other not only in our minds but also in the real business setting. The issue should and can be clearly portrayed as one of today's most crucial socio-politico-economic problems for both developing and developed economies. Instead of sketchy anecdotes (for example, the Bhopal incident), the authors should open with a convincing argument of what the issue really is and why it is significant in modern societies.

In the middle of a rather lengthy discussion on the general concepts of values and culture in chapter 2, the authors write,

> to speak of a "conflict" between environmental and development values is not to assert any intrinsic opposition between them; rather,...the values are so related that the policy and practice options that would advance one value tend to exclude the policy and practice options that would advance the other value (p. 22).

Readers may find themselves confused not knowing whether the authors contend that the values are in (strong or weak) conflict or simply competing with each other.

The authors admit that, as a study of three self-selected cases, their work cannot be widely generalized. I therefore fully agree with the authors that the work should be interpreted as *ethically informed empirical science* that adds to our understanding of the process by which certain values become the outcome of technology transfer.

The book showcases three success stories: Du Pont's wholly-owned subsidiary in Bangpoo, Thailand; Occident Chemical's joint venture in the same location; and Xerox's joint venture concern in Rampur, India. Chapter 3 presents detailed profiles of these multinational corporations and their partners and the hosting countries. The comparative analysis of the three corporations highlights both their shared characteristics and important differences. All three companies produce potentially hazardous chemicals and have well-developed management systems for environment, health, and safety. However, it is important to recognize that they have different histories, philosophies, and characteristics. For example, while Du Pont has the longest history and better reputation for safety, consumer exposure is not a major issue at Occidental because it produces only industrial chemicals.

Likewise, it is crucial to understand that the contrasts in business environment between Thailand and India create different expectations of how the technology transfer is processed in each country. Yet the chapter also states that, due to fairly weak enforcement systems in both countries, the companies have relative autonomy in implementing their environment, health, and safety policies.

Chapter 4 narrates the three chronologies, summarizes the vital statistics of each case, provides interpretive commentaries, and eventually identifies the variables that may explain the nature of the interactions among the principal parties. While the idiosyncrasies of the three cases are clearly identified, the chapter still leaves room for further discussion of probable impacts caused by the different characteristics. One can easily conjecture that the environment, health, and safety policy implications for the Xerox plant would be quite different than those for the other two since it hires far more employees.

The following three chapters present the three elements that are identified as most crucial for multinational corporations' financial and environmental success in a technology transfer project: host country development policies, corporate culture, and business arrangements. The beauty of this presentation is that the authors (plus two guest writers) present indigenous articulation of how each of these variables comes into play at various stages and how significantly they can affect the outcome. Moreover, Brown and her colleagues explore these variables in depth from a theoretical perspective as well as in reference to the case studies.

The two guest writers (Jeanne X. Kasperson and Roger E. Kasperson) contribute an excellent chapter on corporate safety culture and technology (chapter 6). Their elegant chapter should not only keep readers interested but also enlightened about the significance of corporate culture, which sometimes interferes with the host country's development policy. They note, for example, that for Du Pont's highly acclaimed corporate culture to work, full control over operations is essential.

Another strong point of this book is found in its final chapter (chapter 8). The authors provide a synthesis with some careful and meaningful conclusions. It is particularly illuminating when they identify key variables during each stage of the project implementation. The authors provide careful explanations as to why their conclusion does not endorse the seemingly common belief that strong conflicts between development, equity, and independence and environment, health, and safety values are inevitable in international technology transfer. The book ends with a list of practical, workable recommendations for both multinational corporations and host countries. For example, it is beneficial to both parties to articulate the goals and objectives of environment, health, and safety management at an early stage of the project.

The book is well written and is appropriate for a general audience. However, it is mainly targeted for discerning readers, such as organizational researchers, policy-makers, and regulators at multinational corporations and governments. Yet, despite its limitation as a collection of several cases, it is very comprehensive and thought-provoking in the area of corporate environmentalism.

BOOK REVIEWS

Government Risk-Bearing, edited by Mark S. Sniderman (Kluwer Academic Publishers, 1991).

Reviewer: Gregory R. Niehaus, University of South Carolina

This book is a collection of nine articles presented to a conference held at the Federal Reserve Bank of Cleveland in 1991. The conference brought together an impressive group of scholars and practitioners. Although the articles deal with a diverse set of institutions, all are concerned with the advantages and disadvantages of government involvement in risk bearing and in public policy approaches to reduce the frequency and severity of losses. A commentary by another conference participant complements each article. The editor's excellent preface outlines the purpose of the conference and summarizes each article. Instead of repeating the editor's summaries, this review identifies some of the common themes addressed in the articles and comments on the strengths and weaknesses of the book.

