Book review

The CORE Team (2017): *The Economy: Economics for a Changing World*, Oxford, UK (1152 pages, Oxford University Press, softcover, ISBN 978-0-19881-024-7, £40)

Antonella Stirati

Dipartimento di Economia, Università Roma Tre, Italy

This textbook, produced by a large team of economists and freely available online, is the result of a long-standing project and great effort in producing innovative teaching for undergraduates. The material is organized around a variety of economic problems which are discussed on the basis of data and models.

The motivations for this effort are a willingness to ‘change the way economics is taught’, overcome the fact that ‘the subject of economics has become detached from our experience of real life’, show students that ‘studying economics can help you to understand the economic challenges of the real world, and prepare you to confront them’, and deal with what students regard as ‘the most pressing problems that economists should address’ (pp. xiii, xiv). These are, on the basis of surveys among students, highly relevant social and economic issues such as inequality, unemployment and environmental sustainability. The educational approach is described as: ‘we begin with a historical or current problem, even if it is a complex one, and then we use models to illuminate it. CORE’s pedagogy thus flips the convention in economics texts on its head’ (p. xiv).

Indeed the book presents a lot of empirical material, current and historical, and provides models and insights to explain them; it is therefore a lively and very informative textbook. It also contains some interesting and non-conventional messages, for example that conflict of interest is a pervasive feature of economic life (pp. 160, 227); inflation reflects conflict over income distribution (pp. 644–648); the interest rate is set by the central bank (p. 435); there is no evidence of a negative trade-off between equality and growth, rather the opposite (pp. 895–898); the adverse effects on labour of globalization and technical change can be long-lasting (pp. 721, 831).

However, the impression on the whole is that its content is less innovative than one would expect, and I will try to explain why, and what are in my view its main shortcomings. Before that, it may be appropriate to openly state what I regard as the main purposes in the teaching of economics. I believe students should be trained to think *rigorously* and *critically* about economic problems; in order to do so they must understand very well the assumptions and logical steps of different economic theories, so as to be able to evaluate them on various grounds: realism of assumptions and premises, internal consistency, consistency of their conclusions and predictions with empirical evidence. Of course, this is not likely to be fully in the power of undergraduates – yet they can be taught to approach problems in this way and to understand that this is how our discipline should work. The emphasis of *The Economy* is, rather, on stimulating interest and curiosity in the students by starting from real-world phenomena. It is of course an open question whether the rigorous and critical training can also be made lively, stimulating and relevant to real-world problems, but I tend to think that these objectives can be pursued together. Also, I am not fully

convinced by the view that mainstream economics has become detached from real-life problems. This may be true of some highly formalized strands in economic modelling, but in fact traditional mainstream economics – that is, a combination of Marshallian microeconomics and macroeconomic models in which price flexibility can ensure the tendency to full employment or, if price flexibility is hindered, a tendency to some ‘equilibrium’ unemployment or NAIRU prevails – provides plenty of explanations of inequality, unemployment and other relevant economic issues (incidentally, as we shall see, often not far from those found in this textbook). The problem is, rather, that many non-mainstream economists do not like those explanations! And with reason: most often they do not appear fully consistent with a deeper analysis of empirical evidence and do not provide good predictions, which in turn suggests there must be something wrong with the underlying theory. From this perspective, I will propose a necessarily selective assessment of the very wide material in the book.

In my view, its main drawbacks are that:

- ultimately it presents one variant of the mainstream, that is, New Keynesian macroeconomics and its microfoundations, while other economic theories and interpretations are not mentioned; and
- much like other standard textbooks it tends to present theories as if they were facts; this seriously damages critical thinking, which requires a clear understanding of the logical constructs that are at the basis of *any* interpretation of economic phenomena, so that they can be properly assessed.

