

## Industrial Organization

*Industrial Organization: Markets and Strategies* provides an up-to-date account of modern industrial organization that blends theory with real-world applications. Written in a clear and accessible style, it acquaints the reader with the most important models for understanding strategies chosen by firms with market power and shows how such firms adapt to different market environments. It covers a wide range of topics including recent developments on product bundling, branding strategies, restrictions in vertical supply relationships, intellectual property protection and two-sided markets, to name just a few. Models are presented in detail and the main results are summarized as lessons. Formal theory is complemented throughout by real-world cases that show students how it applies to actual organizational settings. The book is accompanied by a website containing a number of additional resources for lecturers and students, including exercises, solutions to exercises and slides.

Companion website at [www.cambridge.org/belleflamme](http://www.cambridge.org/belleflamme).

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## Markets and Strategies

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## Preface

A large part of economic transactions takes place through markets. On these markets, firms take decisions in response to prevailing market conditions that affect the well-being of market participants. Such decisions are relevant to the field of Industrial Organization (IO) and their analysis lies at the heart of this book. *Industrial Organization: Markets and Strategies* indeed aims at presenting the role of imperfectly competitive markets for private and social decisions.

Among the numerous decisions taken by firms is the *make-or-buy decision*, whereby firms compare the costs and benefits of manufacturing a product or service against purchasing it. Typically, the firm will prefer the ‘make’ option over the ‘buy’ option if the purchase price is higher than the in-house manufacturing cost or if outside suppliers are unreliable. Naturally, the firm must also have the necessary skills and equipment to meet its own product standards.

There is a clear analogy between this generic dilemma and the decision process that led us to write this book. As industrial organization teachers since the start of our academic careers, we have both long relied on existing textbooks to support our courses. Yet, through the years, our needs became different from the offers of outside suppliers. That is, the ‘make’ option started to become more tempting than the ‘buy’ option.

At the end of 2004 we firmly took our decision to ‘make’ a new textbook.<sup>a</sup> At that time (and this still holds today), we could not find on the market any textbook in industrial organization that suited the type of courses at the advanced undergraduate or master level we were teaching. We knew that many of our colleagues shared our views. Our objective was thus to produce a new text that would greatly simplify the work of teachers who, thus far, had to combine material from different books and look for applications to meet their students’ needs. Naturally, benefits to teachers are meant to spill over to their students. Although we believe in formal modelling, we also believe that it is important not to overload students with techniques and to motivate the analysis with real-world cases. So, we endeavoured to write a book that blends up-to-date theoretical developments and real-life applications.

The concretization of our efforts currently lies in your hands. To convince you that the best option for you is the ‘buy’ decision, we propose three main reasons for which *Industrial Organization: Markets and Strategies* is your choice.

- We have produced a book that is easy to read, while maintaining a high level of rigour and conciseness. We intend to be exact and clearly state assumptions and results. As a consequence, you will be able to see easily where a new model starts, what are its assumptions and results, and what are the arguments that lead to those results.
- Our book covers a wide range of topics as it includes recent developments in the IO literature, as well as topical issues (related, e.g., to the digital economy).
- Many of the arguments made in IO theory are arguments at the margin; to formalize them we cannot rely on ‘calculus-free theory’. Hence, we present and analyse

<sup>a</sup> As it took us four years to complete the redaction of this book, we can provide proof that we largely underestimated the costs of this ‘make’ decision. Firms, as analysed in this book, are not subject to such a bias.

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simple and hopefully elegant models. We summarize the main results as lessons. We also illustrate the relevance of these models by relating them to real-world cases.

The **targeted audience** of the book is advanced Bachelor or Master students taking a course in industrial organization. The book is also a useful reference for an IO course at the Ph.D. level as well as for an advanced course for Business School teaching. In any case, to learn effectively from this book, students need to have a course of intermediate microeconomics or business economics in their academic background. Note that selected chapters of the book can also serve as support for courses in business and managerial economics, in management strategy, in strategic pricing, in economics of innovation, in the theory of competition policy or in oligopoly theory. It is also possible to focus on topics and cases to outline a course of industrial organization in the digital economy.

