

Financial Analysts Journal >
Volume 41, 1985 - Issue 1

52 Views | 2 CrossRef citations to date | 0 Altmetric

Research Articles

Risk and Return on Equity: The Use and Misuse of Historical Estimates

Willard T. Carleton & Josef Lakonishok

Pages 38-47 | Published online: 31 Dec 2018

 Cite this article  <https://doi.org/10.2469/faj.v41.n1.38>

 CFA Institute [member access](#) to the Financial Analysts Journal.

 Sample our Economics, Finance, Business & Industry journals, sign in here to start your access, latest two full volumes FREE to you for 14 days

 Citations  Metrics  Reprints & Permissions

[Read this article](#)

About Cookies On This Site

We and our partners use cookies to enhance your website experience, learn how our site is used, offer personalised features, measure the effectiveness of our services, and tailor content and ads to your interests while you navigate on the web or interact with us across devices. You can choose to accept all of these cookies or only essential cookies. To learn more or manage your preferences, click "Settings". For further information about the data we collect from you, please see our [Privacy Policy](#).

 Accept All

Essential Only

Settings

Risk and Return on Equity: The Use and Misuse of Historical Estimates

The task of estimating a company's expected return typically involves an initial estimate of the market's expected return. This, in turn, is usually based on summary statistics about risk premiums drawn from historical average returns. The approach appears simple, but the underlying complexities may trip up unwary analysts.

The authors demonstrate how choice of measurement period, averaging method, portfolio weighting and risk-free rate can cause the equity risk premium to vary from 0.9 to 24.9 per cent. Over the 1926-80 period, for example, the arithmetic mean annual return on an equally weighted portfolio was 17.1 per cent; the geometric mean annual return on a corresponding value-weighted portfolio was 9.1 per cent. Furthermore, differences in historical returns between industries, and company size effects within industries, are also substantial.

FINANCIAL ANALYSTS HAVE come to rely heavily on summary statistics drawn from historical returns on common stocks.¹ Typically, these returns, aggregated over time and over securities, have been compared with historical returns on lower-risk assets such as Treasury bills or U.S. government bonds to provide estimates of the stock market's average risk premium on equities.² The considerable complexity underlying the aggregate data seems to have been ignored, for the most part, in practice.

The consequences of ignoring complexity can be substantial in dollar terms. For example, the book value of Duke Power Company's common equity is about \$2.4 billion. Each percentage point in estimates of its cost of equity capital thus translates into \$24 million of earnings per year, when applied as an earnings rate on book equity. And the differences between estimates of costs of equity generated by different "readings" of historical returns could easily amount to several percentage points—or multiples of \$24 million per year—in required earnings.

This article attempts to introduce some cau-

tion into the uncritical acceptance and use of aggregated historical return differentials. Using return data for the period 1926-80, we present tables showing how mean or risk-adjusted stock returns are affected by the following dimensions of historical return measurement and presentation:

- geometric vs. arithmetic mean returns,
- equally weighted vs. value-weighted stock portfolios,
- time periods chosen,
- bills vs. bonds as the base for the market risk premium,
- industry risk-adjusted return differentials,
- effect of data point intervals on industry risk adjustments,
- the significance of some industry "alphas,"
- size effects within industries.

We used as our main data base the monthly

Willard Carleton is Karl Eller Professor of Finance at the College of Business and Public Administration of the University of Arizona. Josef Lakonishok is Associate Professor of Finance at The Leon Recanat Graduate School of Business Administration of Tel Aviv University.

1. Footnotes appear at end of article.

Log in via your institution

Loading institutional login options...



Log in to Taylor & Francis Online



Log in

Restore content access

Restore content access for purchases made as guest


Purchase options *

Save for later

PDF download + Online access

- 48 hours access to article PDF & online version
- Article PDF can be downloaded
- Article PDF can be printed


USD 53.00

 Add to cart

Issue Purchase

- 30 days online access to complete issue
- Article PDFs can be downloaded
- Article PDFs can be printed

USD 162.00

 Add to cart

* Local tax will be added as applicable

Related Research

People also read

Recommended articles

Cited by
2



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



Copyright © 2024 Informa UK Limited Privacy policy Cookies Terms & conditions

Accessibility



Registered in England & Wales No. 3099067
5 Howick Place | London | SW1P 1WG

