In this book the author examines and ultimately rejects the conventional economic view that workers who have more dangerous jobs accept their risks voluntarily and are compensated through higher wages. In doing so, he attacks widely used techniques for assigning a monetary value to human life for cost–benefit analysis and other purposes. Arguments are drawn from the history of occupational safety and health, econometric analysis of wage and risk data, and formal models of the labor market. In place of the conventional view, Peter Dorman proposes a view based on new work in decision theory (thick rationality) and the theory of repeated games. These insights are combined with comparative policy analysis to support an approach to risk that promotes both regulatory effectiveness and democratic values. Despite its technical content, the book is written in highly accessible style, and is concerned with matters of general interest in the development of critical social science.
Markets and mortality
Markets and mortality

Economics, dangerous work,
and the value of human life

PETER DORMAN
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Preface

At some point, every careful reader of this book will begin to wonder just who it was intended for. Certainly I had in mind specialists and practitioners in the fields I have sought to cover: labor economists, personnel and safety officials, union activists, government regulators, and producers and consumers of benefit–cost analysis. This would explain the literature summaries and the analyses of statistical evidence and formal economic theory. But what accounts for the story-telling, the excursions into philosophy and psychology, and the other digressions that recur throughout this text? What is the point?

The simple answer would be to say that I had in mind the elusive educated lay reader. But why would this individual, the target of so many works, turn to a study of the economics of occupational safety and the valuation of life? Not for practical reasons, certainly, since this work is the product of an economist, not an industrial hygienist, and it contains no useful advice for avoiding the hazards of the workplace. My hope, rather, is that readers from a variety of backgrounds will find this topic interesting in ways that transcend its immediate concerns, as I have. Not that the human dimensions are not compelling: I have gone to greater lengths than most writers on this subject to make the consequences of dangerous work explicit and immediate. Yet it is the combination of intellectual complexity and life-or-death significance that makes this topic truly gripping – it presents a series of vexing theoretical and empirical puzzles that we must try to solve. Moreover, it is my view, which I attempt to communicate in this work, that the study of occupational safety provides a laboratory for the analysis of economics itself. The thread that begins with empirical anomalies in the “market for risk” leads ultimately to the foundations of economics as a social science, to its core behavioral and methodological assumptions. But, just as important, the thread leads back again to the world of practical policy decisions: we can propose fundamental changes in social theory and see
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how they might be reflected in new policies toward the allocation of risk. So this book is intended for a particular lay reader, one who cares about basic questions in social theory but appreciates the discipline imposed by the need to respond to the risks faced by real human beings in an economic environment that actually exists.

Even so, there remains the problem of mathematics. There is often pressure on writers of books such as this either to include mathematical material and target the work to specialists, or to leave out the math in hopes of attracting a more general readership. (In my case this pressure came from colleagues, not Cambridge University Press.) It is understandable that this should happen, since many readers who might otherwise be interested in technical subjects will be dissuaded if they find equations or matrices where they expected common English sentences. I am persuaded, however, that there is a political dimension to this problem that requires that the math be left in. Let me explain.

Mary Douglas (1985, p. 13) says, “The dialogue about risk and justice tends to be conducted in two languages: traditional English rhetoric on behalf of regulation and mathematical language on behalf of principles of free choice. This is reminiscent of a medieval law court in which the native plaintiffs made their vernacular requests and were answered in dog Latin.” Indeed, there are two separate and highly distinct literatures on the economics of risk, one in narrative form that largely endorses the view that occupational risk is imposed on individuals by institutions and policies (and should perhaps be lessened), and another using mathematical optimization theory and econometrics that views this risk as freely chosen by individuals, and therefore more or less acceptable. Moreover, I believe that the balance of power is gradually shifting in the direction of mathematically informed analysis, and that this bodes ill for the view that risk, in a world of great inequalities in power, must be considered in relation to justice as well as efficiency. Of course, even were this not the case, the fact that two such strains can continue side-by-side for so long and influence each other so little is testimony to the extent of our society’s two-cultures problem. One interpretation of the present book is that it is an attempt to overcome this stultifying divide. While I have gone to considerable lengths to translate the insights of the narrative literature into mathematical terms, and vice-versa, there are limits to this enterprise, and those who want to consider all the arguments must read both the sentences and the equations. I have tried to make this as painless as possible for the general reader, offering brief histories of the evolution of important economic concepts and techniques as well as providing intuitive accounts and examples. Nevertheless, portions of this book will require an extra dollop of effort from the non-technically inclined; if it is
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any consolation, these readers can pride themselves on contributing, in their own way, to dismantling the wall separating the two cultures.

This book developed over the course of a decade, and during that time I was given invaluable assistance from several sources. My greatest debt is to Herb Gintis, my dissertation advisor, who offered the patient support that too few graduate students receive; although he would find much to disagree with, this book reflects his influence from beginning to end. My thinking was also influenced by discussions with Sam Bowles and Bob Sass, but mention should also be made of the many members of the Progressive Economics Network internet list who offered their electronic advice on earlier drafts of some of these chapters. In its later stages the book was aided immeasurably by the wise criticism of two anonymous readers; they gave the work the sort of skeptical and comprehensive scrutiny that authors would like to impose on themselves, but usually cannot. Finally, it is significant that this book was written during a long sequence of temporary academic positions at colleges and universities across the United States. My connection with the economics profession became tenuous over those years, and without the help of faculty who found work for me at the last minute, year after year, this volume would never have come to be. I am pleased to have the opportunity to state publicly that I appreciate every one of those jobs and the friends and colleagues who made them possible.

PETER DORMAN