Hamilton, James D.

A new approach to the economic analysis of nonstationary time series and the business cycle. (English) Zbl 0685.62092

Econometrica 57, No. 2, 357-384 (1989).

The paper proposes a discrete-state Markov process model for specifying a nonstationary time series of economic data representing the business cycle. Thus the mean growth rate of a nonstationary series such as postwar U.S. real GNP is viewed subject to occasional, discrete shifts of regime due for example to oil shocks or Suez crisis. An empirical application of this technique to modeling changes in regime from an upswing to downswing and vice versa to US data on real GNP over 1951 to 1984 suggests that the periodic shift from a positive growth rate to a negative growth rate is a recurrent feature of the U.S. business cycles.

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