small business management and public policy foundation. Berney and Owens claimed the small business's lack of political power and lack of public policy support imperiled the achievement of national, economic goals. The authors recommended "neutral" tax policies to reduce the relative susceptibility of small businesses to improper tax policy.

The final paper, by Richard Judd and Barbara Sanders, gave a historical perspective on business regulation. It is noted that small business provides new job creation at a time when the large firms are contracting. In the development of economic policy, the authors cite two themes: attempting to get out of the way of business development and creating policies and programs that stimulate business formation and job creation in order to contribute to economic vitality and growth.

On the whole, this book provides an excellent panorama of the issues in economic and public policy development that affect the small business sector. Many of the essays were written in the early 1980s but address issues that are still current. Many of the findings cited are drawn from limited and carefully selected samples, but the methodologies do provide insight for continued research about small business topics. Changes in tax policy and restructuring of the SBA programs are changes not fully discussed in this work, but the core of the concern for small business is still a vital issue of national policy.

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Peter Daley, *The Biotechnology Business: A Strategic Analysis*, London: Frances Pinter Publishers, 1985. ISBN 0 86187 551 6. $27.50.

The U.S. biotechnology industry in the 1980s is a fascinating case of unrealized potential. The unbridled investor enthusiasm of the 1970s has given way in this decade to caution, disappointment and even disillusionment. Dreams of a new generation of blockbuster drugs, developed by small entrepreneurial start-up companies, funded by clairvoyant venture capitalists, hitting the market and reaping enormous profits after a short-term commitment of time and resources have, indeed, faded. In the late 1980s, the industry is passing through a crisis of confidence. In some cases, regulators have been slow in approving new products with promise, and, in other cases, product test results have demonstrated the absence of either performance or promise. Lags between product design and commercialization have been very long. Accordingly, product sales have been sluggish in the industry.

Despite the disappointing performance and profitability of the industry in the 1980s, however, industry analysts persist in predicting that biotechnology is the wave of the future and that biotech products will eventually affect productivity and welfare in society in some profound and important ways. Industry profitability will naturally follow. Globally, it is evident that governments of technologically advanced countries view biotech as the growth industry of the future and subsidize it accordingly. Of course, these optimistic forecasts and positive views of the industry are the same as those formulated in the 1960s and 1970s. What has changed as the result of the industry's experience in the 1980s? It is the time horizon of these forecasts. Handsome returns to investments in biotechnology are predictable, but the payoff will be long term, not short term. The challenge in the short term, particularly for small entrepreneurial firms, is survival. Survival and ultimate success will depend, of course, on how effectively firms manage uncertainty in the present and strategize to exploit product development opportunities in the future. Peter Daly, in his very timely book on the biotechnology business, examines the issues and options relating to strategic management in the industry and develops what he considers to be a 'blueprint' for success.

The first two chapters of the book are introductory, focusing on the recent history of the industry with a special emphasis on emerging technologies and technological applications. Readers with scientific credentials will probably find these chapters to be elementary and will skip them. Other readers (including social scientists and management students) will find the author's explanations of monoclonal antibodies and recombinant DNA technology to be concise, precise and clear. There is nothing in these early chapters which will push back the frontiers of knowledge of the biotechnology industry. The author's "pitch" clearly reflects his attempt to reach an audience with little or no background in the scientific end of the business.

Scholars and business analysts interested in the evolution of the biotechnology industry will find Chapter 3 to be informative. Daly pulls together some interesting data from company reports, trade journals and government documents, tracking the financial and product development origins of new, entrepreneurial start-ups in the industry since the mid-1970s. The author's examination of the financial mechanisms available to start-up companies (venture capital, public stock offerings, R&D limited partnerships) and the limitations of the same should be required reading for would-be industry entrepreneurs or investors.

The analytical core of the book begins with Chapter 4. Using the data base provided earlier and borrowing extensively from the Michael Porter technique of analyzing emerging industries, Daly is able to demonstrate that biotechnology does indeed exhibit the classical characteristics found in any emerging industry. "These include an early proliferation of small embryonic companies, typical early entry barriers and technological uncertainty which increases the risks of early participation in the industry and contributes to strategic uncertainty" (p. 39).

Although the early chapters of the book (1 through 4) will probably appeal only to those who have a special research or business interest in biotechnology, Chapters 5 and 6 will have a broader appeal.

In the former, Daly examines the role of science in the origins of biotechnology, not in isolation but rather in comparison to the earlier birth, growth and development of the semiconductor industry. Any reader interested in the processes of technological change and the commercialization of technological products will find this comparative study to be informative and enlightening. Those early investors in biotechnology whose enthusiasm and risk taking went unrewarded based their optimism, at least in part, on perceived similarities between the two industries. Their enthusiasm and expectations should have been tempered by the significant differences set forth in this very well-structured chapter. These differences include: (1) the nature of university/industry linkages, (2) the relation of product to process innovation and (3) the industry/government interface, including the area of patent protection.

