

Chapter D3 – FOREST VALUATION METHOD

Valuation method Describe the methodologies used (sales, income, cost). All three methods should be considered and if one is not used then explanation should be given as to why not.

The valuer should attempt at all times to see the assets through the eyes of market participants.

References: Chapter B12 Forest Valuation Method, Guidance Notes For Forest Valuation Method
Chapter B11 Taxation Effects AU/NZ
Chapter B14 Valuation for Insurance Cover, Compulsory Sale and Compensation

Disclosure of key elements Reference should be made to the following key elements wherever they figure in any of the methods:

- the number of rotations recognised in the cashflows on which the valuation is based;
- identification of whether tree growing is considered compatible with the highest and best use of the land;
- the land value/tree crop value interrelationship;
- treatment of forest roads and other durable assets; and
- whether the modelling of the forest is estate-based or stand-based
- assumptions about:
 - land tenure rights and obligations;
 - forest management (e.g. species, silviculture, regeneration strategy, treatment of untended stands);
 - harvesting strategy (e.g. rotation age);
 - linkage to downstream processing, vital legal contracts or company policy.
- treatment of inflation effects in future cash flows;
- treatment of tax in the cashflows (detail all tax conventions, calculations and assumptions);
- source of discount/compound rate applied and rationale for its selection, including the relationship between the tax treatment of the cash flows and the discount/ compound rate (see below);
- treatment of land value and/or lease payments and/or share of stumpage to landowner (whichever is relevant);
- timing, area, cost, price and yield convention sets;
- treatment of other forest revenues (if applicable);



- state of land/forest at closing date(s).

References: Chapter B12 Forest Valuation Method
Chapter B10 Discount Rate
Chapter B11 Taxation Effects AU/NZ
Chapter B6 Value of Land AU/NZ

Discount rates

The source and rationale for the selection of any discount rates should be fully disclosed, including the relationship between discount rates and the tax treatment of cash flows.

Disclosure:

- all discount rates applied in the valuation;
- the discounting convention (e.g. mid-year, end-of-year, terminal value assumptions);
- applied to real or nominal cash flows;
- applied to pre- or post-tax cash flows;
- capital structure assumptions;
- treatment of risk;
- whether cashflows include 'notional' costs such as those associated with the opportunity cost of land.

Source and rationale:

- methods of derivation;
- assumptions (consistent with methods);
- risk treatment;
- specific allowances (buyer/seller);
- transaction evidence.

Explanation of the choice of discount rates may include reference to:

- use of the Capital Asset Pricing Model (CAPM) and Weighted Average Cost of Capital (WACC) approaches;
- implied discount rates associated with other forest sales;
- declared asset reporting rates;
- declared hurdle rates;
- capitalisation rates and multipliers;
- the minimum market acceptable IRR observed in a range of alternative forest projects;
- discount rate surveys.



Note: When referencing alternative earnings rates, care must be taken to exclude expected inflation from an earnings rate that is expressed as a nominal rate (i.e. including inflation) rather than a “real” rate.

References: Chapter B10 Discount Rate
Chapter A4 Discount Rate (Background issues)

Other forest revenues

If there are outputs from the forest, other than logs, that have economic value, decide whether these outputs are material and measurable. If they are then the treatment of the cash flows and land value associated with these revenues must be decided and disclosed.

References: Chapter B12 Forest Valuation Method, Guidance Notes on Other Forest Revenues

Valuation conventions

Take care over the internal consistency of timing, discounting, area, yield cost and price conventions. Simple errors can have a significant impact on the value results.

Reference: Chapter B12 Forest Valuation Method, Guidance Notes on Forest Valuation Conventions.

