Specification Testing in Dynamic Factor Models

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Abstract

This paper develops a series of specification tests of Dynamic factor model. The weak exogeneity, linear dependency, and omitted explanatory variables tests are presented. All of the tests can be constructed as a natural byproduct of the routine used to calculate the "smoothed" density, and they do not require the estimation of the additional parameters. The finite sample size and power are considered in Monte Carlo experiments. The tests are applied to the term structure model of yield curve.

JEL classification: C00; C5; C10; C12; C13; C22 E43; E44;

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