The EVT model may be familiar to insurance actuaries, and the author states that it has recently been introduced to financial risk managers. Using several banking examples, the author provides a sketchy description of the EVT model, assuming that the reader is familiar with it.

Chapter 2 introduces some historical loss incidents as a means to appreciate the need for operational control systems.

Chapter 3 is a review of current banking regulations. The author suggests that current regulation is a function of the failures of previous bankers to manage their operational risk. This failure is ascribed to the lack of accurate models.

Section 2 (Chapters 4 through 6) is intended to provide the foundations for understanding the new Delta-EVT model. It is here that the writing style may frustrate understanding. For example, in attempting to describe the model variables, the author states, "[o]perational risk measurement uses risk factors, which are those causal factors that create losses with a random uncertainty, to measure the variability of earnings (p. 58)." The abundance of such compound sentences (with questionable grammar) permeates the entire book. Thus the material is presented in an overly complex way that hinders understanding. This is unfortunate because the general format and logic of the text are well conceived. The material is presented in a logical fashion, the assumptions are enumerated, and the advantages and disadvantages of each idea are clearly stated. The result is that unless the reader already understands the Delta and EVT models, this text does not serve as a source for learning the material.

Section 3 (Chapters 7 through 9) presumes that the reader is now completely familiar with the foundations of the Delta and EVT models, and the author builds upon that knowledge to apply the Delta-EVT to several banking situations. These examples use considerable unexplained banking jargon and concepts and contain numerous formulae with unexplained variables and a few errors. Some examples are unnecessarily complex applications of an otherwise fairly simple concept. Compounded by sentences such as "Building causal models for operational risk involves seven steps, which are presented in this section in two groups, namely those steps associated with building and training causal models and those for using the trained model (p. 160)." The overall result is less than optimal understanding.

Section 4, Mathematical Foundations, contains one well-written chapter. In contrast to the rest of the book, Chapter 10 (Error Propagation) is succinct and includes clear examples. Chapters 11 and 12 (Extreme Value Theory and Bayesian Methods) fail in their purpose of providing a clear definition of these fundamental concepts. While most readers may already be familiar with these ideas, the intent of these chapters was to serve as a foundation for those who need their knowledge refreshed.

I enjoyed many parts of the book. The application of risk management to banking operations was an enlightening read. However, if the reader's purpose is to learn the theory and application of the EVT, Delta, or Delta-EVT models, then the reader may be disappointed.

Social Dialogue and Pension Reform, edited by Emmanuel Reynaud, 2000, Geneva: International Labour Office.

Reviewer: William L. Ferguson, The University of Louisiana at Lafayette

Social Dialogue and Pension Reform is a compilation of research papers regarding the current pension environment and recent reforms undertaken and/or debated in major industrialized nations, in particular the United Kingdom, the United States, Germany, Japan, Sweden, Italy, and Spain. The work was originally prepared at the request of the Department of Social Security in the French Ministry of Employment and Solidarity for comparative purposes (thus the absence of France in the above list). The book is targeted primarily at anyone interested in public policy decision making and is specifically intended to increase awareness and understanding of various approaches to public pension schemes. The author(s) of each article provide(s) a brief historical outline of the public pension system of each country, as well as the then "current" [i.e., roughly between 1996 and 1998] environment, along with a discussion of national institutional structures and reform mechanisms proposed and/or employed. Finally, the authors identify the general strengths and weaknesses of each system and the proposed reforms for each country. They do not advocate, or contemplate, a single, "magic bullet" approach.

Sometimes each case contains tedious detail into the history, structure, and political interaction among the various actors/players (e.g., the makeup of the German *Sozialbeirat*, or of U.S. Statutory Advisory Councils). Carefully highlighted are the many difficulties inherent in consensus-building, social relationships, and political problems between the relevant actors (e.g., majority party agenda control and lack of transparency in the British system; the machinations and maneuvering of government and trade unions leading up to the 1995 Toledo Pact in Spain). The book illuminates incentives influencing the actors and overarching decision control mechanisms employed in various countries (e.g., 75-year Board of Trustee revenue/expense forecasts in the United States; legally mandated systematic five-year cyclical reviews in Japan). Articles also appropriately espouse the projected consequences of inaction or delay.

