INVESTMENT APPRAISAL IN FORESTRY WITH PARTICULAR REFERENCE TO CONIFERS IN BRITAIN

R. J. N. Bushy and A. J. Grayson
Forestry Commission Booklet 47, HMSO, London, 1981, £3.75 (sterling).

In the past decade, United Kingdom investors including private individuals and institutions such as banks and insurance companies have realised the attractions of forestry as an investment outlet. Recently, Irish investors have begun to show an interest in forestry. Certain investors are attracted to forestry for taxation reasons and the time span of their interest is short-term. (Generally, the tax advantages of forestry are greater in Britain than in Ireland). The bulk of investors, however, (and particularly the institutions), regard forestry as a long-term investment suitable, for example, for pension fund monies which can remain tied up for periods of twenty years or more. It is to the latter group that this booklet is primarily aimed. It should also, however, be relevant to farmers and landowners considering the use of part or all of their holdings for forestry.

The organisation of the booklet is as follows:

Part I covers the general principles involved in any form of investment appraisal. Here, concepts such as discounting, fixed and variable costs, real returns, etc. are explained.

Parts II and III show, using a large number of marked examples, how these principles can be used to evaluate different forest projects.

This booklet can be regarded as essential reading, not only for the investor without a previous forestry background, but also for the forester wishing to add a financial perspective to his work. To my knowledge, an equivalent booklet has not recently been published. In a number of respects the booklet is disappointing, however. Two particular problems I believe, complicate investment appraisal in forestry and their treatment in this booklet I would regard as inadequate. These are:

(i) The difficulty of identifying yield class,

(ii) The choice of discount rate.

The 'yield class problem', if I can call it that, works as follows.

The analyst may wish to value either bare land destined for forestry, or a young forest plantation. This can be done using the Management Tables provided the yield class of the land can be identified. All the figures derived from the tables hinge upon the identification of yield class. However, most foresters would regard an assessment of yield class as being tentative, and subject to significant revision until well into the establishment of a plantation. Thus, the approach to investment appraisal outlined in the booklet could give the spurious appearance of scientific accuracy where the yield class estimate itself is tentative.

I am unhappy also about the treatment of discount rate in the booklet. This is the compound interest rate which is used to express expenditures and revenues in present value terms and which represents the return derived by the investor. The choice of discount rate is thus vital — it it a major determinant of whether a given project is viable and should be undertaken. If investment appraisal in forestry is to be technically acceptable, the compound interest rate should be consistent with that used to appraise other projects which are open to the investor. By using three discount rates, 3%, 5% and 7%, the authors effectively avoid this question since for long-term projects, even a 0.5% change in discount rate can critically influence the returns abtained. The first step for the rational investor would involve ascertaining the general rate applicable to risk-free borrowings (e.g. investment in Government stock); to this should be added a margin which takes account of the uncertainty and risks involved in forestry investment. (Currently the real return on UK government stock lies between 2½% and 3%: (equivalent figures are not available for Ireland.) Today's investor should therefore, I feel, use a figure of the order of 4¾% (2¾% risk-free rate plus a margin of 2%).

This publication is certainly of interest to Irish investors, but its relevnace is limited by its heavy reliance on Forestry Commission Management Tables. This highlights the need for revision and extrapolation of those tables to account for provenance differences and faster growth rates in this country. Such information, made publicly available, would provide a valuable stimulus to private sector forestry investment.

D. Bradley.