







Q

Home ► All Journals ► Economics, Finance & Business ► Applied Financial Economics ► List of Issues ► Volume 21, Issue 11 ► Weighted average cost of capital in the

Applied Financial Economics > Volume 21, 2011 - <u>Issue 11</u>

 $\begin{array}{c|c} \textbf{3,121} & \textbf{106} & \textbf{0} \\ \textbf{Views} & \textbf{CrossRef citations to date} & \textbf{Altmetric} \end{array}$

Original Articles

Weighted average cost of capital in the theory of Modigliani-Miller, modified for a finite lifetime company

Peter Brusov Matali Orehova & Nastia Brusova

Pages 815-824 | Published online: 04 Jan 2011



Full Article

Figures & data

References

66 Citations

Metrics

Reprints & Permissions

Read this article



Abstract

The theory of the capital cost and the capital structure by Modigliani and Miller (MM) is based on many assumptions, removal of which significantly alters its conclusions. While the account of corporate and individual taxes, the possibility of bankruptcy and a number of other assumptions have received considerable attention, the MM assumption that all financial flows are perpetuity (the lifetime of the company is infinite) is much less studied. In fact, the lifetime of the company is always, of course, finite and the inclusion of this significantly changes formulae obtained by MM, in particular for the Weighted Average Cost of Capital (WACC). In this article, we consider the WACC of the company in the theory of MM and modify MM's theory for a finite lifetime company. For the first time, we derive the analytical expression for WACC of the company with arbitrary lifetime. In two limited cases – 1 year and perpetuity companies – our expression gives the well-known results of Myers and MM, correspondingly. We have

solved the obtained equation for a 2 year company and compared this result with those of Myers and MM. It shows that WACC values for 2 year company is closer to MM (perpetuity) limit than to Myers (1 year) one at small equity cost (just above the debt cost) while at bigger equity cost, it is closer to Myers limit than to MM one. Algorithm for finding of WACC in the case of arbitrary lifetime of the project has been developed. The use of the obtained equations for the projects of n years, and for companies operating in the market n years significantly alters the assessment of the WACC of the company.

Related Research Data

Interactions of Corporate Financing and Investment Decisions-Implications for Capital Budgeting

Source: The Journal of Finance

Linking provided by Schole plorer

Related research 1

People also read

Recommended articles

Cited by 106

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











Accessibility



Copyright © 2025 Informa UK Limited Privacy policy Cookies Terms & conditions



Registered in England & Wales No. 01072954 5 Howick Place | London | SW1P 1WG