



Accounting and Economic Rates of Return: A Note On Depreciation and Other Accruals

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ACCOUNTING AND ECONOMIC RATES OF RETURN: A NOTE ON DEPRECIATION AND OTHER ACCRUALS

L.A. GORDON AND A.W. STARK*

INTRODUCTION

The debate concerning the accountant's measure of the rate of profit (i.e., the accounting rate of return) as a proxy for the economist's rate of profit (i.e., the internal rate of return) began with the seminal papers of Harcourt (1965) and Solomon (1966). Other papers featuring in the debate are those of Livingstone and Salamon (1970), Stauffer (1971), Gordon (1974), and Fisher and McGowan (1983). Fisher and McGowan's (1983) paper has stimulated a most lively discussion on the subject (Fisher, 1984; Horowitz, 1984; Long and Ravenscraft, 1984; and Van Breda, 1984). The major conclusion of the above noted papers, as well as many others, is that the accountant's rate of profit is a poor proxy for the economist's rate of profit.¹

The incorrect measurement of depreciation is frequently considered the primary cause of the discrepancy between the accounting and economic rates of return. Hence, it is often argued that if the accountant would base depreciation of capital expenditures on the time profile of net cash flow benefits flowing from such expenditures (i.e., use what is commonly called *economic depreciation*) most, if not all, of the discrepancy would vanish. For example, Long and Ravenscraft (1984, p. 499) assert '... it is the divergence between accounting and economic depreciation that causes the accounting and economic profit divergence' (p 499). In a similar vein, a recent paper by Anthony (1986) urges members of the American Economic Association to attempt to convince the

Financial Accounting Standards Board to adopt annuity depreciation (which he states is also often referred to as economic depreciation) in order to reconcile the accountant's measure of profitability with the economist's measure.²

The primary objective of this paper is to point out that it is not solely the accountant's inability to correctly measure economic depreciation that causes inaccuracies in the accounting rate of return as an indicator of the internal rate of return. Other inaccuracies are caused by the fundamental difference between cash flows and accrual accounting profit flows. Although most authors

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