A NEW KEYNESIAN FRAMEWORK

The underlying microfoundations are neoclassical, with the usual apparatus of product demand curves and the neoclassical production function. In addition to these, some other features such as imperfect competition, wages as incentives, incomplete markets and contracts, and incomplete information explain the existence of some involuntary equilibrium unemployment and the impact of effective demand in the short run. The tendency of the economy to return to equilibrium unemployment (the non-accelerating inflation rate of unemployment, or NAIRU) is clearly stated as the result of nominal wage flexibility (pp. 378–381) or central-bank interest-rate policy (pp. 663–687). The NAIRU is determined by the intersection of the usual ‘wage curve’ and a ‘price setting curve’.

Hence, as is the case with New Keynesian approaches, there are some doses of realism and flexibility in short-run analyses, but in the longer run the conventional views generally apply. It is true that in some instances the authors of the book seek to avoid the use of controversial mainstream notions such as decreasing marginal product and increasing marginal costs; yet there seems to be an effort to arrive at the same conclusions reached in the mainstream on very important points, such as the above-mentioned tendency to equilibrium unemployment and accelerating inflation out of equilibrium, or the supply-side determinants of growth and the view that institutions can affect the latter only in so far as they keep down wage demands, stimulate private investments and productivity growth and favour the matching of the unemployed and jobs (pp. 725–737).

This appears somewhat surprising at a time when there is increasing awareness even among *mainstream* economists and international institutions that a major shortcoming in mainstream approaches, even in the more flexible New Keynesian version, appear to be the difficulty in explaining observed facts – major instances being the 2008 crisis and the long stagnation in its aftermath (Summers 2015; Vines/Wills 2018); the disappearance of the

vertical Phillips curve (Blanchard et al. 2015), the lack of evidence that labour-market institutions are responsible for the level of ‘equilibrium’ unemployment (OECD 2016; see Brancaccio et al. 2017, for a survey); evidence that long-term GDP trajectories are affected by aggregate demand shocks (Blanchard et al. 2015; Fatás/Summers 2016; Girardi et al. 2017 for further references).

The book never presents or even mentions alternative views on economic growth, such as the importance of ‘external demand’ for capitalist development emphasized by several prominent Marxist and Keynesian figures in the history of economics (such as Luxemburg, Kalecki and Kaldor) and demand-led growth models currently developed by post-Keynesian and Sraffian economists.

Nor does the book present alternative approaches to what determines investment. In particular, despite its strong empirical support, there is no discussion of the ‘accelerator’ principle, that is, the view that aggregate demand is important in determining aggregate private investment. Yet this perspective could have major implications; for instance, it casts doubt on the possibility of keeping the economy at the equilibrium unemployment rate by means of interest-rate policy.

But what exactly is the theory of aggregate investment in the book? The aggregate investment function and its dependence on the interest rate is based on the ‘array-of-opportunities’ theory (pp. 606–608), whose major analytical flaws have long since been exposed (Ackley, for example, sharply criticized it in the 1970s; see Girardi 2017 for a recent reassessment).

THEORY PRESENTED AS FACTS

The second major drawback of the book is that it presents propositions that are in reality the result of rather complex and possibly controversial theoretical constructs, and are valid only under certain assumptions (for example, *ceteris paribus* or full-employment assumptions), as obvious ‘facts’, sometimes on the basis of descriptions that are wanting in terms of their analytical underpinnings. Some examples are provided below.

a) The fixed mark-up

A graph, based on an empirical survey, shows how the demand for Apple-Cinnamon Cheerios depends on their *relative* price (p. 266). This, as is clearly explained, is the demand for a differentiated product among very similar ones (for example, breakfast cereals with different flavours). Hence it holds when the prices of all other breakfast cereals are kept constant, and more generally under a ‘*ceteris paribus*’ assumption concerning all prices and incomes. It represents how competition works when there is some product differentiation: instead of a horizontal demand curve for individual firms, we have a decreasing but highly elastic one for each firm (or differentiated product).

This micro partial equilibrium decreasing demand schedule for (slightly differentiated) goods, however, ends up playing a most striking, central and quite unwarranted role on issues of the greatest relevance: the mark-up at the micro level is determined by the curve elasticity – but then it is ‘translated’ into a macroeconomic mark-up, which cannot be altered by wage bargaining, and explains *aggregate income shares*. It also determines the *equilibrium employment* level – with given institutions – and *accelerating inflation* when wage claims are inconsistent with the given mark-up.

