Income Approach to Valuation

Topics

- Concept of income approach
- Gross income-outgoings; net income and years purchase
- Actual income Vs potential income
- Terminal income
- Remunerative and accumulative rates of interest and various methods of determining the same
- Capitalization of earnings method
- Discounted future earnings method (Discounted cash flow- DCF technique)
- Pitfalls of DCF technique

Question

A **factory** is on sale in AP, doing reprocessing of lead.

How do you value the factory?

- Total of all assets
  - Land cost, Building cost, machine cost inventory.
- Return on investment
  - Owner invested Rs 5 cr, want 24% return?
- Approximate price a near by factory was sold at.
  - Last factory sold was 5 years ago, 100 kms away.
- Income potential
  - How much income is possible in a reasonable manner.

How in Jio valuation happening

- Loss making unit of Reliance.
- Very high cap ex on towers, cables etc.
- Commodity business
- High speed of technological obsolescence.
- Many players in the market.
- Customer can switch any time, Zero entry / exit barrier.

Collected Rs 82,000 crs in 6 weeks.

Every sale of shares is at a higher price than last one.

Assets are same, Loss is same,

WHY SHARE PRICES ARE INCREASING?

Jio

- Cost Based ?
  - Same cost now as there no major expansion happening.
- Market based
  - Air tel price – Rs 600, Rel Comm, Rs 2,
  - Jio – Rs 1600
- Relationship based?
  - All investors are very hard nosed professionals.
- Reputation Based?
  - No one bothered of reputation of Jio/ Reliance

ALL INVESTMENT IS COMING IN EXPECTING A GREAT FUTURE EARNING.

Concept

- Asset or a group of assets, tangible or intangible or a collection of all.
- This can generate an Income / generating income.
- The income can be reasonably projected for next few years.

The future INCOME – can be converted to a PRESENT VALUE.

This is Income Approach.

Example

Year	Yr 0	Yr 1	Yr 2	Yr 3	Yr 4	Yr 5	Yr 6	Yr ..	Yr ..	Yr N
Income	100	101	104	103	107	110	108	110	115	120

The above is income over period of years.
How much investment is required to get this income.

In this VALUATION, we have taken the FUTURE INCOME as a BASE

concept

- Future income due to the asset is put in one figure of now.
- Value of the asset – comes from, future cash flow, income, cost saving
- Good when
  - Income generating ability is THE critical element.
  - Reasonable projections of income are possible.
- It is assumed that a return will come, and that is reflected on a perceived risk
- Only systematic risk (market risk) cam be covered.
- Also to consider
  - Income producing ability is one of the important attributes.
  - Uncertainty of the timing of income generation. (New asset).
  - Lack of adequate information.

incomes

- Gross Income = all income the business earns in an year.
- Net Income = only profits after reducing business expenses.
- If net income
  - Positive = capital gains
  - Negative = Capital loss.
- Years Purchase
  - Is the sum of Rs 1 receivable every year
  - For a period of n years
  - At a certain rate of compound interest
  - Or “pay back years” in usual language.

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- Actual Income = Gross income in the particular section, except provided in other section.
- Potential Income = ability to earn an income based on talent, experience, qualifications, health, employability, earning potential in location etc.
- Terminal Income = P&M, give income for a limited time. If P&M life is >= 60 years – it is considered income till perpetuity (for valuation purpose).
- In lease hold = income terminates at the end of the lease.

capitalization of earning

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- Concept is that there will be a future earning from the asset.
  - Real earning stream of the asset.
  - Rate of return on the investment.
- Earning can be – per / post tax, adjusted, average, weighted average etc etc
- Capitalization Method – pre tax only. Tax is also after adjustments.
  - Direct Capitalization
  - Discounted Cash Flow technique.

interest

- Remunerative rate of interest
  - Earned as remuneration on capital
  - Depends upon the securities offered.

Invest TODAY

Get returns every month – as income.

- Accumulative rate of interest
  - Rate at with an annual sinking fund is required to get the capital invested.
  - We put in some money per year, at what rate will to become the capital invested after n years

Put some money every month.

Get a larger sum at the end of the period.

Interest earned is “accumulated”

discounted future earning method (DCF)

- Forecasted cash flow is discounted back to the valuation date.
- For a long asset live – DCF – puts a terminal value – representing the value of asset at the end.
  - Terminal value after 25 years / 50 years / 70 years – case by case.

steps of DCF

1. Right type of cash flow (pre or post tax)
2. Appropriate time period for above
3. Prepare the cash flow for that period.
4. Determine the terminal value.
5. Do an appropriate discount rate.
6. Apply the rate to the above cash flows. Include the terminal value.

problems with DCF

- Sensitive to assumptions.
  - Small changes will give a large variations
- More time intensive than other. Takes more time to do it.
- Require to forecast in future. Future is uncertain.
- DCF is a moving target.
- Interest rates will change.
- Better products may come in the market.

thanks