ONLINE ISSN : 1348-6365
PRINT ISSN : 1882-2754

JOURNAL OF THE JAPAN STATISTICAL SOCIETY
Vol. 35 (2005) , No. 1 pp.99-119

[PDF (331K)] [References]

Estimating the Smoothing Parameter in the So-called Hodrick-Prescott Filter

Ekkehart Schlicht[1)]

1) Department of Economics, University of Munich

Abstract: This note gives a statistical description of the Hodrick-Prescott Filter (1997), originally proposed by Leser (1961). A maximum-likelihood estimator is derived and a related moments estimator is proposed that has a straightforward intuitive interpretation and coincides with the maximum-likelihood estimator for long time series. The method is illustrated by an application and several simulations. The statistical treatment in the state-space tradition implies some scepticism regarding the interpretation in terms of low-frequency filtering.

Key words: adaptive estimation, Hodrick-Prescott filter, Kalman-Bucy, Kalman filtering, orthogonal parametrization, random walk, seasonal adjustment, spline, state-space models, time-series, time-varying coefficients, trend, Whittaker-Henderson graduation

[PDF (331K)] [References]

To cite this article:

Ekkehart Schlicht; “Estimating the Smoothing Parameter in the So-called Hodrick-Prescott Filter”, *JOURNAL OF THE JAPAN STATISTICAL SOCIETY*, Vol. **35**, pp.99-119 (2005) .

JOI JST.JSTAGE/jjss/35.99