The articles analyze the general conditions under which government risk bearing is efficient, as well as problems of specific government insurance programs. The book covers a broad range of government programs, including disaster insurance, deposit insurance, crop insurance, insurance for nuclear accidents, liability for and regulation of environmental damage, and pension insurance. However, a central theme of the book is government insurance for financial institutions (not surprising given the conference's sponsor). Consistent with this theme, the authors who do not focus on financial institutions draw lessons from their analysis that would apply to financial institutions.

Most of the papers are normative in nature in that they attempt to identify the appropriate role for government and how to improve current government risk bearing operations. Of course, there are numerous government insurance programs, and casual observation suggests that many need improvement. Thus, the book's topic is important, and the articles provide important guidance for improving the efficiency of many of the government's insurance programs.

To a large extent, however, the policy prescriptions for enhancing the efficiency of these programs are based on relatively straightforward and well-known economic principles. For example, the potential inefficiencies associated with fixed-rate deposit insurance are well known (and were so many years before the savings and loan crisis). This suggests that government risk bearing operations are not designed with only economic efficiency in mind. Wealth redistributions no doubt play an important role in the political process that results in government risk bearing operations. On this issue, the book is weak. Very little attention is given to questions of positive political economy, such as "who benefits from a particular government insurance program?" or "how do the beneficiaries of particular policies influence the political process?" One exception to this general deficiency is a paper by Brian Wright, which includes a short section on the beneficiaries of deposit insurance and crop insurance.

As is true of most conference proceedings, most of the articles do not present original research results of the type that would appear in a high quality academic journal. Instead, the papers generally summarize the results of prior research and present ideas that are not fully developed in a rigorous model. I point this out, not as a criticism, but as a positive point about the book. Indeed, a reader can learn a great deal with relative ease from this book. The papers are not technically demanding, yet they contain ideas that are based on rigorous research.

In sum, the book provides an excellent survey of the economics of government risk bearing. The book includes both analysis of general issues and of actual government risk bearing programs. Thus, the book is valuable to all who have an interest in the conditions under which government risk bearing can improve economic efficiency and the problems and potential solutions of existing government risk bearing operations. In addition, many of the articles could be used in undergraduate and graduate risk management and insurance classes.

BOOK REVIEWS

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Workers at Risk: The Failed Promise of the Occupational Safety and Health Administration, by Thomas O. McGarity and Sidney A. Shapiro (Praeger, 1993).

Reviewer: Leta C. Finch, Vermont Insurance Institute at Champlain College

For anyone interested in an abbreviated history of the Occupational Safety and Health Administration (OSHA), this is the book. The authors have done a fine job of condensing OSHA's long, complex birth and maturation. The descriptive chronology of significant events reads well without the burden of needless details.

The authors also have presented, from a legal point of view, the myriad problems that OSHA has been unable to resolve, most notably its cheshire cat approach to balancing the need to be all things to all concerned parties against its insufficient budget and staff constraints. Clearly, establishing a priority-setting process is crucial to OSHA's credibility as an effective federal oversight bureaucracy. Nurturing the myth that all workplace safety issues are equal in importance slows regulation of critical issues to a snail's pace. Congress must either financially empower OSHA to allow each and every issue high priority or stand solidly behind OSHA when it exerts the courage to set priority criteria.

The authors, however, offer little in the way of innovative or thoughtful solutions or suggestions to help solve OSHA's administrative and oversight challenges. The overall message from McGarity and Shapiro is that OSHA should close in the legal boundaries of current regulation and apply more muscle to the overall oversight process. Will doing more of what hasn't worked in the past make OSHA at last effective and indeed reduce workplace injuries, disease, and fatalities? I think not. All of us who have worked or currently work in the ranks of property and casualty loss control in the insurance business can tell you that OSHA regulations do little to improve workplace safety as long as U.S. companies are badly managed. Although OSHA regulations have indeed added clout to the insurance industry's effort to reduce insurable losses, a high incidence of workplace injuries will persist if workplace morale is low.

All this may be moot, however, as a result of OSHA's July 1994 stakeholders meeting. The intent of the meeting was to, at long last, garner much-needed ideas about revitalizing the administration from private business and CEOs. One of the important insights that came out of the meeting was that top management commitment and meaningful employee involvement must go hand in hand. Without addressing the demoralizing management tactics that continue to exist in U.S. businesses, a worker may continue to find it far more appealing to stay off the job with a real or alleged injury than come to work anguished over how he or she will be treated. Until management begins treating all employees with the same level of respect it in turn demands for itself, workplace injuries will not be controlled by enforcing safety violations by fines or citations.

