Is Economic Growth Biologically Driven? An Historical Analysis of Recent Developments in Cliometrics of Growth

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Abstract

The study of the causal determinants of economic growth and development has long aroused an intense interest amongst economists. Until recently, the heart of the debate has mainly focused on the role of capital accumulation, either physical or human, on the impact of institutional or geographical factors, on innovation and technological progress, or on the significance of other growth-promoting factors such as ideas, and even religious and cultural aspects.

In this article, we focus on two different "biological hypotheses" that have been recently made by two prominent cliometricians, Robert W. Fogel (post-1982) and Oded Galor (since 2013). Indeed, one of the most interesting aspects of both Fogel's and Galor's analysis of the dynamics of economic growth is that they rest upon biological explanations. More specifically, Fogel developed a physiological theory of economic growth, named "technophysio evolution", which is based on the synergism between physiological capital accumulation and technological progress. On the other hand, Galor has recently engaged in the search for deeper determinants of economic development, i.e. genetic factors.

This paper is organized as follows. The first two sections respectively present the genesis of these two approaches. Thus, in the case of Fogel, we show that this latest work of his academic career was clearly influenced by his previous work on slavery. Based upon interviews with some of his colleagues, i.e. Deirdre McCloskey, Richard Steckel, Stanley Engerman and Robert Margo, we also argue that Fogel did not have a full conception of his project at the beginning, but progressively discovered the potential of using heights data in order to assess human welfare, nutritional status and in turn economic growth. In the light of these historical developments, Section 3 then discusses the epistemological stances of these two scholars. We argue that, with respect to these studies, Fogel and Galor are both, first and foremost, empiricists. They both heavily lean on econometrics and statistics in order to address their research topics, and none of them has a very sophisticated conception of the relationship between economics and biology. Finally, in Section 4, we argue that the faith in the neutrality of statistical methods lead them to underestimate the political dimension of their own interpretation of the dynamics of economic growth.

Keywords: Fogel, Galor, Cliometrics of Growth, Biology and Economics.

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