

Investment Demand When Economic Depreciation is Stochastic

[Get access >](#)

Panos Fousekis , James S. Shortle

American Journal of Agricultural Economics, Volume 77, Issue 4, November 1995,
Pages 990–1000, <https://doi.org/10.2307/1243822>

Published: 01 November 1995 **Article history** ▼

Abstract

The neoclassical model of investment by a risk-neutral firm is generalized to include uncertainty about the rate of depreciation by replacing the deterministic capital accumulation identity with a stochastic variant. Ito's stochastic dynamic optimization is used to derive conditions for optimal investment. A nondegenerate steady-state distribution of the capital stock is shown to exist and is derived for the empirically important case of a normalized quadratic profit function and static price expectations. It is demonstrated for this case that uncertainty about the rate of depreciation decreases the expected steady-state capital stock and investment.

This content is only available as a PDF.

Copyright 1995, American Agricultural Economics Association

Issue Section: [Articles](#)

You do not currently have access to this article.

Sign in

 [Get help with access](#)

**Agricultural and Applied Economics
Association members**

[Sign in through society site >](#)



AAEA
Agricultural & Applied
Economics Association

Personal account

- Sign in with email/username & password
- Get email alerts
- Save searches
- Purchase content
- Activate your purchase/trial code
- Add your ORCID iD

Sign in >

Register

Institutional access



Sign in through your institution

[Sign in through your institution](#)

[Sign in with a library card](#)

[Sign in with username/password](#)

[Recommend to your librarian](#)

Institutional account management

[Sign in as administrator](#)

Purchase

[Subscription prices and ordering for this journal](#)

[Purchasing options for books and journals across Oxford Academic](#)

Rental



This article is also available for rental through DeepDyve.