Session 7

The Income Approach/Investment method

Principle of Income Approach

- *The Principle of Anticipation:* This principle states that income capitalization method, techniques and procedures try to take anticipation of future benefits to account and estimate their present value.
- This may involve either forecasting the anticipated future income or estimating the capitalization rate which implicitly shows the anticipated pattern of change in income over **time.**
- From this principle, value can be defined as the present worth of future benefits.

Income Approach/Investment Method

- Some properties are held purely as investments in order to generate income and achieve future capital growth.
- The Investment Market – Typically Investment Properties are office blocks, retail shops, shopping centres and multi-purpose factories.
- Income approach has two methods:
  - Direct capitalization method
  - Discounted Cash flow method
- **Direct capitalization method**
- On the one hand , direct capitalization consider only one year's income expectancy and then convert income into value via rate or factor.

- Steps for Direct Capitalization Method
  - research the income and expense data of the subject property and comparable properties.
  - estimate the potential gross income of the subject property by summing the rental income and other potential incomes (miscellaneous income such as parking fees, laundry and vending receipts are added to the potential).
  - the appraiser ought to estimate vacancy and collection loss (due to vacancies, tenant turnover, and nonpayment of rent).
  - calculates an effective gross income (EGI) for the property by deducting the vacancy and collection loss from the annual potential gross income.
  - Estimate the total operating expenses (TOE) of the subject property by adding fixed expenses, variable expenses and replacement allowance.

- Fixed expenses are operating expenses that generally don’t vary with occupancy and which prudent management will pay whether the property is occupied or vacant whereas variable expenses vary with occupancy or the extent of services provided.
- Replacement allowance represents an allowance that provides for the periodic replacement of building components that wear out more rapidly than the building itself and must be replaced during the buildings economic life.

- estimate the annual Net operating Income (NOI) of the subject property by deducting TOE from EGI
- Estimate the capitalization rate from similar properties
- Capitalize the NOI by capitalization rate to estimate the value of the property.

- **Estimating Potential Gross Income**
  - is the total income attributable to a property before any allowance for vacancy and collection loss and before deductions for any operating expenses.
  - represents all of the rent that could possibly be collected for this property.
  - It is the total annual rental income the property would produce assuming 100 percent occupancy and no collection losses
  - All the above data/rents are collected from comparable properties, i.e., it is the market rent

- **The two common practice of estimating Potential gross income are :**
  - PGI = (No. of room units)*(monthly rent)*(12 months)
  - PGI = (amount of rentable space)*(rent per unit of space)

  - Note: It is important to distinguish the market rent and contract rent, the analysis should be based on market rent.

Estimation of market rental from comparable properties

- Making detail inspection of the property to be valued
- Taking measurement (NIA or GIA) of the property
- Considering the lease agreement of the property (including lease length, pattern of rent review, repair and liability, restrictive user clause etc)
- Assessing rental evidences
- Analysis and adjustment of comparable property rents

- Adjustment of the rental value will be done by considering the following:
  - Date of Valuation
  - Location

- Building design/Layout of building
- Shape
- Size
- Presence of road network
- Facilities
- Car parking
- Natural lighting
- Type of construction materials
- Rent review pattern
- Length of lease
- Repair & insurance
- Restrictive user clause
- etc

Estimation of Vacancy and Collection Losses

- Vacancy and collection loss is an allowance for reductions in potential gross income attributable to vacancies, tenant turnover, any rental concessions and nonpayment of rent or other income.
- The rents collected each year are typically less than annual potential gross income, so an allowance for vacancy and collection loss is usually included in the appraisal of income-producing property.

- The recent history of the subject and comparable properties is the starting point for estimating vacancy and collection loss.
- The appraiser should also consider projected market conditions and neighbourhood trends.
- The Allowances for vacancy and collection loss is usually estimated as a percentage of potential gross income.

- **Estimation of Effective Gross Income**
  - Effective gross income (EGI) = PGI-VCL

    Where PGI = Potential Gross Income

    VCL= Vacancy & collection loss

- **Estimation of Operating Expenses**
- Operating expenses are expenditures necessary to maintain the real property and continue the production of gross income.
- These operating expenses are the costs necessary to maintain the property so it can continue to produce rental income.
- They are typically estimated on an annual basis.

- The starting point for estimating operating expenses is often the subject property’s recent history, this information should be checked against recent data from comparable properties
- Operating expenses can be estimated as a percentage of effective gross income or potential gross income

- Operating Expense generally divided into two categories: Allowable Expenses and Non-Allowable Expenses.

  - Allowable Expenses is operating expenses that may be ordinary and regular expenditure necessary to keep a proper functioning competitively.
  - Allowable operating expenses include, but are not limited to, Fixed Expenses (property tax and insurance) , Variable expenses (outlays for property management, leasing expenses, maintenance and repair, utilities, etc) and Replacement Allowance and Capital Expenditures .

- Non-Allowable Expenses are operating expenses that have nothing to do with the property appraised. This includes: Depreciation, Income taxes and debt payments (i.e., both the interest on debt and the retirement, or repayment, of debt).

Fixed expenses or cost

- To an appraiser, fixed costs are those costs which will be incurred regardless of the occupancy rate of the property.

- These costs would be incurred even if there were no tenants renting space.
- Fixed costs include property taxes and casualty insurance. This includes:
  - *Property taxes:* Property taxes are an "ad valorem" tax, meaning that they are a tax which is based on value.
  - *Property Insurance:* Owners of income properties need adequate insurance on the property.

Variable expenses or Costs

- Variable costs are those costs which will be affected by the occupancy rate of the property.
- Variable costs includes:
  - *Property management*:
  - *Utilities:*
  - *Maintenance and repair***:**
  - *Grounds and parking area maintenance*
  - *Replacement allowance***:**
- Total operating expenses are the sum of fixed, variable expenses and the reserve for replacements.

- **Net Operating Income**
  - NOI= EGI-TOE

  Where: NOI is net operating income

  EGI is effective gross income

  TOE is the total operating expense.

- Once we determine NOI, the resultant "NOI" is capitalized by an overall capitalization rate to derive value.

Capitalization rates and Income Multipliers

- A capitalization rate is a rate used for the conversion of net income into value.
- It can be market extracted and compared to other investment opportunities.

  - The cap rate is determined by analyzing cap rates for sales transactions of most similar *comparable* properties in the area to the subject property.

- Subsequently the appraiser needs to “reconcile” these rates by weighting them on the basis of the differences of the comparables from the subject property in terms of location, condition, amenities, income-earning capacity, occupancy rate, etc.

- The capitalization rate of a particular property can be determined according to the following formula:

$$Capitalization Rate = Net operating income / Sale price$$

- If an apartment building has sale price of Birr 2,500,000 and an annual net operating income of Birr 200,000, then the cap rate is:
  - Cap rate = 200,000/2,500,000 =

DCF Method