Notably, only two countries had undertaken any significant recent reform to their pension systems as of publication of these applicable country reports. Though each had undertaken a relatively dramatic overhaul of their former system, neither approach would be considered especially new or groundbreaking. Specifically, Sweden culminated almost 20 years of serious debate by reconstructing its former two-tiered system (a basic flat pension plus earnings-related supplement) to a single defined contribution (DC) approach. Italy also changed from an earnings-based to a DC approach but chose to strictly control the rate of return for pensions via indexation and tightly linking returns to fluctuations in gross domestic product (GDP), balanced by ad hoc adjustments of capitalization rates and/or conversion factors.

However, the goal of the book is not to encourage, export, or even evaluate the ultimate success (or failure) of any one formula or course of action undertaken by any individual country. Rather, what is important is identification of key insights into the reform process that are available from studying the history of the debate in each country. To this end, the central common threads and underlying themes running throughout the book of greatest import for decision makers include: (1) having credible, objective, and mutually agreeable technical data on which to base decisions; (2) achieving broad-based, balanced involvement in the decision process by the public, experts, and relevant societal groups, typically through an advisory group structure (whether permanent or ad hoc); and (3) the ongoing need for constructive dialogue and consensus-building in dealing with complex, long-term problems.

Overall, the book offers a thorough and thoughtful discussion of the primary strengths and weaknesses of current pension programs currently employed by seven major industrialized nations as social policy tools. Policymakers, insurance academics, students, and other interested parties will find this book highly relevant in understanding the formulation, assessment, and debate of alternative strategies for public pension reform. The book offers an objective overview of the various public pension programs, as well as important insights into the inner workings of potentially unfamiliar systems.

Framework for Credit Risk Management, by Brian Coyle, 2000, Chicago, Ill.: Fitzroy Dearborn.

Reviewer: Maurizio Pompella, University of Siena

Framework for Credit Risk Management, by Brian Coyle, deals with one of the most debated subjects in economic literature, especially in the field of banking: how to identify, appraise, and control credit risk. It is a most comprehensive manual that may serve as a guide to credit risk management, but it is a very brief one, for it has been structured as an introductory survey. The main topics of the book are credit risk—the focus being on a series of different configurations of it—and the "canons of lending" (good lending principles).

Despite a limited number of pages (137), which results, as mentioned above, in a small but easily readable book, the volume offers a telling outline of bank credit policies and risk-reduction strategies needed to contain the consequences of credit risk. It also investigates the methods used to face the ex post impact of risk—particularly security forms, covenants, and conditional lending (when the borrower is required to provide loan guarantees)—comparing how banks and nonfinancial companies behave in the case of debtor's default (nonpayment occurrences). The book deals with both *trade credit* and *bank credit*, in fact, and analyzes some of the contractual instruments available to cope with counterpart risk, including credit insurance.

Nevertheless, the author seems to follow a traditional style, also showing a preference for a very *qualitative* approach. As a consequence, he ignores most of the *quantitative* and recent literature concerned with the management of *values at risk* and credit risk, except for a few references, somewhere in Chapter 6, to credit scoring.

The first chapter simply defines credit risk and explains the risk-reward trade-off that lenders have to evaluate in order to decide the terms and conditions of a loan.

Chapters 2 and 3 deal with trade credit and bank credit, respectively. The former provides an overview of collective and individual risks that a trading company should consider when credit customers are grouped (misdiversification). The latter introduces some of the fundamentals of good lending (the activities aimed to prevent *bad debts*), briefly dealing with the relationship between credit risk and interest rates; however, no mention could be found there of credit rationing.

The following chapters (4 through 8) look at the core of credit risk management: (1) Chapter 4 describes credit control as a process to decide how much credit should be granted and to monitor debtors and bad debts; (2) Chapter 5 reports on so-called "lending propositions," which offer a survey of the principles to be followed in