Chapter 3: “General Equilibrium and Main Functional Forms of Utility and Production” contains GE models with concrete functional specifications. Though in principle suitable as examples for the theory the models essentially just formally repeat computations of chapter 1.

Chapter 4 “Computable General Equilibrium” presents in very short way many applications as already mentioned.

Chapter 5 “Welfare” starts with sloppy verbal formulations of the two Welfare Theorems that stand in remarkable contrast to previous purely formal treatments. The chapter treats compensation criteria, “second best” theory, property rights and public goods, (non-) renewable resources and even a “Bioeconomic Model” in very short and inadequate sections. Again the motivation in all these cases is insufficient and requires some previous knowledge. The chapter concludes with transaction costs, asymmetric information in firms, and elements of agency theory.

The short last chapter 6 “Market Failures and Government Failures” contains mini-sections on topics such as information problems, voting paradox, aggregation of individual preferences and some paradoxes, before it concludes by discussing the invisible hand, state and institutions, Rawls and social justice and utility theories.

Many of the chosen topics just do not fit into the context described by the title, in particular given the limited size of the book.

I do not see any part of the book for which I could not find a better alternative to offer to interested students.

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This superb book is the first of three proposed volumes on the theory of incentives by Jean-Jacques Laffont, one of the field’s chief architects, and David Martimort, one of the most innovative of the new generation of scholars. The first volume is an exemplary text book and research tool. These books will not be mere surveys of the field – although the reader will assuredly come away with a good overview of the subject, an appreciation of how the theoretical edifice was constructed, and where to go to find extensions that space limitations did not allow the authors to address.
The Principal-Agent Model is a thorough and insightful treatment of the case of a single principal who engages an agent to perform a task. The principal may be an individual, or a group of individuals, or an institution such as a firm. Either the agent’s information differs from that of the principal, or the principal finds it costly to monitor the agent’s actions, or the principal’s observations of the agent’s conduct cannot be confirmed by the officers of a court. The aim of course is to determine the form of the contract that a principal could offer to an agent in order to maximize the principal’s own payoff subject to the constraints that asymmetric information and the agent’s own payoff maximizing behavior impose on the ability of the principal to extract the agent’s information rent.

The authors’ second volume will treat the principal-agent relationship when there are two or more agents. Consequently, the possibility of collusion between the agents will be acknowledged. Even without collusion, the many-agent case presents new complications. In many applications the principal’s objective is to overcome the free-rider problem that would otherwise cause the pursuit of self-interest by agents to be self defeating – i.e., to precipitate an inefficient outcome. In general, there can be competition between the agents. (In fact if there is no element of competition, the agents can be treated as a single individual.) On the other hand, in cases where the principal’s objective is to maximize her own payoff, she may be able to exploit the fact that one agent’s payoff can be increased at the expense of another agent to mitigate the incentive compatibility constraints and thus extract a larger share of the agents’ information rents. The third book will investigate the implications of limitations on contract design, imposed by factors such as the inability of a court to verify a key parameter enabling the parties to determine the value of a trade.

This first book is very timely. The study of economics has been transformed by thirty years of remarkable research on incentives and the economics of information. (There is a very nice introductory chapter on the treatment of incentives in the economics literature from Adam Smith to the present day.) Many fields – labor, public finance, etc. – include important results in which the role of incentives is used to explain anomalies. The reach of incentive theory extends significantly to contemporary business and government – auctioning the radio spectrum comes first to mind. But there are so many issues and so many results that charting one’s own course could be quite daunting. One expects a definitive and accessible treatment from these two authors. The reader will not be disappointed.

One of the strengths of the book is that the authors exploit their mastery of the subject by means of a simple two-person model in which a principal

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