Nonetheless, *Workers at Risk* is a book to have in one's library as a quick reference for the concise history it offers. It is, however, far better to follow the outcomes of future stakeholders meetings to predict changes that may impact OSHA's effectiveness. Indeed, the "failed promise" has not been intentional, just the result of naiveté, or an unwillingness, on the part of OSHA to address the real reasons for workplace injuries.

BOOK REVIEWS

Financial Management of Life Insurance Companies, edited by J. David Cummins and Joan Lamm-Tennant (Kluwer Academic Publishers, 1993).

Reviewer: Frans T. E. Dooren, Erasmus Insurance Centre, Erasmus University, Rotterdam, The Netherlands

Financial Management of Life Insurance Companies is a collection of nine papers that were prepared for the Symposium on Life Insurance Company Financial Management, held at the Wharton School in November 1992. The symposium was the primary event sponsored by the Solomon S. Huebner Foundation for Insurance Education in celebration of its fiftieth anniversary, and this book was published to commemorate the event.

The book's theme is the management of life insurers using techniques drawn from the field of finance. The editors state in their foreword that the importance of financial management has greatly increased in recent years, paralleling the growth in competition within the financial services industry. To succeed in today's business environment, insurers must use financial techniques such as asset-liability management, financial hedging, futures, and options. They should also be increasingly precise in measuring the tradeoffs between risk and return in both their asset and their product portfolios. The papers' topics represent a broad spectrum. Each self-contained chapter covers a single topic.

The first paper, contributed by Salvatore R. Curiale, deals with life insurer solvency. This chapter--and others--has a noticeable U.S. flavor, dealing with the savings and loan debacle, the collapse of the junk bond and commercial real estate markets, and the burgeoning federal deficit, all of which have influenced the life insurance industry. The seizure of two Executive Life companies in the spring of 1991 by regulators caused a crisis of confidence that spread throughout the life insurance industry. According to Curiale, the industry, in addition to offering sound products, should redefine prudence with respect to its investments and establish a stronger link between assets and liabilities. Life insurers have begun to merge in order to cut cost, expand market share, and take advantage of economies of scale and are likely to focus on the types of business they do best. Such consolidation and "going back to basics" will continue and should prove healthy not only for the life insurance industry but for every other sector of U.S. industry. The role of regulators is to restore public confidence in the life insurance industry. They must be vigilant in ensuring that insurance policies provide real benefits and value and that consumers can understand the risks associated with competing products.

In the second paper, Harry D. Garber evaluates considerations in a mutual life insurer conversion. From a financial perspective, the key impediment to mutual life company stability, growth, and development is that equity capital can be raised only through retained earnings from the company's operations. Conversion of life insurers from mutual to stock form is a solution. Other solutions are offered in the last paper by Michael Touhy and Andrew Giffin (discussed below), including raising capital through a downstream holding company or by adding a stock company component to the capital structure.

Anthony M. Santomero's paper contains a banking industry perspective on banking and insurance. It provides an interesting description of history and structure of the commercial banking system in the United States and its influence on the financial industry.

Marshall E. Blume and Donald B. Keim, in an update of an earlier analyses, discuss the myths and reality of low-grade bonds. They conclude that low-grade bonds display characteristics of both small stocks and high-grade bonds. The paper establishes that the correlation of the returns of low-grade bonds and other financial assets, including long-term government and equities, is not perfect, implying that low-grade bonds have a place in any well-diversified portfolio.

The fifth paper, "The Paradox of Performance Measurement" by William H. Panning, examines the paradox that "good" performance makes the firm worse off. This trap can be avoided by changing the focus of evaluation to encompass the future as well as the past and the risks incurred as well as the results achieved. The author offers a process of investment decision-making that seeks to control both risk and return, and feed-forward control. This paper is excellently written and a pleasure to read.

"Estimating Divisional Cost of Capital for Insurance Companies," by Franklin Allen, contains an analytic approach to divisional cost of capital. It starts with a simple benchmark case and, by adding imperfections to it, builds toward more complex situations.

Clifford W. Smith, Jr. explores two major implications of corporate risk management theory for life insurers: The impact of interest rate risk management policy on the value of a life insurer and the risk management policies of loan customers with respect to the insurer's asset portfolio. The author argues that an insurer sells imbedded interest rate options and thus creates a significant exposure to interest rate volatility, which can be managed only through options. Specialized risk management tools that allow firms to hedge many sources of market-wide financial risk are forwards, futures, options, and swaps. In addition to these off-balance-sheet hedging alternatives, financially engineered instruments, such as dual-currency bonds, provide on-balance-sheet hedging alternatives.

