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Economics

Theories give core market a boost

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Huw Dixon

Microeconomics. Third edition - Microeconomics. Third edition - Microeconomics. Sixth edition - Microeconomics. First edition - Microeconomic Theory - Microeconomics. First Edition

Microeconomics is the core of economics. Indeed, macroeconomics did not come into existence until the 1930s. All the tools of the economist are learnt in the micro course, and unless you have done at least one micro course, you cannot be an economist.

Microeconomics texts come in different guises depending on the target audience. The material they cover is pretty much the same, the only difference being in the exposition: does it adopt a mathematical approach, does it assume any previous knowledge, how much detail does it go into? The books reviewed cover a range of levels, from an introduction for beginners to one suitable as a graduate textbook.

The similarities between them are striking. There is a core of traditional microeconomics: this has not changed much since the 1960s, and covers supply and demand, the consumer and producer, welfare and policy. One big change has been in the style of exposition. There is a greater attempt to make texts interesting, particularly at the introductory end. The handling of the core material has also moved on. We have learnt more: the distinction between sunk and fixed costs emerged as a key concept in William Baumol's theory of contestable markets in the 1980s and is now part of the core.

However, the books also reflect how the syllabus has evolved beyond the traditional core. First, the developments in the economics of information started in the 1970s: second, risk and uncertainty; third, the emergence of game theory as the core modelling tool in theoretical economics in the 1980s. This is a refreshing development; the same could not have been said ten years ago. Indeed, all the books reviewed are in new editions, and they have developed in these areas of information and game theory. Some of the developments of the 1990s, such as auction theory, are now coming through as well.

These textbooks reflect the fact that although things change slowly, they do change. The factors that hold them back are partly the conservatism of publishers. It is a common experience for a publisher to expect a microeconomics textbook to include all the standard stuff. This is well and good, but would it not be good to have a little more diversity?

The courses people teach differ considerably, and I am sure the textbooks should reflect this diversity. In macroeconomics, this has happened. There is much less consensus on what should form the basis of macroeconomics texts, and courses differ a lot. One thing that strikes me from reading these textbooks is how useful microeconomics is in understanding economic phenomena. This might sound obvious, but it is a real advance. The rapid development of economics with a theoretical understanding of information, risk and strategic behaviour has been combined with three decades of sound empirical work that has made economics much more of an applied science than it was in the 1970s.

There used to be a divide between abstract theory (with little empirical application), and applied work (with little theoretical input). That is no longer true: the gap has greatly reduced. This is reflected in the textbooks. For example, Paul Krugman (one of these authors) brought strategic theory to the analysis of trade policy in the 1980s, and this now appears in some of these texts as an application. There is also a wider public understanding of economics, with its ideas and principles pervading public policy and political thinking.

Hugh Gravelle and Ray Rees's *Microeconomics* is fairly unusual in that it provides for the gap between intermediate undergraduate texts and MSc-level texts. It has been going since 1981 and is used both as an advanced undergraduate text and for MSc programmes that have a non-specialist economics intake. It was revised in 1992 and, with this edition, the book has moved with the times. In particular, there is more emphasis

on game theory, uncertainty and asymmetric information.

This is a popular book because the writers are both economists of great insight who are able to explain things very well. The book uses mathematics a lot, but it is not as high level as that in graduate texts such as Andreu Mas-Colell, Michael Whinston and Jerry Green's *Microeconomic Theory*. The maths is in context and there is a lot of clear explanation of the intuitive arguments underlying the theory, with useful figures to illustrate ideas. I think this new edition marks a significant improvement in exposition and coverage over the previous one and will ensure the book's continuing success.

Jeffrey Perloff's *Microeconomics* is an intermediate textbook and, while much material in such textbooks is fairly standard, Perloff has some excellent additional features. First are his excellent "applications": these cover a multitude of examples to illustrate topics, from Disneyland pricing (price discrimination) to European cigarette taxes (tax incidence). Such examples are standard in first-year textbooks but less so in intermediate texts. The most impressive aspect of the book is that it explains some quite advanced material very clearly. The technical stuff, mainly the mathematical models, is relegated to copious appendices. But the in-text material has excellent diagrams, all the main equations and concise and clear explanations.