Chapter 6 examines the role of governments in the growth and development of the biotech industry. The attempt is made to draw comparisons between governments, such as Japan, that have been supporting their industries through industrial policies and governments, such as in the U.S., that play a more neutral or even an adversarial role. Although Daly touches all bases in stretching the analysis to issues relating to "targeting" policies, regulation, antitrust, taxation and R&D support, the chapter is a bit disappointing. First, the very thin data base offered in support of conclusions disallows a comprehensive analysis of the basic issues. Secondly, there are missed opportunities in the chapter. Daly recounts the all-too-familiar story of the Food and Drug Administration of the U.S. and its overly stringent, product testing regulations but fails to cover some of the fascinating issues confronting the industry relating to evolving patent and trade secrecy law.

One characteristic of the early development of the biotechnology business, particularly in the U.S., was the domination of R&D by a strong, "science-push" approach rather than one of "market-pull." Often, managerial attention was too focused on scientific and technological feasibility rather than on real market need. Those start-up companies that survived the 1970s and early 1980s did so based on the development of managerial strategies that incorporated and integrated market need with technological feasibility. The most successful start-up companies of the 1970s in the U.S. (Genetech, Genex, Cetus, Centocor and Celltech) and their strategies are featured in Chapter 7. The analysis is particularly interesting because the strategies of these young entrepreneurial companies are compared to and contrasted with those of two older firms (Eli Lilly and Monsanto) that moved into the biotechnology business from well-established positions in the pharmaceutical and chemical industries.

The case studies in Chapter 7 serve as a springboard for the author's subsequent analysis of the strategic challenges facing new entrepreneurial firms in the industry (last two chapters of the book). Chapter 8 examines the types of strategic choices (e.g., early vs. late product timing, broad vs. narrow market focus) that new firms must make. A risk/benefit analysis of each strategic option is then conducted. Finally, comparisons are made between the strategic options of the entrepreneurial start-up companies in the industry and those of the more established chemical and pharmaceutical firms.

In outlining the elements of success in the development and commercialization of biotech products (Chapter 9), Daly borrows extensively from the analytical toolbox of the Boston Consulting Group. Featured in the chapter is the growth share matrix (i.e., a firm is identified as a star, a cash cow, a dog or a question mark) and the BCG experience curve analysis.

Following a rather thorough examination of strategic options, Daly takes a position in favor of a "focussed," rather than a "broad-based," product development strategy for start-up companies (p. 127). The temptation in biotechnology is to diversify because the technology, itself, is broad based and offers seemingly attractive business opportunities in a variety of areas. To Daly, this temptation must be resisted. Attempting to capitalize on the wide applicability of its technology exposes the firm to the significant danger of being out-focused by other companies. "For success, a new biotechnology firm must clearly define its core business and stick to it. . . . Dominance must be achieved in some market segment." (p. 127)

In summary, this short book should attract a wide audience including industry analysts, management consultants, current or would-be industry entrepreneurs/investors and scholars working in the areas of biotechnology studies, strategic management analysis, entrepreneurial and small business studies and the economics of technological change. It is the type of book that one will read selectively. Those approaching the book from the scientific side will find early chapters to be simplistic and later chapters interesting. Those approaching from the management studies side will find the opposite.

Finally, the book is competent, but it could have been better. The sins are those of omission not commission. A broader data base would have been helpful in supporting key arguments and in giving the book more of an international focus. Attempts are made to compare and contrast biotech industries in different parts of the world, but data limitations in these sections of the book are quite visible. Authoritative sources of data should have been pursued beyond the Office of Technology Assessment of the U.S. Congress.

The chapters on strategic management are competent and interesting, but, in this reviewer's opinion, Daly depends a bit too much on the Michael Porter/Boston Consulting Group approach to strategic analysis. There are, of course, alternative techniques of analysis that may have led Daly to a different set of findings and conclusions.

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Peter Asch, *Consumer Safety Regulation: Putting a Price on Life and Limb*, New York and Oxford: Oxford University Press, 1988.

In this book, Peter Asch attempts to bridge the communication gap between "consumer advocates," who insist on a "right to safety" and believe the unregulated market will not provide enough, and "traditionalists," who believe that consumers are the best judges and protectors of their own interests. His exposition is a model of clarity; whether either side will listen remains to be seen.

As stated in the preface, this book is directed toward policy makers and others with an interest in consumer protection. Although not intended primarily for economists, it provides an excellent overview of the consumer-protection field that would be useful both as an undergraduate text and as a reference for professional economists.

The book is divided into three parts. The first provides an introduction to the issues and raises what is, to economists, the fundamental question: Why should we presume that the set of consumer products supplied through the market is inappropriately dangerous? A number of plausible reasons — consumer misperceptions or inept decision making, perhaps exacerbated by misleading advertising and the complexity of modern products — are suggested.

Part I also describes the historical development of consumer product regulation in the United States and Great Britain. Although consumer