

Empirical Evaluation of Overspecified Asset Pricing Models*

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Abstract

Empirical asset pricing models with potentially too many risk factors are increasingly common. Unfortunately, they can yield misleading statistical inferences. Unlike other studies focusing on the properties of standard estimators and tests, we explicitly characterize the linear subspace of risk prices compatible with a given model pricing restrictions. We also propose tests to detect problematic cases such as economically meaningless SDFs uncorrelated to the chosen test assets. We conduct simulation exercises to assess the finite sample size and power of our tests. We confirm the empirical relevance of our methods by revisiting Yogo's (2006) linearized version of the consumption CAPM.

Keywords: Continuously Updated GMM, Factor pricing models, Set estimation, Stochastic discount factor, Underidentification tests.

JEL: G12, G15, C12, C13.

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