The Engineering Economist ›
A Journal Devoted to the Problems of Capital Investment
Volume 47, 2002 - Issue 4

ARTICLES

A BETTER UNDERSTANDING OF WHY NPV UNDERVALUES MANAGERIAL FLEXIBILITY

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Pages 418-435 | Published online: 31 May 2007

Cite this article https://doi.org/10.1080/00137910208965043

ABSTRACT

The Real Options paradigm addresses the valuation of managerial flexibility in capital budgeting. Despite the great strides achieved by researchers in this field, many financial analysts have chosen not to adopt this new paradigm due to a lack of comfort with the approach and the mathematical complexity of the valuation models. This article shows how some projects with real options can be valued using simple and familiar tools-discounting expected cash flows after adjusting the discount rate. Unless the discount rate is adjusted to account for the impact of real options on risk, a traditional net present value (NPV) analysis misses the value of flexibility. By narrowing the gulf between Real Options analysis and more familiar tools, the weighted average discount rate (WADR) approach introduced in this paper may help novices better understand die Real Options paradigm, which subsequently may gain the wider acceptance it deserves. Though the WADR approach is practical only for simple real

options, comfort with the approach may encourage analysts to pursue more advanced and robust real option valuation techniques for more complex applications.

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