The study of networks and their applications has had a long tradition in engineering, operations research/management science, and in computer science. More recently, the fields of finance and economics have come to be rich and fascinating sources of network-based problems and applications. Interest from such disciplines has been supported, in part, by the greater availability of powerful network-based methodologies and tools that allow for enhanced modeling as well as computation of their solutions.

The role of networks in finance and economics has gained new prominence for a variety of reasons, including: the emergence of network industries from transportation and logistics to telecommunications; the recognition of the interdependence among many network systems, such as telecommunications with finance and telecommunications with transportation in the form of electronic commerce; new relationships between economic decision-makers in terms of cooperation and competition which are yielding new supply chains as well as financial networks; the realization of the importance of networks and the pricing of their usage, and interest surrounding networks and their evolution over space and time.

The growing attention to financial and economic networks is happening at a time when few volumes exist on such a topic. This book seeks to remedy this situation and brings together leading edge researchers. The idea for this book originated at the Eighth International Conference for Computational Economics (Computing in Economics and Finance) held in Aix-en-Provence, France, June 27-29, 2002. The editor of this volume organized two sessions on Network Economics for that venue and several of the papers presented there (but now in refereed and revised format) appear here as chapters.

This book is organized into two parts, with the first focusing on financial networks and the second on economic networks. The book contains a variety of innovations in terms of theory and applications. It should be a valuable resource to researchers and students, as well as to practitioners and to those who would like to know more about financial and economic networks.
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