

LEASING

Principle 1: Lessor

1. For the Lessor, Leasing is a capital budgeting decision. Hence the appropriate discount rate is the after tax Weighted Average Cost of Capital (WACC). All the rules of capital budgeting will apply
2. Where Break Even Rental is to be computed, assume the Lease Rental as Rs X, compute the NPV in terms of X and equate it to the Cost of the Asset

Principle 2: Lessee

3. For the Lessee, Leasing is a financing decision. The decision to have the asset is already taken; the only remaining decision is whether to borrow money and buy the asset or whether to take the asset on Lease.
4. The appropriate discount rate will depend on the opportunity cost of money. If the alternative to leasing is
 - a. debt financing, the appropriate rate is the after tax cost of debt
 - b. equity financing, the appropriate rate is the after tax cost of equity
 - c. both debt and equity the appropriate rate is the after tax weighted average cost of capital
5. Typically the evaluation will be as under

Method 1:

Step 1: Compute Present Value of borrow and buy option

- a. Purchase price
- b. Less: Present value of tax saved on depreciation
- c. Less: Present value of net salvage value
- d. PV of Borrow and Buy

Note 1: The above format can be used if the borrowing rate and discounting rate are same.

Note 2: If they are different we must compute the cash flow associated with repayment and interest and discount it at the given discount rate. In such as situation

(i) Principal should be discounted at after tax rate. This is because principal being NOT tax deductible its pre and post tax rates are same.

(ii) After tax interest should be discounted at after tax rate.

Step 2: Compute Present Value of Lease option

Establish the after tax lease rental and discount it at the after tax discount rate

Step 3: Decision

If $PVLO < PVBO$, take the asset on Lease. Else, borrow money and buy the asset

The above method is called the PV model. Other models are also available; the focus being a call taken on what should be appropriate discount rate.

Method 2: IRR method

The IRR of a lease can be computed as under

Step 1: Establish the cash flow structure by taking the following

- a. Cost of asset is inflow since no money is now required to be paid
- b. Lease rental after tax is outflow
- c. Tax saved on depreciation had the asset been bought is now an outflow since this is now foregone
- d. Net salvage value of the asset is an outflow as this is foregone by having taken the asset on lease

Step 2: Compute IRR

If IRR is greater than cost of capital or opportunity cost (This is the post tax cost), take the asset on lease. Else, buy the asset.

6. Break Even Rental for Lessee is that Rental at which the present value of borrowing equals the present value of leasing. Or the IRR of leasing equals the opportunity cost

Principle 3: Salvage value treatment

This needs to be consistent

- If as the buyer of an asset, you propose to dispose of the asset at the end of the useful life, then as a lessee you should not buy the asset at the end of the lease period.
- If as the buyer of an asset, you propose to retain the asset at the end of the useful life, then as a lessee you should buy the asset at the end of the lease period.

Principle 4: Timing of taxes

- Lease rental can be paid in advance or in arrears.
- Irrespective of when lease rentals become payable/receivable taxes are to be paid at the end of the year. Hence tax shelter/tax payments must be taken at year end
- Alternatively given the strong system of advance tax in our country, it would be apt to consider tax payment and tax shelter as and when the lease rental becomes receivable / payable
- Tax benefit of depreciation should be taken at year end only.

Other Evaluation Models

BHW Model

Evaluation	Financing Part (FA-L)	Tax Shields Part - OA-L
	PV of Loan payments minus PV of lease payments	PV of lease related tax shields minus PV of loan related tax shields, minus PV of RV
	This equation is called Financial Advantage of Leasing	This equation is called Operating Advantage of Leasing
Decision rule	If FAL+OAL is positive, preference is for Leasing If FAL+OAL is negative, preference is for Borrow & Buy	

Bower Model

Evaluation	Cost of purchase	Cost of Lease
	Initial Investment	PV of Lease rentals
	(-) PV of Tax shields on Depreciation (-) PV of Residual Value	(+) PV of Tax shield on interest, (-) PV of tax shield on lease rentals
Decision rule	IF COL is < COP, decision is in favour for leasing If COL is > COP decision is in favour of Borrow and Buy	