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## Foreword

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Wherever I go in the world people are talking about manufacturing. Some countries worry that they have too little while others are concerned that they have too much! There are many reasons for the rapidly rising interest in the manufacturing industries but perhaps the most significant is a renewed appreciation of the role that manufacturing plays in economies of all sizes.

Towards the end of the 20th century and the beginning of the 21st, there was much talk of post-industrial societies and the trend towards services. There were some justifications for these views. Wealthier societies were indeed consuming more services and advanced economies were finding it increasingly difficult to compete in labour-intensive manufacturing. What many commentators at the time failed to appreciate, however, was that manufacturing is not simply about changing the shape of materials; rather, it can be seen as a whole cycle of activities, from understanding markets through to design, production, distribution and service. This modern 'value chain' view of manufacturing meant that most economies want at least some part of the action. Indeed, losing capability in the physical part of manufacturing might make it more difficult to access other, potentially more lucrative parts of the cycle. So around the world there is a reappraisal of what is meant by manufacturing and how it might impact on local prosperity, growth and international engagement.

This book represents a major contribution to our thinking about modern manufacturing industries – and is not just timely, it is long overdue! The authors have done an outstanding job in bringing to bear a range of multi-disciplinary perspectives on a domain which all too often suffers from rather narrow disciplinary analyses. Ranging from engineering to social science and drawing on examples from the US, Europe and Asia, the book provides not only a wealth of fact and illustration but also a rich landscape to inform those charged with industrial policy and manufacturing strategies.

The book will, I am sure, be warmly welcomed by scholars and students as well as practitioners. It provides essential reading for those involved in the renaissance of manufacturing and will enable them to take a broad and informed view of this vital and fascinating activity.

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