One example is oligopoly. Perloff starts his analysis with game theory (he sets up the pay-off matrix), then he looks in turn at cartels, the Cournot and Stackelberg models (with full game tree), monopolistic competition and the Bertrand model. The analysis is excellent, with lots of examples. The book is comprehensive in its coverage and includes subjects such as moral hazard, risk and limited information. I had not read this text before but was impressed by the quality of exposition.

Robert Pindyck and Daniel Rubinfeld's *Microeconomics* is now in its sixth edition. These economists deliver an introductory text that is serious and insightful. They have added material: not only do they have a chapter on risk and uncertainty, with applications to portfolio choice, they go beyond that by having a section on behavioural theories of finance. They also have sections on auction theory. This text is ahead of the field in including more recent advances in economics: while most of the others go up to the 1980s, these two have embraced the 1990s. There is good online support for both students and lecturers.

Krugman and Robin Wells's *Microeconomics* is an introductory text and is a fun read. It relies on Krugman's populist style, familiar to many from his books and *New York Times* column. There are photos and cartoons throughout, with brief examples. But it is ultimately a disappointment. The exposition and range of topics is so standard: the oligopoly section even has a kinked demand curve, something that should have been expunged from textbooks years ago.

Walter Nicholson's text *Microeconomic Theory* certainly stands out from the others. It is an introduction and presumes no former knowledge of the subject, but it is rigorous and uses mathematics as an essential part of the exposition. This makes it a perfect introduction for those with a good mathematics background. It is also adult in its approach: fewer "applications" and more discussion of real issues (for example, how utility is non-unique). The best comparison in terms of depth is with Gravelle and Rees, but it is nowhere near as full or developed in its exposition. This edition has some extra material. In particular, there is more on duality in consumer theory (expenditure functions) and producer theory (profit functions), with more examples of widely used functional forms. There is also more material on the economics of information and incentive-compatible mechanism design. There is no bespoke online material to accompany it, but the publisher offers access to a useful generic resource.

Don Waldman's *Microeconomics* is a serious attempt to provide a reasonably formal introduction to microeconomics. It does not have as much mathematics as Perloff or Nicholson's text, but it does not pretend that maths does not exist. However, while it adopts a formal and comprehensive approach, it has the look and feel of a more standard introductory text: colours, examples, applications and so on. It covers some quite advanced concepts: it has a chapter on game theory and uses this to formulate the oligopoly section, which includes the homogenous and differentiated Bertrand case. The analysis is primarily graphical, but there is a brief appendix about deriving reaction functions, although I doubt whether it has enough there to allow it to be learnt by students. There is good access to online course materials, with a CD that comes with the book that has lots of helpful material, such as more maths and quizzes.

After reading this crop of texts, I feel a sense of progress. These textbooks are good: they reflect the experience of decades of teaching courses in universities. The rapid progress of economics is also reflected in their contents. This is a part of economics that is being well taught and is extremely valuable for students and society. Maybe that is why economists earn so much when they leave university.

Huw Dixon is head of economics and related studies, York University.

Microeconomics. Third edition

Author - Hugh Gravelle and Ray Rees
Publisher - Financial Times/Prentice Hall
Pages - 738
Price - £39.99
ISBN - 0 582 40487 8

Microeconomics. Third edition

Author - Jeffrey M. Perloff
Publisher - Pearson Addison-Wesley
Pages - 724
Price - £42.99
ISBN - 0 321 21036 0

Microeconomics. Sixth edition

Author - Robert S. Pindyck and Daniel L. Rubinfeld
Publisher - Pearson Prentice Hall
Pages - 720
Price - £43.99
ISBN - 0 13 191207 0

Microeconomics. First edition

Author - Paul Krugman and Robin Wells
Publisher - Worth
Pages - 537
Price - £39.99
ISBN - 0 7167 6277 3

Microeconomic Theory: Basic Principles and Extensions. Ninth Edition

Author - Walter Nicholson
Publisher - Thomson South-Western
Pages - 671
Price - £37.99
ISBN - 0 324 22505 9

Microeconomics. First Edition

Author - Don E. Waldman
Publisher - Pearson Addison-Wesley
Pages - 613

Price - £42.99
ISBN - 0 321 24838 4