The notion of a *fixed* mark-up conveyed by the shift from micro partial equilibrium analysis to the aggregate level hides the absence of a clearly stated theory of primary

income distribution: why is it that increased wage demands caused by lower unemployment or increased union power cannot diminish the mark-up, or at least the pure remuneration of capital component that must be included in it? What determines this pure remuneration component? Despite the preoccupation with inequality, this basic question about primary distribution is not openly discussed, and yet it is crucial for many issues, including the notion that a below-equilibrium unemployment will cause *accelerating* inflation (Stirati 2001; 2016)

Furthermore, the claim that a nominal wage reduction will cause a return to macroeconomic equilibrium unemployment is also based on the micro partial equilibrium analysis for the individual firm in imperfect competition. The argument runs as follows (p. 381): if unemployment is higher than equilibrium unemployment, firms will lower nominal wages and prices; at lower prices, as the above described demand curve shows, each individual firm will sell more! But of course the *ceteris paribus* assumption is violated, since *all* prices and nominal incomes are falling, and the individual firm demand curve which depends on its *relative price*, given all other prices and incomes, will provide no additional sales at all! It is true that in the following pages, the fall in nominal incomes is recognized as one of the circumstances that might hinder the adjustment process – but it is not a particular circumstance, it is *by definition* what happens when all prices, including nominal wages, are falling. Thus, relying on simple empirics and shifting from micro to macro may blur the analytical framework and lead to serious slips: only the usual (and very controversial) ‘Keynes effect’ and ‘real balance effect’ may bring about an increase in *aggregate* sales and employment as a result of a fall in the price *level*.

b) The production function

The argument for the diminishing marginal product of capital is the following:

as the worker works with more capital goods output increases, but at a diminishing rate (Charlie Chaplin showed in the 1936 film *Modern Times* that there is a limit to the number of machines workers can make use of). This means that with increasing quantities of capital goods we have diminishing marginal product of capital goods. (p. 695)

There is no mention that the production function and capital theory were the objects of one of the most important theoretical controversies of the last century. Indeed in traditional theory the increase in the capital–labour ratio along a given production function was regarded as involving changes in the types of machines (Hicks 1932: 19–21; Dvoskin/Petri 2016). That is, each worker would still use, say, one machine, but the machine would embody more capital than the one in use before. But then the problem is how to compare different ‘machines’ and be able to say which one embodies ‘more capital’ than the other without reasoning in a circle, and whether the ordering of ‘machines’ (or techniques) in terms of the ‘quantity’ of capital they embody can be independent of the relative prices of outputs and capital goods, the interest rate and the wage rate. What the capital controversy has brought to light is that this is not possible, and that there is no way to determine the relative ‘capital intensity’ of techniques independently of distribution and prices (Pasinetti 1966; Garegnani 1970).

Even leaving these problems aside, a smart student faced with the Charlie Chaplin argument might wonder: why does it matter at all? Wouldn’t any sensible entrepreneur willing to increase production hire more workers along with the additional machines? So, what is the point? The student should be clearly told that diminishing returns only apply under the assumption that there is full employment and no additional labour is available. This might then allow the student to wonder if the assumption ever holds in real life.

To sum up, I believe that providing some hints about alternative views would not have been too difficult, even at an undergraduate level. For example, it could be suggested that, as the Keynesian multiplier works, this may also affect capital formation, and hence have long-run consequences; or that if primary income distribution is ultimately the result of institutions and bargaining power, changes in favour of the workers may persistently increase real wages at the expense of profits: there is a conflict that in some instances *may* lead to inflation and (according to the evidence) much more rarely to accelerating inflation. Thus, just questioning the conventional investment theory and the notion of a fixed profit rate could have gone a long way towards presenting the possibility of alternative views on socially relevant issues and favouring a greater awareness of what assumptions and constructs lay behind them.

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