

The European Journal of Finance >

Volume 23, 2017 - [Issue 12: 8th Portuguese Finance Network Conference University of the Algarve, 18th - 20th June 2014](#)

398 | 9 | 0  
Views | CrossRef citations to date | Altmetric

Original Articles

# The effects of an uncertain abandonment value on the investment decision

Roger Adkins & Dean Paxson 

Pages 1083-1106 | Received 28 Oct 2014, Accepted 22 Oct 2015, Published online: 03 Feb 2016

 Cite this article  <https://doi.org/10.1080/1351847X.2015.1113195>



Sample our  
Economics, Finance,  
Business & Industry Journals  
>> [Sign in here](#) to start your access  
to the latest two volumes for 14 days

 Full Article  Figures & data  References  Citations  Metrics

 Reprints & Permissions

[Read this article](#)

 Share

## Abstract

Using a three-factor stochastic real option model framework, this paper examines the effects of abandonment on the investment decision. Abandonment is classified according to whether the opportunity arises for an active operating asset post-investment, or for holding the project opportunity pre-investment. Separate analytical models are developed for the alternative forms of abandonment optionality. Numerical sensitivity analysis shows that the presence of a post-investment abandonment opportunity makes the investment opportunity appear to be more attractive because of the abandonment option value, but not by a considerable amount. Also, in contrast to the standard real option finding, an abandonment value volatility increase produces a project value threshold fall owing to the increase in the abandonment option value.

Keywords:

JEL Classification:

D81

G31

H25

---

## Acknowledgements

We thank the two anonymous referees, Michela Altieri (the discussant), Michael Flanagan, Paulo Pereira, Artur Rodrigues and other participants at the PFN Vilamoura 2014 conference for comments on earlier versions.

---

## Disclosure statement

No potential conflict of interest was reported by the authors.

---

## Notes

1. Some authors assume  $\theta_\psi = r - \alpha_\psi$ , without a risk adjustment. It is likely that these drifts may be related for some types of equipment such as cars, but not perhaps for ships, but we ignore these possibilities.
  2. In our base case, we assume zero correlation between  $V$ ,  $K$  and  $X$ , that is  $X$  may not be reflective of real option investment values. This assumption is relaxed in Figures 5 and 10.
  3. A similar result is obtained for the investment cost volatility.
  4. An algebraic explanation is available from the authors.
  5. All of these numerical results are available from the authors.
-

People also read

Recommended articles

Cited by  
9

### Information for

- Authors
- R&D professionals
- Editors
- Librarians
- Societies

### Opportunities

- Reprints and e-prints
- Advertising solutions
- Accelerated publication
- Corporate access solutions

### Open access

- Overview
- Open journals
- Open Select
- Dove Medical Press
- F1000Research

### Help and information

- Help and contact
- Newsroom
- All journals
- Books

### Keep up to date

Register to receive personalised research and resources by email

 Sign me up

