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**"Industrial Growth and the Theory of Retardation: Precursors to an
Evolutionary Adaptive Theory of Economic Change"**

Abstract

One of the central lessons of the Nelson and Winter world view is the need to build a theory of growth in a bottom up fashion with due attention paid to the emergence of constraints at higher levels of aggregation. In the 1930s the foundations for an evolutionary adaptive theory of growth were also being laid by a group of scholars that included such diverse economists as Schumpeter, Simon Kuznets, Arthur Burns and Allyn Young. A central theme of this work was diversity and retardation in rates of growth at industry level. At the same time mathematical ecologists, such as Alfred Lotka, were developing the r-K theory of species growth and diffusion into an ecological niche. There are remarkable similarities between these two strands of literature.

In this paper I explore the nature of the theory of retardation, and link it to the wider evolutionary picture of economic growth. My claim is that the 1930s literature provide an important precursor to modern evolutionary growth theory.