

A NOTE ON TEACHING THE AGGREGATE-SUPPLY/ AGGREGATE-DEMAND MODEL

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In a recent article in this *Journal*, Robert Barro argued that the aggregate-supply/aggregate-demand (AS-AD) framework presents an unsatisfactory blending of the IS-LM and market-clearing models [1994, 5]. Moreover, the typical introductory and intermediate textbook treatments are “logically flawed” [ibid., 5] and “should be abandoned as a teaching tool” [ibid., 1]. While it may appear to some that Barro’s judgement is overdrawn and his recommendation excessive, I maintain that he is too lenient toward the AS-AD apparatus. Indeed, apart from any problems with its logical inconsistencies, compelling pedagogical reasons show that the AS-AD model is highly unsuitable for undergraduate education in economics.

TEACHING THE AS-AD MODEL

There are essentially two related, but different reasons for studying economics at the introductory and intermediate levels. One is content-based: the need for students to become aware of the fundamental economic problems of modern society and to possess some appreciation for the available policy alternatives for dealing with them. The second reason is developmental: the need for students, through the application of economic concepts, to develop an independent ability to analyze economic issues and policy alternatives.

The developmental goal is, above all else, concerned with creating and nurturing in students a capacity for “economic thinking.” It is what Bach and others mean when they urge that an undergraduate economics education should focus on “a way of thinking about problems, not a set of answers ready to be taken off the shelf” [1990, 39]. It follows that textbook materials must be student-centered to enhance student ability to grasp and manipulate disciplined logical arguments, abstractions, and hypothetical propositions, capabilities that do not emerge naturally or spontaneously from ordinary everyday living and activities. On the contrary, it is clear, as physicist Alan Cromer notes, these “thinking processes themselves must be formally learned” [1993, 27].

From the perspective of the developmental needs of students, the AS-AD framework seems ideally designed to prevent learning by concealing the logic behind all the macro processes. Even for professional economists, the AS and AD concepts are extremely challenging, as Barro’s note attests, and several decades were required for macro theorists to elaborate some sort of coherent explanation for their existence [Mankiw, 1990, 1675-58].

But the immediate pedagogic objection is that the curves express such highly abstract and summarized relationships that it is difficult or impossible for even intelligent, motivated undergraduates to reason independently through the underlying logic of the macro system. The curves are artificial constructs cobbled together from the interdependent interactions of numerous underlying equations, conditions, and assumptions. At least eleven equations are required to generate the AD curve (including the Keynes effect for the LM curve and the Pigou effect for the IS curve), plus additional equations to generate the AS curve, including assorted assumptions relating choices between fixed nominal wages versus market-clearing wages and downwardly sticky general prices versus market-clearing prices.

Even worse, because the AS and AD curves have become the standard textbook means of *introducing* macro theory, they are typically presented at a point when students have been previously exposed to virtually nothing about the reasoning behind any of the AS-AD equations. Accordingly, the AS-AD exercise amounts to a form of intellectual indoctrination that relies primarily on the authority of the textbook and the instructor to gain student acceptance rather than the power of reason. The overall effect of presenting the AS-AD framework when students have no ability to understand its internal logic is to discourage them from developing their own ability to reason.

A BROADER ARGUMENT

The AS-AD apparatus is not only an extremely challenging and abstract theoretical construct, but is highly dysfunctional as a teaching tool for developing student's independent capability for logical reasoning and analysis. In an earlier note in this *Journal*, McCloskey advances an even broader pedagogical argument which, while not specifically directed toward the AS-AD framework, nonetheless is related to its value (or lack of value) in undergraduate economics education [McCloskey, 1992].

McCloskey maintains that the undergraduate curriculum cannot, and ought not even attempt to teach the substance of economics. Undergraduate courses can teach *about* economics, he believes, but they cannot teach *how to do* economics, as the undergraduate program in English literature or art history teaches about literature or painting, not how to do it. Nor is it reasonable, he argues, to hold up as an ideal of economics education that students learn to think like economists. "As an empirical scientist I have to conclude...that thinking like an economist is too difficult to be a realistic goal for teaching" [ibid., 238]. Surprisingly, McCloskey's belief about undergraduate education in economics is not very different from physicist Cromer's belief about education in science. The aim of science education, Cromer believes, is less about teaching the substance of the various sciences and more about developing the necessary prerequisite mental structures for students to become capable of scientific thought [1993, 192].

Many economists, perhaps most of us, are unwilling to accept the allegation that undergraduates cannot begin to learn to think like economists. Yet there may be less

divergence than meets the eye. It is likely we can all agree that a pedagogy which enhances the development of independent analytical ability to think clearly and follow logical reasoning processes is a productive approach, and that theoretical constructs (like the AS and AD curves) that retard the development of such abilities are unproductive.

CONCLUSION

As presented in most introductory and intermediate textbooks, the AS-AD framework offers textual neatness and expository convenience at the cost of impeding the development of student analytical abilities. Whenever key assumptions, equations, and conditions are hidden or inarticulated, essential parts of the reasoning chain are lost and students become unable to think the problem logically through for themselves to reach their own conclusions. Unable to follow the reasoning processes, they have little choice but to fall back on the authority of the textbook and instructor. Ironically, as Barro now makes us aware, the typical AS-AD textbook treatments are themselves logically flawed.

NOTES

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