Management Science

Publication details, including instructions for authors and subscription information:
http://pubsonline.informs.org

Erratum To "The Capital Asset Pricing Model: An Evaluation of Its Potential as a Strategic Planning Tool" By Thomas H. Naylor and Francis Tapon

Bruce James Brownlee,

ERRATUM

MANAGEMENT SCIENCE
Vol 29, No 5, May 1983
Printed in U.S.A

ERRATUM TO "THE CAPITAL ASSET PRICING MODEL: AN EVALUATION OF ITS POTENTIAL AS A STRATEGIC PLANNING TOOL" BY THOMAS H. NAYLOR AND FRANCIS TAPON*

BRUCE JAMES BROWNLEE

In the October 1982 article by Naylor and Tapon, equation (1) shows the value of the firm V as

$$V = \frac{R - \rho r_m \sigma}{i} \tag{1}$$

where

R = expected rate of return for the company,
i = the risk-free interest rate,
r_m = correlation between company's rate of return and all N firms in the market,
ρ = market price of risk (comparing extra risk against increased return), and
σ = standard deviation of the company's return.

The right-hand side of the equation represents the difference between two rates of return, all divided by a third interest rate. That this should be equal to the value of the firm is either a new departure in economic logic or the equation is erroneous.

I would be most interested in seeing an additional development showing how value can be computed as the ratio of two rates of return.

Correspondence may be sent to:
Dr. Bruce James Brownlee
Nuclear Data Power Division
2734 South Cobb Industrial Blvd.
Smyrna, Georgia 30080

* *Management Science*, Vol. 28, No 10 (October 1982), pp. 1166–1173.

REPLY

MANAGEMENT SCIENCE
Vol 29 No 5, May 1983
Printed in U.S.A

REPLY TO BROWNLEE ERRATUM

Mr. Brownlee is absolutely correct about the units not making sense in equation (1). R should have been defined as *expected profit*, not expected rate of return. Obviously, this is true for equations (2) and (3) as well. Having improperly defined R, we then proceeded to use the incorrect definition all too consistently.

THOMAS H. NAYLOR
Center for Corporate Economics and Strategy
Duke University
Durham, North Carolina 27706

0025-1909/83/2905/0633$01.25