OUTLINE

Title: Reflections on the Keynes' method

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In general, the debate about John Maynard Keynes' method raises two main questions: In terms of unit of analysis, did Keynes adopt an atomistic or an organicist view? Is it possible to observe continuities or discontinuities in Keynes' philosophical foundations throughout his main writings?

Each of these questions has generated their own research agendas in their specific issues. Commonly cited in discussions as to whether Keynes was an atomist or an organicist, for instance, are the controversies between Bateman (1989) and Davis (1989-1990), who regard him as an atomist, and Carabelli (1985, 1988), Rotheim (1989-1990) and Winslow (1986, 1989a, 1989b), who consider him an organicist. As to whether his philosophical footings show continuity or rupture, O'Donnell (1989, 2002) argues prominently for continuity, while Bateman (1989, 1991) sees discontinuities in the philosophical principles underpinning Keynes' view, whereas Carvalho (1992), Gerrard (1992) and Dostaler (2007) point to both ruptures and continuities.

Given that, this paper discusses which method Keynes adopted in his works. We argue that Keynes' method is related to the theory of knowledge he developed in his *Treatise on Probability* (TP), which is anchored in induction, or, alternatively, inductive logic. Moreover, we argue that Keynes used induction both to describe how the economic agents think and to apprehend and theorize the economic system. Thereafter, we portray evidences that the inductive logic stated by Keynes in his TP was adopted in some of his most important economic writings, namely *Tract on Monetary Reform* (Tract), 1923, *Treatise on Money* (TM), 1930, and *The General Theory of Employment, Interest and Money* (GT), 1936.

It is important to mention that this paper does not present an original contribution on Keynes' logical and inductive arguments. This topic was previously developed by authors, such as Carabelli (1988), O'Donnell (1989) and Davis (1994). Its contribution is to bring back the Keynes' original writings both to show how he had regarded induction and to display the way he used it in some of his main economic writings.

The paper has four sections.

The first section presents, briefly, the relevant contributions on Keynes' method. Thus, it shows that the Keynesian method has different interpretation. Shackle (1965), one of the first authors to address the issue, compares Keynes' method to a kaleidoscope in *Keynesian Kaleidics*. He argues that Keynes' kaleidoscopic method brings together (i) the analysis of moments of equilibrium, (ii) the condition that the point of equilibrium in question is unstable, and (iii) the unpredictable human behavior. Kregel (1976) highlights points of equilibrium, expectations and dynamics as fundamental analytical elements in explaining Keynes' method. To O'Donnell (1989: 327), "methodologically, he [Keynes] accepted both deduction and induction in economics and sought to embrace both formal and non-formal modes of reasoning." According to Carvalho (2003), what matters for Keynes' method is empiricism, and experience. These points are essential to Keynes' construction of economic theory. Finally, to Carabelli (1985), Keynes has his own method, whose foundations are encountered in the TP, and which rests on how probability is defined, i.e., as a relation that is above all cognitive, organic in nature, uses inductive logic and ordinary language instead of formal logic, and is prone to uncertainty and change over time.

Section two is about induction in Keynes' TP. The idea is to show the foundations of a theory of knowledge in which probability plays a central role. However, his conception of probability is not an accounting of frequencies of events from which to perform calculations resulting in more or less probable inferences. Keynes' probability relates premises to arguments that stem from them, and which inspire a greater or lesser degree of belief. The degree of rational belief is sustained by the weight of the argument. The greater the number of instances one has, the more he/she believes in the reasons and conclusion. In this scenario, Keynes' probability refers to individuals having a greater or lesser degree of rational belief in their arguments.

Section three presents some evidences of induction in Keynes' main economic works. According to us, there are various notable allusions to induction based on experience in the course of the Tract, the TM and the GT. Thus, induction based on particular experience serves as a source of research problems, as in the Tract, where "the fluctuations in the value of money since 1914 have been on a scale so great as to constitute, with all they involve, one of the most significant events in the economic history of the modern world." (KEYNES, 1971a: 1). Moreover, induction from particular experienced evidence inspires categorizations for modeling behaviors, as in the TM remark: "the second category of savings deposits comprise what, in language borrowed from the stock exchange, we will call the 'bear' position." (KEYNES, 1971b: 223). Finally, in GT (Chapter 18), induction from experience is a constant

resource Keynes uses: “yet experience shows” (KEYNES, 1964 252), or “our third condition accords with our experience of human nature” (KEYNES, 1964: 252), and “thus our four conditions together are adequate to explain the outstanding features of our actual experience.” (KEYNES, 1964: 254).

The last section presents the final remarks. According to us, the role of the induction is perhaps one of the most important facets of the Keynesian theoretical revolution. It can be said that the induction Keynes developed in the TP is indeed present in his later economic writings. It is his epistemological and methodological presuppositions that make uncertain knowledge valid, and this is a fundamental component in explaining the behavior of a monetary production economy.