

Article

VALUATION OF FINANCIAL LEASE CONTRACTS

Stewart C. Myers, David A. Dill, Alberto J. Bautista

First published: June 1976

<https://doi.org/10.1111/j.1540-6261.1976.tb01924.x>

Citations: 184

VALUATION OF FINANCIAL LEASE CONTRACTS

STEWART C. MYERS, DAVID A. DILL AND ALBERTO J. BAUTISTA*

I. INTRODUCTION

THIS PAPER PRESENTS a formula for evaluating financial lease contracts. We use it to solve the firm's lease vs. borrow problem, and to examine the economic rationale for leasing. The formula is derived from the objective of maximizing the equilibrium market value of the firm, with careful consideration of interactions between the decision to lease and the use of other financing instruments by the lessee and the lessor. The analysis applies the "adjusted present value" methodology developed by one of us in another paper [10].

Leasing has attracted so much scholarly attention that it is impossible to say anything totally new about it. Our approach is similar to that of Schall [13], although we take it further than he does. Our conclusions mostly support those presented by Bower in his excellent review article [2]. We do claim to provide a more complete and rigorous analysis than was provided by these and other writers.¹ Moreover, we go on to fresh questions, particularly, "Why do firms lease?"

The lease valuation formula is derived in the second section of the paper. The formula is useful and interesting in several respects. First, it is simple and easy to use, even in cases where the lease contract does not displace debt on a dollar-for-dollar basis. The decisionmaker need only discount the after-tax lease payments and depreciation tax shields at an adjusted discount rate r^* , which is calculated from Modigliani and Miller's formula for the weighted average cost of capital. Second, the formula solves simultaneously for the value of the lease contract and the value of the "equivalent loan"—that is, the value of debt displaced by the lease.

* The authors are, respectively, Professor of Finance, M.I.T., Financial Analyst, IBM Corp., and Financial Analyst, Baxter Laboratories.

This paper combines the main results of two previous papers, [1] and [9]. In their early work on [1], Bautista and Dill used an Adjusted Present Value approach (see [10]) to analyze several actual lease contracts. Although tantalizing insights emerged, these analyses were somewhat cumbersome and difficult to generalize. Eventually Myers derived the "exact" solution, which Bautista and Dill used in [1]. This solution is described in [9], a working paper prepared for seminars at the London Graduate School of Business Studies and the European Institute for Advanced Studies in Management in February 1975.

The authors wish to thank the London Graduate School of Business Studies for research support. We are grateful to the referee, Richard S. Bower, as well as Fischer Black, Julian Franks, Donald Lessard, Brian Terry, Lawrence Schall, and J. Fred Weston for helpful comments.

1. There are several good reviews of the literature on financial leases (see [2], [3], [5] and [13]), so we omit the customary introductory discussion and citations. Specific differences between our procedures and conclusions and those of others are pointed out as we go along.

1 A. Bautista and D. Dill. "A Rational Method for Lease Analysis," Unpublished M.S. thesis, M.I.T., 1975.

[Google Scholar](#)

2 R. S. Bower. "Issues in Lease Financing," *Financial Management*, 2 (Winter 1973), 25-33.

[Web of Science®](#) | [Google Scholar](#)

3 M. J. Gordon. "General Solution to the Buy or Lease Decision," *Journal of Finance*, 29 (March 1974), 245-50.

[Web of Science®](#) | [Google Scholar](#)

4 R. W. Johnson and W. G. Lewellen. "Analysis of the Lease or Buy Decision," *Journal of Finance*, 27 (September 1972), 815-23.

[PubMed](#) | [Web of Science®](#) | [Google Scholar](#)

5 W. G. Lewellen, M. S. Long and J. J. McConnell. "Asset Leasing in Competitive Capital Markets," *Journal of Finance*, this issue.

[Google Scholar](#)

6 M. H. Miller and F. Modigliani. "Dividend Policy, Growth and the Valuation of Shares," *Journal of Business*, 34 (October 1961), 411-33.

[Web of Science®](#) | [Google Scholar](#)

7 M. H. Miller and C. W. Upton. "Leasing, Buying, and the Cost of Capital Services," *Journal of Finance*, this issue.

[Google Scholar](#)

8 F. Modigliani and M. H. Miller. "Corporate Income Taxes and the Cost of Capital: A Correction". *American Economic Review*, 53 (June 1963), 433-43.

[Web of Science®](#) | [Google Scholar](#)

9 S. C. Myers. "An Exact Solution to the Lease vs. Borrow Problem," Working paper, London Graduate School of Business Studies, 1975.

[Google Scholar](#)

10 S. C. Myers. "Interactions of Corporate Financing and Investment Decisions—Implications for Capital Budgeting," *Journal of Finance*, 29 (March 1974), 1-25.

[PubMed](#) | [Web of Science®](#) | [Google Scholar](#)

11 S. C. Myers. "Procedures for Capital Budgeting Under Uncertainty," *Industrial Management Review*, 9 (Spring 1968), 1-20.

 | [Web of Science®](#) | [Google Scholar](#) |

12 L. D. Schall. "Asset Valuation, Firm Investment, and Firm Diversification," *Journal of Business*, 45 (January 1972), 11-28.

 | [Web of Science®](#) | [Google Scholar](#) |

13 L. D. Schall. "The Lease-or-Buy and Asset Acquisition Decisions," *Journal of Finance*, 29 (September 1974), 1203-14.

 | [Web of Science®](#) | [Google Scholar](#) |

14 R. Vancil. "Lease or Borrow—New Method of Analysis," *Harvard Business Review*, 39 (September 1961), 122-36.

 | [Web of Science®](#) | [Google Scholar](#) |

15 P. Vanderwicken. "Powerful Logic of the Leasing Boom," *Fortune*, 87 (November 1973), 132-61.

 | [Google Scholar](#) |

Citing Literature



[Download PDF](#)

ABOUT WILEY ONLINE LIBRARY

[Privacy Policy](#)

[Terms of Use](#)

[About Cookies](#)

[Manage Cookies](#)

[Accessibility](#)

[Wiley Research DE&I Statement and Publishing Policies](#)

[Developing World Access](#)

HELP & SUPPORT

[Contact Us](#)

Training and Support
DMCA & Reporting Piracy

OPPORTUNITIES

Subscription Agents
Advertisers & Corporate Partners

CONNECT WITH WILEY

The Wiley Network
Wiley Press Room

Copyright © 1999-2025 John Wiley & Sons, Inc or related companies. All rights reserved, including rights for text and data mining and training of artificial intelligence technologies or similar technologies.

WILEY