CHICAGO JOURNALS

Comments | 1 February 1984

Efficient Asset Portfolios and the Theory of Normal Backwardation: A Comment

Alan J. Marcus | AUTHOR INFO AND AFFILIATIONS

Publication: Journal of Political Economy • Volume 92, Number 1 • **DOI**: https://doi.org/10.1086/261215

GET ACCESS

Efficient Asset Portfolios and the Theory of Normal Backwardation: A Comment

Alan J. Marcus

Boston University School of Management

In a recent paper, Carter, Rausser, and Schmitz (1983) (hereafter CRS) argue that previous studies of the risk premium on agricultural commodity futures contracts used incorrect proxies for the market index and consequently mismeasured the equilibrium risk premium on those contracts. CRS show that when an alternative market index is used to measure systematic risk, the required risk premium is positive and of economically significant magnitude. This result contradicts that of Dusak (1973) and supports the notion of a generalized Keynesian theory of normal backwardation. The purpose of this Comment is to argue that the market index constructed by CRS is inappropriate and that their empirical results stem directly from the use of this index.

The CRS Model

CRS follow Dusak in employing the capital asset pricing model as the basis for their analysis of equilibrium risk premia. They regress first differences of the logarithms of weekly average futures prices on a market index to derive the measure of systematic risk (beta) for five agricultural commodities. However, they argue that Dusak was incorrect in using the Standard and Poor's 500 Stock Price Index as the proxy for the market index since the S&P 500 excludes agricultural commodities. (Virtually no U.S. farms are traded in equity markets.) Instead, CRS argue that an equally weighted average of the S&P 500 and the Dow Jones commodity futures index would constitute a more appropriate market proxy.

The construction of the market index is the central issue in the CRS methodology. To appreciate its importance, note that the average beta of commodity futures prices against the Dow Jones commodity futures index must, by construction, equal 1.0, while Dusak has shown that the beta of commodities against the S&P 500 is close to

[*Journal of Political Economy*, 1984, vol. 92, no. 1]
© 1984 by The University of Chicago. All rights reserved. 0022-3808/84/9201-0011$01.50

Get full access to this article

View all available purchase options and get full access to this article.

GET ACCESS

ALREADY A SUBSCRIBER? SIGN IN AS AN INDIVIDUAL OR VIA YOUR INSTITUTION

Download PDF

THE UNIVERSITY OF CHICAGO PRESS JOURNALS

The University of Chicago Press Books

Chicago Distribution Center

The University of Chicago

© 2025 The University of Chicago and other publishing partners. All rights reserved, including rights for text and data mining and training of artificial intelligence technologies or similar technologies.