

JAMES A. GRAASKAMP COLLECTION OF TEACHING MATERIALS

V. INDUSTRY SEMINARS AND SPEECHES - SHORT TERM

I. Other Presentations In Which Either The Date And /  
Or Sponsoring Organization Is Missing

1. Risk Management/Investment Related Topics

k. "Investment Purchase Simulation", no  
date

### Investment Purchase Simulation

Investment simulation is useful to select most probable use, predict most probable price, or test the market comparison price prediction for fit to the profile of consumer objectives. Each requires a different level of data for application, depending on the type of property and the sophistication of investor-buyers in the market place.

- A. Do not confuse gross rent multipliers, net income multipliers, or market capitalization rates as investment simulation techniques. These are market comparison techniques. Sales price is being related to gross rents, net income, or indirectly to investment.
- B. The front door and back door approaches may be considered as the most basic method of investment simulation. Examples are provided in Exhibits 1-4; a second example of this method is provided in the demonstration appraisal case.
  1. The back door approach is used primarily to determine the most probable use.
  2. The front door approach is used to test a most probable price conclusion determined from the market place.
  3. The BFCF model was specifically designed as an after tax test of probable market price (~~see Exhibit 6~~).
- C. Construction of an income statement is the initial step for investment valuation of either a rental property or a subdivision. It requires:
  1. Careful determination of a rent schedule for each class of GLA available.
  2. Establishment of a cost base for operations.
  3. Determination of a projection index to adjust both revenues and expenses over time.
  4. A summary of the detailed accounting estimates into a net income figure.
  5. Adjustment of the net income figure if necessary to allocate the income to the specific real estate being appraised.
- D. Exhibits 7-8 show the forecast of revenue, expenses, and deductions for non-real estate allocations for a hotel property.
  1. Note that the estimate of occupancy is much more difficult than the determination of average rent per room per night.
  2. Note that projection for inflation may differ with specific items, such as utilities, labor, and supplies.
  3. Note that this appraisal was for a real estate tax appeal so that real estate taxes are not included in expenses.
  4. Note that a five year projection is about as far in the future as one cares to go.
  5. Except in the case of subdivisions, a short-term projection makes it necessary to have an assumption about real sale price.

- E. How the appraiser treats expected resale price is very much related to the issue of appraisal.
1. For tax assessment, one can assume real sale at the same price as purchase price since the assessor can annually update the value based on income returns.
  2. The mortgage lender can take a stable or declining value view for his purposes.
  3. For the speculative property, the seller or the investor may wish to determine the sensitivity of price to different after tax resale proceeds, which may be the prime motivation for investment. (See Roulac in Appendix)
  4. For condemnation all speculation as to future value will need to be avoided if the income approach is to be admissible in court.
  5. For insurance appraisal, the general increase in property value or replacement cost will need to be considered in the purchase of insurance adequate to meet conditions of the contract.
- F. Once the income stream is known, then the investment band approach can be applied in several ways:
1. With an existing mortgage subtract debt service and capitalize remainder as a series of present value revisions.
  2. Determine value from pretax application of back door approach using the default ratio and mortgage terms available in the market.
  3. Process cash throw-off analysis with a computer model to determine value and rate of return after taxes to the equity position.
  4. Use some multiplier or other guideline applied by the most probable buyer type to the cash flows in question. For example, buyers may pay eight times house profit or FHA may calculate cap rate integrating cash return to equity, mortgage insurance, and debt service.
- G. For land appraisal the income approach might involve a format such as in Exhibit 9:
1. The key elements are retail price of a lot and rate of sale.
  2. Sales cost and administrative costs can be standardized at 10% each. (Except recreational land where sales cost equal 35-45%)
  3. Real estate tax costs need to be adjusted for local practice. (Wisconsin example)
  4. Profits should be discounted by 15-25% at a minimum.