The specific features of the book help to address a number of **learning challenges** usually faced by industrial organization students.

- *Students often struggle to connect theory with practice.* The integration of real-world cases in the text, showing how theories relate to real applications, greatly reduces this problem. In addition, this helps students to understand better the relevance of topics.
- *Students often struggle to understand the working of models.* To address this issue, we carefully develop the models we present and we make their assumptions explicit. We want students to see models at work and we make sure that they do not spend their time uncovering hidden calculus.
- *Students may be overwhelmed by a large variety of models and lose track.* To avoid or, at least, reduce this risk, we have introduced a large number of lessons that guide the reader through the book and summarize the main insights of the analysis.
- *Students may become bored by constructed examples.* As a consequence, we draw many real-world cases from industries that students consider to be important, notably in consumer goods industries and in the digital economy. This makes students more involved and curious about how to address additional issues that appear in the cases.
- *Students often have trouble relating different topics with one another.* The book is carefully organized to make sure that students do not ‘close’ a topic (and forget its analysis) when moving to the next one. Each part of the book contains several chapters covering related topics and starts with a general introduction that gives a bird’s-eye view of the part material and explains the links between the various chapters. Multiple cross-references between chapters are made throughout the text. As a result, students should acquire a deeper and more transversal understanding of the various issues of industrial organization.
- *The needs of different types of students may be in conflict.* In particular, students who want to dig deeper may have problems finding the right material, while those who simply want to read the textbook may be distracted by many references in the text or in footnotes. To solve this dilemma, we minimize the number of footnotes and provide access to the relevant literature through endnotes. Moreover, the

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bibliography is sorted by the parts in which the respective work is cited. Hence, the book adequately combines access to the scientific literature for those who need it, and uninterrupted reading for those who do not.

A number of **supplementary resources** accompany the book and help instructors teach and students learn. Exercises are posted on the textbook website. Solutions to these exercises are made available to instructors. Additional exercises can be uploaded by other researchers. On the website also slides are posted. These come in two different sets (two files per chapter). The first set provides a quick overview on the different topics. Instructors can use this set to motivate a particular topic, establish key insights, provide some intuition, and some reality check. The second set presents the most important models in-depth. Each instructor can make his or her preferred blend from the slides provided by the authors.

Students at Barcelona, Frankfurt, Liège, Louvain, Luxembourg, Manchester, Mannheim and Munich (from the advanced undergraduate to the Ph.D. level) have seen parts of this book at various stages of completion. We thank them for their feedback. Several people – colleagues and students – dedicated their precious time reading parts of this book and helped us to make this book a reality with comments and suggestions on previous drafts and exercises for the textbook website. At the risk of forgetting some of them, we want to mention Francesca Barigozzi (Bologna), Giuseppe De Feo (Glasgow), Estelle Derclaye (Nottingham), Vincenzo Denicolo (Bologna), Roman Inderst (Frankfurt), Heiko Karle (Brussels), Johannes Koenen (Mannheim), Florian Köpke (Mannheim), Christian Lambertz (Mannheim), Marco Marinucci (Louvain), Yann Ménière (Paris), Jeanine Miklós-Thal (Rochester), Volker Nocke (Mannheim), Pierre M. Picard (Luxembourg), Thomas Roende (Copenhagen), Isabel Ruhmer (Mannheim), Markus Reisinger (Munich), Maarten Pieter Schinkel (Amsterdam), Yossi Spiegel (Tel Aviv), Cecilia Vergari (Bologna), Georg von Graevenitz (Munich) and Xavier Wauthy (Brussels). We should add to this list the various anonymous referees who conscientiously reviewed and commented initial drafts of several chapters. We want to thank them all for their contributions, support and encouragement. Over the whole period, Chris Harrison from Cambridge University Press was supportive and, perhaps due to our incomplete information disclosure about the progress of the book, optimistic that this book project will come to a happy end. We kept going because we could not disappoint him after all these years. We thank the team at Cambridge University Press for their dedication to produce this book.