



Do organizations adopt sophisticated capital budgeting practices to deal with uncertainty in the investment decision? A research note

Frank H.M. Verbeeten^a

^a Eindhoven University, Berg Op Zoom 5500, 5500-TB Eindhoven, The Netherlands

Received 1 August 2008; accepted 12 July 2009

Abstract

This study examines the impact of uncertainty on the sophistication of capital budgeting practices. While the theoretical applications of sophisticated capital budgeting practices (defined as the use of real option reasoning and/or game theory decision rules) have been well documented, empirical evidence on the factors that affect the importance and use of these sophisticated capital budgeting practices is scarce. I investigate the relation between specific uncertainties and sophisticated capital budgeting practices in 100 Dutch organizations. The empirical results show that sophisticated capital budgeting involves the use of multiple tools and procedures (such as Monte Carlo simulations, sensitivity calculations, Game Theory decision rules and Real Option Reasoning). An increase in financial uncertainty is associated with the use and importance of sophisticated capital budgeting practices. Finally, size and industry are also related to the use and importance of sophisticated capital budgeting practices. © 2009 Elsevier Ltd. All rights reserved.

Keywords: Capital budgeting practices; Real option theory; Game theory; Uncertainty

1. Introduction

Allocating resources among competing investment projects is one of the most critical decisions made by top management, as it is the means of implementing a firm's strategy (McGuinn et al., 2008; Bowman and Hurry, 1999; Baker and Schuchel, 1978). Considerable attention has been devoted to investigating the

¹ Tel.: +31 40 2470175; fax: +31 40 2470003.
E-mail address: f.verbeeten@tue.nl.