The eighth paper, "Asset/Liability Management: From Immunization to Option-Pricing Theory" by Elias S. W. Shiu, is of particular value for the many references cited, which form an adequate list of additional reading for historical reviews, technical details, and the use of different immunization methods. Shiu presents a short review of the classical immunization theory by Redington, which assumes asset and liability cash flows are fixed and certain. Then he extends the theory to the general case of interest-sensitive cash flows by means of modern option-pricing theory. The option-pricing methodology, with the principle of no arbitrage, can be used to value interest-sensitive cash flows. In this way, one can compute *relative* market values and price-sensitivity indexes for both assets and liabilities. With this information, one can design appropriate strategies for managing assets and liabilities.

The last chapter, "Scorekeeping in the 1990's: Financial Issues of Multinational Insurance Organizations" by Michael Touhy and Andrew Giffin, deals with the most important financial issues according to the world's leading multinational insurance organizations. To identify these issues, the authors reviewed the 1990 annual statements of 29 multinational insurers.

After identifying some of the apparent directions of major multinational insurers and the financial issues, they suggest financial management methods for each of these areas. The conclusion drawn is that whether multinationals face a global imperative or not, managing their financial affairs is becoming increasingly important. Company modeling, embedded and appraisal value analyses, profitability variance analyses, risk-based capital analyses, and asset-liability management are currently available tools through which they can make more efficient use of capital and manage their varied business units more effectively.

This interesting and provocative collection of papers should be of interest to readers of this journal. Most papers include many references for those who would like to explore the subject further. The broad spectrum of topics, however, results in a book that lacks a cohesive focus. Therefore, it is appropriate for courses as a supplemental resource. Nevertheless, the book is a must for everyone in the field of insurance. Further, this book is also of value to academics, practitioners, and other students of finance who are interested in the application of financial techniques to insurance problems. I highly recommend the book for every university library.

BOOK REVIEWS

6 ***Essentials of Risk Management and Insurance,*** by John H. Hampton (American Management Association, 1993).

Reviewer: Audrey A. Weir, Lecturer, Department of Risk and Financial Services, Caledonian University, Glasgow, Scotland

Essentials of Risk Management and Insurance promises to be an interesting text on the highly topical subject of risk management and an insight into the essentials of insurance within the United States. The text is divided into three main areas: risk management (four chapters), insurance (fourteen chapters), and global risk management and insurance (one chapter). Personal and commercial insurance are jointly discussed.

The preface provides information about the book's aims, usage, and potential market. The author suggests that the text will provide an overview of each topic and serve as a source of information. This objective has been fulfilled; the text competently discusses the issues within a wide variety of insurance needs (e.g., personal insurance and liability, commercial insurance and liability, life insurance, health insurance, etc.). Discussions on the nature of risk, risk management, risk management programs, and risk financing options are included.

Usage of the text is not limited to a simple read and absorb. Exercises at the end of each chapter allow the reader to "analyze, interpret and apply the lessons of the text." Within any professional or academic text, exercises to test the level of understanding are a welcome feature. On the negative side, specimen answers are not provided, and this would have maximized the benefit to the reader/student.

The aims for the reader, and perhaps an indicator of the potential consumers of this book, are "a better understanding of your insurance protection" and "to assess the world of insurance and risk management...as a career field." The text certainly achieves the first objective and would aid understanding of the world of insurance as a career option. The depth of risk management coverage, however, may preclude such a full understanding for the second objective.

Each chapter deals mainly with discrete topics, and this review would become overly long if each were discussed independently. Thus, I will attempt to give a flavor for the content. The main focus of the book is written from an insurance perspective. Chapters 1 and 2 deal with the nature of risk and the nature of insurance. Within the nature of risk, the topics of insurable risks and categories of insurable risk are listed. Estimates of loss amounts rely on indemnity as the measure of reimbursement, and the components of loss are listed as direct costs, indirect costs, and additional expenses.

Additional topics covered include insurance in the United States, the legal environment of insurance, insurance contracts, health and disability insurance, automobile insurance, life insurance, personal insurance, commercial insurance, liability, workers' compensation, reinsurance, global insurance, and risk management.

This book is an interesting read and an excellent reference point. The chapters are well executed, having a high degree of structure and hinging around key words, which are then exceptionally well explained. A glossary allows for easy comparison of suspected differences between the U.S. and U.K. definitions. The author is commended on an easy to comprehend style and a broad, brief investigation of the insurance market and the principles and practice of insurance in the United States. As an introductory text on insurance with additional coverage of risk management, or for those interested in comparing the U.S. system to any other country, this text is highly recommended.