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Clive W. J. Granger and cointegration. (English) Zbl 1380.62012

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Summary: Clive Granger developed the fundamental concept of cointegration for linking variables within non-stationary vector time series. Granger discovered cointegration while trying to refute a critique by Hendry of his research with Paul Newbold on ‘nonsense regressions’ between nonstationary data. Although the initial estimation and testing approach in his paper with Robert F. Engle has been superceded by a plethora of methods, the concept of cointegration has led to a merger of economic analyses of long-run equilibrium relations with empirical dynamic systems. The multivariate cointegration method of Sren Johansen extended Nobel Laureate Trygve Haavelmo’s earlier formulation of an economy as a system of simultaneous stochastic relationships to nonstationary time series. Clive Granger was awarded The Sveriges Riksbank Prize in Economic Science in Memory of Alfred Nobel in 2003 for his contribution, sharing it with Rob Engle, whose citation was for developing methods for analyzing changing variances.

MSC:

[62-03](#) History of statistics

[62P20](#) Applications of statistics to economics

[62M10](#) Time series, auto-correlation, regression, etc. in statistics (GARCH)

[01A70](#) Biographies, obituaries, personalia, bibliographies

[91B84](#) Economic time series analysis

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[Clive Granger](#); [cointegration](#); [nonsense regression](#); [equilibrium correction](#); [Granger representation theorem](#)

Biographic references:

[Granger, Clive W. J.](#)

Software:

[OxMetrics](#)

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